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Amended Draft Mapping of Fitch Ratings' credit assessments under the Standardised Approach

1. Executive summary

1. This report describes the mapping exercise carried out by the Joint Committee (JC) to propose an amended 'mapping'¹ report of the credit assessments of Fitch Ratings (Fitch), with respect to the version published on 11 November 2015. The resulting mapping tables have remained unchanged with respect to the afore-mentioned version.
2. The methodology applied to produce the mapping is the one specified in Commission Implementing Regulation (EU) 2016/1799 of 7 October 2016 (the Implementing Regulation)² laying down implementing technical standards with regard to the mapping of credit assessments of external credit assessment institutions for credit risk in accordance with Articles 136(1) and 136(3) of Regulation (EU) No 575/2013 of the European Parliament and of the Council (Capital Requirements Regulation – CRR). This Implementing Regulation employs a combination of the provisions laid down in Article 136(2) of the CRR.
3. The information base used to produce this mapping report reflects additional quantitative information collected after the submission of the draft Implementing Technical Standards by the JC to the European Commission. Two new rating scales, the Fund Credit Quality Ratings³ and the Derivative Counterparty Ratings have been introduced. However, due to the fact that the Fund Credit Quality Ratings assessment type is not considered as a valid credit rating under the Regulation (EC) No 1060/2009 (Credit Rating Agencies Regulation - CRA), it will be removed.
4. 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

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 OJ L 275, 12.10.2016, p. 3-18

³ A dedicated scale has been introduced for the "International fund credit ratings", which were previously rated under the "Long-term issuer credit rating scale". The scope of the definition remains unchanged.

objective of allowing investors to easily compare all credit ratings that exist with regard to a specific rated entity⁴ nor should be understood as a comparison of the rating methodologies of Fitch with those of other ECAs. This mapping should however be interpreted as the correspondence of the rating categories of Fitch with a regulatory scale which has been defined for prudential purposes.

5. As described in Recital 12 of the Implementing Regulation, it is necessary to avoid causing undue material disadvantage on those ECAs which, due to their more recent entrance in the market, present limited quantitative information, with the view to balancing prudential with market concerns. Updates to the mapping should be made wherever this becomes necessary to reflect quantitative information collected after the entry into force of the Implementing Regulation.
6. The resulting mapping tables have been specified in Annex III of the revised draft ITS on the mapping of ECAs' credit assessments under Article 136(1) and (3) of the CRR. Figure 1 below shows the result for the main ratings scale of Fitch, the Long-term issuer default rating scale.

Figure 1: Mapping of Fitch's Long-term 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
RD	6
D	6

⁴ In this regard, please consider https://www.esma.europa.eu/sites/default/files/library/esma_2015-1473_report_on_the_possibility_of_establishing_one_or_more_mapping.pdf.

2. Introduction

7. This report describes the mapping exercise carried out by the JC to propose an amended 'mapping' report of the credit assessments of Fitch, with respect to the version published on 11 November 2015.
8. Fitch is a credit rating agency that has been registered with ESMA in 31 October 2011 and therefore meets the conditions to be an eligible credit assessment institution (ECAI)⁵. Fitch is an international credit rating agency that encompasses more than 30 separate ratings companies operating across more than 50 offices worldwide.
9. The methodology applied to produce the mapping is the one specified in the Implementing Regulation. This Implementing Regulation employs a combination of the provisions laid down in Article 136(2) of the CRR. The information base used to produce this mapping report reflects additional quantitative information collected after the submission of the draft Implementing Technical Standards by the JC to the European Commission. Two new rating scales, the Fund Credit Quality Ratings⁶ and the Derivative Counterparty Ratings have been introduced. However, due to the fact that the Fund Credit Quality Ratings assessment type is not considered as a valid credit rating under the Regulation (EC) No 1060/2009 (Credit Rating Agencies Regulation - CRA), it will be removed. The quantitative information is drawn from data available in the ESMA's central repository (CEREP⁷) based on the credit rating information submitted by the ECAIs as part of their reporting obligations.
10. The following sections describe the rationale underlying the mapping exercise carried out by the Joint Committee (JC) to determine the applicable mapping. Section 3 describes the relevant ratings scales of Fitch for the purpose of the mapping. Section 4 contains the methodology applied to derive the mapping of Fitch's main ratings scale whereas Sections 5 and 6 refer to the mapping of its remaining relevant ratings scales. 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 the CRR.

⁵ It is important to note that the mapping does not contain any assessment of the registration process of Fitch carried out by ESMA.

⁶ A dedicated scale has been introduced for the "International fund credit ratings", which were previously rated under the "Long-term issuer credit rating scale". The scope of the definition remains unchanged.

⁷ <https://cerep.esma.europa.eu/cerep-web/>

3. Fitch credit ratings and rating scales

11. Fitch 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)⁸:

- Global long-term corporate issuer default ratings (IDR)** - Rated entities in a number of sectors, including financial and non-financial corporations, sovereigns and insurance companies, are generally assigned Issuer Default Ratings (IDRs). IDRs opine on an entity's relative vulnerability to default on financial obligations. The "threshold" default risk addressed by the IDR is generally that of the financial obligations whose non-payment would best reflect the uncured failure of that entity. As such, IDRs also address relative vulnerability to bankruptcy, administrative receivership or similar concepts.
- Global long-term corporate finance obligation ratings** - Ratings of individual securities or financial obligations of a corporate issuer address relative vulnerability to default on an ordinal scale. In addition, for financial obligations in corporate finance, a measure of recovery given default on that liability is also included in the rating assessment. This notably applies to covered bonds ratings, which incorporate both an indication of the probability of default and of the recovery given a default of this debt instrument. **Global long-term insurer financial strength (IFS) ratings** - provides an assessment of the financial strength of an insurance organization. The IFS Rating is assigned to the insurance company's policyholder obligations, including assumed reinsurance obligations and contract holder obligations, such as guaranteed investment contracts. The IFS Rating reflects both the ability of the insurer to meet these obligations on a timely basis, and expected recoveries received by claimants in the event the insurer stops making payments or payments are interrupted, due to either the failure of the insurer or some form of regulatory intervention. In the context of the IFS Rating, the timeliness of payments is considered relative to both contract and/or policy terms but also recognizes the possibility of reasonable delays caused by circumstances common to the insurance industry, including claims reviews, fraud investigations and coverage disputes.
- Derivative Counterparty ratings** - issuer level ratings and are assigned to selected banks and bank holding companies on the same scale as long-term issuer default ratings but with a 'dcr' suffix. They address only Fitch's opinion on a bank's relative vulnerability to default, due to an inability to pay on any derivative contract with third-party, non-government counterparties. They have been introduced in response to developments in bank resolution frameworks and creditor hierarchies following the global financial crisis. **Global short-term issuer default/obligation ratings** - based in all cases on the short-term vulnerability to default of the rated entity and relates to the capacity to meet financial obligations in accordance with the documentation governing the relevant obligation. Short-Term Ratings

⁸ As explained in recital 4 of the 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.

are assigned to obligations whose initial maturity is viewed as "short term" based on market convention. Typically, this means up to 13 months for corporate, sovereign, and structured obligations, and up to 36 months for obligations in U.S. public finance markets.

- **Global short-term insurer financial strength ratings** - provides an assessment of the near-term financial health of an insurance organization and its capacity to meet senior obligations to policyholders and contract holders that would be expected to be due within one year. The analysis supporting the ST-IFS Rating encompasses all of the factors considered within the context of the IFS Rating, but with greater weight given to an insurer's near-term liquidity, financial flexibility and regulatory solvency characteristics and less weight given to longer-term issues such as competitiveness and earnings trends.

12. Fitch 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:

- **Global long-term issuer default ratings scale.** The specification of this rating scale is described in Figure 3 of Appendix 1.
- **Corporate finance obligations long-term ratings scale.** The specification of this rating scale is described in Figure 4 of Appendix 1.
- **Long-term international Insurer financial strength (IFS) ratings scale.** The specification of this rating scale is described in Figure 5 of Appendix 1.
- **Derivative Counterparty ratings scale.** The specification of this rating scale is described in Figure 6 of Appendix 1.
- **Short-term ratings scale.** The specification of this rating scale is described in Figure 7 of Appendix 1.
- **Short-term IFS ratings scale.** The specification of this rating scale is described in Figure 8 of Appendix 1.

13. The mapping of the Long-term issuer default ratings scale is explained in Section 4 and it has been derived in accordance with the quantitative factors, qualitative factors and benchmarks specified in the Implementing Regulation.

14. The mapping of the Short-term ratings scale is explained in Section 5 and it has been indirectly derived from the mapping of the Long-term issuer default ratings scale and the internal correspondence established by Fitch between the long-term and the short-term rating scales, as specified in Article 13 of the Implementing Regulation. This internal relationship is shown in Figure 9 of Appendix 1.

15. The indirect mapping approach described in the previous paragraph has also been applied in the case of the other long-term and short-term rating scales, as explained in Section 6. In these

cases, however, the relationship with the Long-term issuer default ratings scale (or Short-term ratings scale) has been assessed, for the purpose of the mapping, by the JC based on the comparison of the meaning and relative position of the rating categories.

4. Mapping of Fitch's Long-term issuer default ratings scale

16. The mapping of the Long-term issuer default ratings 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 Implementing Regulation 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 used to arrive at an initial mapping proposal by comparing its value with the benchmark specified in point (a) of Article 14 of the Implementing Regulation.
- The *short run default rates* of a rating category have been compared with the benchmarks specified in point (b) of Article 14 of the Implementing Regulation, which represent the maximum expected deviation of a default rate from its long-term value within a CQS.

18. In a second stage, the qualitative factors proposed in Article 7 of the Implementing Regulation 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. Initial mapping based on the quantitative factors

19. This mapping report reflects additional quantitative information collected after the submission of the draft ITS by the JC to the Commission.

4.1.1. Calculation of the short-run and long-run default rates

20. The short run and long run default rates of each rating category have been calculated with the pools of items rated from 1 July 2001 to 1 July 2015, based on the information contained in CEREP and according to the provisions laid down in the Implementing Regulation. As in the mapping report published in November 2015:

- For AAA and AA rating categories, the number of credit ratings cannot be considered to be sufficient for the calculation of the short run and long run default rates specified in Articles 3 – 5 of the Implementing Regulation. Therefore the allocation of the CQS has been made in accordance with Article 6 of the Implementing Regulation, as shown in Figure 18 of Appendix 3. In these cases, 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.

- For RD and D rating categories, no calculation of default rates has been made since they already reflect a 'default' situation.
- For the remaining rating categories, the number of credit ratings can be considered to be sufficient and therefore the calculation has followed the rules established in Articles 3 to 5 of the Implementing Regulation. The result of the calculation of the short run and long run default rates for each rating category is shown in Figure 13 of Appendix 3.

21. Withdrawn ratings have been weighted by 50% as indicated in Article 4(3) of the Implementing Regulation.

22. The default definition applied by Fitch, described in Appendix 2, 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 19 in Appendix 4, the rating categories A, BBB, BB and B of the Long-term issuer default rating scale of Fitch have been initially allocated to each CQS based on the comparison of the long run default rates (see Figure 13 in Appendix 3) and the long run default rate benchmark intervals established in point (a) of Article 14 of the Implementing Regulation. Rating categories A, BBB, BB and B remain assigned to CQS 2, 3, 4 and 4 respectively⁹.

23. In the case of rating categories AAA and AA, where the number of credit ratings cannot be considered to be sufficient, this comparison has been made according to Article 6 of the Implementing Regulation. The results are shown in Figure 18 of Appendix 3. The first data cohort suggests assignment to CQS1 while the second data cohort points to CQS 2. This is in line with the analysis performed in the mapping report published in November 2015. The additional quantitative information collected since the mapping was produced does not register any default and suggests mapping to CQS 1. This reinforces the mapping to CQS1 assigned in the mapping report published in November 2015.

4.1.3. Reviewed mapping based on the short run default rates

24. As shown in Figures 14 to 17 in Appendix 3, the short run default rates of rating categories A to B have been compared with the short run default rate benchmark values established in point (b) of Article 14 of the Implementing Regulation¹⁰.

25. The objective is to assess, for each rating category, whether the short-run default rates have deviated from their corresponding benchmark values and whether any observed deviation has been caused by a weakening of the assessment standards. Therefore short run default rates

⁹ These results are robust also when considering the alternative estimated historical data for 2001-2006 proposed in the mapping report published in November 2015, see Figure 14 in Appendix 3.

¹⁰ For AAA and AA rating categories, the number of credit ratings cannot be considered to be sufficient and therefore no calculation of the short run default rate has been made. In the case of rating categories CCC-C, the review of the short run default rates is not necessary since they have been mapped to CQS 6.

experienced within a rating category have been confronted with the short run benchmarks “monitoring” and “trigger” levels specified in Annex I of the Implementing Regulation. The result of this comparison can be found in the third column of Figure 19 in Appendix 4.

26. The additional short-run default rates collected after the mapping published in November 2015 was produced do not breach their respective monitoring and trigger levels.

4.2. Final mapping after review of the qualitative factors

27. The qualitative factors specified in Article 7 of the Implementing Regulation 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 behavior¹¹, as it is the case of AAA and AA rating categories, or where quantitative evidence is sufficient but does not reflect the expected risk profile underlying a rating category as it is the case of rating category B.

28. Fitch has not registered any change in the quantitative factors since the draft Implementing Technical Standards were submitted by the JC to the Commission. Therefore the qualitative considerations remain unchanged with respect to the original mapping report, which means that the meaning and relative position of the credit assessments is the only qualitative factor that suggests an adjustment of the mapping proposal resulting from the quantitative factors.

- The meaning of rating categories AAA and AA are in line with CQS 1 according to the reference definition established in the Implementing Regulation. Since the adjacent rating category (A) has been mapped on the basis of quantitative information to CQS 2, it can be concluded that the proposed mapping for AAA and AA rating categories is CQS 1.
- Regarding rating category B, the meaning and relative position of the rating category suggest a mapping to CQS 5.

5. Mapping of Fitch’s Short-term rating scale

29. Fitch also produces short-term issuer ratings and assigns them to the Short-term ratings scale (see Figure 7 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 Implementing Regulation, the internal relationship established by Fitch with the long-term issuer default rating scale (described in Figure 9 of Appendix 1) has been used to derive the mapping. This should ensure the consistency of the mappings proposed for Fitch.

30. More specifically, as each short-term issuer rating can be associated with a range of long-term issuer 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

¹¹ 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.

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

31. The result is shown in Figure 20 of Appendix 4:

- **F1+.** In particular, F1+ indicates an exceptionally strong intrinsic capacity for timely payment of financial commitments. It is mapped to long-term categories AAA/AA and A+, which are mostly mapped to CQS 1. Therefore, CQS 1 is the proposed mapping.
- **F1.** This rating category indicates the strongest intrinsic capacity for timely payment of financial commitments. F1 is internally mapped to the long-term category A, which is mapped to CQS 2. Therefore, CQS 2 is the proposed mapping.
- **F2.** This rating category indicates a good intrinsic capacity for timely payment of financial commitments. It is internally mapped to long-term categories A- to BBB, which are mostly mapped to CQS 3. Therefore, CQS 3 is proposed mapping.
- **F3.** This rating category indicates that the intrinsic capacity for timely payment of financial commitments is adequate. It is internally mapped to long-term categories BBB to BBB-, which are mapped to CQS 3. Therefore, CQS 3 is the proposed mapping.
- **B.** This rating category is regarded as vulnerable, as it reflects minimal capacity for timely payment of financial commitments, plus heightened vulnerability to near term adverse changes in financial and economic conditions. It is internally mapped to long-term categories BB+ to B-, which are mapped to CQS 4 and 5. Since the risk weights assigned to CQS 4 to 6 are equal to 150% according to Article 131 CRR, the mapping proposed for the B rating category is CQS 4.
- **C.** This rating category reflects the fact that default is a real possibility. It is internally mapped to long-term categories CCC to C, which are all 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 C rating category is CQS 4.
- **RD/D.** A short-term obligation rated RD or D indicates default (RD indicates an entity that has defaulted on one or more of its financial commitments, although it continues to meet other financial obligations; D indicates a broad-based default event for an entity, or the default of a short-term obligation). It is internally mapped to long-term categories D and RD, which are 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 RD/D rating category is CQS 4.

6. Mapping of other Fitch credit rating scales

32. As mentioned in Section 3, Fitch produces a number of additional credit ratings that are assigned to different credit rating scales.

33. Based on the methodology described in the previous section, the mapping of each rating scale has been derived from the relationship established by the JC with the relevant Long-term or Short-term ratings scale. More specifically, as each rating can be associated with one or a range of long-term (or short-term) rating categories, its CQS has been determined based on the most frequent CQS assigned to the related rating categories. In case of draw, the most conservative CQS is assigned. The results are shown in Figures 21 to 24 of Appendix 4:

- **Corporate finance obligations long-term rating scale** (see Figure 4 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer default ratings scale. Therefore the mapping of each rating category has been derived from its meaning and relative position and the mapping of the corresponding categories of the Long-term issuer rating scale. Notably, the only exception is rating category B, which is mapped to CQS 6 instead of CQS 5 as the rating category B in the Long-term issuer credit rating scale. The reason for this change is that category B may contain defaulted issuers, which are equivalent to CQS 6. The result of the mapping of this scale is shown in Figure 21 of Appendix 4.
- **Long-term international IFS ratings scale** (see Figure 5 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer credit rating scale. Even though the definitions of the rating categories refer to insurance companies, the mapping was derived from the meaning and relative position of the rating categories and the mapping of the corresponding categories of the Long-term issuer rating scale. The result of the mapping of this scale is shown in Figure 22 of Appendix 4.
- **Derivative Counterparty ratings scale** (see Figure 6 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer default ratings scale. Therefore the mapping of each rating category has been derived from its meaning and relative position and the mapping of the corresponding categories of the Long-term issuer default rating scale. The result of the mapping of this scale is shown in Figure 23 of Appendix 4.
- **Short-term IFS ratings scale** (see Figure 9 in Appendix 1). The rating categories can be considered comparable to those of the Short-term ratings scale. Therefore the mapping of each rating category has been derived by the JC from its meaning and relative position and the mapping of the corresponding categories of the Short-term ratings scale. The result of the mapping of this scale is shown in Figure 24 of Appendix 4.

Appendix 1: Credit ratings and rating scales

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

SA exposure classes	Name of credit rating	Credit rating scale
Long-term ratings		
Central governments/ Central banks	Long-term issuer default ratings	Long-term rating scale
Regional and local governments and PSEs	Long-term issuer default ratings	Long-term credit ratings scale
Institutions	Long-term issuer default ratings	Long-term credit rating scale
	Long-term corporate finance obligation ratings	Corporate finance obligations - Long-term rating scale
	Derivative counterparty ratings	Derivative counterparty rating scale
Corporates	Long-term issuer default ratings	Long-term credit rating scale
	Long-term corporate finance obligation ratings	Corporate finance obligations - Long-term rating scale
	Long-term international insurer financial strength (IFS) ratings	Long-term international IFS rating scale
Covered bonds	Long-term corporate finance obligation ratings	Corporate finance obligations - Long-term rating scale

SA exposure classes	Name of credit rating	Credit rating scale
Short-term ratings		
Institutions	Short-term issuer ratings	Short-term rating scale
	Short-term obligation ratings	Short-term rating scale
Corporates	Short-term issuer ratings	Short-term rating scale
	Short-term obligation ratings	Short-term rating scale
	Short-term insurer financial strength ratings	Short-term rating scale

Source: Fitch

Figure 3: Long-term issuer default ratings scale

Credit assessment	Meaning of the credit assessment
AAA	Highest credit quality. 'AAA' ratings denote the lowest expectation of default risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.
AA	Very high credit quality. 'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
A	High credit quality. 'A' ratings denote expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.
BBB	Good credit quality. 'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.
BB	Speculative. 'BB' ratings indicate an elevated vulnerability to default risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial flexibility exists which supports the servicing of financial commitments.
B	Highly speculative. 'B' ratings indicate that material default risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is vulnerable to deterioration in the business and economic environment.
CCC	Substantial credit risk. Default is a real possibility.
CC	Very high levels of credit risk. Default of some kind appears probable.

C	Near default. A default or default-like process has begun, or the issuer is in standstill or for a closed funding vehicle, payment capacity is irrevocably impaired. Conditions that are indicative of a 'C' category rating for an issuer include: (a) the issuer has entered into a grace or cure period following non-payment of a material financial obligation; (b) the issuer has entered into a temporary negotiated waiver or standstill agreement following a payment default on a material financial obligation; (c) the formal announcement by the issuer or their agent of a distressed debt exchange; (d) a closed financing vehicle where payment capacity is irrevocably impaired such that it is not expected to pay interest and/or principal in full during the life of the transaction, but where no payment default is imminent
RD	Restricted default. 'RD' ratings indicate an issuer that in Fitch Ratings' opinion has experienced an uncured payment default on a bond, loan or other material financial obligation but which has not entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, and which has not otherwise ceased operating. See the definition of default for further information (Annex 2).
D	Default. 'D' ratings indicate an issuer that in Fitch Ratings' opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, or which has otherwise ceased business. See the definition of default for further information (Annex 2).

Source: Fitch

Figure 4: Corporate finance obligations - Long-term ratings scale

Credit assessment	Meaning of the credit assessment
AAA	Highest credit quality. 'AAA' ratings denote the lowest expectation of credit risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.
AA	Very high credit quality. 'AA' ratings denote expectations of very low credit risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
A	High credit quality. 'A' ratings denote expectations of low credit risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher
BBB	Good credit quality. 'BBB' ratings indicate that expectations of credit risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.
BB	Speculative. 'BB' ratings indicate an elevated vulnerability to credit risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial alternatives may be available to allow financial commitments to be met.
B	Highly speculative. 'B' ratings indicate that material credit risk is present.
CCC	Substantial credit risk. 'CCC' ratings indicate that substantial credit risk is present.
CC	Very high levels of credit risk. 'CC' ratings indicate very high levels of credit risk.
C	Exceptionally high levels of credit risk. 'C' indicates exceptionally high levels of credit risk.

Corporate finance defaulted obligations typically are not assigned 'RD' or 'D' ratings, but are instead rated in the 'CCC' to 'C' rating categories, depending upon their recovery prospects and other relevant characteristics. This approach better aligns obligations that have comparable overall expected loss but varying vulnerability to default and loss.

Source: Fitch

Figure 5: Long-term international IFS ratings scale

Credit assessment	Meaning of the credit assessment
AAA	Exceptionally strong. 'AAA' IFS Ratings denote the lowest expectation of ceased or interrupted payments. They are assigned only in the case of exceptionally strong capacity to meet policyholder and contract obligations. This capacity is highly unlikely to be adversely affected by foreseeable events.
AA	Very strong. 'AA' IFS Ratings denote a very low expectation of ceased or interrupted payments. They indicate very strong capacity to meet policyholder and contract obligations. This capacity is not significantly vulnerable to foreseeable events.
A	Strong. 'A' IFS Ratings denote a low expectation of ceased or interrupted payments. They indicate strong capacity to meet policyholder and contract obligations. This capacity may, nonetheless, be more vulnerable to changes in circumstances or in economic conditions than is the case for higher ratings.
BBB	Good. 'BBB' IFS Ratings indicate that there is currently a low expectation of ceased or interrupted payments. The capacity to meet policyholder and contract obligations on a timely basis is considered adequate, but adverse changes in circumstances and economic conditions are more likely to impact this capacity.
BB	Moderately weak. 'BB' IFS Ratings indicate that there is an elevated vulnerability to ceased or interrupted payments, particularly as the result of adverse economic or market changes over time. However, business or financial alternatives may be available to allow for policyholder and contract obligations to be met in a timely manner.
B	Weak. 'B' IFS Ratings indicate two possible conditions. If obligations are still being met on a timely basis, there is significant risk that ceased or interrupted payments could occur in the future, but a limited margin of safety remains. Capacity for continued timely payments is contingent upon a sustained, favourable business and economic environment, and favourable market conditions. Alternatively, a 'B' IFS Rating is assigned to obligations that have experienced ceased or interrupted payments, but with the potential for extremely high recoveries. Such obligations would possess a recovery assessment of 'RR1' (Outstanding).

CCC	Very weak. 'CCC' IFS Ratings indicate two possible conditions. If obligations are still being met on a timely basis, there is a real possibility that ceased or interrupted payments could occur in the future. Capacity for continued timely payments is solely reliant upon a sustained, favourable business and economic environment, and favourable market conditions. Alternatively, a 'CCC' IFS Rating is assigned to obligations that have experienced ceased or interrupted payments, and with the potential for average to superior recoveries. Such obligations would possess a recovery assessment of 'RR2' (Superior), 'RR3' (Good), and 'RR4' (Average).
CC	Extremely weak. 'CC' IFS Ratings indicate two possible conditions. If obligations are still being met on a timely basis, it is probable that ceased or interrupted payments will occur in the future. Alternatively, a 'CC' IFS Rating is assigned to obligations that have experienced ceased or interrupted payments, with the potential for average to below-average recoveries. Such obligations would possess a recovery assessment of 'RR4' (Average) or 'RR5' (Below Average).
C	Distressed. 'C' IFS Ratings indicate two possible conditions. If obligations are still being met on a timely basis, ceased or interrupted payments are imminent. Alternatively, a 'C' IFS Rating is assigned to obligations that have experienced ceased or interrupted payments, and with the potential for below average to poor recoveries. Such obligations would possess a recovery assessment of 'RR5' (Below Average) or 'RR6' (Poor).

Source: Fitch

Figure 6: Derivative Counterparty ratings scale¹²

Credit assessment	Meaning of the credit assessment
AAA dcr	Highest credit quality. 'AAA' ratings denote the lowest expectation of default risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.
AA dcr	Very high credit quality. 'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
A dcr	High credit quality. 'A' ratings denote expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.
BBB dcr	Good credit quality. 'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.
BB dcr	Speculative. 'BB' ratings indicate an elevated vulnerability to default risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial flexibility exists which supports the servicing of financial commitments.
B dcr	Highly speculative. 'B' ratings indicate that material default risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is vulnerable to deterioration in the business and economic environment.
CCC dcr	Substantial credit risk. Default is a real possibility.

¹² Please note that derivative counterparty ratings only address Fitch's opinion on a bank's relative vulnerability to default, due to an inability to pay on any derivative contract with third party, non government counterparties.

CC dcr	Very high levels of credit risk. Default of some kind appears probable.
C dcr	Exceptionally high levels of credit risk. Default is imminent or inevitable, or the issuer is in standstill. Conditions that are indicative of a 'C' category rating for an issuer include: (a) the issuer has entered into a grace or cure period following non-payment of a material financial obligation; (b) the issuer has entered into a temporary negotiated waiver or standstill agreement following a payment default on a material financial obligation; or (c) Fitch Ratings otherwise believes a condition of 'RD' or 'D' to be imminent or inevitable, including through the formal announcement of a distressed debt exchange.
RD dcr	Restricted default. 'RD' ratings indicate an issuer that in Fitch Ratings' opinion has experienced an uncured payment default on a bond, loan or other material financial obligation but which has not entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, and which has not otherwise ceased operating. See the definition of default for further information (Annex 2).
D dcr	Default. 'D' ratings indicate an issuer that in Fitch Ratings' opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, or which has otherwise ceased business. See the definition of default for further information (Annex 2).

Figure 7: Short-term ratings scale

Credit assessment	Meaning of the credit assessment
F1	Highest short-term credit quality. Indicates the strongest intrinsic capacity for timely payment of financial commitments; may have an added "+" to denote any exceptionally strong credit feature.
F2	Good short-term credit quality. Good intrinsic capacity for timely payment of financial commitments.
F3	Fair short-term credit quality. The intrinsic capacity for timely payment of financial commitments is adequate.
B	Speculative short-term credit quality. Minimal capacity for timely payment of financial commitments, plus heightened vulnerability to near term adverse changes in financial and economic conditions.
C	High short-term default risk. Default is a real possibility.
RD	Restricted default. Indicates an entity that has defaulted on one or more of its financial commitments, although it continues to meet other financial obligations. Typically applicable to entity ratings only.
D	Default. Indicates a broad-based default event for an entity, or the default of a short-term obligation.

Source: Fitch

Figure 8: Short-term IFS ratings scale

Credit assessment	Meaning of the credit assessment
F1	Insurers are viewed as having a strong capacity to meet their near-term obligations. When an insurer rated in this rating category is designated with a (+) sign, it is viewed as having a very strong capacity to meet near-term obligations.
F2	Insurers are viewed as having a good capacity to meet their near-term obligations.
F3	Insurers are viewed as having an adequate capacity to meet their near-term obligations.
B	Insurers are viewed as having a weak capacity to meet their near-term obligations.
C	Insurers are viewed as having a very weak capacity to meet their near-term obligations.

Source: Fitch

Figure 9: Internal relationship between Fitch's long-term and short-term ratings scales

Long-term issuer credit ratings scale	Short-term issuer credit ratings scale				
AAA	F1+				
AA+					
AA					
AA-					
A+	F1				
A					
A-					
BBB+					
BBB	F2				
BBB-					
BB+					
BB					
BB-	F3				
B+					
B					
B-					
CCC	B				
CC					
C					
RD/D					
				C	
				RD/D	

Source: Fitch

Appendix 2: Definition of default

Fitch's current definitions of default are as follows:

- **RD: Restricted Default.** RD ratings indicate an issuer in Fitch Ratings' opinion has experienced an uncured payment default or distressed debt exchange on a bond, loan or other material financial obligation but which has not entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, and which has not otherwise ceased operating. This would include:
 - a. the selective payment default on a specific class or currency of debt;
 - b. the uncured expiry of any applicable grace period, cure period or default forbearance period following a payment default on a bank loan, capital markets security or other material financial obligation;
 - c. the extension of multiple waivers or forbearance periods upon a payment default on one or more material financial obligations, either in series or in parallel; or
 - d. ordinary execution of a distressed debt exchange on one or more material financial obligations.
- **D: Default.** D ratings indicate an issuer in Fitch Ratings' opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, or which has otherwise ceased business.

Default ratings are not assigned prospectively to entities or their obligations; within this context, non-payment on an instrument that contains a deferral feature or grace period will generally not be considered a default until after the expiration of the deferral or grace period, unless a default is otherwise driven by bankruptcy or other similar circumstance, or by a distressed debt exchange.

In all cases, the assignment of a default rating reflects the agency's opinion as to the most appropriate rating category consistent with the rest of its universe of ratings, and may differ from the definition of default under the terms of an issuer's financial obligations or local commercial practice.

With respect to structured finance ratings, ratings in the CC category and below are considered by Fitch to be materially impaired. All such ratings are therefore also captured within CEREP default statistics in accordance with CEREP reporting requirements.

The effective definition of default has not changed but the rating RD was introduced after 01/01/2006. Recovery values were reflected in the D rating category before 01/01/2006. After this date recovery values are reflected in the individual ratings of securities, not the IDR. Defaulted

obligations in covered bond ratings prior to 10/05/2013 were not assigned RD or D ratings but were rated in the B to C rating categories.

Source: Fitch

Appendix 3: Default rates of each rating category

Figure 10: Number of rated items, with relevant weights¹³

Date	AAA	AA	A	BBB	BB	B	CCC-C
01/07/2001	65.5	218.0	529.5	430.5	115.5	63.0	15.5
01/01/2002	76.0	218.0	553.0	487.0	127.0	76.0	18.5
01/07/2002	76.5	227.0	582.5	546.0	116.5	113.0	14.5
01/01/2003	82.5	219.5	618.0	575.5	145.5	129.0	24.0
01/07/2003	91.5	218.5	617.5	628.5	150.5	140.5	39.0
01/01/2004	102.0	220.0	651.5	657.5	173.5	162.0	31.0
01/07/2004	111.0	233.5	666.5	701.0	186.0	173.5	35.0
01/01/2005	123.5	234.0	726.5	740.5	227.5	165.5	34.5
01/07/2005	120.0	252.0	755.0	742.0	302.0	147.5	36.5
01/01/2006	129.5	256.0	841.5	819.0	358.0	217.5	28.5
01/07/2006	150.5	294.5	836.5	876.0	354.5	257.5	27.0
01/01/2007	166.0	307.0	880.0	895.0	371.5	284.0	23.5
01/07/2007	152.5	321.5	857.5	931.0	375.0	302.5	25.0
01/01/2008	171.5	319.5	859.0	935.0	375.0	320.5	27.5
01/07/2008	141.0	314.0	853.5	948.5	377.0	314.5	30.0
01/01/2009	135.5	259.5	873.0	963.0	341.0	318.0	60.0
01/07/2009	119.0	215.0	799.5	942.5	370.5	301.5	58.5
01/01/2010	118.0	202.0	804.0	963.0	357.0	303.5	57.5
01/07/2010	88.5	189.5	805.5	982.5	350.0	316.5	38.0
01/01/2011	87.0	184.5	806.5	1027.0	371.5	308.5	36.5
01/07/2011	89.0	178.5	791.5	1031.0	403.5	342.5	35.5
01/01/2012	96.0	129.5	818.0	1060.5	416.0	331.5	45.5
01/07/2012	98.0	116.5	800.5	1,084.0	429.5	315.5	44.5
01/01/2013	99.5	111.5	793.5	1,124.5	431.5	327.0	51.0

Source: Joint Committee calculations based on CEREP data

¹³ Withdrawn ratings have been weighted by 50% as indicated in Article 4(3) of the ITS.

Figure 11: Number of defaulted rated items

Date	AAA	AA	A	BBB	BB	B	CCC-C
01/07/2001	0	0	1	2	6	2	0
01/01/2002	0	0	0	2	1	3	4
01/07/2002	0	0	0	1	1	3	3
01/01/2003	0	0	0	2	0	3	3
01/07/2003	0	0	0	1	0	4	2
01/01/2004	0	0	0	1	0	2	2
01/07/2004	0	0	0	1	1	2	2
01/01/2005	0	0	0	2	0	1	2
01/07/2005	0	0	0	2	1	3	4
01/01/2006	1	0	9	5	3	7	2
01/07/2006	1	0	8	9	21	24	8
01/01/2007	1	0	11	15	25	27	11
01/07/2007	1	3	8	18	24	38	11
01/01/2008	1	3	8	17	22	49	14
01/07/2008	1	0	10	12	27	45	18
01/01/2009	0	0	2	9	13	36	39
01/07/2009	0	0	0	5	4	16	22
01/01/2010	0	0	0	8	2	14	14
01/07/2010	0	0	0	8	5	16	12
01/01/2011	0	0	0	9	4	12	12
01/07/2011	0	0	0	5	6	23	14
01/01/2012	0	0	0	3	9	25	17
01/07/2012	0	0	0	0	13	31	22
01/01/2013	0	0	0	0	12	30	24

Source: Joint Committee calculations based on CEREP data

Figure 12: Short-run and long-run observed default rates

Date	A	BBB	BB	B	CCC-C
01/07/2001	0.2%	0.5%	5.2%	3.2%	0.0%
01/01/2002	0.0%	0.4%	0.8%	3.9%	21.6%
01/07/2002	0.0%	0.2%	0.9%	2.7%	20.7%
01/01/2003	0.0%	0.3%	0.0%	2.3%	12.5%
01/07/2003	0.0%	0.2%	0.0%	2.8%	5.1%
01/01/2004	0.0%	0.2%	0.0%	1.2%	6.5%
01/07/2004	0.0%	0.1%	0.5%	1.2%	5.7%
01/01/2005	0.0%	0.3%	0.0%	0.6%	5.8%
01/07/2005	0.0%	0.3%	0.3%	2.0%	11.0%
01/01/2006	1.1%	0.6%	0.8%	3.2%	7.0%
01/07/2006	1.0%	1.0%	5.9%	9.3%	29.6%
01/01/2007	1.3%	1.7%	6.7%	9.5%	46.8%
01/07/2007	0.9%	1.9%	6.4%	12.6%	44.0%
01/01/2008	0.9%	1.8%	5.9%	15.3%	50.9%
01/07/2008	1.2%	1.3%	7.2%	14.3%	60.0%
01/01/2009	0.2%	0.9%	3.8%	11.3%	65.0%
01/07/2009	0.0%	0.5%	1.1%	5.3%	37.6%
01/01/2010	0.0%	0.8%	0.6%	4.6%	24.3%
01/07/2010	0.0%	0.8%	1.4%	5.1%	31.6%
01/01/2011	0.0%	0.9%	1.1%	3.9%	32.9%
01/07/2011	0.0%	0.5%	1.5%	6.7%	39.4%
01/01/2012	0.0%	0.3%	2.2%	7.5%	37.4%
01/07/2012	0.0%	0.0%	3.0%	9.8%	49.4%
01/01/2013	0.0%	0.0%	2.8%	9.2%	47.1%
Weighted Average	0.3%	0.7%	2.8%	7.3%	31.3%

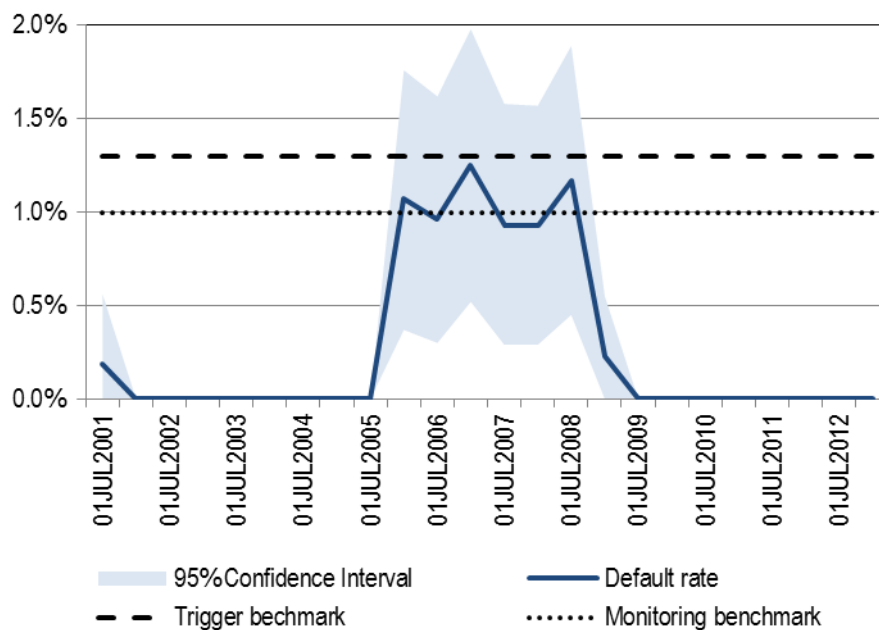
Source: Joint Committee calculations based on CEREP data

Figure 13: Short-run and long-run observed default rates, using the estimation for 2001-2006 used in the mapping report published in November 2015.

Date	A	BBB	BB	B	CCC-C
01/07/2001	0.2%	1.4%	4.8%	9.8%	0.0%
01/01/2002	0.0%	1.4%	4.8%	9.8%	21.6%
01/07/2002	0.0%	1.4%	4.8%	9.8%	20.7%
01/01/2003	0.0%	1.4%	4.8%	9.8%	12.5%
01/07/2003	0.0%	1.4%	4.8%	9.8%	5.1%
01/01/2004	0.0%	1.4%	4.8%	9.8%	6.5%
01/07/2004	0.0%	1.4%	4.8%	9.8%	5.7%
01/01/2005	0.0%	1.4%	4.8%	9.8%	5.8%
01/07/2005	0.0%	1.4%	4.8%	9.8%	11.0%
01/01/2006	1.1%	1.4%	4.8%	9.8%	7.0%
01/07/2006	1.0%	1.0%	5.9%	9.3%	29.6%
01/01/2007	1.3%	1.7%	6.7%	9.5%	46.8%
01/07/2007	0.9%	1.9%	6.4%	12.6%	44.0%
01/01/2008	0.9%	1.8%	5.9%	15.3%	50.9%
01/07/2008	1.2%	1.3%	7.2%	14.3%	60.0%
01/01/2009	0.2%	0.9%	3.8%	11.3%	65.0%
01/07/2009	0.0%	0.5%	1.1%	5.3%	37.6%
01/01/2010	0.0%	0.8%	0.6%	4.6%	24.3%
01/07/2010	0.0%	0.8%	1.4%	5.1%	31.6%
01/01/2011	0.0%	0.9%	1.1%	3.9%	32.9%
01/07/2011	0.0%	0.5%	1.5%	6.7%	39.4%
01/01/2012	0.0%	0.3%	2.2%	7.5%	37.4%
01/07/2012	0.0%	0.0%	3.0%	9.8%	49.4%
01/01/2013	0.0%	0.0%	2.8%	9.2%	47.1%
Weighted Average	0.3%	1.0%	3.8%	9.1%	31.3%

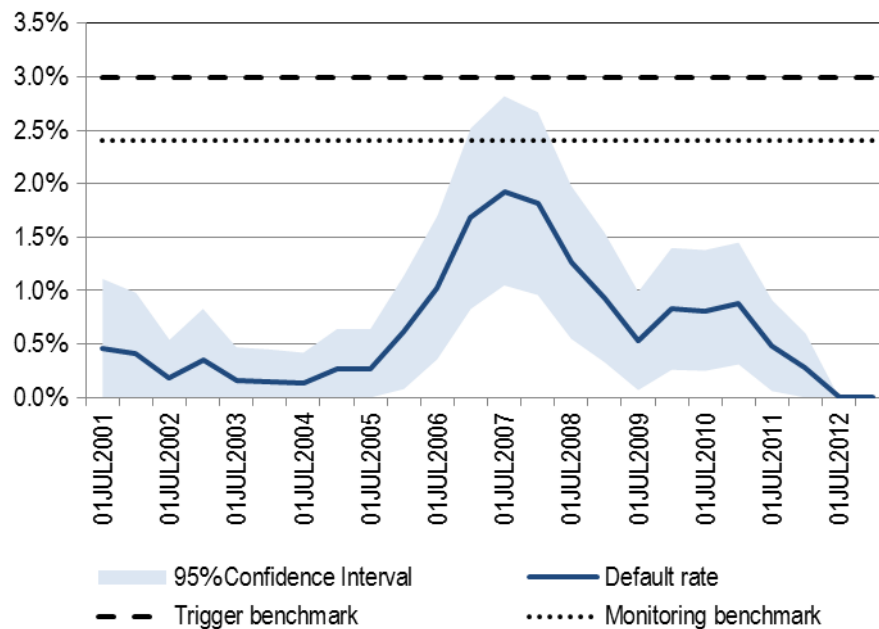
Source: Joint Committee calculations based on CEREP data

Figure 14: Short-run and long-run observed default rates of A rating category



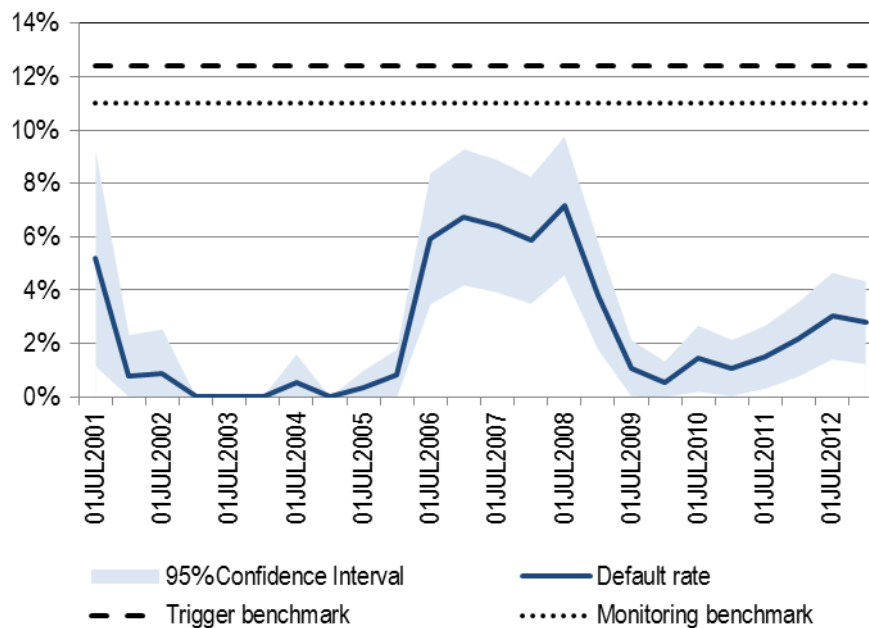
Source: Joint Committee calculations based on CERP data

Figure 15: Short-run and long-run observed default rates of BBB rating category



Source: Joint Committee calculations based on CERP data

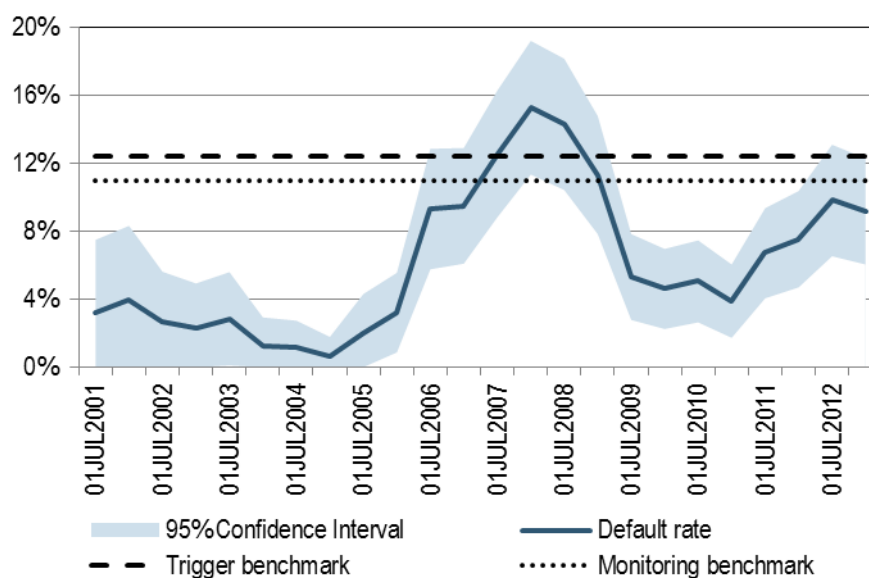
Figure 16: Short-run and long-run observed default rates of BB rating category



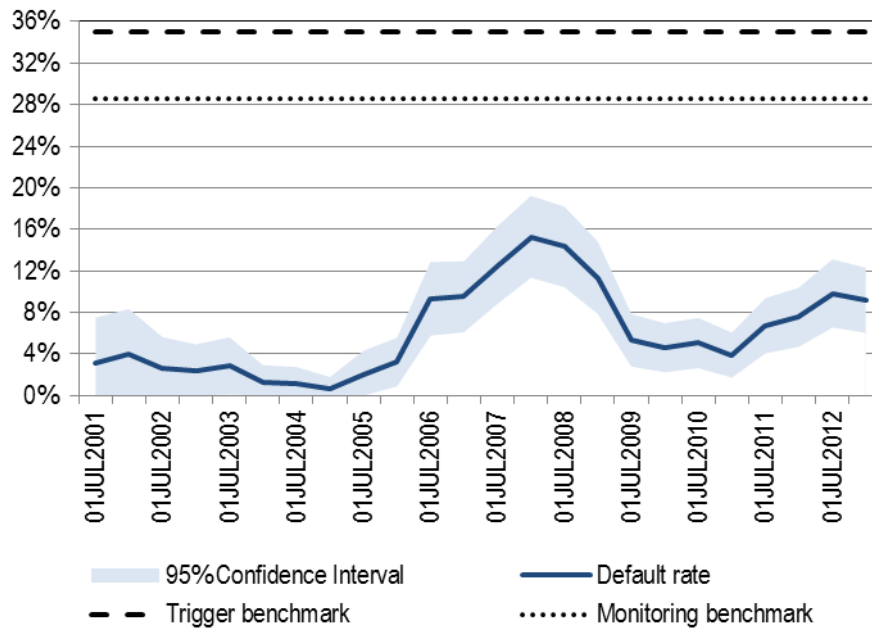
Source: Joint Committee calculations based on CERP data

Figure 17: Short-run and long-run observed default rates of B rating category

Panel A: Short-run benchmarks associated with CQS4



Panel B: Short-run benchmarks associated with CQS5



Source: Joint Committee calculations based on CERP data

Figure 18: Mapping proposal for rating categories with a non-sufficient number of credit ratings

2001-2005	AAA/AA
CQS of equivalent international rating category	CQS1
N. observed defaulted items	0
Minimum N. rated items	0
Observed N. rated items	2889
Mapping proposal	CQS1
2006-2010	AAA/AA
CQS of equivalent international rating category	CQS1
N. observed defaulted items	12
Minimum N. rated items	7010
Observed N. rated items	4051
Mapping proposal	CQS2
2011-2013	AAA/AA
CQS of equivalent international rating category	CQS1
N. observed defaulted items	0
Minimum N. rated items	0
Observed N. rated items	1190
Mapping proposal	CQS1

Source: Joint Committee calculations based on CERP data

Appendix 4: Mappings of each rating scale

Figure 19: Mapping of Fitch's Long-term issuer default ratings 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	1/2	n.a.	1	Quantitative evidence is not clear. The meaning, relative position and time horizon of the rating category are representative of the final CQS.
AA	1/2	n.a.	1	
A	2	2	2	The quantitative factors are representative of the final CQS.
BBB	3	3	3	The quantitative factors are representative of the final CQS.
BB	4	4	4	The quantitative factors are representative of the final CQS.
B	4	4	5	The quantitative factors suggest CQS 4. The meaning and relative position of the credit assessment are representative of the final CQS.
CCC	6	6	6	The quantitative factors are representative of the final CQS.
CC	6	6	6	The quantitative factors are representative of the final CQS.
C	6	6	6	The quantitative factors are representative of the final CQS.
RD	n.a.	n.a.	6	The meaning and relative position of the rating category is representative of the final CQS.
D	n.a.	n.a.	6	

Figure 20: Mapping of Fitch's Short-term rating scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (established by Fitch)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review based on qualitative factors (CQS)	Main reason for the mapping
F1+	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.
F1	A+/A-	2	2	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
F2	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.
F3	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 most frequent step 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 most frequent step associated with the corresponding long-term credit rating category. The risk weights assigned to CQS 4 to 6 are all 150%, therefore CQS 4.
RD/D	RD/D	6	4	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category. The risk weights assigned to CQS 4 to 6 are all 150%, therefore CQS 4.

Figure 21: Mapping of Fitch's Corporate finance obligations - Long-term ratings scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review based on qualitative factors (CQS)	Main reason for the mapping
AAA	AAA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
AA	AA	1	1	
A	A	2	2	
BBB	BBB	3	3	
BB	BB	4	4	
B	B – RD/D	5 - 6	6	
CCC	CCC – RD/D	6	6	
CC	CC – RD/D	6	6	
C	C – RD/D	6	6	

Figure 22: Mapping of Fitch's Long-term international IFS ratings scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
AAA	AAA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
AA	AA	1	1	
A	A	2	2	
BBB	BBB	3	3	
BB	BB	4	4	
B	B	5	5	
CCC	CCC	6	6	
CC	CC	6	6	
C	C	6	6	

Figure 23: Mapping of Fitch's Derivative counterparty ratings scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review based on qualitative factors (CQS)	Main reason for the mapping
AAA dcr	AAA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
AA dcr	AA	1	1	
A dcr	A	2	2	
BBB dcr	BBB	3	3	
BB dcr	BB	4	4	
B dcr	B	5	5	
CCC dcr	CCC	6	6	
CC dcr	CC	6	6	
C dcr	C	6	6	

Figure 24: Mapping of Fitch's Short-term IFS ratings scale

Credit assessment	Corresponding Short-term ratings scale assessment (assessed by JC)	Range of CQS of corresponding Short-term ratings scale assessment	Final review based on qualitative factors (CQS)	Main reason for the mapping
F1+	F1+	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding short-term rating category.
F1	F1	2	2	
F2	F2	3	3	
F3	F3	3	3	
B	B	4	4	
C	C	4	4	