MOODY'S
INVESTORS SERVICE

CROSS-SECTOR
RATING METHODOLOGY

Mapping National Scale Ratings from Global Scale Ratings

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Summary

This rating methodology explains Moody's approach to mapping national scale ratings (NSRs) from our global scale ratings (GSRs). NSRs are relative measures of creditworthiness within a given country, generated via a country-specific mapping from the global scale. The methodology includes detailed guidelines for (1) the design of new maps and changes to existing maps and (2) the circumstances under which maps may be reviewed and amended.

The specific maps derived from this methodology that will be used in each of the individual countries in which Moody's assigns NSRs are not part of the methodology itself. The current maps for specific countries are listed in "National Scale Rating Maps"[1].

This report updates and replaces the methodology "Mapping Moody's National Scale Ratings to Global Scale Ratings", published June 2014[2]. Under this methodology, we set out principles for mapping using one of two alternative approaches, depending on the number of rated issuers in a given country. NSR maps are established based on those principles, and NSRs may be re-mapped when certain trigger points are reached, ensuring that NSRs will continue to provide enhanced credit differentiation relative to global scale ratings in the countries in which they are offered.

[1] For a link to this document, please see the Moody's Related Research section below.

[2] This update may not be effective for some jurisdictions pending receipt of regulatory approval. Recalibration of existing maps may be delayed in countries where the sovereign rating is under review – see the section of this report "Guidelines for initiating a revision of existing maps" below.

NSRs: Definition, purpose, and characteristics

NSRs reflect the same risk factors as GSRs. We typically assign NSRs in order to provide greater credit differentiation among credits than is offered by the global rating scale in countries where the country risk ceiling and/or sovereign rating are relatively low. In these countries, GSRs are clustered towards the bottom end of the rating scale and within few rating categories, because these credits' shared risks – particularly country risk – dominate their idiosyncratic risks. In such cases, domestic market investors can benefit from the added information provided by NSRs, which typically permit the use of the full range of 21 rating categories, from Aaa at the top to C at the bottom. NSRs may be assigned to any debt obligation offered within a given domestic capital market, whether or not denominated in the relevant local currency.

Moody's global rating scale is intended to be comparable across industries, markets, type of obligation, and geography: For instance, the risk of default and loss associated with a Ba1 GSR on bonds issued by an industrial company in Korea is intended to be directly comparable to that of a Ba1 rating on the deposit obligations of a bank in Lebanon.

In contrast, national scales are not intended to rank credits across multiple countries. Rather, they provide a measure of relative creditworthiness within a single country. To distinguish NSRs from GSRs and from NSRs in other countries, we label them with a two letter suffix that forms an abbreviation of the country name (e.g., Aaa.mx for Mexico). Since the default likelihood of a Aaa.nn NSR may differ significantly from that associated with a global Aaa, or even from a Aaa.nn on another national scale, NSRs should not be used for cross country comparisons. A Aaa.nn rating simply represents the lowest range of credit risk in that particular country.

Some of the concepts that investors may associate with global scale ratings are not applicable to NSRs. There is no such thing as an "investment-grade" or "speculative-grade" NSR. A Baa3.nn NSR is simply one notch higher than a Ba1.nn NSR. In some countries, such as Argentina, even Aaa.nn NSRs correspond to deeply speculative-grade credit GSRs with high credit risk. Definitions of our NSRs are provided in Appendix 1.

NSRs have no inherent absolute meaning in terms of default risk or expected loss; they are ordinal rankings of creditworthiness relative to other domestic issuers[3] within a given country. A historical probability of default and/or expected loss consistent with a given NSR can be inferred from the GSR to which it maps back at that particular point in time. However, both the probability of default and the expected loss of an NSR may change if and when a country's national scale is remapped. To enhance transparency of the meaning of NSRs and to minimize the chances they will be misinterpreted, when we publish an issuer's NSR, we will always publish that issuer's corresponding GSR as well. In addition, we will provide a reference and/or link to historical probability of default data associated with GSRs in all public announcements of rating actions affecting an NSR.

Owing to certain characteristics of national scale maps, NSRs are subject to more frequent and much larger movements than GSRs. The higher granularity of national scales means that changes in credit quality that are not sufficient to cause a change in the GSR may merit a change on the national scale. Similarly, the magnitude of change in an NSR could be considerably greater than for the corresponding global rating, particularly on those scales that offer higher degrees of enhanced differentiation, where a one notch change in an issuer's GSR could result in up to a four notch change in its NSR. Finally, an NSR may change because of a map revision, even if the issuer's creditworthiness has not changed.

[3] For clarity, "domestic issuers" as used in this context represents the ratable universe of potential issuers within a given country.

Fundamental principles guiding the design of NSR maps

Three overarching principles relating to the meaning and purpose of NSRs are set forth below. These principles inform a rule set governing how NSR maps should be designed and under what circumstances they should be revised:

» NSRs are generated by mapping from GSRs using country-specific maps. NSRs reflect the same risks as their corresponding GSRs, which are assigned using Moody's sector and asset-class specific methodologies. The difference between an NSR and its corresponding GSR does not indicate a difference in credit risk, but rather in the unit of measurement used along certain portions of the scale. Similar NSRs in different countries may indicate very different levels of risk, as reflected in the different global scale ratings to which each corresponds, while issuers in different countries with the same GSR may have very different NSRs. Moreover, the same NSR in a particular country (e.g. Aa2.nn) will not necessarily have the same meaning over time, because that country's NSR maps may change, thereby changing the correspondence between GSRs and NSRs.

» NSRs are intended to provide greater credit differentiation than is available on the global scale. The application of the global scale can create ratings compression among domestic issuers in countries with low country ceilings and/or sovereign ratings. Through the use of a country-specific scale, however, the entire scale from Aaa.nn down can be used to differentiate creditworthiness. This typically enables the strongest credits in a given country to achieve the highest rating (Aaa.nn) on its national scale, regardless of how they compare to credits globally. Issuers and transactions with GSRs at or above the sovereign rating generally fall within this category, though there may be circumstances in which credits rated at the same level as the sovereign (or possibly even above it) do not qualify for Aaa.nn NSRs.[4] Except for Aaa.nn NSRs, no NSR category corresponds to more than one GSR category[5].

» NSRs are relative rankings. As a result, NSRs may be revised due to changes in the relative creditworthiness of national peers, as well as changes in their endogenous creditworthiness. When changes in the relative creditworthiness of domestic issuers are accompanied by shifts in the distribution of their GSRs, mapping functions that translate GSRs to NSRs may need to be redesigned to ensure opportunities for differentiation remain adequate. Nevertheless, this need must be balanced against the aim of maintaining the stability of maps, in order to limit the volatility of the NSRs derived from them. [6] Whenever practicable, revisions of "modified" maps (see description below) will be limited to those portions of the maps necessary to ensure the maps continue to provide adequate opportunity for differentiation.

4 As on the global scale, there is no upper bound to Aaa on national scales. Consequently, the Aaa category often includes a wider range of credit quality than other NSRs; some Aaa.nn NSRs – in particular those benefiting from foreign ownership – may be stronger, or more comfortably positioned at the Aaa.nn rating level than others. This may be reflected in higher global scale ratings, potentially by multiple notches. Nevertheless, within the context of the domestic rated universe, we believe it is more important to distinguish these Aaa.nn credits as a group from those of inferior quality than from one another.

5 As used in this document, the terms NSR category and GSR category refer to one of the 21 alpha-numeric rating categories (e.g. Aa2, Baa3, B1).

6 A purely relative national scale rating system would inherently be highly unstable, as any time one rating was upgraded another would have to be downgraded. Consequently, there is no requirement that NSRs be mapped to GSRs in direct proportion to the percentage of fundamental issuers to which those GSRs are assigned. Furthermore, there is no specific target of assigning each of the possible NSRs corresponding to a particular GSR to a specific percentage of issuers. Thus, not every point on the NSR scale will necessarily be utilized in every country. See the section below, Assigning and revising NSRs and NSR outlooks.

Guidelines for designing maps

We use two approaches for map design: The first approach is to select from a set of "standard" maps (Appendix 2) for countries in which we have relatively few (<60) fundamental issuers (defined as domestically-domiciled issuers with monitored GSRs, excluding structured finance transactions; issuers whose ratings reflect credit substitution from foreign entities rated above the sovereign or credit substitution from another domestic fundamental rated issuer[7], branches of foreign banks rated above the sovereign; and the sovereign itself). There is one standard map for each "anchor point", which is the lowest GSR that would map to a Aaa.nn NSR in any given country, ranging from Aa1 to B1. In such cases, the standard map design anticipates the potential range and distribution of ratings that might be assigned in the future. In other words, in the absence of a more developed rated universe, the map design seeks to address the ratable universe.

The second approach is to use "modified" maps for countries where Moody's has assigned 60 or more fundamental ratings.[8] In these countries, there are already enough rated issuers to allow us to adjust the standard map to fit the distribution of the existing universe of ratings and thereby ensure adequate opportunity for differentiation where ratings are most highly concentrated. In these cases, the rated universe is large enough to provide a reasonable proxy for the shape of the ratable universe.[9] As a consequence of this rule, countries with the same sovereign ratings may have different NSR maps.

In both cases, the first step in map design is to determine the anchor point GSR. When a map is first established or subsequently modified, the sovereign local currency GSR will determine the anchor point, subject to certain exceptions applicable under the modified approach as detailed in the table below. Specifically, the anchor point may be higher than the sovereign rating if a relatively large percentage of fundamental issuers are rated above the sovereign; it may also be below the sovereign, but only if a very small percentage of fundamental issuers is rated at or above the level of the sovereign. However, under no circumstances can any GSR below B1 map to Aaa.nn. Consequently, the anchor point will be B1 whenever the sovereign is rated B1 or below.[10]

The design of the rest of the map, from Aa1.nn down, then follows. Lower anchor points cause an increasing number of GSR categories to map to two or more points on the national scale. In other words, as GSRs within a country become more compressed into the lower rating categories, maps with lower anchor points provide progressively more opportunities for differentiation relative to GSRs throughout the rating scale. Under the modified approach, those GSRs that are assigned to particularly high percentages of the total number of fundamental issuers and that consequently would benefit most from greater opportunities for differentiation map to multiple options on the national scale, based upon certain thresholds detailed in the table below. However, because modified map design also seeks to enhance ratings stability, in certain

7 For further clarity on the avoidance of double counting, we also exclude trusts and special purpose vehicles (SPVs) that are rated based on their holdings of financial obligations/receivables of a fundamental issuer, and trusts and SPVs that have a subordinated interest in assets/cash flows where another rated trust/SPV has the senior interest in the same assets/cash flows. We do not, however, exclude project finance issuers whose income stream is based on a contract to provide goods or services to another rated fundamental issuer.

8 Note that we will not change the map design simply because the number of fundamental issuers reaches or falls below 60. We will continue to use standard maps after countries first reach the 60 rating threshold until specific triggers, outlined in "Guidelines for initiating a revision of existing maps: Modified Approach", are breached. Until 1) the sovereign rating changes, 2) fewer than 5% of fundamental issuers are rated at or above the anchor point if the anchor point is above the sovereign, or 3) more than 10% of fundamental issuers are rated above the anchor point if the anchor point is below the sovereign, we will also continue to use modified maps in countries which previously had 60 or more ratings but now have fewer.

9 In countries with 60 or fewer rated fundamental issuers, it is not practical to tailor a map to a limited rating distribution that bears a high risk of sudden and significant change. The added differentiation of modified maps would also be of limited benefit in most countries with so few ratings.

10 We believe the B1 map provides more than sufficient ability to differentiate and rank order credits in countries where the anchor point would otherwise be lower, even though the top of the national rating scale might be unavailable to even the highest rated domestic issuers. The very high rate of default among domestic issuers during sovereign crises means that maps with lower anchor points point (where the full complement of 21 NSRs would remain available) would give an inflated sense of credit differentiation in countries with an elevated risk of such a crisis. For instance, a shutdown of the banking/payment system within a country could put even the highest-rated credits at risk of temporary default.

circumstances, a GSR category that is assigned to a relatively small share of fundamental issuers may map to two NSR categories, while another GSR category that is assigned to a somewhat larger share (but still below the threshold) may map to just one NSR category.

The following table outlines both approaches. Once the anchor point is established, the standard approach is very straightforward – we use the corresponding map in Appendix 2. For the modified approach, criteria for selection of the anchor point and for the design of the map are based on the criteria detailed below in the right-hand column.

	Standard Approach	Modified Approach
	Countries where Moody's has <60 fundamental ratings outstanding	Countries where Moody's has 60 or more fundamental ratings outstanding
Setting the anchor point	The anchor point will be the sovereign local currency GSR, subject to a floor of B1.	The anchor point will generally be set at the sovereign local currency GSR. However, if more than 10% of fundamental issuers are rated above the sovereign on the global scale, the anchor point will be set at the 90th percentile rating. Alternatively, if fewer than 5% of fundamental issuers are rated at or above the sovereign on the global scale, the anchor point will be set at the 95th percentile rating. In no case, however, will the anchor point be below B1.
Aaa.nn to Caa3.nn	Standard maps (see Appendix 2)	When redesigning existing maps, the current map will be modified as necessary to satisfy the differentiation parameters a-c below and to accommodate any needed change in the anchor point, while seeking to preserve ratings stability by minimizing expected NSR changes caused by the map re-design[11]. a) Each GSR, including the anchor point, assigned to 15% or more of the total number of fundamental issuers will map to at least two NSRs.[12] b) Each GSR, including the anchor point, assigned to 30% or more of fundamental issuers will map to at least three NSRs. [12] c) No GSR assigned to fewer than 15% of the total number of fundamental issuers will map to three or more NSRs when another GSR below the anchor point (excluding Ca and C) that represents a larger percentage of total fundamental issuers maps to only one NSR. » For entirely new modified maps, we seek to optimize opportunities for differentiation by maximizing the correlation between the number of fundamental issuer GSRs in a GSR category and the number of available NSR categories corresponding to that GSR category, subject to first satisfying the differentiation parameters a-c above and to minimizing, across the map, the maximum ratio of the of fundamental issuer GSRs in any GSR category divided by the number of available NSR categories.[13]
Features Common to Both Approaches	» Each GSR category maps to at least one NSR category. » Each NSR category except for Aaa.nn maps back to a unique GSR category. » No single GSR category maps to more than three NSR categories, except that, for maps with a B1 anchor point, a single GSR category may in some cases map to four NSR categories. » Ca and C GSR categories map exclusively to Ca and C NSR categories, respectively, across all maps.	

11 Expected NSR changes are based on certain assumptions about the post-remapping distribution of NSRs within available categories.

12 If the anchor point GSR is above the sovereign local currency rating and at or above the level of the local currency country ceiling, it maps to just one NSR category. When the anchor point GSR is above the sovereign local currency rating but below the local currency ceiling, it maps to: one NSR category if fewer than 15% of fundamental issuer GSRs are at or above the anchor point; two NSR categories 15% - 30% of fundamental issuer GSRs are at or above the anchor point; and three NSR categories if 30% or more of fundamental issuer GSRs are at or above the anchor point.

13 For modified maps, in the relatively unlikely event that the design criteria either yield no unique solution or require more than 21 NSR categories, we would expect to make a proposal to modify the methodology.

Guidelines for initiating a revision of existing maps

NSR maps will be subject to revision from time to time in order to ensure that they continue to provide adequate credit differentiation. The specific circumstances and timing of map revisions depends on whether the standard or modified approach is used. In general, maps will be revised in conjunction with changes in the sovereign rating (subject to certain exceptions detailed below) as this can affect the range of GSRs achievable by domestic issuers. Modified approach maps may also be revised following significant shifts in the overall distribution of domestic issuers' GSRs, even if the sovereign has not changed. In some cases, NSRs may be placed under review pending a change to the map design[14].

After a sovereign rating change, remapping will generally occur as soon as practicable[15]. Additionally, modified maps may be reviewed from time to time to ensure they remain consistent with the rules outlined in this methodology, and any maps that are found to have breached the remapping triggers laid out in the table below may be revised. The remapping triggers are by design set higher than the initial map design criteria. This is to provide a cushion to maintain the stability of map designs, so that a map does not have to be redesigned multiple times in short succession because of relatively minor shifts in ratings distributions.

Consistent with the underlying NSR map design principles of providing local scale ratings differentiation while maintaining ratings stability, we may in certain circumstances delay implementation of remapping. For instance, when a sovereign rating is changed by one notch but remains under review, a delay may prevent a series of re-mappings within a short period of time[16]. Additionally, for modified maps, when a sufficiently large number of fundamental GSRs is under review such that the map design could be affected by the outcome of the reviews, remapping may be delayed until such reviews have been concluded.

The following table outlines the approaches for revising standard and modified maps.

14 During a period when NSRs are under review pending a change to the map design, new NSRs will be assigned based on relative positioning to existing NSRs of comparable issuers/transactions NSRs within the country (i.e. by comparison to NSRs of issuers/transactions with the same GSR where applicable, or based on issuers/transactions with similar GSRs), rather than by specific reference to the then-current map. In most cases, these newly assigned NSRs will also be placed under review.

15 Modified maps would typically take somewhat longer to revise, since one of the inputs to the map design is the distribution of domestic fundamental issuer GSRs, which may be affected by the sovereign rating change.

16 Even when the sovereign remains under review, a cumulative multi-notch rating movement in the sovereign rating since the last remapping would in most cases trigger a remapping.

	Standard Approach	Modified Approach
Setting the anchor point	» The anchor point, and consequently the rest of the map design, will typically be revised following a change in the sovereign local currency GSR.	The anchor point will typically be revised under the following circumstances: » If the anchor point is at the level of the sovereign local currency GSR and the sovereign rating changes » If and when fewer than 5% of fundamental issuers are rated on the global scale at or above the anchor point (but if the anchor point was previously at or below the sovereign rating, it will not be revised unless the sovereign has been downgraded or there are no issuers at or above the anchor point). » If and when more than 10% of fundamental issuers are rated above the anchor point on the global scale (but if the anchor point was previously at or above the sovereign rating, it will not be revised unless the sovereign has been upgraded). » Even if these conditions are not met, however, if the map is to be revised to provide greater differentiation below Aaa pursuant to the rules below, the anchor point will be revised at the same time.
Aaa.nn to Caa3.nn	» Because standard maps are being used, this portion of the maps does not change unless the anchor rating changes or until the number of rated fundamental issuers reaches 60, at which point the remapping triggers for modified maps will apply. Upon an identified breach of any of those triggers, the map may be redesigned using the modified approach.	In addition to a change in the anchor point, maps may also be revised from time to time to ensure they continue to offer adequate opportunity for rating differentiation below the Aaa level as the distribution of fundamental issuers' ratings changes.[17] Specifically, maps will typically be revised under the following circumstances: » If any GSR category, including the anchor point, that maps to only one NSR category comes to represent 20%[18] or more of the total number of fundamental issuers. » If any GSR category, including the anchor point, that maps to fewer than three NSR categories comes to represent 40% or more of the total number of fundamental issuers.

When revising a modified NSR map, whether because of a change in the anchor point or a shift in the distribution of GSRs, we seek to preserve, as much as possible, the country's existing distribution of NSRs by focusing changes on those portions of the map necessary to ensure it continues to offer adequate opportunities for differentiation. A key aim of a re-mapping following a sovereign rating change and ensuing changes in domestic issuers' GSRs is to minimize the volatility of NSRs that would otherwise result when there has been no change in domestic issuers' creditworthiness relative to one another. In the case of a sovereign downgrade, this would typically be accomplished by lowering the anchor point, which inherently provides more "uplift" to the map, so that certain GSRs will map to higher NSRs than was previously the case and the full national rating scale will remain available. Whether or not the corresponding GSRs have changed, however, a certain number of NSR changes may be unavoidable when maps are revised, and in some circumstances there may be a substantial number of such rating changes.

17 If the number of issuers falls below 60, the modified approach remapping triggers will no longer apply. The map will only be redesigned if and when the sovereign rating changes.

18 The percentage thresholds for remapping are set above those used in map designs in order to provide a cushion to maintain the stability of maps over time, so that a map does not have to be redesigned multiple times in short succession because of relatively minor shifts in ratings distributions.

Assigning and revising NSRs and NSR outlooks

Assigning NSRs when a GSR maps to more than one NSR

NSRs are assigned based on GSRs that have been determined using the methodologies for GSRs that are relevant to those issuers or securities. Because 21 NSRs must be mapped from a smaller number of GSRs, in many cases, multiple notches on the NSR scale may correspond to just one GSR. This is consistent with the intent of NSRs to provide greater differentiation. In cases where the GSR maps to more than one option on the NSR scale, the rating committee determining the NSR will decide whether the issuer is relatively strongly or weakly positioned within its GSR category, using the same methodology as was used to determine the GSR itself.

Note that although maps are designed to offer opportunities for differentiation by mapping GSRs to multiple NSRs, assigned NSRs will not necessarily be evenly distributed across the available alternatives. For various reasons, rating committees may sometimes determine that a disproportionate share of debts or issuers with the same GSR is either more strongly or more weakly positioned than the rest, or that it is not possible to differentiate amongst them; consequently, in certain cases, one or more of the available NSR alternatives may not be assigned to any debts or issuers at all.

The issuer's GSR outlook status – positive, stable, negative or on review – is among the considerations likely to influence the NSR selected. If the GSR outlook directly mirrors the outlook on the sovereign, however, it is unlikely to be a dispositive factor for determining the relative positioning of the NSR within the available options.

Assigning NSR outlooks

If Moody's has assigned an outlook to a GSR, we may assign an outlook to its corresponding NSR as well. If the GSR has a positive or negative outlook, the outlook on the NSR would typically be the same, except when the GSR outlook directly mirrors the sovereign and/or a mapping change is anticipated. If the GSR has a stable outlook, however, and the GSR maps to multiple options on the national scale, the rating committee may decide on a different outlook for the NSR.

Short-Term NSRs

Just as with short-term GSRs, short-term NSRs are assigned to obligations with an original maturity of 13 months or less. Short-term NSRs are assigned based on the long-term NSRs in a manner similar to that used to map short-term GSRs from long-term GSRs. We use a different nomenclature for our scale of national short-term ratings to accentuate its difference from the global scale. NSRs replace the four-category "prime" system used in the global scale with a four-category scale from NN-1 for the safest credits to NN-4 for the riskiest, where the letters change to indicate the country in which the obligor is located, e.g. MX-1 for Mexico. The definitions of Moody's short-term NSRs are provided in Appendix 1. Note that as with long-term NSRs, short-term NSRs are not directly comparable to their global scale equivalents, or to similar short-term NSRs in other countries. They are simply relative rankings of ability to repay short-term debt obligations within a given country.

Long-Term NSR	Short-Term NSR
Aaa.nn to A2.nn	NN-1
A3.nn to Baa1.nn	NN-2
Baa2.nn to Baa3.nn	NN-3
Ba1.nn to C.nn	NN-4

Moody's Related Research

The current maps for specific countries are listed in "National Scale Rating Maps", which can be found here.

National scale credit ratings and global scale ratings are determined by the use of sector and cross-sector rating methodologies, which can be found here.

For data summarizing the historical robustness and predictive power of credit ratings assigned using many of our credit rating methodologies, see link.

Please refer to Moody's Rating Symbols & Definitions, which is available here, for further information.

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Appendix 1: NSR definitions

National Scale Long-Term Rating Definitions

Moody's long-term National Scale Ratings (NSRs) are opinions of the relative creditworthiness of issuers and financial obligations within a particular country. NSRs are not designed to be compared among countries; rather, they address relative credit risk within a given country. Moody's assigns national scale ratings in certain local capital markets in which investors have found the global rating scale provides inadequate differentiation among credits or is inconsistent with a rating scale already in common use in the country.

In each specific country, the last two characters of the rating indicate the country in which the issuer is located (e.g., Aaa.br for Brazil). The rating definitions are as follows, with an ".nn" signifying a generic country modifier.

Aaa.nn

Issuers or issues rated Aaa.nn demonstrate the strongest creditworthiness relative to other domestic issuers[19].

Aa.nn

Issuers or issues rated Aa.nn demonstrate very strong creditworthiness relative to other domestic issuers.

A.nn

Issuers or issues rated A.nn present above-average creditworthiness relative to other domestic issuers.

Baa.nn

Issuers or issues rated Baa.nn represent average creditworthiness relative to other domestic issuers.

Ba.nn

Issuers or issues rated Ba.nn demonstrate below-average creditworthiness relative to other domestic issuers.

B.nn

Issuers or issues rated B.nn demonstrate weak creditworthiness relative to other domestic issuers.

Caa.nn

Issuers or issues rated Caa.nn demonstrate very weak creditworthiness relative to other domestic issuers.

Ca.nn

Issuers or issues rated Ca.nn demonstrate extremely weak creditworthiness relative to other domestic issuers.

C.nn

Issuers or issues rated C.nn demonstrate the weakest creditworthiness relative to other domestic issuers.

Note: We apply numerical modifiers 1, 2, and 3 in each generic rating classification from Aa to Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.

[19] For clarity, the term "domestic issuers" as used in this appendix represents the ratable universe of potential issuers within a given country.

National scale short-term rating definitions

Moody's short-term NSRs are opinions of the ability of issuers in a given country, relative to other domestic issuers, to repay debt obligations that have an original maturity of thirteen months or less. Short term NSRs in one country should not be compared with short-term NSRs in another country, or with Moody's global ratings.

There are four categories of short-term NSRs, generically denoted NN-1 to NN-4.

In each specific country, the two letters will change to indicate the country in which the issuer is located, i.e. BR-1 to BR-4 for Brazil. South Africa is an exception, using the symbols P-1.za, P-2.za, P-3.za and NP.za. "Issuers" as used below include not just currently rated issuers, but the "ratable universe" of all potential issuers of fixed-income securities within a given country.

NN-1

Issuers rated NN-1 have the strongest ability to repay short-term senior unsecured debt obligations relative to other domestic issuers[20].

NN-2

Issuers rated NN-2 have above-average ability to repay short-term senior unsecured debt obligations relative to other domestic issuers.

NN-3

Issuers rated NN-3 have an average ability to repay short-term senior unsecured debt obligations relative to other domestic issuers.

NN-4

Issuers rated NN-4 have below-average ability to repay short-term senior unsecured debt obligations relative to other domestic issuers.

[20] For clarity, the term "domestic issuers" as used in this appendix represents the ratable universe of potential issuers within a given country.

Appendix 2: Standard NSR Maps

Anchor Point Aa1

Global Scale Rating	National Scale Rating
Aaa	Aaa
Aa1	Aaa to Aa1
Aa2	Aa2
Aa3	Aa3
A1	A1
A2	A2
A3	A3
Baa1	Baa1
Baa2	Baa2
Baa3	Baa3
Ba1	Ba1
Ba2	Ba2
Ba3	Ba3
B1	B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point Aa2

Global Scale Rating	National Scale Rating
Aaa	Aaa
Aa1	Aaa
Aa2	Aaa to Aa1
Aa3	Aa2 to Aa3
A1	A1
A2	A2
A3	A3
Baa1	Baa1
Baa2	Baa2
Baa3	Baa3
Ba1	Ba1
Ba2	Ba2
Ba3	Ba3
B1	B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point Aa3

Global Scale Rating	National Scale Rating
Aaa	Aaa
Aa1	Aaa
Aa2	Aaa
Aa3	Aaa to Aa1
A1	Aa2 to Aa3
A2	A1 to A2
A3	A3
Baa1	Baa1
Baa2	Baa2
Baa3	Baa3
Ba1	Ba1
Ba2	Ba2
Ba3	Ba3
B1	B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point A1

Global Scale Rating	National Scale Rating
Aa3 and above	Aaa
A1	Aaa to Aa1
A2	Aa2 to Aa3
A3	A1 to A2
Baa1	A3 to Baa1
Baa2	Baa2
Baa3	Baa3
Ba1	Ba1
Ba2	Ba2
Ba3	Ba3
B1	B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point A2

Global Scale Rating	National Scale Rating
Aa3 and above	Aaa
A1	Aaa
A2	Aaa to Aa1
A3	Aa2 to Aa3
Baa1	A1 to A2
Baa2	A3 to Baa1
Baa3	Baa2 to Baa3
Ba1	Ba1
Ba2	Ba2
Ba3	Ba3
B1	B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point A3

Global Scale Rating	National Scale Rating
Aa3 and above	Aaa
A1	Aaa
A2	Aaa
A3	Aaa to Aa1
Baa1	Aa2 to Aa3
Baa2	A1 to A2
Baa3	A3 to Baa1
Ba1	Baa2 to Baa3
Ba2	Ba1 to Ba2
Ba3	Ba3
B1	B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point Baa1

Global Scale Rating	National Scale Rating
A3 and above	Aaa
Baa1	Aaa to Aa1
Baa2	Aa2 to Aa3
Baa3	A1 to A2
Ba1	A3 to Baa1
Ba2	Baa2 to Baa3
Ba3	Ba1 to Ba2
B1	Ba3 to B1
B2	B2
B3	B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point Baa2

Global Scale Rating	National Scale Rating
A3 and above	Aaa
Baa1	Aaa
Baa2	Aaa to Aa1
Baa3	Aa2 to Aa3
Ba1	A1 to A2
Ba2	A3 to Baa1
Ba3	Baa2 to Baa3
B1	Ba1 to Ba2
B2	Ba3 to B1
B3	B2 to B3
Caa1	Caa1
Caa2	Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point Baa3

Global Scale Rating	National Scale Rating
A3 and above	Aaa
Baa1	Aaa
Baa2	Aaa
Baa3	Aaa to Aa1
Ba1	Aa2 to Aa3
Ba2	A1 to A2
Ba3	A3 to Baa1
B1	Baa2 to Baa3
B2	Ba1 to Ba2
B3	Ba3 to B1
Caa1	B2 to B3
Caa2	Caa1 to Caa2
Caa3	Caa3
Ca	Ca
C	C

Anchor Point Ba1

Global Scale Rating	National Scale Rating
Baa3 and above	Aaa
Ba1	Aaa to Aa2
Ba2	Aa3 to A1
Ba3	A2 to A3
B1	Baa1 to Baa2
B2	Baa3 to Ba1
B3	Ba2 to Ba3
Caa1	B1 to B2
Caa2	B3 to Caa1
Caa3	Caa2 to Caa3
Ca	Ca
C	C

Anchor Point Ba2

Global Scale Rating	National Scale Rating
Baa3 and above	Aaa
Ba1	Aaa
Ba2	Aaa to Aa2
Ba3	Aa3 to A2
B1	A3 to Baa2
B2	Baa3 to Ba1
B3	Ba2 to Ba3
Caa1	B1 to B2
Caa2	B3 to Caa1
Caa3	Caa2 to Caa3
Ca	Ca
C	C

Anchor Point Ba3

Global Scale Rating	National Scale Rating
Baa3 and above	Aaa
Ba1	Aaa
Ba2	Aaa
Ba3	Aaa to Aa2
B1	Aa3 to A2
B2	A3 to Baa2
B3	Baa3 to Ba2
Caa1	Ba3 to B2
Caa2	B3 to Caa1
Caa3	Caa2 to Caa3
Ca	Ca
C	C

Anchor Point B1

Global Scale Rating	National Scale Rating
Ba3 and above	Aaa
B1	Aaa to Aa2
B2	Aa3 to A2
B3	A3 to Baa2
Caa1	Baa3 to Ba3
Caa2	B1 to B3
Caa3	Caa1 to Caa3
Ca	Ca
C	C

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