



General Methodological Criteria

Mexico

September, 2015

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Chapter I

HR Ratings General Methodological Criteria

Our credit ratings need to be understood as rankings of the relative creditworthiness of different entities or credits. Creditworthiness takes into consideration both the ability and willingness to meet debt obligations in the manner prescribed in the relevant documentation. Default refers to the non-compliance of previously agreed obligations. Later on this document, we present the type of defaults that we recognize and the evaluation that is made over the impact that the default will have in certain obligations over the entity's rating.

As our ratings measure relative creditworthiness they do not necessarily reflect any specific statistical probability of default. In order to make more valid rankings of creditworthiness our different methodologies will apply stress case scenarios to complement our base case analysis.

Ratings given on a local scale basis generally refer to the overall creditworthiness of the obligor and imply a rating on a local (or national) currency basis, unless otherwise specified. In those cases in which the obligor has a significant amount of debt that is not consistent with its cash flow stream, with resulting currency mismatches, the stress case scenario will explicitly incorporate significant moves in the relevant currency. The most obvious case would be an entity with local currency based revenues and foreign currency costs, or with substantial foreign currency debt exposure. A similar stress analysis would be applied in the case of an entity with inflation adjusted debt should HR Ratings believe that the cash flow might not be able to keep pace with high levels of inflation.

The major difference between local and global ratings is the incorporation within the latter of transfer and convertibility risk. In the case of local currency global ratings we additionally take into consideration currency debasement risk via inflation as a way to reduce the burdensomeness of historical debt. This concept attempts to recognize the danger for creditors of the often unlimited ability of a sovereign formally to meet local currency debt obligations via Central Bank monetary



expansion and financing. Generally, global ratings will explicitly specify the currency (local or foreign) to which they apply.

In the determination of our non-sovereign local currency global ratings, a key benchmark will be the difference between the AAA rating that is generally assigned to the local scale, local currency sovereign rating and the global scale, local currency sovereign rating. This sovereign global ratings discount, measured in terms of notches, will generally be applied to a non-sovereign local scale rating in order to determine its local currency global rating, plus/minus extraordinary factors, if any, considered by the Analysis Committee.

This sovereign global rating discount will represent the total impact of convertibility, transfer and currency debasement risk in the determination of the local currency, global sovereign rating. In the case of foreign currency, global ratings, debasement risk generally will be irrelevant. Additionally, relationship between the sovereign and non-sovereign ratings is much less pre-determined and will be a function of the analysis of each individual case. With respect to non-sovereign global scale, foreign currency ratings, HR Ratings will incorporate the convertibility and transfer risk implied in the sovereign rating in the jurisdiction in which foreign exchange revenues are received and foreign currency payments are made.

The Analysis Committee has the faculty of deciding if an entity or issuance will enjoy the same level of credit risk as the sovereign risk of the entity where it resides, or if applicable, determine to what degree such entity or issuance counts with the support of the federal government, currently and in the future, to be able to respond as a guarantor. The assignment of sovereign risk to an entity or issue is justifiable when the entity or issue: 1) provides substantial financial support to the Federal or Central Government, consequently default will immediately deprive the public sector of important revenue flows, 2) in the case of default would result in substantial harm to the economy and thus place significant burdens on the government such that it will feel obliged to support the entity or issue so as to avoid non-payment, 3) has significant political influence such that authorities will feel compelled to intervene in order to prevent default. In those cases in which an entity or issue is deemed to enjoy sovereign risk status, the rating process, as reflected in the report, will consist of: 1) a discussion as to why the entity or issue merits sovereign risk status, 2) a discussion of relevant



macroeconomic and business variables, including full financial projections. Financial projections will include a complete stress case analysis.



Legal Opinion – February 2013 Update

The Legal Opinion is primarily designed to insure that the terms of the operation as specified in the documentation and incorporated into the financial analysis leading to the credit rating cannot be successfully challenged in the courts or by an administrative body. Generally, this will be a binary decision, either sufficient or insufficient. In the event of a determination of insufficiency, the credit rating will receive no benefit from the elements of the structure deemed to be insufficient.

In contrast, the Legal Opinion is not designed to evaluate possible weaknesses in the structure of an operation or, more specifically, factors that might affect the viability of the income flow that is designed to service its debt. Weaknesses in this non-legal context refer not to the projected income flow, per se, as this is part of the financial analysis, but rather to elements that would put into jeopardy the reception of the entirety of the income flow itself. Given the diverse and highly subjective nature of these potential weaknesses, the Analysis Committee will necessarily evaluate their appearance on an ad hoc basis. This could include an assessment of the probability of a loss in income, directly related to the structural weakness and not, for example, to macroeconomic factors. The resulting smaller income flow, therefore, will be part of the financial analysis and in this fashion affect the final credit rating. Or, alternatively, the Analysis Committee can decide that the financial analysis not incorporate the possible effect of these structural weaknesses but rather deduct from the rating determined purely on the basis of the financial analysis an appropriate number of notches in order to reflect the perceived risk that the weakness entails.

HR Ratings reserves the right to obtain a second legal opinion, from a separate attorney, should it be given one that has been issued by counsel contracted for this purpose by those involved in the structuring of the operation for which this Agency is to provide a credit rating.



Treatment of Bank Credits issued as support for Working Capital Needs or Productive Chains. – February 2013 Update

HR Ratings considers that bank credits issued to finance an entity's working capital needs represent bank debt, independently of how they might be registered by the entity on its financial statements; for example, as accounts payable. Therefore, non-payment represents a credit default. Additionally, default, or non-payment, arises at the moment in which this occurs even if the creditor bank has not yet classified the credit as being non-performing.

Global Scale to Local Scale Equivalency – April 2014 Update

On occasions HR Ratings finds it necessary to convert to its Mexican local scale a global scale rating for a foreign entity that has been issued by a different rating agency recognized by the appropriate authorities. The objective is to establish the credit strength for an entity that operates within Mexico by using the global scale rating mentioned above. The conversion will also consider the global scale rating assigned to the “relevant sovereign” of the aforementioned foreign entity. Both ratings must be assigned by the same agency.

The process to determine the rating in terms of HR Ratings local Mexican scale of these entities is as follows:

1. Assign an HR Ratings global scale shadow rating to the previously defined “relevant sovereign”.
2. Determine the difference in number of notches between the assigned global scale shadow rating, mentioned in point 1, and the Mexican sovereign global scale rating; both assigned by HR Ratings.
3. Determine the difference in number of notches between the global scale rating of the foreign entity and the global scale rating of its “relevant sovereign” as assigned by the same recognized agency.



4. Assign to the entity operating within Mexican territory an HR Ratings local Mexican scale rating by incorporating the HR Ratings Mexican sovereign local scale rating (“HR AAA”) and the results obtained in steps 2 and 3.

Treatment for lack of transparency in the reported information or low level of corporate governance - February 2015 Update

There are times in which the information reported by the issuers or entities suffers, according to HR Ratings, from a lack of transparency in terms of presentation and/or consistency. This can include examples where a specific entity does not generate the information according to international accounting standards, or where due to the low level of detail in terms of the presented information, the analysis made by HR Ratings according to its methodologies is affected.

Because of this, HR Ratings can determine, through its Analysis Committee, an additional and direct adjustment factor to the rating assigned to an issuer or entity, when the issuer or entity presents a lack of transparency in terms of the reported information. The adjustment factor must take into account the following considerations in order to determine the impact of such factor in the assigned rating:

- 1.- Severity: The Analysis Committee will evaluate the severity of the lack of transparency in terms of the reported information, considering the severity as proportional to the impact that the lack of transparency has in the analysis made by HR Ratings.
- 2.- Frequency: The Analysis Committee will evaluate the frequency in which the lack of transparency is presented in the information, considering an increased frequency as more serious.
- 3.- Willingness and ability to react: The Analysis Committee will also evaluate the willingness and ability from the issuer or entity to react over the lack of transparency, incorporating the adjustments already made by the issuer and the adjustments that will be made in the future.

On the other hand, there are occasions where the issuer or entity shows a low level of development in terms of adequate practices of corporate governance, including the lack of internal



committees or corporate structures that allow objectivity mainly in terms of internal controls and audits. For this situations, the Analysis Committee will also be able to determine adjustments over the assigned rating of an entity, considering the severity and the willingness and ability to react to determine the impact of the adjustment.

The Analysis Committee will have the capacity to evaluate the factors mentioned above and determine the necessary adjustments to be made to the rating of an entity. It is important to mention that such adjustments will be in addition to the impact that the lack of transparency and the weaknesses in terms of corporate governance can have according to a specific methodology.

Default Criteria –September 2015 Update

Default: By level and degree of compliance

In the assignment of default ratings, HR Ratings' methodologies allow for the distinction between the default of specific debt instruments, on the one hand, and of the entity to which the payment obligation corresponds, on the other¹. Additionally, HR Ratings does not limit the default rating to the default act per se, but extends it to the analysis of the situations in which the payments do not comply in a timely fashion with the originally agreed conditions.

In the specific context of debt instruments, HR Ratings defines "default" (HR D) as the failure to comply with obligatory interest and principal payments, according to the originally agreed upon terms. In the context of the entity responsible for payment compliance, the determination of the credit rating depends on the degree of fulfillment with the totality of its payment obligations. When the default of an entity extends to the "predominant" part of its debt, the rating would be HR D. On the other hand, when the default extends to a "significant" but not necessarily a predominant portion of its debt, the rating would be HR DS (selective default). In those cases where the entity is in compliance with the predominant portion but not with the totality of its debt, it will not necessarily be considered as being in default. In such cases, the rating would be the result of the normal process

¹ A rating in HR D, HR DS or HR DT will be applicable to a global and local scale, indistinctively.



indicated in the methodology of the relevant asset class, and penalized according to the importance and relevance of the debt obligations that are not in compliance.

In specific circumstances, an entity may be in stressed conditions that diminish its willingness and/or ability to comply with its payment obligations according to the originally agreed upon conditions. This may result in a renegotiation between the entity and its creditors of the payment terms. HR Ratings considers a renegotiation in which the creditors agree to accept the new payment terms knowing that the alternative is to receive inferior payments to the ones originally agreed (or no payment whatsoever), as a “forced restructure”. This restructure may represent a “technical default” due to the fact that the entity would not comply with the original agreed payment terms. The result would be the assignment of a rating of HR DT for the instrument(s) in question, in the moment in which the determined payment is made in the forced restructure². However, depending upon the evolution of the entity’s credit environment (e.g. the acceptance by the creditors, the contracting of new debt by the entity) these instruments could experience improvements in their credit rating.

Regarding the credit rating of the entity that has one or more instruments in HR DT, HR Ratings will employ the same criteria used to determine the relation between the ratings of instruments in HR D and that of the entity; basically the notion of the predominance of the debt in default or technical default.

The ratings of HR D and HR DT would be applied to the default on a debt instrument with any third party creditor, whether it be an institution, fund or legal person, private or public. Also, it would be applied if the creditor is the original party or a purchaser of the instrument in a secondary market, except in situations in which a non-transferability clause exists. The ratings of HR D and HR DT may not be applied in the cases in which the “creditor” is not a third party but rather an entity with an intrinsic relationship with the debtor. For example, a debt contracted between a sovereign and a development bank or a social security agency belonging to it.

² A rating does not automatically pass from HR D to HR DT in the moment when an agreement is signed. The rating will pass to HR DT when in the opinion of this Agency significant payments in accordance with the renegotiated terms are made.



It is worth noting that the HR D rating differs significantly from other ratings due to the fact that these refer to the relative probability (not statistical) of the occurrence of non-payment on a debt instrument, while in the case of HR D the default event has already occurred; or in the case of an HR DT, modified payments are being made.

In the case of issuers, the movement from one condition to the other (from non-payment to payment, or to a modified payment, with all its relevant attendant circumstances) is based on our internal criteria, which leaves it to the expert judgement of the committee as to both the degree of penalization in notches as well as the duration of such penalization, which will gradually decrease as the entity demonstrates stability and trustworthiness in its payments.

Considerations in the rating of an entity in mixed situations

An entity can become non-compliant on the payment of anywhere from one to the totality of its debt instruments. In those cases in which an entity complies with payment obligations on one or more credits after non-compliance on others, the circumstances of the default will be evaluated as the latter will have an impact on the credit risk of the entity and on that of debt instruments in particular, increasing its relative probability of default.

HR Ratings defines its DS rating as a selective non-compliance by an entity. This classification presumes that the entity has a part of its debt that is in default, or in technical default, and another part that is in compliance, in such a manner that neither component can be considered as being predominant.

In those cases in which an entity has debt in default as well as obligations that are still being paid with “normality”³, the designation of a rating of HR DS will not be automatic, as it will be necessary to evaluate the relevance and predominance, both of the current debt as well as the debt in default with respect to both the entity as a whole and to the debt that is in compliance. The relevance and therefore the predominance of the debt will be based on the following concepts:

³ Including obligations whose obligations have migrated from HR DT to a non-default rating.

- **Proportion:** The magnitude of the financial value of defaulted debt will be measured in relation to the current debt.
- **Temporality:** We will take into consideration the current impact of the debt in default. The relevant criteria will include: When was it issued? When was it supposed to be paid? Is it still current or outstanding?
- **Litigation:** We will take into account whether the defaulted debt is in a legal process to define if the payment on the debt could result inadmissible.
- **Willingness to pay:** The current government will be analyzed in order to evaluate its payment intentions as to debt instruments, both those in default, as well as those that could be in compliance.
- **Others:** We will evaluate the possible existence of other pertinent factors that might help to distinguish the relevance of each debt instrument.

Therefore, HR Ratings will classify the entity in one of the three following sections:

- **HR D / HR DT⁴:** In those cases in which our analysis determines that the debt in default (by non-compliance due to lack of payment or by restructured payments) predominates it will not be necessary to make a Preliminary Analysis⁵ of the entity to arrive at a rating.
- **HR DS:** In those cases in which our analysis determines that there is no basis for declaring defaulted debt or debt in compliance as being preponderant the rating process will not need to take into consideration an analysis in accordance with the asset's relevant methodology.
- **Qualitative penalization on the Preliminary Analysis:** This refers to those cases in which HR Ratings concludes that the debt in default does not represent a predominant portion of the entity's total debt, rather that the debt predominantly is current. In these cases the normal rating process will be followed, leaving the qualitative penalization judgment to the Analysis Committee. This penalization will use as its starting point the results of the Preliminary Analysis to incorporate the effect of the default history on the entity's credit rating. This qualitative penalization for default is added to other penalization factors or qualitative rewards that would have affected the result of the Preliminary Analysis.

⁴ DT is the nomenclature that we use for Technical Default, which refers to the entity that does not pay its creditors accordance to the originally agreed terms, due to a forced debt restructure.

⁵ The concept of Preliminary Analysis refers to the quantitative analysis section in our methodologies.

Considerations for the rating of obligations from entities with default history

An entity, despite non-compliance with certain financial obligations, could be current on the payments of other credits. Therefore, even though the rating of an entity is in HR D, HR DS or HR DT or with a default penalization in certain instruments, it would be possible to proceed with the rating of its debt obligations that are in full compliance within the established periods.

The rating process would be made according to the relevant methodology for the type of asset in which the obligation subject to analysis is located. However, the final rating of the instrument will be subject to possible limitations depending upon the entity's rating classification. These limitations are defined as follows:

- If the entity's rating is HR D or HR DT, the credit risk rating that HR Ratings assigns to an individual obligation cannot be investment grade on a global scale (i.e., HR BB+ (G) as a maximum rating).
- If the entity's rating is HR DS, the assigned rating given to a compliant obligation will receive a qualitative penalization.
- In case that HR Ratings defines the entity's non-default debt as being predominant, the particular obligation will receive a qualitative penalization. However, this penalization could be even less than that assigned to the entity (thus, the particular obligation could have a final higher rating awarded to the entity).

The relevance and dominance of defaulted debt will be continuously evaluated by the Analysis Committee for which reason the credit risk rating of the entity and therefore of its particular obligations, could change over time.

Subsequent Stage to the entity's default

In the event that we observe an increase in the level of dominance of non-defaulted debt or even the total debt payment that the entity had in default, the qualitative penalization will continue for an

indefinite period of time, at a progressively lower level. Both the extension in the period of time as well as the degree of penalization will be evaluated case by case by the analysis committee.

When HR Ratings assigns a rating of HR D, as a consequence of structural⁶ or non-structural factors, an HR C rating will be the next rating assigned, immediately after the totality of defaulted financial obligations have been paid. However, the criteria for assigning higher ratings subsequent to an HR C will vary depending on the reasons for the default in question. Such criteria is as follows:

Stages of Structural Default

In the case of structural default, the various stages in a rating's evolution are as follows:

1. An **HR D** rating will be assigned, in case of Default.
2. An **HR C** rating will be assigned, when the default is fully paid.
3. **Evaluation** of the entity's financial situation by the Analysis Team.
4. **Rating assignment** taking into account the financial situation of the entity and various other factors that the Analysis Team and the Analysis Committee take into account. The improvement in the rating will be gradual, as the situation of the entity reflects it.

Stages of Non-Structural Default

The stages, in terms of the assigned rating in the event that the default was for non-structural reasons are:

1. An **HR D** rating will be assigned, in case of Default.
2. An **HR C** rating will be assigned, when the default is fully paid.
3. **Penalization Period**, in which a non-investment grade rating is assigned. In such a period, the possible effects related to Default are evaluated, such as: cross default, early amortization events or acceleration of credits or debt issuances and possible legal consequences for the entity. This period may last from one day and until the analyst presents the case with a higher number of decision elements to the Analysis Committee.

⁶ Structural default is one that is the result of a creditor's financial situation, namely, the quantitative analysis that is made of it. In contrast, a non-structural default, is one determined by qualitative factors, not by the general state of the creditor's financial situation.



4. **Recovery Period** which could last up to 6 months, is one where a Default Adjusted Rating is assigned. The Default Adjusted Rating incorporates a certain number of penalization notches as determined by the Analysis Committee, as a consequence of the factors that originated the non-structural default.
5. **Rating assignment** without an adjustment due to Default.



sectors, and are based exclusively on the characteristics of the entity, issuer or operation, independent of any activity or business that exists between HR Ratings and the entity or issuer. The ratings and/or opinions assigned or issued do not constitute an investment recommendation to buy, sell, or hold any instrument nor to perform any business, investment or other operation. The assigned ratings and/or opinions issued may be subject to updates at any time, in accordance with HR Ratings' methodologies.

HR Ratings bases its ratings and/or opinions on information obtained from sources that are believed to be accurate and reliable. HR Ratings, however, does not validate, guarantee or certify the accuracy, correctness or completeness of any information and is not responsible for any errors or omissions or for results obtained from the use of such information. Most issuers of debt securities rated by HR Ratings have paid a fee for the credit rating based on the amount and type of debt issued. The degree of creditworthiness of an issue or issuer, opinions regarding asset manager quality or ratings related to an entity's performance of its business purpose are subject to change, which can produce a rating upgrade or downgrade, without implying any responsibility for HR Ratings. The ratings issued by HR Ratings are assigned in an ethical manner, in accordance with healthy market practices and in compliance with applicable regulations found on the www.hrratings.com rating agency webpage. There Code of Conduct, HR Ratings' rating methodologies, rating criteria and current ratings can also be found on the website.

Ratings and/or opinions assigned by HR Ratings are based on an analysis of the creditworthiness of an entity, issue or issuer, and do not necessarily imply a statistical likelihood of default, HR Ratings defines as the inability or unwillingness to satisfy the contractually stipulated payment terms of an obligation, such that creditors and/or bondholders are forced to take action in order to recover their investment or to restructure the debt due to a situation of stress faced by the debtor. Without disregard to the aforementioned point, in order to validate our ratings, our methodologies consider stress scenarios as a complement to the analysis derived from a base case scenario. The rating fee that HR Ratings receives from issuers generally ranges from US\$1,000 to US\$1,000,000 (or the foreign currency equivalent) per issue. In some instances, HR Ratings will rate all or some of the issues of a particular issuer for an annual fee. It is estimated that the annual fees range from US\$5,000 to US\$2,000,00 (or the foreign currency equivalent)