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## 1. PROCEDURES

### A. Start of the Rating Process

The credit rating process begins following an initial contact from the Business Development Department with the entity or the issuer by sending sales materials, which include a corporate presentation and general datasheet. HR Ratings then sends an economic proposal, engagement letter or proposed service agreement, with the list of information required as part of the rating process.

A service agreement or the appropriate legal instrument is then finalized and sent to the entity or issuer, together with the Code of Conduct. The entity or issuer and the HR Ratings Business Development Director sign the service agreement or appropriate legal instrument, and the contractual legal relationship with the entity or issuer is formalized.

HR Ratings may issue unsolicited ratings, for which HR Ratings does not receive any payment and may or not may sign a service agreement, engagement letter or legal instrument. Where applicable, an NDA will be signed. Unsolicited ratings will be prepared according to the same methodologies as requested ratings and will follow the same rating process, accordingly. HR Ratings will also do the surveillance of unsolicited ratings and may withdraw an unsolicited rating at any time.

The Business Development Director and the entity or issuer designate the individuals authorized to send and receive information throughout the course of the rating process. The initial contact information is entered into HR's internal electronic system.

HR Ratings' internal control procedures determine the sufficiency of the information to be used to assign the rating. This information must be generated and provided by trustworthy sources.

Public and private information from parties other than the issuer is also used as part of the credit rating process. Depending on the reliability of the source, HR Ratings reserves the right to evaluate third party information. Information derived from official governmental sources is presumed to be valid. HR Ratings uses all information available at the time of analysis, including available public information that is relevant to the specific rating, as well as non-public information, consistent with regulatory norms.

### B. Rating Process

HR Ratings' analysis begins with the assignment of the Area Director or the Lead Analyst by the Operations Department. The other analysts, who are secondarily responsible for the project, assist in the rating process. The Lead Analyst, together with any secondary analysts, comprise the "analysis team." The Operations Department will consider the log of potential conflicts of interest maintained on HR Ratings' internal electronic system for the assignment.

The Area Director and / or Lead Analyst, and any secondary analysts, are responsible for conducting the entire analysis, as well as the presentation to the Credit Analysis Committee, including preparation of all supporting documents such as the: (i) analysis report (or press release when there is no analysis report), (ii) if applicable, the rating letter, technical note, legal opinion, datasheet for the influential rating and/or Information Disclosure Form (17g-7 Form); (iii) number and type of model used and minutes of the previous

Credit Analysis Committee regarding the entity, issuer or operation in question. These documents are referred to jointly as the Credit Analysis Committee Package.

When the rating considers influential ratings assigned by other rating agencies, the analysis team monitors these influential ratings weekly. For the purposes of the above, each area of the Credit Analysis Department maintains the current datasheet corresponding to the information for the influential rating in question by the last business day of each week.

In the event of any questions or issues regarding the operation of the analysis team, a meeting is arranged with the Chief Credit Officer and Area Director to clarify any questions before the presentation of the Credit Analysis Committee Package to the Credit Analysis Committee. The Credit Analysis Committee Package is then distributed to all committee members at least twelve (12) hours in advance of the Credit Analysis Committee review, and can be distributed, if necessary, in a shorter period when required by the analysis team.

The following steps are followed for each rating by the assigned analyst:

1. The analyst receives the assignment to begin the rating process and proceeds to gather available public and private information on the issuer and/or offering.
2. The analyst sends the issuer an email request for information covering the following topics:
  - Financial information
  - Business, market, and general relevant economic information
  - Institutional framework
  - Characteristics of the offering (if applicable)
3. If applicable and in accordance with the methodology, the analyst schedules a visit, videocall or virtual meeting, with the entity or issuer to understand the specific characteristics of the issuer, operation and/or offering. The analyst may request further information depending on the complexity of the entity or operation.
4. Based on this information, model and methodology, the analyst prepares an evaluation and analysis of the credit strengths and payment capacities of both the issuer and/or offering; and,
5. The analyst prepares the presentation for the Credit Analysis Committee including all supporting documents in the Credit Analysis Committee Package.

## C. Credit Analysis Committee Structure and Voting Process

### i. Quorum

In accordance with the HR Ratings' General Operations Plan, the Credit Analysis Committee will meet whenever:

- A rating action is required.
- Any relevant event occurs that could impact a current rating; or

- An opinion is to be issued on any industry sector. In this case, the meeting of the Credit Analysis Committee will be optional, provided the Chief Credit Officer has given his approval.

The following people sit in the Analysis Committee, in voting order:

- Analysis Manager
- Analysis Director
- Analysis Executive Director
- Chief Credit Officer (“CCO”)
- Where appropriate, the Chief Officer of Economic Analysis

Prior to each Credit Analysis Committee meeting, the members of the Committee will certify, through the Company’s internal electronic system, that they have no conflict of interest with the entity or issuer. The internal electronic system will also notify the Chief Compliance Officer if there is a conflict of interest reported on the system.

The Committee will meet with a quorum of at least 4 (four) members, and committees may meet simultaneously with different agendas.

A member of the Credit Analysis Committee may not participate in more than 4 (four) committee meetings on the same day for unsecured or structured initial ratings or annual reviews, unless they participate as Lead Analysts and/or Area Directors, or in the case of Committee meetings to determine ratings for entities belonging to the same control group, consortium and/or related entities.

The President of the Analysis Committee must belong to a different analysis area than that of the Analysis Director or Responsible Analyst. At least half of the members who attend the Analysis Committee must be Directors or Managers of an analysis area different than that of the Responsible Analyst and/or Area Director of the entity, issue or operation being rated.

## **ii. Voting Process**

Decisions are taken by an absolute majority, meaning, by the vote in the same direction of half of the Credit Analysis Committee, plus one, present at the meeting. Unless the Lead Analyst is a member of the Credit Analysis Committee, the Lead Analyst only has a “voice”, but no vote.

The Credit Analysis Committee reviews and discusses the proposed rating and upon reaching a conclusion, the Credit Analysis Committee issues a rating and once the rating has been given, the Lead Analyst notifies the issuer of the decision reached by the Credit Analysis Committee, the same day as the rating was assigned. Under no circumstance will the entity or issuer receive any prior notice as to the possible outcome of the rating process. Rather, the entity or issuer will receive a notification only when the Credit Analysis Committee has issued its official opinion.

If the issuer agrees, then HR Ratings proceeds with the publication of the rating. The issuer has up to two (2) business days after receiving the rating report to state what it deems appropriate regarding the report and, if applicable, deliver any additional relevant documentation to be analyzed and evaluated by the Credit Analysis Committee. If there is no response from the issuer within these two (2) business days, HR Ratings will publish the rating the next business day.

During this time, the entity or issuer may indicate whether the rating will be held private or made public. The ratings on securities registered or intended to be registered in the National Securities Register in Mexico will always be made public, as well as any modifications, ratifications or withdrawals of these ratings.

## **D. Rotation policy for the participants in the rating procedures and Credit Analysis Committee**

The Lead Analyst responsible for the development and, where appropriate, monitoring of the rating process, cannot be involved with an entity or companies within the group to which that client belongs, for more than a five (5) year period since its first participation in the initial rating or monitoring with respect to that entity. Such analysts may resume these functions only after a minimum one (1) year period break. A substitute analyst will be used, if necessary, in the fourth year.

Moreover, the analyst responsible for the development and, where appropriate, monitoring of the rating process, cannot be involved with an entity or companies within the group to which that client belongs, for more than a five (5) year period, since its first participation in the initial rating or monitoring with respect to that client. Such analysts may resume these functions only after a minimum one (1) year period break.

In the case of the member of the Credit Analysis Committee responsible for the approval of the credit rating with respect to an entity or companies within the group to which that client belongs, such committee should rotate at least on a seven (7) year basis, returning after a minimum one-year break. To this end, HR Ratings rotates at least half of the members of each committee during this timeframe.

## **E. Surveillance and Monitoring**

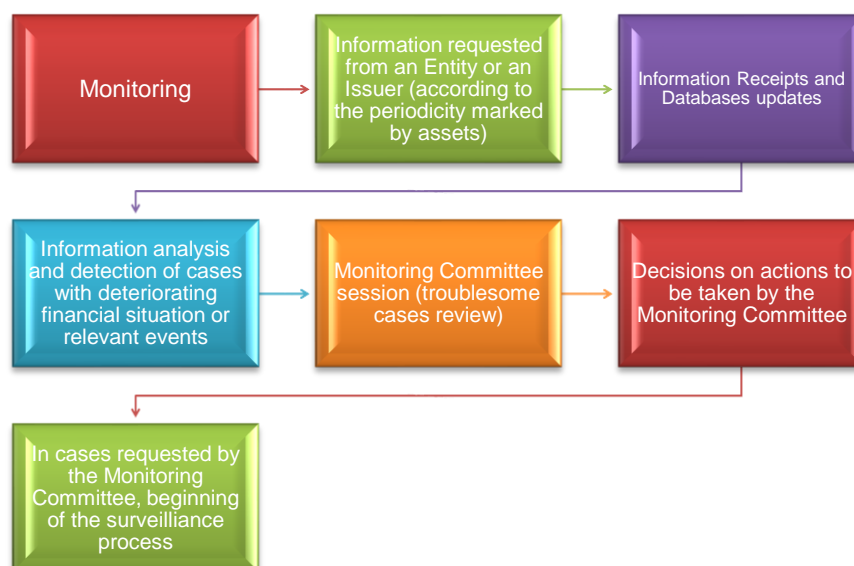
Monitoring refers to periodical internal rating reviews, depending on the entity, issuer, operation, or instrument that may or may not result in a rating action. The monitoring review will be monthly, quarterly, or semi-annually depending on the availability of information, or any other frequency required by HR.

Surveillance refers to the periodical annual review HR performs on all ratings, independent of internal monitoring, the results of which are reported to the public through a rating action.

It is important to note that HR Ratings makes no difference regarding the qualitative and quantitative factors under the initial or surveillance rating. Thus, an initial and a surveillance rating consider the same weight for each of the factors given.

HR Ratings adheres to the view that surveillance ratings can be even more important than the initial rating during the life of the issue until maturity. For this reason, the surveillance for tracking and monitoring all of the ratings assigned by HR Ratings is a vital ongoing activity.

## i. Monitoring chart



## F. Procedures to Withdraw or Suspend a Rating

The Credit Analysis Committee may withdraw the rating given to an entity, issuer, and/or operation on the occurrence of any of the following:

1. For a debt instrument or a credit, when the issuer confirms that the entire amount of the credit or debt security has been repaid in full of no outstanding amount to be rated.
2. For a debt instrument or a credit, when the issuer confirms that the rating assigned has not been used for an issuance or specific credit, and, in consequence, that no funds have been mobilized for said issue or credit, nor for any outstanding current amount.
3. For a debt instrument, when HR Ratings receives the consent of all debtholders of a given issuance to withdraw the rating, by means of an assembly of said debtholders during which the motion to withdraw is unanimously passed.
4. For a debt instrument or a credit, when the period of validity of the initial rating of 1 (one) year passes and the debt instrument has not been placed in the market or the funding from the credit obtained, the rating is automatically withdrawn.
5. When a restructuring of a credit or issuance has been finalized and the Credit Analysis Committee determines that the changes have been substantial, provided another structure is in place.
6. When the entity or issuer has gone into bankruptcy and the rating issued by HR Ratings is no longer necessary.
7. When requested by the entity or issuer to HR Ratings.
8. When the lack of cooperation from the entity or issuer or the lack of information makes assigning a reliable rating impossible. In this event, and if the rating is already public, the reasons for suspension will be communicated to the market. However, before determining the suspension of the rating, HR Ratings will attempt to complete its review based on the information available, making public the results of the review.

Additional information regarding the rating procedure can be found in HR Ratings' Internet website, at the following location: [https://www.hrratings.com/regulatory\\_disclosure/monitoring.xhtml](https://www.hrratings.com/regulatory_disclosure/monitoring.xhtml).

## G. Methodology Committee

HR Ratings has a Methodology Committee, with the responsibility of reviewing, discussing, and approving the Company's rating methodologies and any modifications thereof, and the quantitative models incorporated into said methodologies and the criteria for their application, prior to submitting these to the Board of Directors for final approval.

The Methodology Committee meets at least once a year to review the process and terms established for each rating methodology, or when any of the circumstances established in HR Ratings' Code of Conduct are met.

In addition, the Methodology Committee will assess and validate the qualitative models to be incorporated into any rating methodology and any changes to these models. Similarly, the committee will conduct periodical reviews of the quantitative models incorporated into the rating methodologies.

The Methodology Committee meets on the agreed date to review, discuss, and approve a new methodology or changes to a current methodology. In the event the modification of a methodology is agreed to, the Committee proceeds to analyze whether the ratings previously assigned under earlier methodologies need to be reviewed. This analysis must be documented in the minutes of the corresponding Methodology Committee meeting.

When the Methodology Committee agrees on a new rating methodology or changes to an already existing methodology, the Operations Department takes the necessary steps so that, before the end of the next business day following the Committee meeting, the methodology or its modifications are uploaded to HR Ratings' website for the consultation and comments of market participants. The term for receiving comments from the public will be of at least ten (10) calendar days. HR Ratings will maintain publicly available during this time any comments received through its website and will consider those deemed relevant.

At the end of the time given, the Chief Credit Officer will request the incorporation, when such is the case, of the relevant comments within the following 5 (five) business days and once incorporated, they will ask the Chief Compliance Officer to immediately take the actions necessary for said methodology or modifications to be submitted for the review and formal approval of the Board of Directors.

Within the next 10 (ten) business days from when the methodology or its modifications are approved by the Board of Directors, HR Ratings will notify the Mexican Banking and Securities Commission ("CNBV") of the methodology or its modifications, to comply with the obligation established in the General provisions applicable to rating agencies in Mexico. If no comments are received from the CNBV within twenty (20) business days, HR Ratings will publish the methodology or its modifications in a visible location on the HR Ratings website indicating the reasons for the modifications, when such is the case, immediately at the end of said time and the methodology will be sent to HR Ratings' employees and website subscribers by email.

In the case of methodologies that only apply to ratings in the U.S., HR Ratings will publish the methodology or its modification the next business day after being formally approved by the Board of Directors, by the means indicated in the previous paragraph.

## Exhibit 2

Rating methodologies and their modifications will come into effect the same day as published. Once the modifications or additions to a methodology have been published, the Company will use the new methodology for subsequent ratings and, accordingly, will inform the public immediately of the possible effects on the ratings that could be impacted by the new methodology once these ratings have been reviewed.

Accordingly, HR Ratings will issue a new rating for the instruments in question, within six (6) months following the publication of the modification of a methodology.

Once a new NRSRO methodology has been published, HR Ratings will submit to the Securities and Exchange Commission ("SEC") an updated Form NRSRO. In addition, HR Ratings will submit an updated Form NRSRO when modifications are made to an NRSRO methodology. The Chief Risk Officer will verify that these steps are covered.

In addition, HR Ratings will publish on its website, notice of any significant error identified in any process or methodology that could result in any change to a current rating.

The Methodological Criteria Director will report decisions made by the Methodology Committee to the Company's analysis team, with the corresponding documentation, the same day as said decisions take effect.

In addition, meetings will be held with the analysis team to explain the important decisions made by the Methodology Committee.



## 2. HR RATINGS' SCALES

2.1	Long Term Local Rating Scale.	<a href="https://www.hrratings.com/methodology/rating_scales.xhtml">https://www.hrratings.com/methodology/rating_scales.xhtml</a>
2.2	Short Term Local Rating Scale.	<a href="https://www.hrratings.com/methodology/rating_scales.xhtml">https://www.hrratings.com/methodology/rating_scales.xhtml</a>
2.3	Long Term Global Rating Scale.	<a href="https://www.hrratings.com/methodology/rating_scales.xhtml">https://www.hrratings.com/methodology/rating_scales.xhtml</a>
2.4	Short Term Global Rating Scale.	<a href="https://www.hrratings.com/methodology/rating_scales.xhtml">https://www.hrratings.com/methodology/rating_scales.xhtml</a>
2.5	Structured Finance Rating Scale.	<a href="https://www.hrratings.com/methodology/rating_scales.xhtml">https://www.hrratings.com/methodology/rating_scales.xhtml</a>
2.6	Market Risk Rating Scale.	<a href="https://www.hrratings.com/methodology/rating_scales.xhtml">https://www.hrratings.com/methodology/rating_scales.xhtml</a>

## 2.1. Long Term Local Rating Scale

Symbol	Definition of the Rating
<b>HR AAA</b>	The issuer or issue with this rating is considered to have the highest credit quality, offering high safety for timely payment of debt obligations. Maintains minimum credit risk.
<b>HR AA</b>	The issuer or issue with this rating is considered to have high credit quality and offers high safety for timely payment of debt obligations. Maintains very low credit risk under adverse economic scenarios.
<b>HR A</b>	The issuer or issue with this rating offers acceptable safety for timely payment of debt obligations. Maintains low credit risk.
<b>HR BBB</b>	The issuer or issue with this rating provides moderate safety for timely payment of debt obligations. Maintains moderate credit risk, with weakness in the ability to pay in adverse economic scenarios.
<b>HR BB</b>	The issuer or issue with this rating provides inadequate safety for timely payment of debt obligations. Maintains high credit risk.
<b>HR B</b>	The issuer or issue with this rating provides low safety for timely payment of debt obligations and maintains a high credit risk. The issue or issuer is susceptible to falling into default.
<b>HR C</b>	The issuer or issue with this rating exhibits high probability of falling into default in debt obligation payments.
<b>HR D</b>	The issuer or issue with this rating has the lowest rating. The issue is already in, or is highly likely to fall into, default in the short term.

*\*Our ratings range from HR AAA to HR D, a plus or minus sign may be included in the range from HR AA to HR C, to indicate strength or weakness within a general rating category.*

## 2.2. Short Term Local Rating Scale

Symbol	Definition of the Rating
<b>HR1</b>	The issuer or issue with this rating exhibits high capacity for timely payment of debt obligations in the short term and maintains the lowest credit risk. Within this category, debt instruments and or issuers with features showing relative superiority in terms of credit characteristics may be rated as HR+1.
<b>HR2</b>	The issuer or issue with this rating exhibits an acceptable capacity for timely payment of debt obligations in the short term and maintains a higher credit risk compared with higher credit rating debt instruments.
<b>HR3</b>	The issuer or issue with this rating exhibits a moderate capacity for timely payment of debt obligations in the short term and maintains a higher credit risk compared with higher credit rating debt instruments.
<b>HR4</b>	The issuer or issue with this rating exhibits an insufficient capacity for timely payment of debt obligations in the short term and maintains a very high credit risk. These instruments are susceptible to falling into default.
<b>HR5</b>	The issuer or offering is highly probable they will fall into default on the payment of debt obligations.
<b>HR D</b>	The issuer or offering given this rating has the lowest credit rating and they are already in default.

## 2.3. Long Term Global Rating Scale

Symbol	Definition of the Rating
<b>HR AAA (G)</b>	The issuer or issue with this rating is considered to have the highest credit quality, offering high safety for timely payment of debt obligations. Maintains minimum credit risk on a global scale basis.
<b>HR AA (G)</b>	The issuer or issue with this rating is considered to have high credit quality and offers high safety for timely payment of debt obligations. Maintains very low credit risk on a global scale basis, under adverse economic scenarios.
<b>HR A (G)</b>	The issuer or issue with this rating offers acceptable safety for timely payment of debt obligations. Maintains low credit risk on a global scale basis.
<b>HR BBB (G)</b>	The issuer or issue with this rating provides moderate safety for timely payment of debt obligations. Maintains moderate credit risk on a global scale, with weakness in the ability to pay in adverse economic scenarios.
<b>HR BB (G)</b>	The issuer or issue with this rating provides inadequate safety for timely payment of debt obligations. Maintains high credit risk on a global scale basis.
<b>HR B (G)</b>	The issuer or issue with this rating provides low safety for timely payment of debt obligations and maintains a high credit risk on a global scale. The issue or issuer is susceptible to falling into default.
<b>HR C (G)</b>	The issuer or issue with this rating exhibits high probability of falling into default in debt obligation payments.
<b>HR D (G)</b>	The issuer or issue with this rating has the lowest rating on a global scale basis. The issue is already in, or is highly likely to fall into, default in the short term.

*\*Our ratings range from HR AAA (G) to HR D (G), a plus or minus sign may be included in the range from HR AA (G) to HR C (G), to indicate strength or weakness within a general rating category.*

## 2.4. Short Term Global Rating Scale

Symbol	Definition of the Rating
<b>HR1 (G)</b>	The issuer or issue with this rating exhibits high capacity for timely payment of debt obligations in the short term and maintains the lowest credit risk on a global scale basis. Within this category, debt instruments and or issuers with features showing relative superiority in terms of credit characteristics may be rated as HR+1 (G).
<b>HR2 (G)</b>	The issuer or issue with this rating exhibits an acceptable capacity for timely payment of debt obligations in the short term and maintains a higher credit risk compared with higher credit rating debt instruments on a global scale basis.
<b>HR3 (G)</b>	The issuer or issue with this rating exhibits a moderate capacity for timely payment of debt obligations in the short term and maintains a higher credit risk compared with higher credit rating debt instruments on a global scale basis.
<b>HR4 (G)</b>	The issuer or issue with this rating exhibits an insufficient capacity for timely payment of debt obligations in the short term and maintains a very high credit risk on a global scale basis. These instruments are susceptible to falling into default.
<b>HR5 (G)</b>	The issuer or offering is highly probable they will fall into default on the payment of debt obligations.
<b>HR D (G)</b>	The issuer or offering given this rating has the lowest credit rating and they are already in default.

## 2.5. Structured Finance Rating Scale

Symbol	Definition of the Rating
<b>HR AAA (E)*</b>	The issue with this rating is considered to have the highest credit quality, offering high safety for timely payment of debt obligations. Maintains minimum credit risk.
<b>HR AA (E)*</b>	The issue with this rating is considered to have high credit quality and offers high safety for timely payment of debt obligations. Maintains very low credit risk under adverse economic scenarios.
<b>HR A (E)*</b>	The issue with this rating offers acceptable safety for timely payment of debt obligations. Maintains low credit risk.
<b>HR BBB (E)*</b>	The issue with this rating provides moderate safety for timely payment of debt obligations. Maintains moderate credit risk, with weakness in the ability to pay in adverse economic scenarios.
<b>HR BB (E)*</b>	The issue with this rating provides inadequate safety for timely payment of debt obligations. Maintains high credit risk.
<b>HR B (E)*</b>	The issue with this rating provides low safety for timely payment of debt obligations and maintains a high credit risk. The issue is susceptible to falling into default.
<b>HR C (E)*</b>	The issue with this rating exhibits high probability of falling into default in debt obligation payments.
<b>HR D (E)*</b>	The issue with this rating has the lowest rating. The issue is already in, or is highly likely to fall into, default in the short term.

(E)\* is a local rating.

*\*\*Our ratings range from HR AAA (E) to HR D (E), a plus or minus sign may be included in the range from HR AA (E) to HR C (E), to indicate strength or weakness within a general rating category.*

## 2.6. Short-Term Market Risk Rating Scale

Symbol	Definition of the Rating
<b>1CP</b>	The asset portfolio has extremely low sensitivity to changes in market conditions.
<b>2CP</b>	The asset portfolio has low sensitivity to changes in market conditions.
<b>3CP</b>	The asset portfolio has low to moderate sensitivity to changes in market conditions.
<b>4CP</b>	The asset portfolio is moderately sensitive to changes in market conditions.
<b>5CP</b>	The asset portfolio has moderate to high sensitivity to changes in market conditions.
<b>6CP</b>	The asset portfolio is highly sensitive to changes in market conditions.
<b>7CP</b>	The asset portfolio is extremely sensitive to changes in market conditions.

To indicate the rating is a limited rating, HR Ratings assigns at the end of each rating the symbol "(L)".  
HR Ratings could also assign the symbol "P" to indicate a preliminary Rating.

## 2.7. Long-Term Market Risk Rating Scale

Symbol	Definition of the Rating
<b>1LP</b>	The asset portfolio has extremely low sensitivity to changes in market conditions.
<b>2LP</b>	The asset portfolio has low sensitivity to changes in market conditions.
<b>3LP</b>	The asset portfolio has low to moderate sensitivity to changes in market conditions.
<b>4LP</b>	The asset portfolio is moderately sensitive to changes in market conditions.
<b>5LP</b>	The asset portfolio has moderate to high sensitivity to changes in market conditions.
<b>6LP</b>	The asset portfolio is highly sensitive to changes in market conditions.
<b>7LP</b>	The asset portfolio is extremely sensitive to changes in market conditions.

To indicate the rating is a limited rating, HR Ratings assigns at the end of each rating the symbol “(L)”.  
HR Ratings could also assign the symbol “P” to indicate a preliminary Rating.



## 2.8. Long-Term ratings for Special-Tax Bonds of U.S.A. Local Entities

Symbol	Definition of the Rating
<b>HR AAA</b>	The bond with this rating is considered to have the highest credit quality, offering high safety for timely payment of debt obligations. The pledge is insensitive to market changes and shows steady growth above inflation. The bond offers multiple and adequate protections to bondholders.
<b>HR AA</b>	The bond with this rating is considered to have high credit quality and offers high safety for timely payment of debt obligations. Maintains very low credit risk due to the low sensitivity of its pledge to market changes, and to a steady revenue growth. The bond offers adequate protections to bondholders.
<b>HR A</b>	The bond with this rating offers acceptable safety for timely payment of debt obligations. Maintains low credit risk to a steady pledge that grows with inflation and that shows low sensitivity to market changes. The bond offers protections to bondholders.
<b>HR BBB</b>	The bond with this rating provides moderate safety for timely payment of debt obligations. Maintains moderate credit risk with weakness in the ability to pay in adverse economic scenarios due to a pledge that grows below inflation and with certain volatility.
<b>HR BB</b>	The Bond with this rating provides inadequate safety for timely payment of debt obligations. Maintains high credit risk due to a decreasing or volatile pledge, that is sensitive to market changes.
<b>HR B</b>	The bond with this rating provides low safety for timely payment of debt obligations and maintains a high credit risk. The bond is susceptible to falling into default due to a decreasing and volatile pledge that is sensitive to market changes and that depends on a concentrated tax base.
<b>HR C</b>	The bond with this rating exhibits high probability of falling into default in debt obligation payments.
<b>HR D</b>	The bond with this rating has the lowest rating on the U.S.A. scale basis. The issue is already in, or is highly likely to fall into, default in the short term.

*\*Our ratings range from HR AAA to HR D, a plus or minus sign may be included in the range from HR AA to HR C, to indicate strength or weakness within a general rating category. To indicate the rating is a limited rating, HR Ratings assigns at the end of each rating the symbol "(L)". HR Ratings could also assign the symbol "P" to indicate a preliminary Rating.*

## 3. METHODOLOGIES

All our methodologies are publicly available at: <https://www.hrratings.com/methodology/>

### 3.1. Current versions of methodologies

	Methodology	
1	Methodology for the Evaluation of Charter School Debt ( <i>Long Term and Short Term Global Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/New%20Charter%20Schools%20Methodology%20R.pdf">https://www.hrratings.com/docs/metodologia/New%20Charter%20Schools%20Methodology%20R.pdf</a>
2	General Methodological Criteria.	<a href="https://www.hrratings.com/docs/metodologia/General_Methodological_Criteria_January_2023.pdf">https://www.hrratings.com/docs/metodologia/General_Methodological_Criteria_January_2023.pdf</a>
3	Rating Methodology for Mexican Municipalities.	<a href="https://www.hrratings.com/docs/metodologia/Methodology_to_Rate_Mexican_Municipalities_(April_2021).pdf">https://www.hrratings.com/docs/metodologia/Methodology_to_Rate_Mexican_Municipalities_(April_2021).pdf</a>
4	HR Ratings' Corporate Debt Credit Risk Evaluation ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Corporate_Debt_Credit_Risk_Evaluation_(August_2021).pdf">https://www.hrratings.com/docs/metodologia/Corporate_Debt_Credit_Risk_Evaluation_(August_2021).pdf</a>
5	Rating Methodology for Mexican States.	<a href="https://www.hrratings.com/docs/metodologia/0_Methodology_to_Rate_Mexican_States_(April_2021).pdf">https://www.hrratings.com/docs/metodologia/0_Methodology_to_Rate_Mexican_States_(April_2021).pdf</a>
6	U.S. State Government General Obligations Methodology Addendum ( <i>Long Term and Short Term Global Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/General%20Obligation%20States%20Methodology%20March%202014_final.pdf">https://www.hrratings.com/docs/metodologia/General%20Obligation%20States%20Methodology%20March%202014_final.pdf</a>
7	Sovereign Debt Methodology ( <i>Long Term and Short Term Global Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/0_Sovereign%20Debt%20Methodology.pdf">https://www.hrratings.com/docs/metodologia/0_Sovereign%20Debt%20Methodology.pdf</a>
8	U.S. Local Government General Obligations Methodology ( <i>Long Term and Short Term Global Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/General%20Obligation%20Methodology%20Nov_2013_final.pdf">https://www.hrratings.com/docs/metodologia/General%20Obligation%20Methodology%20Nov_2013_final.pdf</a>
9	Hybrid Instruments Credit Methodology ( <i>Long Term Local Rating Scales</i> )	<a href="https://www.hrratings.com/docs/metodologia/Hybrid%20Instruments%20Credit%20Methodology.pdf">https://www.hrratings.com/docs/metodologia/Hybrid%20Instruments%20Credit%20Methodology.pdf</a>
10	Addendum - Rating Methodology for Subordinated Debt ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/3.2.2.%20Rating%20Methodology%20for%20Subordinated%20Debt.pdf">https://www.hrratings.com/docs/metodologia/3.2.2.%20Rating%20Methodology%20for%20Subordinated%20Debt.pdf</a>
11	Rating Methodology for Non-Bank Financial Institutions ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Methodology_for_NBFI_February_2022.pdf">https://www.hrratings.com/docs/metodologia/Methodology_for_NBFI_February_2022.pdf</a>

12	Rating Methodology for Brokerage Firms ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Rating_Methodology_for_Brokerage_Firms_August_2022.pdf">https://www.hrratings.com/docs/metodologia/Rating_Methodology_for_Brokerage_Firms_August_2022.pdf</a>
13	Rating Methodology for Investment Funds ( <i>Credit and Market Rating</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Investment%20Funds%20Methodology%202019.pdf">https://www.hrratings.com/docs/metodologia/Investment%20Funds%20Methodology%202019.pdf</a>
14	Addendum – Rating Methodology for Bonded Warehouses ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/HR290816NP%208.%20Adendum%20AGD3%200(eng).pdf">https://www.hrratings.com/docs/metodologia/HR290816NP%208.%20Adendum%20AGD3%200(eng).pdf</a>
15	Partial Guarantees for Structured and Unsecured Debt Issues.	<a href="https://www.hrratings.com/docs/metodologia/Partial%20Guarantees%20Methodology.pdf">https://www.hrratings.com/docs/metodologia/Partial%20Guarantees%20Methodology.pdf</a>
16	Water Operating Agencies: Debt Evaluation Methodology for Mexican Entities ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Methodology_for_Water_Operating_Agencies_(August_2021).pdf">https://www.hrratings.com/docs/metodologia/Methodology_for_Water_Operating_Agencies_(August_2021).pdf</a>
17	Special-Tax Bonds Methodology ( <i>Long Term and Short Term Global Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Special-Tax%20Bonds%20Methodology%20(MP).pdf">https://www.hrratings.com/docs/metodologia/Special-Tax%20Bonds%20Methodology%20(MP).pdf</a>
18	Debt backed by Federal Transfers to the Municipalities Addendum ( <i>Structured Finance Rating Scale</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Federal%20Transfers%20Backed%20Debt%20Addendum%20(Municipalities).pdf">https://www.hrratings.com/docs/metodologia/Federal%20Transfers%20Backed%20Debt%20Addendum%20(Municipalities).pdf</a>
19	Debt backed by Federal Transfers to the States ( <i>Structured Finance Rating Scale</i> )	<a href="https://www.hrratings.com/docs/metodologia/Federal%20Transfers%20Backed%20Debt%20Methodology%20(States).pdf">https://www.hrratings.com/docs/metodologia/Federal%20Transfers%20Backed%20Debt%20Methodology%20(States).pdf</a>
20	Revenue Sharing Obligations for Mexican States and Municipalities: Debt Backed by Sub-National Entities Own Revenues ( <i>Structured Finance Rating Scale</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Own-Revenues%20Backed%20Debt%20Addendum%20(States%20and%20Municipalities).pdf">https://www.hrratings.com/docs/metodologia/Own-Revenues%20Backed%20Debt%20Addendum%20(States%20and%20Municipalities).pdf</a>
21	Methodology for Rating Banks ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/03.2.1.%20Banks.pdf">https://www.hrratings.com/docs/metodologia/03.2.1.%20Banks.pdf</a>

## 3.2. Current versions of qualitative and quantitative Models

### a) Banks

- *Version: Nov.20*
- *File Name: Bancos (Entidad\_Año). Nov.20*
- *Approved (Model): November 24, 2020.*
- *Methodology: Methodology for Rating Banks, February 2021.*
- *Approved (Methodology): December 8, 2020.*
- *Developed by: HR*

**Description:** The model weights metrics that are divided into three categories: (i) profitability and operating efficiency, (ii) solvency and capitalization and (iii) liquidity. Each of these metrics uses historical information of the last eight quarters (two years) and a projection for the next eight quarters. The projection exercise is conducted for two scenarios and requires the bank's evaluated historical financial information, including the balance sheet, the income statement, and the cash flow statement. The model incorporates an environmental, social and corporate governance (ESG) analysis through the evaluation of ESG factors that HR Ratings considers as fundamental for an entity's credit quality.

### b) Non-Bank Financial Institutions (IFNBs)

#### 1. General Model for Non-Bank Financial Institutions

- *Version: Dic.21*
- *File Names: IFNB\_(Entidad\_Año). Dic.21*
- *Approved (Model): December 2, 2021.*
- *Methodology: Methodology for Rating Non-Bank Financial Institutions (NBFIs), February 2022.*
- *Approved by HR: December 2, 2021.*
- *Developed by: HR*

**Description:** The model weights metrics that are divided into three categories: (i) profitability and operating efficiency, (ii) solvency and capitalization and (iii) liquidity. Each of these metrics uses historical information of the last eight quarters (two years) and a projection for the next eight quarters. The projection exercise is conducted for two scenarios and requires the NBFIs' evaluated historical financial information, including the balance sheet, the income statement, and the cash flow statement. The model incorporates an environmental, social and corporate governance (ESG) analysis through the evaluation of ESG factors that HR Ratings considers as fundamental for an entity's credit quality.

#### 2. SOFIPOS, SOCAPs and Credit Unions

- *Version: Dic.21*
- *File Names: UC\_SOFIPOS\_SOCAPS (Entidad\_Año). Dic.21*
- *Approved (Model): December 2, 2021.*
- *Methodology: Methodology for Rating Non-Bank Financial Institutions (NBFIs), February 2022.*
- *Approved by HR: December 2, 2021.*
- *Developed by: HR*

**Description:** The model weights metrics that are divided into three categories: (i) profitability and operating efficiency, (ii) solvency and capitalization and (iii) liquidity. The model introduces changes to the evaluation process to fully reflect the operational and regulatory differences applicable to these institutions. The main distinction stems from the construction used for the ICAP metric. Each of these metrics uses historical information of the last eight quarters (two years) and a projection for the next eight quarters. The projection exercise is conducted for two scenarios and requires the pawnshop's evaluated historical financial information, including the balance sheet, the income statement, and the cash flow statement. The model incorporates an environmental, social and corporate governance (ESG) analysis through the evaluation of ESG factors that HR Ratings considers as fundamental for an entity's credit quality.

### 3. Pawnshops

- *Version: Dic.21*
- *File Names: Casas de Empeño (Entidad\_Año).Dic.21*
- *Approved (Model): December 2, 2021.*
- *Methodology: Methodology for Rating Non-Bank Financial Institutions (NBFIs), February 2022.*
- *Approved by HR: December 2, 2021.*
- *Developed by: HR*

**Description:** The model weights metrics that are divided into three categories: (i) profitability and operating efficiency, (ii) solvency and capitalization and (iii) liquidity. The model introduces changes to the evaluation process to fully reflect the operational and regulatory differences applicable to these institutions. The main changes introduced in the model refer to adjustments to the delinquency ratios used to measure profitability and operating efficiency, and the introduction of the assets held in custody to net debt ratio for measuring solvency. Each of these metrics uses historical information of the last eight quarters (two years) and a projection for the next eight quarters. The projection exercise is conducted for two scenarios and requires the pawnshop's evaluated historical financial information, including the balance sheet, the income statement, and the cash flow statement. The model incorporates an environmental, social and corporate governance (ESG) analysis through the evaluation of ESG factors that HR Ratings considers as fundamental for an entity's credit quality.

#### c) Bonded Warehouses Model

- *Version: Jul.20*
- *File Name: Almacenadoras (Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Rating Methodology for Bonded Warehouses, March 2010.*
- *Approved (Methodology): March 14, 2018.*
- *Developed by: HR*

**Description:** The model explains the principal risk factors present in these entities starting from the business model. Its purpose is to justify and give a different weighting to the qualitative and quantitative risk factors for the assignment of the rating by HR Ratings. Among the most important quantitative factors to consider are the historic and projected financial statements and the analysis of the operating efficiency.

## d) Brokerage Firms Model

- *Version: May.22*
- *File Name: Casas de Bolsa (Entidad\_Año).May.22*
- *Approved (Model): May 18, 2022.*
- *Methodology: Rating Methodology for Brokerage Firms, August 2022.*
- *Approved (Methodology): May 18,2022.*
- *Developed by: HR*

**Description:** The model weights metrics that are divided into three categories: (i) profitability and operating efficiency, (ii) market risk and (iii) capitalization. Each of these metrics uses historical information of the last eight quarters (two years) and a projection for the next eight quarters. The projection exercise is conducted for two scenarios and requires the brokerage firm's evaluated historical financial information, including the balance sheet, the income statement, and the cash flow statement. The model incorporates an environmental, social and corporate governance (ESG) analysis through the evaluation of ESG factors that HR Ratings considers as fundamental for an entity's credit quality.

## e) Mutual Funds Model – SIID.

- *Version: Jul.20*
- *File Name: Calculadora de Fondos de Inversión (Fondo\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Rating Methodology for Investment Funds, May 2019.*
- *Approved (Methodology): February 2019.*
- *Developed by: HR*

**Description:** This model has two principal aspects: Credit Risk and Market Risk. Credit Risk is based on the credit quality of the assets that form the portfolio of the mutual fund, while Market Risk measures movements in the valuation of the fund because of changes in market interest rates and other variables, such as the exchange rate, inflation, and market volatility. The methodology incorporates a secondary aspect, the evaluation of the Management Quality of the fund for both ratings.

## f) Models used for Sovereign Debt

- *Version: Jul.20*
- *File Name: Sovereign Debt (Country\_Year).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Sovereign Debt Methodology, May 19, 2017.*
- *Approved (Methodology): March 14,2018.*
- *Developed by: HR*

**Description:** The model is based upon the interaction of four analytic dimensions that represent economic growth, fiscal accounts, monetary policy, and external accounts. The model also accounts for metrics that evaluate the institutional quality of the sovereign debt. The model uses HR Ratings forecasts for both a base and a stress model. It also incorporates data from the IMF, the World Bank, and the UN.

## g) Models used for Mexican General Obligation ratings

### 1. States

- *Version: Feb.21*
- *File Name: Estados (Entidad\_Año).Feb.21*
- *Approved (Model): February 22, 2021.*
- *Methodology: Rating Methodology for Mexican, April 23, 2021.*
- *Approved (Methodology): February 23, 2021.*
- *Developed by: HR*

**Description:** The HR Ratings' rating process begins with a quantitative assessment, which includes six metrics that analyze the balance sheet, the extent of the liabilities and the periodic burden of the entity's debt service. Subsequently, this methodology incorporates qualitative considerations with an environmental, social and governance (ESG) criteria; this analysis is qualitative and is limited to the assignment of up to three notches, upwards or downwards, thereby generating the credit rating of the assessed entity.

### 2. Municipalities

- *Version: Feb.21*
- *File Name: Municipios (Entidad\_Año).Feb.21*
- *Approved (Model): February 23, 2021.*
- *Methodology: Rating Methodology for Mexican Municipalities Public Finance Unsecured Debt, April 23, 2021.*
- *Approved (Methodology): February 23,2021.*
- *Developed by: HR*

**Description:** The HR Ratings' rating process begins with a quantitative assessment, which includes six metrics that analyze the balance sheet, the extent of the liabilities and the periodic burden of the entity's debt service. Subsequently, the methodology incorporates a number of qualitative considerations where environmental, social and governance (ESG) criteria that impact the assessment and, therefore, the assigned rating are considered.

## h) Models used for U.S. General Obligations Ratings

### 1. Local Governments

- *Version: Nov.13*
- *File Name: GOLocal\_Blank (Entidad\_Año).Nov13*
- *Approved (Model): November 27, 2013.*
- *Methodology: U.S. Local Government General Obligations Methodology, November 27, 2013.*
- *Approved (Methodology): March 14,2018.*
- *Developed by: HR*



**Description:** The model is based upon the General Obligation Quantitative Risk Model which accounts for the financial balance, the primary balance, debt metrics and debt servicing metrics, all as share of total revenues or unrestricted revenues. These metrics are projected for both a base and a stress scenario. The qualitative considerations account for a liquidity analysis, a general fund analysis, pensions liabilities, state regulation and support, among others.

## 2. States

- Version: Mar.13
- File Name: GOStates\_Blank (Entidad\_Año).Mar.14
- Approved (Model): March 28, 2014.
- Methodology: U.S. State Government General Obligations Methodology (Addendum to Methodology), March 28, 2014.
- Approved (Methodology): March 14,2018.
- Developed by: HR

**Description:** The model is based upon the General Obligation Quantitative Risk Model which accounts for the financial balance, the primary balance, debt metrics and debt servicing metrics, all as share of total revenues or unrestricted revenues. These metrics are projected for both a base and a stress scenario. The qualitative considerations account for a liquidity analysis, a general fund analysis, pensions liabilities, business type activities, among others.

### i) Models used for Corporate Debt Ratings

#### 1. Unsecured Corporate Debt

- Version: Jun.21
- File Name: Corporativos (Entidad\_Año).Jun.21
- Approved (Model): June 10, 2021.
- Methodology: Corporate Debt Credit Risk Evaluation: Methodology for Rating Unsecured Debt and Structured Debt of Dependent Future Flows of Corporate Entities, August 6, 2021.
- Approved by HR: June 10,2021.
- Developed by: HR

**Description:** The model is based upon four metrics that are derived from the entity's financial statements. First, the DSCR derived from the entity's period flows, then the same coefficient but adding the cash reserves to the numerator. The third measures the years required for the entity to serve its debt. And the last one measures the value of their marketable assets as a percent of the entity's total liabilities. ESG considerations are incorporated with a focus on the potential impact of Environmental, Social or Corporate Governance factors over the credit quality of an entity.

#### 2. FIBRAS (REIT's)

- Version: Jun.21
- File Name: Corporativos FIBRAS (Entidad\_Año).Jun.21
- Approved (Model): June 10, 2021.



- Methodology: Corporate Debt Credit Risk Evaluation: Methodology for Rating Unsecured Debt and Structured Debt of Dependent Future Flows of Corporate Entities, August 6, 2021.
- Approved by HR: June 10, 2021.
- Developed by: HR

**Description:** The model is based upon four metrics that are derived from the entity's financial statements. First the DSCR derived from the entity's period flows, then the same coefficient but adding the cash reserves to the numerator. The third measures the years required for the entity to serve its debt. The last metric used to identify the risk of acquiring assets through debt is the loan to value ratio. ESG considerations are incorporated with a focus on the potential impact of Environmental, Social or Corporate Governance factors over the credit quality of an entity.

### 3. Structured Debt of Dependent Future Flows

- Version: Jun.21
- File Name: Flujos Futuros Dependientes (Entidad\_Año).Jun.21
- Approved (Model): June 10, 2021.
- Methodology: Corporate Debt Credit Risk Evaluation: Methodology for Rating Unsecured Debt and Structured Debt of Dependent Future Flows of Corporate Entities, August 6, 2021.
- Approved by HR: June 10, 2021.
- Developed by: HR

**Description:** The model is based upon three metrics that are derived from the entity's financial statements. First, the DSCR derived from the entity's period flows, then the same coefficient but adding the cash reserves to the numerator. The third measures the years required for the entity to serve its debt. The total debt and debt service used in the construction of these metrics refers only to the structured debt of the relevant entity. While the Free Cash Flow used in the evaluation is developed using the same process that applies to unsecured corporate debt, there are specific cases in which HR Ratings will use the assigned revenues for the construction of its metrics. The rating resulting from the quantitative analysis for the structured debt will be restricted to a maximum of 5 notches above the rating assigned to the issuer for issuers with a rating equal or higher than "HR BBB-". If the issuer has an assigned rating equal to or less than "HR BB+" the structured debt rating may not exceed "HR BBB-(E)". After determining the result of the quantitative evaluation with the restrictions that have been described, the model can still assign qualitative adjustments based on the credit strength or weakness of the issuer and the structured debt itself.

#### j) Models used for Charter Schools ratings

- Version: Feb.15
- File Name: CharterSchool (Entidad\_Año).Feb.15
- Approved (Model): February 13, 2015.
- Methodology: Charter Schools Credit Risk Evaluation Methodology, February 13, 2015.
- Approved (Methodology): March 14, 2018.
- Developed by: HR

**Description:** The Charter Schools quantitative model is based upon the corporate debt methodology. However, the qualitative analysis accounts for the specific state laws regarding the permissions to operate

and the ADA (Average Daily Attendance) and the WADA (Weighted Average Daily Attendance) upon which the state transfers are conditioned.

## k) Models used for Water Operating Agencies for Mexican entities

### 1. Unsecured Debt for Water Operating Agencies

- Version: Jul.20
- File Name: OOA (Entidad\_Año). Jul.20
- Approved (Model): July 15, 2020.
- Methodology: Water Operating Agencies: Methodology for Rating Unsecured Debt and Structured Debt of Dependent Future Flows of Water Operating Agencies, August 2021.
- Approved (Methodology): June 10, 2021.
- Developed by: HR

**Description:** This model has two principal aspects: The operating metrics of the WOA, that measure efficiency in terms of charging customers and delivering water to residences, industrial complexes, or local businesses. The second aspect measures the financial performance of the WOA based on coverage metrics, the years that would take the free cash flow to cover the net debt and the weight of non-debt liabilities.

### 2. Structured Debt of Dependent Future Flows for Water Operating Agencies

- Version: Jun.21
- File Name: Flujos Dependientes OOAs (Entidad\_Año). Jun.21
- Approved (Model): June 10, 2021.
- Methodology: Water Operating Agencies: Methodology for Rating Unsecured Debt and Structured Debt of Dependent Future Flows of Water Operating Agencies, August 2021.
- Approved (Methodology): June 10, 2021.
- Developed by: HR

**Description:** The model is based upon three metrics that are derived from the entity's financial statements. First, the DSCR derived from the entity's period flows, then the same coefficient but adding the cash reserves to the numerator. The third measures the years required for the entity to serve its debt. The total debt and debt service used in the construction of these metrics refers only to the structured debt of the relevant entity. While the Free Cash Flow used in the evaluation is developed using the same process that applies to the unsecured debt for water operating agencies, there are specific cases in which HR Ratings will use the assigned revenues for the construction of its metrics. The rating resulting from the quantitative analysis for the structured debt will be restricted to a maximum of 5 notches above the rating assigned to the issuer for issuers with a rating equal or higher than "HR BBB- ". If the issuer has an assigned rating equal to or less than "HR BB+" the structured debt rating may not exceed "HR BBB-(E)". After determining the result of the quantitative evaluation with the restrictions that have been described, the model can still assign qualitative adjustments based on the credit and/or operational strength or weakness of the issuer and the structured debt itself.

## **l) Models used for Ratings of Partial Guarantees**

### **1. Infrastructure**

- *Version: Jul.20*
- *File Name: Garantías Parciales\_Infraestructura (Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Partial Guarantees for Structured and Unsecured Debt Issues: Debt Methodology.*
- *Approved (Methodology): March 2019.*
- *Developed by: HR*

### **2. Unsecured**

- *Version: Jul.20*
- *File Name: Garantías Parciales\_Quirografarias (Entidad\_Año). Jul.20*
- *Approved (Model): March 2019.*
- *Methodology: Partial Guarantees for Structured and Unsecured Debt Issues: Debt Methodology.*
- *Approved (Methodology): March 2019.*
- *Developed by: HR*

**Description:** For infrastructure, the partial guarantees model measures the average number of debt services that could be paid by using the guarantee, providing strength in terms of liquidity. Depending on the estimated average, certain number of notches will be awarded to the rating. For unsecured ratings, the model measures the percentage of the outstanding debt covered by the guarantee; however, the model controls for the Credit Rating of the entity providing the guarantee. According to certain values of coverage, notches will be awarded to the rating.

## **m) Model used for Rating Special-Tax Bonds of U.S.A. Local Entities**

- *Version: Jul.20*
- *File Name: Special-Taxes Model (Entity\_Bond). Jul.20*
- *Approved (Model): July 15, 2020*
- *Methodology: Special-Tax Bonds Methodology.*
- *Approved Methodology: April 2020.*
- *Developed by: HR Ratings*

**Description:** The model rates Special-Tax Bonds of U.S.A. Local Entities with four sets of key factors. The first one consists of an economic analysis of the elasticities of the taxed goods & services, and the concentration and strength of the tax base. The second set studies the historical performance of the trend and volatility of the pledge. The third set measures two coverage metrics and the fourth the Additional Bond Test and the Debt Service Reserve Fund requirements. Lastly, the model allows qualitative adjustments based on very specific factors and limited by concepts.

n) Models used for Mexican Structured Credit ratings.

**1. States and municipalities (Federal Income)**

- *Version: Jul.20*
- *File Name: Deuda Estructurada (Entidad\_Banco\_Clave).Jul.20*
- *Approved (Model): July 23, 2020.*
- *Methodologies: Structured Debt of Mexican States: Federal-Transfers Backed Debt Methodology (September 2020); Structured Debt of Mexican Municipalities: Addendum to the Federal-Transfers Backed Debt Methodology (September 2020).*
- *Approved (Methodology): August 5, 2020.*
- *Developed by: HR*

**Description:** The model is based upon the relationship of the Mexican economic growth and the revenue sharing obligations ("Ramo" 28) that the Federal Government transfers to the states and municipalities. Given an estimated income from said transfers, the minimum DSCR is determined along the debt structure. The revenues will be stressed through a TOE rate that will ultimately reduce the DSCR (always above one) in a critical period in such a way that the reserve funds can be reestablished in a previously determined post-critical period.

**2. Municipalities (Own income, FEFOM)**

- *Version: Jul.20*
- *File Name: DE Programa Especial FEFOM (Entidad\_Banco\_Clave). Jul.20*
- *Approved (Model): July 23, 2020.*
- *Methodology: Structured Debt of Subnational Entities and OPDs: Addendum to the Own-Revenue Backed Debt Methodology (September 2020)*
- *Approved (Methodology): August 5, 2020.*
- *Developed by: HR*

**Description:** The model is also based upon the TOE rate and the capacity of the revenues to reestablish the reserve funds in the post-critical period. However, in this methodology, the ability to successfully isolate the source of revenue from the entity through a trust fund is of major importance.