

# FORM NRSRO

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## APPLICATION FOR REGISTRATION AS A NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION (NRSRO)

SEC 1541 (1-15)

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**APPLICATION FOR REGISTRATION AS A  
NATIONALLY RECOGNIZED  
STATISTICAL RATING ORGANIZATION (NRSRO)**

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| <input type="checkbox"/> INITIAL APPLICATION<br><br><input type="checkbox"/> APPLICATION TO ADD CLASS OF CREDIT RATINGS<br><br><input type="checkbox"/> APPLICATION SUPPLEMENT<br>Items and/or Exhibits Supplemented:<br><hr style="width: 50%; margin-left: 0;"/> | <input type="checkbox"/> ANNUAL CERTIFICATION<br><br><input checked="" type="checkbox"/> UPDATE OF REGISTRATION<br>Items and/or Exhibits Amended:<br><u>Item 1 and Exhibit 2</u><br><br><input type="checkbox"/> WITHDRAWAL FROM REGISTRATION |
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**Important: Refer to Form NRSRO Instructions for General Instructions, Item-by-Item Instructions, an Explanation of Terms, and the Disclosure Reporting Page (NRSRO). “You” and “your” mean the person filing or furnishing, as applicable, this Form NRSRO. “Applicant” and “NRSRO” mean the person filing or furnishing, as applicable, this Form NRSRO and any credit rating affiliate identified in Item 3.**

1. A. Your full name:

HR Ratings de México, S.A. de C.V.

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B. (i) Name under which your credit rating business is primarily conducted, if different from Item 1A:

HR Ratings

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(ii) Any other name under which your credit rating business is conducted and where it is used (other than the name of a credit rating affiliate identified in Item 3):

N/A

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C. Address of your principal office (do not use a P.O. Box):

Guillermo González Camarena 1200, Floor 10, Centro de Ciudad Santa Fe <small>(Number and Street)</small>	Mexico City <small>(City)</small>	Mexico <small>(State/Country)</small>	01210 <small>(Zip/Postal Code)</small>
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D. Mailing address, if different:

N/A

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E. Contact person (See Instructions):

Alejandra Medina Díaz <small>(Name and Title)</small>	Head of Compliance		
Guillermo González Camarena 1200, Floor 10, Centro de Ciudad Santa Fe <small>(Number and Street)</small>	Mexico City <small>(City)</small>	Mexico <small>(State/Country)</small>	01210 <small>(Zip/Postal Code)</small>

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**CERTIFICATION:**

The undersigned has executed this Form NRSRO on behalf of, and on the authority of, the Applicant/NRSRO. The undersigned, on behalf of the Applicant/NRSRO, represents that the information and statements contained in this Form, including Exhibits and attachments, all of which are part of this Form, are accurate in all significant respects. If

this is an ANNUAL CERTIFICATION, the undersigned, on behalf of the NRSRO, represents that the NRSRO's application on Form NRSRO, as amended, is accurate in all significant respects.

10/28/2020

(Date)

HR Ratings de México, S.A. de C.V.

(Name of the Applicant/NRSRO)

By: 1st/ José Fernando Montes de Oca Gática José Fernando Montes de Oca Gática, Chief Executive Officer  
(Signature) (Print Name and Title)

2. A. Your legal status:

Corporation  Limited Liability Company  Partnership  Other (specify) \_\_\_\_\_

B. Month and day of your fiscal year end: 12/31

C. Place and date of your formation (i.e., state or country where you were incorporated, where your partnership agreement was filed, or where you otherwise were formed):

State/Country of formation: Mexico Date of formation: 6/22/07

3. Your credit rating affiliates (See Instructions):

HR Ratings, LLC United States, One World Trade Center, Suite  
(Name) (Address) 8500, New York, New York, Zip Code

(Name) (Address)

(Name) (Address)

(Name) (Address)

(Name) (Address)

4. The designated compliance officer of the Applicant/NRSRO (See Instructions):

Alejandra Medina Diaz Head Compliance Officer  
(Name and Title)  
Guillermo González Camarena 1200, Mexico City Mexico 01210  
Floor 10, Centro de Ciudad Santa Fe  
(Number and Street) (City) (State/Country) (Postal Code)

5. Describe in detail how this Form NRSRO and Exhibits 1 through 9 to this Form NRSRO will be made publicly and freely available on an easily accessible portion of the corporate Internet website of the Applicant/NRSRO (See Instructions):

Form NRSRO and exhibits will be made publicly available at: [https://www.hrratings.com/regulatory\\_disclosure/nrsro.xhtml](https://www.hrratings.com/regulatory_disclosure/nrsro.xhtml)

6. COMPLETE ITEM 6 ONLY IF THIS IS AN INITIAL APPLICATION, APPLICATION SUPPLEMENT, OR APPLICATION TO ADD A CLASS OF CREDIT RATINGS.

A. Indicate below the classes of credit ratings for which the Applicant/NRSRO is applying to be registered. For each class, indicate the approximate number of obligors, securities, and money market instruments in that class as of the date of this application for which the Applicant/NRSRO has an outstanding credit rating and the approximate date the Applicant/NRSRO began issuing credit ratings as a "credit rating agency" in that class on a continuous basis through the present (See Instructions):

Class of credit ratings	Applying for registration	Approximate number currently outstanding	Approximate date issuance commenced
<b>financial institutions as that term is defined in section 3(a)(46) of the Exchange Act (15 U.S.C. 78c(a)(46)), brokers as that term is defined in section 3(a)(4) of the Exchange Act (15 U.S.C. 78c(a)(4)), and dealers as that term is defined in section 3(a)(5) of the Exchange Act (15 U.S.C. 78c(a)(5))</b>	<input type="checkbox"/>		
<b>insurance companies as that term is defined in section 3(a)(19) of the Exchange Act (15 U.S.C. 78c(a)(19))</b>	<input type="checkbox"/>		
<b>corporate issuers</b>	<input type="checkbox"/>		
<b>issuers of asset-backed securities as that term is defined in 17 CFR 229.1101(c)</b>	<input type="checkbox"/>		
<b>issuers of government securities as that term is defined in section 3(a)(42) of the Exchange Act (15 U.S.C. 78c(a)(42)), municipal securities as that term is defined in section 3(a)(29) of the Exchange Act (15 U.S.C. 78c(a)(29)), and foreign government securities</b>	<input type="checkbox"/>		

**B.** Briefly describe how the Applicant/NRSRO makes the credit ratings in the classes indicated in Item 6A readily accessible for free or for a reasonable fee (See Instructions):

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**C.** Check the applicable box and attach certifications from qualified institutional buyers, if required (See Instructions):

- The Applicant/NRSRO is attaching \_\_\_\_\_certifications from qualified institutional buyers to this application. Each is marked "Certification from Qualified Institutional Buyer."
- The Applicant/NRSRO is exempt from the requirement to file certifications from qualified institutional buyers pursuant to section 15E(a)(1)(D) of the Exchange Act.

**Note: You are not required to make a Certification from a Qualified Institutional Buyer filed with this Form NRSRO publicly available on your corporate Internet website pursuant to Exchange Act Rule 17g-1(i). You may request that the Commission keep these certifications confidential by marking each page "Confidential Treatment" and complying with Commission rules governing confidential treatment. The Commission will keep the certifications confidential upon request to the extent permitted by law.**

**7. DO NOT COMPLETE ITEM 7 IF THIS IS AN INITIAL APPLICATION.**

**A.** Indicate below the classes of credit ratings for which the NRSRO is currently registered. For each class, indicate the approximate number of obligors, securities, and money market instruments in that class for which the NRSRO had an outstanding credit rating as of the most recent calendar year end and the approximate date the NRSRO began issuing credit ratings as a “credit rating agency” in that class on a continuous basis through the present (See Instructions):

Class of credit rating	Currently registered	Approximate number outstanding as of the most recent calendar year end	Approximate date issuance commenced
<b>financial institutions as that term is defined in section 3(a)(46) of the Exchange Act (15 U.S.C. 78c(a)(46)), brokers as that term is defined in section 3(a)(4) of the Exchange Act (15 U.S.C. 78c(a)(4)), and dealers as that term is defined in section 3(a)(5) of the Exchange Act (15 U.S.C. 78c(a)(5))</b>	<input type="checkbox"/>		
<b>insurance companies as that term is defined in section 3(a)(19) of the Exchange Act (15 U.S.C. 78c(a)(19))</b>	<input type="checkbox"/>		
<b>corporate issuers</b>	<input type="checkbox"/>		
<b>issuers of asset-backed securities as that term is defined in 17 CFR 229.1101(c)</b>	<input type="checkbox"/>		
<b>issuers of government securities as that term is defined in section 3(a)(42) of the Act (15 U.S.C. 78c(a)(42)), municipal securities as that term is defined in section 3(a)(29) of the Exchange Act (15 U.S.C. 78c(a)(29)), and foreign government securities</b>	<input type="checkbox"/>		

**B.** Briefly describe how the NRSRO makes the credit ratings in the classes indicated in Item 7A readily accessible for free or for a reasonable fee (See Instructions):

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<p><b>8.</b> Answer each question. Provide information that relates to a “Yes” answer on a Disclosure Reporting Page (NRSRO) and submit the Disclosure Reporting Page with this Form NRSRO (See Instructions). You are not required to make any disclosure reporting pages submitted with this Form publicly available on your corporate Internet website pursuant to Exchange Act Rule 17g-1(i). You may request that the Commission keep any disclosure reporting pages confidential by marking each page “Confidential Treatment” and complying with Commission rules governing confidential treatment. The Commission will keep the disclosure reporting pages confidential upon request to the extent permitted by law.</p>	
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	YES	NO
<b>A.</b> Has the Applicant/NRSRO or any person within the Applicant/NRSRO committed or omitted any act, or been subject to an order or finding, enumerated in subparagraphs (A), (D), (E), (G), or (H) of section 15(b)(4) of the Securities Exchange Act of 1934, been convicted of any offense specified in section 15(b)(4)(B) of the Securities Exchange Act of 1934, or been enjoined from any action, conduct, or practice specified in section 15(b)(4)(C) of the Securities Exchange Act of 1934 in the ten years preceding the date of the initial application of the Applicant/NRSRO for registration as an NRSRO or at any time thereafter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.</b> Has the Applicant/NRSRO or any person within the Applicant/NRSRO been convicted of any crime that is punishable by imprisonment for 1 or more years, and that is not described in section 15(b)(4) of the Securities Exchange Act of 1934, or been convicted of a substantially equivalent crime by a foreign court of competent jurisdiction in the ten years preceding the date of the initial application of the Applicant/NRSRO for registration as an NRSRO or at any time thereafter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>C.</b> Is any person within the Applicant/NRSRO subject to any order of the Commission barring or suspending the right of the person to be associated with an NRSRO?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**9. Exhibits** (See Instructions).

<p><b>Exhibit 1.</b> Credit ratings performance measurement statistics.</p> <p><input type="checkbox"/> Exhibit 1 is attached and made a part of this Form NRSRO.</p>
<p><b>Exhibit 2.</b> A description of the procedures and methodologies used in determining credit ratings.</p> <p><input checked="" type="checkbox"/> Exhibit 2 is attached and made a part of Form NRSRO.</p>
<p><b>Exhibit 3.</b> Policies or procedures adopted and implemented to prevent the misuse of material, nonpublic information.</p> <p><input type="checkbox"/> Exhibit 3 is attached and made a part of this Form NRSRO.</p>
<p><b>Exhibit 4.</b> Organizational structure.</p> <p><input type="checkbox"/> Exhibit 4 is attached to and made a part of this Form NRSRO.</p>
<p><b>Exhibit 5.</b> The code of ethics or a statement of the reasons why a code of ethics is not in effect.</p> <p><input type="checkbox"/> Exhibit 5 is attached to and made a part of this Form NRSRO.</p>
<p><b>Exhibit 6.</b> Identification of conflicts of interests relating to the issuance of credit ratings.</p> <p><input type="checkbox"/> Exhibit 6 is attached to and made a part of this Form NRSRO.</p>
<p><b>Exhibit 7.</b> Policies and procedures to address and manage conflicts of interest.</p> <p><input type="checkbox"/> Exhibit 7 is attached to and made a part of this Form NRSRO.</p>

**Exhibit 8.** Certain information regarding the credit rating agency's credit analysts and credit analyst supervisors.

Exhibit 8 is attached to and made a part of this Form NRSRO.

**Exhibit 9.** Certain information regarding the credit rating agency's designated compliance officer.

Exhibit 9 is attached to and made a part of this Form NRSRO.

**Exhibit 10.** A list of the largest users of credit rating services by the amount of net revenue earned from the user during the fiscal year ending immediately before the date of the initial application.

Exhibit 10 is attached to and made a part of this Form NRSRO.

**Note: You are not required to make this Exhibit publicly available on your corporate Internet website pursuant to Exchange Act Rule 17g-1(i). You may request that the Commission keep this Exhibit confidential by marking each page "Confidential Treatment" and complying with Commission rules governing confidential treatment. The Commission will keep the information and documents in the Exhibit confidential upon request to the extent permitted by law.**

**Exhibit 11.** Audited financial statements for each of the three fiscal or calendar years ending immediately before the date of the initial application.

Exhibit 11 is attached to and made a part of this Form NRSRO.

**Note: You are not required to make this Exhibit publicly available on your corporate Internet website pursuant to Exchange Act Rule 17g-1(i). You may request that the Commission keep this Exhibit confidential by marking each page "Confidential Treatment" and complying with Commission rules governing confidential treatment. The Commission will keep the information and documents in the Exhibit confidential upon request to the extent permitted by law.**

**Exhibit 12.** Information regarding revenues for the fiscal or calendar year ending immediately before the date of the initial application.

Exhibit 12 is attached to and made a part of this Form NRSRO.

**Note: You are not required to make this Exhibit publicly available on your corporate Internet website pursuant to Exchange Act Rule 17g-1(i). You may request that the Commission keep this Exhibit confidential by marking each page "Confidential Treatment" and complying with Commission rules governing confidential treatment. The Commission will keep the information and documents in the Exhibit confidential upon request to the extent permitted by law.**

**Exhibit 13.** The total and median annual compensation of credit analysts.

Exhibit 13 is attached and made a part of this Form NRSRO.

**Note: You are not required to make this Exhibit publicly available on your corporate Internet website pursuant to Exchange Act Rule 17g-1(i). You may request that the Commission keep this Exhibit confidential by marking each page "Confidential Treatment" and complying with Commission rules governing confidential treatment. The Commission will keep the information and documents in the Exhibit confidential upon request to the extent permitted by law.**

## Contacts

### Pedro Latapi

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### Alfonso Sales

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Director  
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### Mauricio Prieto

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This document is the exclusive property of HR Ratings and is applicable beginning October 28<sup>th</sup>, 2020.

## This document establishes HR Ratings' General Methodological Criteria.

HR Ratings' General Methodological Criteria describes concepts that are applicable to all the rating assigned to states, issuers, issues, credits and structured products. The common concepts to understand HR Ratings' ratings are the following:

- **HR Ratings' ratings** reflect an evaluation of the credit quality of an entity, issuer, issue, credit or structured product against other similar entities, products or assets and not necessarily a statistical probability of payment default (*page 2*);
- **Default Criteria.** On assigning a rating based on level of default, HR Ratings' methodologies allow the distinction between the default of specific debt Instruments and entities subject to the payment obligation (*page 2*).
- **Liabilities with Specific Accounting Treatment.** There are entities that have lines of credit or liabilities with finance cost that may not be posted in accounting as a banking and/or securities market debt. Notwithstanding, HR Ratings considers any breach or delay of previously agreed debt payment obligations as a default or non-payment (*page 4*).
- **Relationship between Short- and Long-Term Ratings.** Although the ratings on each scale between these concepts have a typically direct relationship, short-term ratings may be in a higher range based on the credit strengths that facilitate short-term funding (*page 5*).
- **HR Ratings' ratings may be assigned on a Local Scale and/or a Global Scale.** Here, the difference is based on that Global Scale ratings consider the sovereign risk of the country in which the entity predominantly operates (*page 5*).
- **Equivalence of Global to Local Scale.** HR Ratings has a process to measure the credit risk of any entity in a country not rated directly by HR Ratings and make an equivalence with the credit risk that another entity may have in a country rated by HR Ratings (*page 6*).
- **Ratings Actions and Attributes:** HR Ratings assigns one of three possible attributes to its ratings: Outlook, Observations or Review in Process (*page 7*).
- **Sovereign Support.** HR Ratings may consider that an entity or issue has the backing of the Federal Government or Central Government of the country in which it operates and therefore, both would maintain the same rating (*page 8*).
- **Legal Opinion.** In the case of structured transactions, such as products, issues or loans with any directly assigned payment source, HR Ratings may request a Legal Opinion from an external independent lawyer (*page 8*).
- **Treatment of the Lack of Transparency in the Information Presented or the Low Level of Corporate Governance.** If HR Ratings identifies shortfall in the information provided for analysis or identifies weakness in the Corporate Governance of the rated entity, it may apply an unfavorable qualitative adjustment to the rating (*page 9*);
- **Limited and Preliminary Ratings.** These represent an analysis of credit strength under specific assumptions, these do not have a determined term and are not subject to withdrawal, monitoring or update. Therefore, these ratings are not regulatory (*page 9*).
- **Influential Ratings.** This refers to the use of credit ratings assigned by other rating agencies authorized by the relevant authorities and that have an impact of HR Ratings' rating processes (*page 11*).



## 1. HR Ratings' Ratings

HR Ratings' ratings are an evaluation of the credit quality of an entity, issuer, issue, credit or structured product against other similar entities, products or other forms of structured debt. The ratings show the relative position of an asset and entity in its market and do not represent a statistical probability of default; therefore, they are not associated with an evaluation of the risk of non-payment at each rating level. Moreover, credit quality refers to the capacity and intention of complying with the debt obligations (and/or contractual obligations in the case of insurance and bonding institutions) and the time and manner stipulated.

These ratings may be assigned for the Short-Term and/or the Long-Term with their respective scales that reflect the respective risks. These ratings may also be assigned in the Local Scale and the Global Scale and regardless of the lapse they evaluate and the scale in which they are assigned, they may be granted one of the following three attributes: Outlook, Observations or Review in Process.

The credit ratings are dynamic; therefore, HR Ratings will follow-up on and monitor them constantly during the entire time the ratings remain valid.

## 2. Default Criteria.

### 2.1. Default: Definitions be level of default

On assigning a rating based on level of default, HR Ratings' methodologies allow the distinction between the default of specific debt Instruments and entity subject to the payment obligation. Additionally, HR Ratings does not limit the default rating to the event of non-payment, but instead extends its analysis to cases in which payments do not meet the conditions originally agreed in terms of time and manner.

In the specific context of debt instruments, HR Ratings defines non-payment or default (HR D) as a delay or suspension in obligatory principal or interest payments, in accordance with the terms, conditions and deadlines originally agreed. In terms of the entity responsible, the assignment of the credit rating depends on the level of credit of all its obligations taken as a whole: When an entity's default covers the "Predominant" part of its debt, the rating is held at HR D. When the default is "Significant", but not necessarily "Predominant", the entity's rating would be assigned as HR DS (selective default). In these cases, the importance and relevance of the debt in default would be considered.

In many cases, an entity may find itself in adverse or stress conditions that affects its intention and/or capacity to meet its payment obligations in accordance with the conditions originally agreed, which may result in a renegotiation of the payment terms between the entity and its creditors. HR Ratings considers a forced restructure as one in which the creditors and the entity agree payment terms other than those previously established and for which, if said modification were not implemented, the entity would not have had the capacity to meet its obligations correctly and promptly. Under these assumptions, HR Ratings would consider the assignment of a rating of HR DT (technical default).

However, based on the evolution of the circumstances (e.g., acceptance by the creditors, the contracting or new debt by the entity), the credit ratings of these instruments may undergo more accelerated improvements, above all in comparison with instruments rated as HR D or HR DS.

In terms of the credit rating of any entity with one or more instruments rated as HR DT, HR Ratings will apply its "Preponderance" criterion to determine if said entity will be granted a

rating of HR D or HR DS. The Preponderance of the debt shall be based on the following concepts:

- **Proportion:** This is the magnitude of the debt in debt compared to the debt that is up to date.
- **Timing:** This is the current impact the debt has on default. It is weighted in context: When was it issued? When did it have to be settled? Is it still current for our analysis?
- **Litigation:** It is determined if the debt in default is in legal process to define if the payment could be inadmissible and the considerations around said process.

HR Ratings considers that when default does not represent the “Predominant” part of the entity’s debt, the rating process will be conducted in order to evaluate the result of the analysis qualitatively to then incorporate the effect on the credit quality of the history of the default. HR Ratings will evaluate the “Preponderance” of the debt in default continuously; therefore, the entity’s credit rating of the debt credit and thus, its obligations may change over time.

Ratings of HR D and HR DT would be applied to the default of a debt instrument with any third-party creditor, whether this be an institution, a fund, an individual, either private or public. These ratings would also apply if the creditor is the original or the purchaser of the instrument in the secondary market, except in situations in which there were a non-transfer clause. Ratings of HR D and HR DT may not be applied in cases in which the creditor was not a third party, but instead an entity related intrinsically with the debtor. For example, a debt contracted by and between a country and a development or a social security entity. Table 1 summarizes the types of default in which an entity or an issue may incur:

**Table 1: Default by:**

	Issuer	Issue
<b>HR D</b>	Yes	Yes
<b>HR DS</b>	Yes	No
<b>HR DT</b>	Yes	Yes

Source: HR Ratings.

In the case of issuers, the movement from one status to another (from default to payment or to modified payment, with all its circumstances) both the level of downgrade of *notches* and the duration of said downgrade will be considered by HR Ratings, which will reduce gradually if the entity shows consistency in its payments.

In cases where a default is identified of an issue not related to the payment capacity and/or intention of the issuer because it is due to the operative failures of an intermediary or any other entity through which cash flows in order to service the debt, HR Ratings will consider the lapse expected for payment to be made and may determine that said default does not require a rating action. This decision will be reported to the market in a press release. However, if this type default is frequent, it will be considered as a weakness of the issue and HR Ratings may assign an unfavorable qualitative adjustment or change in the attribution of the rating through a rating action.

## 2.2. Obligations in compliance in entities with histories of default

An entity, despite having breached certain obligations, may be up to date with the payment of other credits. Therefore, even if the rating of an entity is HR D, HR DS, HR DT or with a penalization for default on certain instrument, it would be possible to proceed with the rating of a debt obligation that in being paid normally within the terms established (in compliance).

The rating process would be conducted in accordance with the methodology relevant to the type of asset. However, if the entity's rating is HR D, HR DT or HR DS, the rating granted to the obligation in compliance may receive a qualitative penalization.

## 2.3. Stage following default for entities

If an improvement is observed in the "Preponderance" of the current debt or even the entire debt that the entity had in default is paid, the qualitative penalization will continue for an indefinite period, and may be progressively less.

When HR Ratings assigns a rating of HR D due to structural or non-structural factors, it will proceed to assign a rating of HR C immediately after having repaid all the financial obligations. However, the criterion to assign higher ratings will vary based on the reasons for falling into default. These criteria are detailed as follows:

- a) The following elements will be considered in the event of a structural default:
  1. A rating of HR D will be assigned in the event of default.
  2. A rating of HR C will be assigned when the default is paid.
  3. HR Ratings' evaluation of the entity's financial situation.
  4. Assignment of a rating considering the entity's financial situation and several adjustment factors. The improvement of the rating will be gradual, as the entity's situation continues to be reflected.
  
- b) The ratings will be as follows if there is a non-structural default:
  1. A rating of HR D will be assigned in the event of default.
  2. A rating of HR C will be assigned when the default is paid.
  3. There is a Monitoring Period in which the possible effects related to default are evaluated, such as cross-debt maturity, events of advanced or accelerated amortization of credits or debt issues and the possible legal consequences on the entity. This lapse is indefinite.
  4. A Recovery Period that may last for up to six months in which a Rating Adjusted for Default may be assigned. The Rating Adjusted for Default incorporates a certain number of adjustment *notches* because of factors that lead to the non-structural default.
  5. Assignment of a rating without an adjustment for default.

## 3. Treatment of Liabilities with no Specific Accounting Treatment

HR Ratings may observe cases in which entities that have lines of credit or liabilities with finance cost operate and that due to the nature of said lines or the accounting treatment used may not be presented as a banking and/or securities market debt. In these cases, HR Ratings considers that these captions represent liabilities with cost regardless of how they are recorded by the borrower in the information presented. Pursuant to this, the entity shall be default or non-payment at the time there is a breach or delay in the previously agreed obligations. Also, default is considered even if the bank or creditor entity does not classify it

as past-due portfolio from the beginning, but until the legal period to recognize said account in accounting has elapsed.

## 4. Relationship between Short- and Long-Term Ratings

HR Ratings may grant Short- and Long-Term Ratings to entities depending on the requirement generated. The analysis conducted, in accordance with the relevant methodology, captures the credit risks associated to different factors and their specific impact in these lapses. In general terms, the relationship between the rating scales in different lapses is shown in Table 2:

Table 2: Equivalencies	
Ratings	
Long Term	Short Term
HR AAA	HR+1
HR AA (+/-)	HR1
HR A (+/-)	HR2
HR BBB (+/-)	HR3
HR BB (+/-)	HR4
HR B (+/-)	HR4
HR C (+/-)	HR5

Source: HR Ratings.

However, the equivalence shown in this Table 2 is not direct. The Short-Term rating may be higher at Long-Term rating level when the entity or the issue has an immediate source of liquidity. For example, in cases in which certain issuers are recurring and have the capacity to fund themselves in the market in the Short-Term. Also, certain issuers or issues have contingent lines of cash or some form of partial guarantee. For example, if HR Ratings identifies that an entity has any of these strengths, it may assign a Long-Term rating in the range of HR A (+/-), but the Short-Term rating assigned may be HR1.

## 5. Local and Global Scale Ratings

HR Ratings' ratings may be assigned on a Local Scale and/or a Global Scale. The Local Scale refers to an issuer's or issue's credit quality within a specific country. In occasions, HR Ratings will rate entities that have cash flow that originate from multiple currencies. However, the following factors must be considered in order to determine on which Local Scale the rating is to be assigned:

- Country or countries in which the entity operates;
- The composition of earnings and/or income in terms of currency;
- The denomination of the debt obligations, the functional currency in which the financial information is reported;
- The exchange rate risk to which it may be exposed;
- The operating conditions of the entity that may lead to any direct relationship with any jurisdiction.

In general, HR Ratings' models and methodologies assign ratings on the scale because the parametrization of the metrics used in the analysis will have the same validation regardless on the political demarcation where the entity operates.

Moreover, ratings on the Global Scale include the Sovereign Risk, which refers to the risks associated with degradation, convertibility and transferability of the currencies involved in the entity's operation.

To assign a rating on the Global Scale to an entity that only operates in one country, only uses the currency of that country and has only been assigned a rating on the Local Scale, the difference in terms of *notches* between the ratings on the Local Scale and the Global Scale assigned to the respective country will be applied to it.

For entities that have cash flow that originate from multiple currencies, HR Ratings will evaluate to what extent each currency contributes to or mitigates the risk to assign its rating on the Global Scale. In this vein, HR Ratings does not consider that the rating on the Local Scale is a ceiling for the rating on the Global Scale, considering the country in which the entity operates.

## 6. Equivalence of Global to Local Scale

In occasions, HR Ratings must measure the credit risk on the Local Scale of an entity (a subsidiary) that depends on another entity (a holding company) that operates in a different country. An example of this is in cases in which it is determined that the credit risk of a subsidiary applies to the risk of its holding company in another country.

This equivalence would only be necessary when HR Ratings does not have the credit rating of the holding company<sup>1</sup>, and the following elements would be required to apply it:

- i. The holding company's credit rating on the Global Scale<sup>2</sup>.
- ii. The sovereign rating of the country in which the holding company operates<sup>3</sup>.
- iii. The average of the Influential Ratings in the market of the country in which the holding company operates<sup>4</sup>.
- iv. HR Ratings' sovereign rating of the country in which the subsidiary operates.

The process to determine the HR Ratings' rating on the Local Scale for these entities is as follows:

1. The difference is measured in terms of *notches* between the average of Influential Ratings (element iii) and the sovereign rating of the entity rated by HR Ratings (element iv).
2. The difference is measured in terms of *notches* between the Influential Rating of the holding company (element i) and the Influential Rating of the country in which the holding company operates (element ii).

<sup>1</sup> This equivalence may only be applied when HR Ratings has assigned a rating on the Local Scale and on the Global Scale to the country in which the subsidiary operates.

<sup>2</sup> Since HR Ratings does not have the credit rating of this entity, it must use the lowest Influencing Rating on the market. Influential Ratings are defined in section 11 on page 11 of this document.

<sup>3</sup> In this case, the Influencing Rating of the same rating agency is required.

<sup>4</sup> The Influential Ratings must have been assigned on the Global Scale.

3. Based on the differences explained in points 1 and 2, the rating will be assigned to the entity (subsidiary) on the Local Scale of the country rated by HR Ratings.
4. HR Ratings may make adjustments to the rating on the Local Scale of the entity (subsidiary) based on its specific situation.

## 7. Ratings Actions and Attributes of Ratings

HR Ratings defines the term “Rating Action” as all decisions that refer to an assignment, modification, ratification or withdrawal of a rating or to the assignment, modification, ratification or withdrawal of a rating attribute. A rating cannot have an attribute of Review in Process and Observations and/or Outlook at the same time because a Review in Process precedes an Observation or an Outlook.

HR Ratings defines a Rating Attribute as a particular characteristic of a rating and recognizes three types:

- a) **Outlook.** Outlook refers to trends, typically long-term, observed from the rating process, whether macroeconomic, related to an industry, or inherent to the entity or issue rated. The sense of the effect is known; therefore, the Outlook is assigned as: “Positive”, “Negative” or “Stable” and in general terms, relates to any Long-Term rating assigned by HR Ratings<sup>5</sup>. However, in cases in which HR Ratings only rates or publishes the Short-Term rating, it will assign an Outlook on the risks it identifies.
- b) **Observation.** An observation refers to Short-Term events or trends that may have an impact on the rating and its sense is also known. These events or trends are typically inherent to the entity or issue but may also manifest themselves following macroeconomic events or events related to an industry or sector. This type of attribute differs from the Outlook in which the events that cause it would have an effect in the Short-Term.

The Observations period is from zero to nine months and it is HR Ratings’ obligation to renew it in accordance with the terms indicated. To do so, a report and/or communicate will be issued within a maximum of nine months from the date of the previous Observation, in which said attribute may be modified, ratified or withdrawn. A rating cannot have an attribute of Observation and/or Outlook at the same time because an Observation precedes an Outlook.

- c) **Review in Process.** This type of attribute differs from the previous attributes because it refers to a structural change of the entity or a specific scenario and above all, the sense and/or the magnitude of the impact cannot always be anticipated. Additionally, HR Ratings may place any entity or issue into Review in Process following a methodological change.

For example, an acquisition could have been announced with uncertain effects (which in itself may give rise to an Observation action), but there may be uncertainty with regard to the consummation of said acquisition or the case may arise in which an acquisition is arranged to take place, but the method of financing (debt or capital) has yet to be determined or announced. In these cases, a Review in Process action will be assigned if there is no further information.

Generally, a Review in Process lasts for up to nine months with the probability that it may be extended if the events that give rise to said action prevail. Unlike the Observation and

<sup>5</sup> In this section, the sense refers to whether the impact is positive, negative or neutral.

the Outlook, the Review in Process is neutral if the details of the possible change or the possibility that they will occur are unknown.

When a Review in Process is assigned, the most-recent rating action must be mentioned, substituting the previous attribute. If this Review in Process is applied, HR Ratings will issue a report and/or communique within a maximum of nine months from the date of the previous review, and the review period being extended for a further nine months or the Review in Process may be withdrawn.

## 8. Sovereign Support

HR Ratings may consider that an entity or issue has the backing of the Federal Government or Central Government of the country in which it operates and therefore, it would maintain the same rating. This assignment is justified when the entity or issue:

1. Provides significant financial support to the Federal Government and incapacity to pay would imply an immediate reduction of the flow of income for the Public Sector;
2. In the case of default by an institution, the economy and the markets would be affected, this generating difficulties for the Public Sector, which would be obliged to assist said institution or issue to avoid an event of default;
3. It has such an important level of political influence that the authorities are obligated to intervene to avoid an event of default.

In those cases, in which an entity or issue is considered to have a sovereign credit risk, the rating process will consist of:

1. An evaluation of the reasons why the entity or issue deserves the same sovereign risk rating.
2. An analysis of the macroeconomic factors and those inherent to the entity, including all those related to the specific methodology.

## 9. Legal Opinion

In the case of structured transactions, such as products, issues or loans with any directly assigned payment source, HR Ratings may request a Legal Opinion from an external independent lawyer. The main purpose of the Legal Opinion is to ensure that the legal documents and accessory legal elements used in the rating process are valid in accordance with the applicable legislation, they meet all the requirements to be upheld in a legal process and be enforceable, and that they adequately isolate the resource or asset to be used to service payment of the debt. This last point would indicate that if the entity related to the structured transaction incurred in default and therefore the entity would face a situation of bankruptcy or liquidation, the assets assigned for the payment of the transaction would not be considered as part of the entity's mass in the bankruptcy or liquidation process.

In general terms, the Legal Opinion would have a binary characteristic, which would be defined as either enough or insufficient. If the Legal Opinion is insufficient, HR Ratings will not take the benefit of the structure into account for the assignment of the rating; therefore, the analysis profile and the methodology used may differ from those used for structured transactions.

## 10. Treatment of the Lack of Transparency in the Information Presented or the Low Level of Corporate Governance.

There are occasions in which, at HR Ratings' discretion, the information submitted by issuers or entities have a low level of transparency in terms of presentation and/or consistency. This may include situations in which an entity does not adhere to international accounting standards or sound market practices.

Due to this, HR Ratings may apply a negative adjustment factor to the rating of any issuer or issue when the information submitted lacks transparency. Said adjustment shall consider the following factors, which will determine the extent of the adjustment on the rating assigned:

1. **Severity:** HR Ratings will evaluate the severity of the low level of transparency/lack of adherence in terms of the information submitted, considering the severity as proportional to the impact that the low level of transparency has on the analysis conducted.
2. **Frequency:** HR Ratings will evaluate the frequency with which the information submitted lacks transparency, considering a greater frequency as more severe.
3. **Capacity and Will to React:** After identifying the lack of transparency, HR Ratings will evaluate the efforts made by the issuer or entity to improve its transparency and adherence to the accounting standards. HR Ratings will also evaluate the entity's or issuer's capacity and will to react in terms of the possible adjustments made to the information submitted and the adjustments to be incorporated into future information.

Moreover, there are occasions on which the company or entity shows poor compliance in terms of sound Corporate Governance practices, including the lack of support committees or structures that allow for objectivity, mainly in the sphere of auditing and internal control. To do this, HR Ratings may apply adjustments to the rating, considering factors of severity and capacity to react, as described, in order to establish the impact of said adjustments. This is additional to what the methodology in each case may weight in relation to Corporate Governance practices.

## 11. Limited and Preliminary Ratings.

Limited Ratings are an analysis of credit strength requested by a client in which HR Ratings is asked to evaluate a particular entity, issue or credit under a set of hypothetical or specific characteristics, assumptions or scenarios in order to establish the rating that could be assigned if said characteristics were met or observed.

Moreover, Preliminary Ratings are an analysis of credit strength requested by the entity or issuer in which HR Ratings is asked for a prior or initial evaluation of any transaction that the issuer intends to perform, but does not yet have the information in order to close the transaction. This is generally for the purpose of initiating a sale or prospecting to investors. HR Ratings will evaluate the entity, issue or credit based on the methodologies used for each type of asset.

Limited and Preliminary Ratings have no validity beyond the time they are granted and are not subject to withdrawal, monitoring or update. Therefore, these ratings are not regulatory. However, a Preliminary Rating can be converted into a Regulatory Credit Rating after confirming the conditions applicable to the Preliminary Rating.



It is important to note that a Regulatory Rating may differ from the Preliminary Rating if on materializing there were any change in the conditions applicable to the Preliminary Rating. Once the Preliminary Rating is converted into Regulatory Credit Rating, it will receive the same treatment and have the same terms as the rest of the rating and will be subject to withdrawal, monitoring or update.

HR Ratings will explain in the report or communicate that it is in fact a Limited or Preliminary Rating and they may be private or public depending on the requirements of the entity or issuer.

In the case of Limited Ratings, HR Ratings will evaluate the entity, issue or credit based on the methodologies used for each type of asset, considering the assumptions provided by the client; therefore, the rating will be granted based on said assumptions. HR Ratings may incorporate its own assumptions, where appropriate, to conduct the rating process.

The following cases are some examples of the use of a Limited Rating:

- When seeking to analyze an issue or credit under the set of specific hypothetical characteristics (specific level of capacity, coverage, term, amount, payment source, to mention a few).

- When seeking to evaluate the impact in terms of the credit quality of a transaction that an entity may perform (merger, acquisition, a specific purchase, investment projects, refinancing or restructuring process, sale of assets, spin-off of business units, among others).

- When seeking the credit evaluation for transactions without having the final documentation or legal opinions available in order to consider possible changes to issues already in the market. In the light of this, considering the hypothetical changes, the Limited Rating may be a requirement for stockholders' or holders' meetings to approve the modifications proposed.

Preliminary Ratings include assumptions on variables that are known to be relevant but have yet to be determined. Preliminary Ratings are usually required as part of predetermined processes, such as placements or applications to guarantees.

The following cases are some examples of the use of a Preliminary Rating:

- When a public-sector entity or any other institution seeks to evaluate the capacity of a bidder to finance a certain project or transaction.

- When in the case of structured and non-structured transactions, the credit evaluation is sought without having the final documentation.

In order to assign a Limited or Preliminary Rating, the first step will be the express request of the entity or issuer. Then HR Ratings will conduct the analysis to determine said rating with the information and assumptions provided by the entity or issuer (in the case of Limited Ratings). During the analysis process, HR Ratings will not provide any feedback whatsoever on the rating to be assigned or the sensitivity to it. This is because Limited and Preliminary Ratings do not include any financial advice or restructuring service.

In the report or communicate HR Ratings will explain the assumptions taken into consideration for the assignment of the rating, clarifying that it is in fact a Limited or Preliminary Rating and that said rating depends on the assumptions included in the analysis.

The scale used for the Limited Ratings is the same as the one used in the scales relating to each type of asset. However, to indicate that it is a Limited Rating, HR Ratings assigns the indicative "(L)" to the end of each symbol. The scale used for the Preliminary Ratings is the same as the one used in the scales relating to each type of asset. However, to indicate that it is a Preliminary Rating, HR Ratings assigns the indicative "(P)" to the end of each symbol.

## 12. Influential Ratings.

In certain analysis processes, HR Ratings requires the credit analysis or evaluation of entities that do not maintain a rating assigned. In these cases, a rating issued by another rating agency may be used, which is defined as an Influential Rating. The Influential Ratings must be granted by rating agencies authorized by the regulators in each jurisdiction and in each case HR Ratings may evaluate if it considers or not the Influential Rating in the assignment of the ratings in accordance with the different methodologies applicable.

If an Influential Ratings is used, the analysis team must follow-up on it in accordance with the stipulations set forth in its internal policies and procedures to monitor possible changes in said rating and which would affect the analysis performed by HR Ratings.



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**HR Ratings de México, S.A. de C.V. (HR Ratings), is a securities rating agency authorized by the National Banking and Securities Commission (CNBV), registered with the Securities and Exchange Commission (SEC) as a Nationally Recognized Statistical Rating Organization (NRSRO) for public finance, corporate and financial institutions' assets, as described in clause (v) of Section 3(a)(62)(A) of the U.S. Securities Exchange Act of 1934 and certified as a Credit Rating Agency (CRA) by the European Securities and Markets Authority (ESMA).**

The ratings and opinions of HR Ratings de México S.A. de C.V. (HR Ratings) are opinions on the credit quality and/or asset management capacity or relative to the performance of the tasks focused on complying with the corporate purpose by issuers and other entities or sectors. Said ratings and opinions are based exclusively on the characteristics of the entity, issue and/or transaction, regardless of any business activity by and between HR Ratings and the entity or issuer. The ratings and/or opinions granted are issued on behalf of HR Ratings and not of its management or technical staff and do not constitute recommendations to purchase, sell or hold any instrument or perform any type of business, investment or transaction. In addition, said ratings and/or opinions may be subject to updates at any time in accordance with HR Ratings' ratings methodologies, pursuant to the terms of section II and/or III, as applicable, of Article 7 of the "General Provisions Applicable to Securities Issuers and Other Participants in the Securities Market".

HR Ratings bases its ratings and/or opinions on information obtained from sources considered to be accurate and reliable. However, HR Ratings does not validate, guarantee or certify the accuracy, precision or entirety of any information and is not liable for any error or omission or for the results obtained from the use of said information. Most of the debt instrument issuers rated by HR Ratings have paid a credit rating fee based on the amount and type of the issue. The advantage of the instrument or the solvency of the issuer and, if applicable, the opinion of the capacity of an entity in terms of the management of assets and the performance of its corporate purpose may be modified, which will affect, as applicable, the upgrade or downgrade of the rating, without this implying any liability whatsoever for HR Ratings. HR Ratings issues its ratings and/or opinions in an ethical manner and in accordance with sound market practices and the applicable standards provided on its web page [www.hrratings.com](http://www.hrratings.com), where documents such as the Code of Conduct, the ratings methodologies or criteria and current ratings can be consulted.

The ratings and/or opinions issued by HR Ratings consider an analysis of the relative credit quality of an entity, issuer and/or issue; therefore, they do not necessarily reflect a statistical probability of default on payment, this being understood as the impossibility or the lack of will of an entity or issuer to perform its contractual payment obligations. Creditors and/or holders may then be forced to take measures to recover their investments, which may even include restructuring the debt due to the stress situation faced by the debtor. Notwithstanding the foregoing, to grant greater validity to our credit quality opinions, our methodology considers stress scenarios as a complement to the analysis prepared on a base scenario. The fees paid to HR Ratings by issuers generally vary from US\$1,000 to US\$1,000,000 (or the equivalent in local currency) per issue. In some cases, HR Ratings will rate all or some of the issues of a particular issuer for an annual fee. The annual fees are expected to vary between US\$5,000 and US\$2,000,000 (or the equivalent in local currency).

## METHODOLOGIES

### Current versions of previously sent 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	Methodology for Public Finances: Unsecured Debt Ratings for Mexican Municipalities Methodology Addendum ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Addenda_Deuda_Quirografia_Municipios%20English%20Final.pdf">https://www.hrratings.com/docs/metodologia/Addenda_Deuda_Quirografia_Municipios%20English%20Final.pdf</a>
3	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%20Debt%20Credit%20Risk%20Evaluation%20Final.pdf">https://www.hrratings.com/docs/metodologia/Corporate%20Debt%20Credit%20Risk%20Evaluation%20Final.pdf</a>
4	Public Finance Methodology Unsecured Rating for Mexican States ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Unsecured%20Rating%20for%20Mexican%20States.pdf">https://www.hrratings.com/docs/metodologia/Unsecured%20Rating%20for%20Mexican%20States.pdf</a>
5	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>
6	Sovereign Debt Methodology ( <i>Long Term and Short Term Global Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/Sovereign%20Debt%20Methodology.pdf">https://www.hrratings.com/docs/metodologia/Sovereign%20Debt%20Methodology.pdf</a>
7	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%20Nov2013_final.pdf">https://www.hrratings.com/docs/metodologia/General%20Obligation%20Methodology%20Nov2013_final.pdf</a>
8	Methodology for Infrastructure ( <i>Structured Finance Rating Scale</i> ).	<a href="https://www.hrratings.com/docs/metodologia/0Metodologia%20para%20Infraestructura%20(eng)%20limpio1.pdf">https://www.hrratings.com/docs/metodologia/0Metodologia%20para%20Infraestructura%20(eng)%20limpio1.pdf</a>
9	Rating Methodology for Banks ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/3.2.1.%20Banks.pdf">https://www.hrratings.com/docs/metodologia/3.2.1.%20Banks.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/3.2.3.%20Non%20Bank.pdf">https://www.hrratings.com/docs/metodologia/3.2.3.%20Non%20Bank.pdf</a>
12	Addendum - Rating Methodology for Credit Unions ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/3.2.4.%20Rating%20Methodology%20for%20Credit%20Unions.pdf">https://www.hrratings.com/docs/metodologia/3.2.4.%20Rating%20Methodology%20for%20Credit%20Unions.pdf</a>
13	Addendum - Rating Methodology for Leasing Agents ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/3.2.5.%20Leasing%20Agents.pdf">https://www.hrratings.com/docs/metodologia/3.2.5.%20Leasing%20Agents.pdf</a>
14	Rating Methodology for Brokerage Firms ( <i>Long Term and Short Term Local Rating Scales</i> ).	<a href="https://www.hrratings.com/docs/metodologia/3.2.6.%20Brokerage%20Firms.pdf">https://www.hrratings.com/docs/metodologia/3.2.6.%20Brokerage%20Firms.pdf</a>
15	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>

16	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>
17	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>
18	Rating Methodology for Water Operating Agencies (Debt Evaluation Methodology for Mexican Entities).	<a href="https://www.hrratings.com/docs/metodologia/Mexican%20Water%20Operating%20Agencies%20Methodology.pdf">https://www.hrratings.com/docs/metodologia/Mexican%20Water%20Operating%20Agencies%20Methodology.pdf</a>
19	Special-Tax Bonds Methodology (Methodology for Municipal Entities of the United States of America).	<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>
20	Structured Debt of Mexican Municipalities: Addendum to the Federal-Transfers Backed Debt Methodology.	<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>
21	Structured Debt of Mexican States: Federal-Transfers Backed Debt Methodology.	<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>
22	Structured Debt of Subnational Entities and OPDs Addendum to the Own-Revenue Backed Debt Methodology.	<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>
23	Hybrid Instruments Rating Methodology	<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>

### Update versions of previously sent methodologies

24	General Methodological Criteria.	<a href="https://www.hrratings.com/docs/metodologia/General%20Methodological%20Criteria%20(October%202020).pdf">https://www.hrratings.com/docs/metodologia/General%20Methodological%20Criteria%20(October%202020).pdf</a>
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## MODELS

### Current versions of qualitative and quantitative Models

#### a) Banks / SOFIPOS / SOCAPS Model

- *Version: 2*
- *File Name: Bancos (Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Methodology for Rating Banks, May 2009.*
- *Approved (Methodology): March 14, 2018.*
- *Developed by: HR*

**Description:** The model identifies the principal risk indicators within each category of credit risk affecting the entity evaluated; both those that are inherit to the entity and those arising from external factors. Regarding the ability to pay, the principal sources of risk are identified that could cause delay and even default on the settlement of any liability.

#### b) IFNBs / Credit Unions / Leasing Companies Model

- *Version: 2*
- *File Names: IFNB\_(Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Rating Methodology for Non-Bank Financial Institutions, May 2009. Rating Methodology for Financial Leasing Agents and Pure Leasing Agents, January 2010. Rating Methodology for Bonded Warehouses, March 2010. Rating Methodology for Credit Unions, August 2011.*
- *Approved by HR: 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

#### c) Brokerage Firms Model

- *Version: 2*
- *File Name: Casa de Bolsa (Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Rating Methodology for Brokerage Firms, June 2009.*
- *Approved (Methodology): March 14,2018.*
- *Developed by: HR*

**Description:** The model identifies the principal risk indicators within each category of credit risk affecting the firm evaluated; both those that are inherit to the entity and those arising from external factors. Regarding the ability to pay, the principal sources of risk are identified that could cause delay and even default on the settlement of any liability.

#### d) Investment Funds Model – SIID.

- *Version: 2*
- *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.

## e) Pure Leasing Companies Model

- *Version: 2*
- *File Name: Arrendadoras Puras (Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Rating Methodology for Financial Leasing Agents and Pure Leasing Agents, January 2010.*
- *Approved (Methodology): March 14,2018.*
- *Developed by: HR*

**Description:** The model is based upon quantitative and qualitative factors that evaluates credit risks such as the possibility that the entity will be unable to collect future rents or leasing contracts and the lessor will not be able to recover the asset in a timely manner. So, it analyses the tools and processes used to collect the financial income earned and recover the leased product.

## f) Models used for Sovereign Debt

- *Version: 2*
- *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. 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: 2*
- *File Name: Estados (Entidad\_Año).Jul.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Rating Methodology for Unsecured Risk for Mexican States, July 31, 2014.*
- *Approved (Methodology): March 14,2018.*
- *Developed by: HR*

**Description:** The model accounts for fiscal metrics, debt metrics and debt servicing metrics. Most of them as a percent of unrestricted revenues, that discounts transfers to the municipalities and revenue sharing obligations compromised for structured debt servicing. The methodology also accounts for qualitative factors such as contingent liabilities, credit history, liquidity and former willingness to pay.

### 2. Municipalities

- *Version: 2*
- *File Name: Municipios (Entidad\_Año).Jul.20*

- *Approved (Model): July 15, 2020.*
- *Methodology: Unsecured Risk Evaluation for Municipalities, July 31, 2015.*
- *Approved (Methodology): March 14, 2018.*
- *Developed by: HR*

**Description:** The model accounts for fiscal metrics, debt metrics and debt servicing metrics. Most of them as a percent of unrestricted revenues, that discounts revenue sharing obligations compromised for structured debt servicing. The methodology also accounts for qualitative factors such as contingent liabilities, credit history, liquidity and former willingness to pay.

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

### 1. Local Governments

- Version: 1
- File Name: *GOLocal\_Blank*
- 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: 1
- File Name: *GOStates\_Blank*
- 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

- *Version: 2*
- *File Name: Corporativos (Entidad\_Año).July.20*
- *Approved (Model): July 15, 2020.*
- *Methodology: Corporate Debt Credit Risk Evaluation Methodology, May 21, 2014.*
- *Approved by HR: March 14, 2018.*
- *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. Qualitative considerations are incorporated to account for industry risks.

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

- Version: 1
- File Name: *Charters\_Blank*
- 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 states 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 condition.

k) **Models used for Rating for Debt backed by the operation of highways, toll ways and bridges.**

- Version: 2
- File Name: *Concesion\_Peaje (Proyecto\_Año).Jul.20*
- Approved (Model): July 15, 2020.
- Methodology: Methodology for Infrastructure, November 6, 2015.
- Approved (Methodology): March 14, 2018.
- Developed by: HR

**Description:** The model is based upon the TEA rate which accounts for the stress the revenues from users' fees can withstand without the DSCR dropping below one throughout the debt structure. The methodology also incorporates demand risks derived from economic performance of the region around the project and for diverse risks that can affect maintenance cost.

l) **Models used for Water Operating Agencies for Mexican entities**

- Version: 1
- File Name: *OOA (Entidad\_Año).Jul.20*
- Approved (Model): July 15, 2020
- Methodology: Water Operating Agencies: Debt Evaluation Methodology for Mexican Entities July 2019
- Approved (Methodology): July 2019
- 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 complex or local business. 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 debt net and the weight of non-debt liabilities.

m) **Models used for Ratings of Partial Guarantees**

1. **Infrastructure**

- Version: 1
- 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: 1
- 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.

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

- Version: 1
- 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 set of key factors. The first one consists in an economic analysis of the elasticities of the taxed goods & services, and the concentration and strength of the tax base. The second set studies de 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.

### o) Models used for Mexican Structured Credit ratings

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

- Version: 2
- File Name: *Producto Estructurado (Entidad\_Banco\_Clave).Sep.20*
- Approved (Model): August 5, 2020.
- File Name: Programa Especial FEFOM
- 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: 2
- File Name: *PE Programa Especial FEFOM (Entidad\_Banco\_Clave).Sep.20*
- Approved (Model): August 5, 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.