BANCO CENTRAL DO BRASIL

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RESOLUTION BCB 229, OF MAY 12, 2022

Establishes the procedures for calculating the portion of risk weighted assets (RWA) related to credit risk exposures subject to the calculation of the capital requirement through the standardized approach (RWA_{CPAD}), as addressed by Resolution CMN 4,958, of October 21, 2021, and Resolution BCB 200, of March 11, 2022.

The Board of Directors of the Central Bank of Brazil, in a session held on May 11, 2022, based on the provisions of arts. 9, 10, item IX, and 11, item VII, of Law 4,595, of December 31, 1964, and on art. 9, item II, of Law 12,865, of October 9, 2013, and considering art. 3, paragraph 2, of Resolution CMN 4,958, of October 21, 2021, arts. 3, item III, and 14, of Resolution 4,282, of November 4, 2013, and art. 3, paragraph 2 of Resolution BCB 200, of March 11, 2022,

R E S O L V E S :

TITLE I
PRELIMINARY PROVISIONS

SOLE CHAPTER
ON THE OBJECT AND SCOPE OF APPLICATION

Art. 1. This Resolution establishes the procedures for calculating the portion of risk weighted assets (RWA) related to credit risk exposures subject to the calculation of the capital requirement through the standardized approach (RWA_{CPAD}), as addressed by Resolution CMN 4,958, of October 21, 2021, and Resolution BCB 200, of March 11, 2022.

Art. 2. The RWA_{CPAD} portion must be equal to the sum of the products of the values of exposures by their respective Risk Weighting Factors (FPR).

Paragraph 1. In the calculation of the RWA_{CPAD} portion, the recognition of credit risk mitigating instruments is allowed, as per Circular 3,809, of August 25, 2016.

Paragraph 2. Without prejudice to the provisions of the heading, the RWA_{CPAD} portion also

includes the additional amount related to participation in mutualized guarantee funds of central counterparties (ParcDF), as established in this Resolution.

TITLE II
ON THE DEFINITION AND VALUE OF EXPOSURES
CHAPTER I
ON THE DEFINITION OF EXPOSURE

Art. 3. The RWA_{CPAD} portion must include in its calculation: (Amended, as of July 1, 2024 by Resolution BCB No. 395, of 06/26/2024.)

I – all exposures classified in the banking book and; (Included, as of July 1, 2024, by Resolution BCB No. 395, of 06/26/2024.)

II - exposures related to counterparty credit risk of transactions classified in the trading book. (Included, as of July 1, 2024, by Resolution BCB No. 395, of 06/26/2024.)

Paragraph 1. Exposures related to direct investments in shares and commodities covered by the portion related to market risk exposures subject to the calculation of the capital requirement through the standardized approach (RWA_{MPAD}) or an internal model authorized by the Central Bank of Brazil (RWA_{MINT}) of the RWA amount, as addressed by Resolution CMN 4,958, of 2021, and Resolution BCB 200, of 2022, must not be included in the calculation of the RWA_{CPAD} portion.

Paragraph 2. The RWA_{CPAD} portion must include in its calculation the exposures to financial derivative instruments referenced in shares or commodities, even if subject to the RWA_{MPAD} or RWA_{MINT} portion.

Paragraph 3 For the purposes of the heading, the definitions of the banking book and trading book established in Article 26 of Resolution No. 4,557, of February 23, 2017, and Article 26 of Resolution BCB No. 265, of November 25, 2022, must be considered. (Included, as of July 1, 2024, by Resolution BCB No. 395, of 06/26/2024.)

Art. 4. For the calculation of the RWA_{CPAD} portion, the following items qualify as exposures:

I - the application of financial resources in goods and rights and the expense or cost recorded as an asset;

II - any advance granted;

III - any financial derivative instrument included in the institution's own portfolio;

IV - the line of credit;

V - committed funds to be released within 360 (three hundred and sixty) calendar days;

VI - the provision of guarantee, bail, co-obligation, or any other form of personal guarantee for the fulfillment of a third party's financial obligation (fidejussory guarantee);

VII - the repurchase agreement, securities lending, or operation with a financial derivative

instrument, carried out on behalf of a client, with clearing or settlement performed in a clearinghouse or

provider such service, where an entity intervenes as a central counterparty, as per Paragraph 7;

VIII - goods or rights delivered or made available by a client due to operations listed in item VII, except when the institution does not assume any obligations, including the obligation to reimburse the client in case of default by third parties;

IX - the exposure associated with counterparty credit risk, as defined by Paragraph 3 of art. 21 of Resolution 4,557, of February 23, 2017, and by art. 19, § 3, of Resolution BCB 265, of November 25, 2022, as applicable; (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

X - goods or rights delivered or made available by the institution to a third party, when its restitution is conditioned on the solvency of that third party or any other party, notwithstanding the provisions of item I; (Amended, as of January 31, 2025, by Resolution BCB 452, of 1/21/2025.)

XI - any asset, including investment fund quotas, that the institution has committed to acquiring; and (Amended, as of January 31, 2025, by Resolution BCB 452, of 1/21/2025.)

XII - the absolute value of the negative adjustment recorded in equity as referred to in Art. 4, caput, item I, subitem 'i', of Resolution CMN 4,955, of October 21, 2021, and Art. 3, caput, item I, subitem 'i', of Resolution BCB 199, of March 11, 2022, as applicable. (Included, as of January 31, 2025, by Resolution BCB 452, of 1/21/2025.)

Paragraph 1. The following items are not considered exposures:

I - co-obligations and other forms of risk retention and benefits resulting from the sale or transfer of financial assets that remain recorded as assets by the institution, as per specific regulation;

II – funds quotas and securitization instruments associated with operations of sale or transfer of financial assets that remain recorded as assets by the institution, as per specific regulation, in the proportion between the amount of transferred assets that remain recorded as assets by the institution and the total value of the assets of the respective fund or securitization process;

III - interdependent operations and other operations carried out with institutions that are part of the prudential conglomerate; (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

IV - equity items deducted in the calculation of the Total Regulatory Capital (PR), as defined in arts. 5 to 9 of Resolution CMN 4,955, of October 21, 2021, and in arts. 4 to 8 of Resolution BCB 199, of March 11, 2022, gross of the associated deferred tax liabilities subtracted for PR calculation purposes;

V - operations with over-the-counter financial derivative instruments in which the institution acts exclusively as an intermediary, not assuming rights or obligations resulting from the variation in replacement cost or default by any of the parties;

VI - credit derivative transactions in which the institution acts as the risk transferring counterparty and holds the reference asset of the derivative, provided the following aspects are respected:

a) the credit derivative meets the conditions for recognition as a credit risk mitigating instrument as per Circular 3,809, of 2016; and

b) only the value equal to or lower than the value of the held credit asset should be considered;

VII - checks, bills, credit transfer documents (DOCs), and other payment instruments to be credited to client accounts, when there is no assumption of rights or obligations resulting from these instruments, including in case of default by any of the parties;

VIII - linked active operations, as specified in Resolution 2,921, of January 17, 2002, when there is no assumption of rights or obligations resulting from these operations, including in case of default by any of the parties and up to the limit of the respectively linked liabilities;

IX - trade letter of credit issued by the institution, linked to an import exchange contract, provided that the total counter value in national currency has been delivered;

X - credit operations with public sector bodies and entities related to the allocation of a portion of the PR, as per art. 4 of Resolution CMN 4,995, of March 24, 2022;

XI - the portion of credit operations covered by the Programa Emergencial de Suporte a Empregos, established by Law 14,043, of August 19, 2020, funded with federal resources;

XII - the portion of credit operations carried out within the scope of the Programa Emergencial de Acesso a Crédito in the guarantee of receivables modality (Peac-Maquininhas), established by Law 14,042, of August 19, 2020, to be reimbursed to the Union;

XIII – outstanding operations of sale of foreign currency and gold with prompt settlement or of securities in the spot market that remain recorded as assets; (Amended, as of July 1, 2023, by Resolution BCB 266, of 11/25/2022.)

XIV – outstanding operations of purchase or sale of foreign currency and gold with prompt settlement or of securities in the spot market conducted on behalf of clients, that remain recorded as assets; and (Amended, as of July 1, 2023, by Resolution BCB 266, of 11/25/2022.)

XV - for an institution or conglomerate subject to the calculation of the RWASP portion related to the capital required for risks associated with payment services, as defined in Resolution BCB 200, of 2022: (Amended, as of January 1, 2024, by Resolution BCB 363, of 12/14/2023.)

a) the receivables from issuers of payment instruments related to the institution's activity as an acquirer, as defined in art. 3, item III, of Resolution BCB 80, of March 25, 2021, covered by the "ADQ" component of the RWASP portion; (Amended, as of January 1, 2024, by Resolution BCB 363, of 12/14/2023.)

b) the receivables from an acquirer of payment instruments related to the institution's activity as a sub-acquirer, as defined in Resolution BCB 150, of October 6, 2021, covered by the "ADQ" component of the RWASP portion; and (Amended, as of January 1, 2024, by Resolution BCB 363, of 12/14/2023.)

c) the net resources corresponding to the balances of electronic currencies held in payment accounts, as per art. 22 of Resolution BCB 80, of 2021. (Included, as of July 1, 2023, by Resolution BCB 266, of 11/25/2022.)

Paragraph 2. The exposures of consolidated entities, including consolidated investment funds, as per specific regulation, must be considered as if they were held entirely by the institution, except

when eliminated by accounting criteria.

Paragraph 3. The exposure related to counterparty credit risk, when provided for in this Resolution, is additional to any other exposure resulting from the underlying asset or the operation performed.

Paragraph 4. The line of credit, as mentioned in item IV of the heading, is considered the operation formalized, including through a membership contract, with the following characteristics:

I - the operation consists of a promise of disbursement of resources for a counterparty up to a specific amount; and

II - the amount to be drawn by the counterparty is uncertain.

Paragraph 5. The committed funds to be released, as mentioned in item V of the heading, is considered the future disbursement related to the contracted credit operation, regardless of whether it is conditioned on the debtor's fulfillment of previously specified conditions.

Paragraph 6. The types of guarantees, as mentioned in item VI of the heading, include those linked to:

I – line of credit;

II - committed funds to be released within 360 (three hundred and sixty) calendar days; and

III - operation with a financial derivative instrument, own or of a third party, including that performed in the over-the-counter market.

Paragraph 7. For the operation mentioned in item VII of the heading, the following must be considered:

I - the exposure to counterparty credit risk in relation to the client; and

II - the exposure to counterparty credit risk in relation to a third party, including the central counterparty, except when the institution does not assume obligations of reimbursement to the respective client.

Paragraph 8. The exposure mentioned in item X of the heading includes the establishment of a guarantee linked to the own operation or of a third party through an asset owned by the institution, except if this asset:

I - is identified as owned by the institution; and

II - is promptly returned to the institution in case of liquidation, bankruptcy, or similar provision suffered by the counterparty.

Paragraph 9. The asset delivered or made available to a counterparty within the scope of

linked active operations, as specified in Resolution 2,921, of 2002, is included in item X of the heading.

Paragraph 10. The exposure mentioned in item XI of the heading does not include those

related to repurchase agreements, securities lending, or operations with financial derivative instruments. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

CHAPTER II
ON THE VALUE OF EXPOSURES
Section I
General Provisions

Art. 5. The value of exposures mentioned in art. 4 must be determined according to the criteria established in the Padrão Contábil das Instituições Reguladas pelo Banco Central do Brasil (Cosif), except for specific provisions in the terms of this Resolution.

Paragraph 1. In the absence of a criterion established in Cosif and a specific provision, the value of the exposure must correspond to the market value.

Paragraph 2. The mark-to-market, when provided for the purposes of calculating the RWA_{CPAD} portion, must be performed consistently and verifiably, even if not adopted for Cosif.

Art. 6. For the determination of the value of the exposure, provisions must be deducted. (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

Paragraph 1. The value of the exposure, after the deductions mentioned in the heading, must be equal to or greater than zero.

Paragraph 2. The application of the Credit Conversion Factor (FCC), when necessary for the determination of the value of the exposure, must occur prior to the deductions mentioned in the heading.

Paragraph 3. In the case of exposures registered as assets, the following must be considered in the exposure value:

I - transaction costs and amounts received that are part of the effective interest rate of the financial instrument;

II - premium or discount obtained upon acquisition of the financial instrument;

III - present value adjustment, at the original effective interest rate, of the contracted cash flows in restructured operations; and

IV - fair value adjustment, including the adjustment related to hedge accounting. (Included, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

Section II
On Advances

Art. 7. The value of the exposure related to the granting of an advance must correspond to the advanced amount, plus interest and other incurred charges.

Sole paragraph. In the case of goods or rights delivered in advance in an outstanding operation of purchase or sale of foreign currency, gold, or securities, two exposures to the same counterparty are considered:

I - the granted advance, as per the heading; and

II - the original operation.

Section III
On Leasing

Art. 8. For financial leasing operations, according to the criteria established in the Cosif, the following must be considered:

I - the exposure related to the leased asset, which must correspond to the book value of the unguaranteed residual value, if any; and

II - the exposure related to the debtor's credit risk, which must correspond to the present value of the overdue and future lease payments, plus the guaranteed residual value, if any. (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

Art. 9. For operational leasing operations, according to the criteria established in the Cosif, the following must be considered:

I - the exposure related to the leased asset, which must correspond to the book value of the leased asset; and

II - the exposure related to the debtor's credit risk, which must correspond to the overdue lease payments. (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

Section IV
On Repurchase Agreements and Securities Lending

Art. 10. For repurchase agreement or securities lending operations, the following must be considered:

I - the exposure related to the underlying asset, in the case of the following operations with own underlying asset:

a) sale with repurchase commitment; and

b) securities lending; and

II - the exposure related to counterparty credit risk, in the case of the following operations:

a) purchase with resale commitment;

b) sale with repurchase commitment; and

c) securities lending.

Paragraph 1. The value of the exposure related to the underlying asset must correspond to the book value of the asset.

Paragraph 2. The value of the exposure related to counterparty credit risk must correspond:

I - to the book value of the resale, in the case of purchase with resale commitment; or

II - to the book value of the underlying asset, in the case of a sale with repurchase commitment and securities lending operation.

Paragraph 3. The value of the exposure related to the underlying asset and the value of the exposure related to counterparty credit risk must be marked to market, as per Paragraph 2 of art. 5, when this procedure is required for credit risk mitigation purposes, as per Circular 3,809, of 2016.

Paragraph 4. For an institution classified in Segment 2 (S2), Segment 3 (S3), or Segment 4 (S4), as per Resolution 4,553, of January 30, 2017, or Resolution BCB 197, of March 11, 2022, the determination of the value of the exposure mentioned in item II of the heading through the multiplication of the book value of the operation by the percentage of 5% (five percent) is admissible upon an option of said institution.

Paragraph 5. The option mentioned in Paragraph 4 is limited to operations:

I - processed in the Sistema Especial de Liquidação e Custódia (Selic) or in a system operated by a Qualified Central Counterparty (QCCP), as defined in art. 67, Paragraph 1, located in Brazil, and

II - in which the traded underlying asset is a federal bond referenced or indexed in Reais.

Paragraph 6. In the case of using the option mentioned in Paragraphs 4 and 5, the recognition of credit risk mitigation mentioned in Circular 3,809, of 2016, in the exposure mentioned in item II of the heading is prohibited.

Section V
On Financial Derivative Instruments

Art. 11. The value of the exposure related to a transaction with a financial derivative instrument must correspond:

I - to the value of the exposure related to counterparty credit risk determined: . (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

a) in the form of the SA-CCR Approach, provided in Annex I of this Resolution, or

b) in the form of the CEM Approach, provided in Annex II of this Resolution; and (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - to the notional value of the contract, in the case of a credit derivative in which the institution acts as the risk receiver. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 1. Transactions with financial derivative instruments include purchase or sale operations for future settlement of foreign currency, gold, securities, or any asset eligible for classification in the asset classes provided in the SA-CCR and CEM approaches.

Paragraph 2. In the calculation of the value of the exposure related to counterparty credit risk of financial derivative instruments, it must be observed that: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - financial derivative instruments must be marked to market daily, consistently and verifiably, even if this marking is not adopted for accounting purposes; and

II - the value of the exposure must be determined considering the period expressed in years, composed of 252 (two hundred and fifty-two) business days, and truncated to eight decimal places.

Paragraph 3. The institution classified in Segment 1 (S1), as per Resolution 4,553, of 2017, must adopt the SA-CCR Approach, as established in Annex I of this Resolution.

Paragraph 4. The institution classified in S2, S3, or S4 must adopt the CEM Approach, as established in Annex II of this Resolution, with the option to use the SA-CCR approach.

Paragraph 5. Once the option mentioned in Paragraph 4 is exercised, the use of the SA-CCR Approach must be maintained for at least 2 (two) consecutive fiscal years.

Paragraph 6. In the case of Paragraph 4, both the adoption of the SA-CCR Approach and the return to the use of the CEM Approach must:

I - be communicated to the Central Bank of Brazil at least 3 (three) months in advance, respectively, to the beginning and the end of its use; and

II - be used in the fiscal year immediately following the formalization of the communication.

Paragraph 7. The Central Bank of Brazil may determine the institution classified in S2, S3, or S4 to use the SA-CCR Approach or the CEM Approach, considering:

I - the adequacy of the institution's risk management framework to transactions with financial derivative instruments; and

II - the relevance of these instruments:

a) in its business model;

b) in its operating income; or

c) in the amount of derivatives traded in the over-the-counter market or with a central counterparty.

Section VI
On Exposures Related to Intermediation, Clearing, or Settlement of Operation Performed on behalf of a Clients to be settled in a Central Counterparty

Art. 12. The value of the exposure related to counterparty credit risk, as mentioned in art. 4, Paragraph 7, items I and II, in a repurchase agreement or securities lending operation, performed on behalf of a client, with intermediation, clearing, or settlement performed in a clearing chamber or provider of such services, where an entity intervenes as a central counterparty must correspond:

I - to the market value of the operation, in the case of purchase with resale commitment; and

II - to the market value of the underlying asset, in the case of sale with repurchase commitment and securities lending.

Sole paragraph. Observed the provisions of Circular 3,809, of 2016, the asset delivered or made available by a client as collateral for the operation mentioned in the heading is recognized as financial collateral in both exposures mentioned in art. 4, Paragraph 7, items I and II.

Art. 13. The value of the exposure related to counterparty credit risk, as mentioned in art. 4, Paragraph 7, items I and II, in a transaction with a financial derivative instrument, performed on behalf of a client, with intermediation, clearing, or settlement performed in a clearing chamber or provider of such services, where an entity intervenes as a central counterparty, must correspond to the value determined according to art. 11, as if the operation were held by the institution itself.

Sole paragraph. Observed the provisions of Circular 3,809, of 2016, the asset made available by a client as collateral for the transaction mentioned in the heading is recognized as financial collateral in both exposures mentioned in art. 4, Paragraph 7, items I and II.

Art. 14. For an institution classified in S2, S3, or S4, the use of information provided by a QCCP, as defined in art. 67, Paragraph 1, when located in Brazil, for the determination of the value of the exposure mentioned in arts. 12 and 13, is admissible upon an option of said institution.

Paragraph 1. For the purposes of the provision in the heading, the determination of a single consolidated exposure value per client is allowed.

Paragraph 2. Observed the provisions of Circular 3,809, of 2016, the asset made available by a client as collateral for the transaction mentioned in the heading is recognized as financial collateral, provided that this instrument is included in the information provided by the QCCP.

Art. 15. The value of the exposure related to counterparty credit risk resulting from an asset made available by a client, as mentioned in art. 4, item VIII, must correspond to the market value of the asset.

Section VII
On Investment Funds

Art. 16. The value of the exposure related to investment in an investment fund quota must correspond to the total value of the fund's exposures, in proportion to the institution's participation in the net worth of the fund, being the fund's exposures identified in the form of art. 17 or, when not possible, inferred in the form of art. 18.

Sole paragraph. If the treatment provided in the heading is not possible, the value of the exposure related to investment in an investment fund quota must correspond to the book value of the acquired quotas and will be subject to the treatment established in art. 59, item II.

Art. 17. The exposures of the investment fund must be identified and treated as if they were held by the institution, according to the terms of this Resolution.

Paragraph 1. It is considered that the exposure is identified when there is sufficient information for the determination of the appropriate FPR according to Title III of this Resolution.

Paragraph 2. For the identification of the investment fund's exposures, the latest information available published up to 30 (thirty) calendar days before the calculation date of the RWA_{CPAD} portion must be used.

Paragraph 3. The use of information published up to 90 (ninety) calendar days before the calculation date of the RWA_{CPAD} portion is allowed for the identification of the fund's exposures in case the investment fund has positions or operations that could be adversely affected by their disclosure, as defined by the Comissão de Valores Mobiliários (CVM), or the equivalent authority abroad.

Paragraph 4. If the fund conducts transactions with financial derivative instruments, the value of the exposure to counterparty credit risk associated with these instruments must be determined according to the provisions of art. 11.

Paragraph 5. If it is verified that it is impossible to determine the replacement cost in a transaction with a financial derivative instrument part of the fund's portfolio, for the application of the provisions of art. 11, the following provisions must be observed:

I - the replacement cost must correspond to the sum of the notional values of the derivatives associated with each netting set, in case the institution uses the SA-CCR Approach, as established in Annex I of this Resolution; or

II - the replacement cost must correspond to the notional value of the derivative, in case the institution uses the CEM Approach, as established in Annex II of this Resolution.

Paragraph 6. If it is verified that it is impossible to determine the value corresponding to the potential future gain in a transaction with a financial derivative instrument part of the fund's portfolio, for the application of the provisions of art. 11, the following provisions must be observed:

I - the value of the Potential Future Exposure must correspond to the sum of the notional values of the derivatives associated with each netting set multiplied by 15% (fifteen percent), in case of the use of the SA-CCR Approach, as established in Annex I of this Resolution; and

II - the Potential Future Exposure Factor must correspond to 15% (fifteen percent), in case of the use of the CEM Approach, as established in Annex II of this Resolution.

Paragraph 7. The value of the respective exposures must be multiplied by 120% (one hundred and twenty percent) if, for the identification or measurement of the investment fund's exposures, the institution uses information that is not:

I – of public domain; or

II - provided by the fund's administrator and kept available to the Central Bank of Brazil.

Paragraph 8. If the institution does not identify the totality of the investment fund's exposures, the value of the unidentified portion will correspond to the value of the fund's total assets minus the amount identified in the form of this art. and will be subject to the treatment established in art. 59, item II.

Art. 18. If it is not possible to identify the exposures in the form provided in art. 17, the investment fund's exposures must be inferred through the use of information related to the asset portfolio present in the current mandate of the fund or in the applicable regulation, considering: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - the limits of its composition by type of asset; and

II - the leverage policy.

Paragraph 1. The value of the exposure of the investment fund in each type of asset provided in the fund's mandate or in the applicable regulation (Ei) must correspond to the result of the following formula:

Ei = PL X leverage X i, in which: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - PL corresponds to the total value of the fund's net equity; (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - "leverage" corresponds to the maximum limit of the ratio between total assets and net equity of the fund, as provided in the fund's mandate or in the applicable regulation; and (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

III - i corresponds to the maximum percentage of investment in each type of asset, as provided in the fund's mandate or in the applicable regulation. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 2. If the sum of the maximum percentages mentioned in Paragraph 1, item III, exceeds 100% (one hundred percent), the types of assets provided in the fund's mandate or in the applicable regulation that are associated with the lowest FPR, according to the terms of this Resolution, must be partially or fully disregarded, successively, until the sum of the percentage of the remaining assets reaches 100% (one hundred percent). (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 3. If the fund's mandate or the applicable regulation authorizes transactions with financial derivative instruments, the provisions of Paragraphs 4 to 6 of art. 17 must be observed, considering that the respective notional value corresponds to the value of the fund's asset portfolio multiplied by the maximum leverage limit provided in the fund's mandate or in the applicable regulation. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 4. If the institution cannot infer a portion of the fund's exposures, including due to the prohibition mentioned in Paragraph 5, its respective value will correspond to the remaining value of the fund's asset portfolio, multiplied by the maximum leverage limit provided in the fund's mandate or in the applicable regulation, and will be subject to the treatment established in art. 59, item II. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 5. It is prohibited to infer the exposure of an investment fund whose quota has

been acquired through another investment fund whose quota, equally, has been acquired by the institution through an investment in a quota of an investment fund.

Paragraph 6. If there is no provision of a maximum leverage limit in the fund's mandate or in the applicable regulation, the value of the exposure related to investment in a quota of an investment fund must correspond to the book value of the acquired quotas and will be subject to the treatment established in art. 59, item II. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Section VIII
On Exposures to Securitization Processes

Art. 19. For securitization processes, when applicable, the following definitions must be used:

I - traditional securitization is the process in which the cash flow associated with a set of underlying assets is used to pay the remuneration of securitization instruments that contain at least two classes of payment prioritization, in which there is the actual transfer of the underlying assets;

II - synthetic securitization is the process in which the cash flow associated with a set of underlying assets is used to pay the remuneration of securitization instruments that contain at least two classes of payment prioritization, in which the credit risk related to the underlying assets is transferred through a credit derivative or any other mean that allows such transfer;

III - underlying assets are the receivables, securities, including credit derivatives, that generate the cash flows of the securitization process;

IV - non-performing underlying assets are those for which at least one of the events mentioned in art. 24 of Resolution 4,557, of February 23, 2017, and art. 22 of Resolution BCB 265, of November 25, 2022, as applicable, is verified; (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

V - securitization instrument is the security or financial instrument, including credit derivative, whose remuneration is derived from the cash flows of the underlying assets;

VI - implicit support is the assumption of any non-contractual obligation, aiming to cover losses of investors in securitization instruments;

VII - senior class is the class of securitization bonds that presents the highest payment priority in the same issuance, compared to the other classes; and

VIII - resecuritization is the securitization process whose underlying assets include securitization instruments.

Paragraph 1. Exposures to structured processes in only one class of payment prioritization must be treated as exposures to investment fund quotas for the purposes of this Resolution.

Paragraph 2. Exposures to securitization instruments of the senior class may be treated as exposures to investment fund quotas for the purposes of this Resolution.

Paragraph 3. In operations with securitization bonds issued by a special purpose entity (SPE), all assets of the SPE associated with the securitization process must be considered part of the underlying

assets, including any reserve fund.

Art. 20. In securitization processes where the institution provides implicit support, the exposures associated with the securitization bonds benefited by this support must be considered as if they were entirely held by the institution.

Section IX
On Exposures Not Accounted for in the Balance Sheet

Art. 21. The value of each exposure mentioned in art. 4, items IV, V, VI, X, and XI, must be determined by multiplying the sum of the respective future disbursements contractually established, minus the values that have already been recorded as assets by the institution, by the corresponding FCC. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 1. In the case it is not possible to determine the maximum limit of the future disbursements contractually established, the value considered in the sum mentioned in the heading must be determined:

I - according to art. 11, in the case of an operation related to a financial derivative instrument;

II - according to arts. 16, 17, and 18, in the case of an operation related to an investment fund;

III - according to arts. 19 and 20, in the case of an operation related to securitization processes; and

IV - according to the precepts established in this Resolution for a direct exposure to the object linked to the contract, in the other cases.

Paragraph 2. A 10% (ten percent) FCC must be applied to the cancelable line of credit:

I - unconditionally and unilaterally by the institution, regardless of prior communication to the counterparty; or

II - unilaterally by the institution due to the deterioration of the credit risk profile of the counterparty, following the criteria defined in the institution’s credit risk management policy, according to Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 3. A 20% (twenty percent) FCC must be applied to the operation related to international trade, in which the shipment of goods is tied to the operation's payment guarantee, with an original maturity term of up to 1 (one) year.

Paragraph 4. A 40% (forty percent) FCC must be applied to the line of credit:

I - cancelable due to any condition not specified in Paragraph 2, item II; (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - cancelable, when, for any reason, the institution is not effectively able to perform the cancellation; or (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

III - not cancelable. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 5. A 50% (fifty percent) FCC must be applied to the operation related to:

I - bid bonds and participation in auctions garantees;

II - performance bonds, including perfect functioning clauses and compliance with service levels;

III - goods supply guarantees;

IV - underwriting guarantees for securities distribution in primary and secondary markets, through public offer, according to specific regulation; and

V - endorsement or pledge in judicial or administrative proceedings of a fiscal nature.

Paragraph 6. A 100% (one hundred percent) FCC must be applied to the exposure related to:

I - fidejussory guarantee, when there is no specific FCC established;

II - committed funds to be released within 360 (three hundred and sixty) calendar days;

III - asset, including investment fund quotas, that the institution has committed to acquiring; and

IV - goods or rights delivered or made available by the institution to a third party, including due to the need to establish a guarantee, according to art. 4, item X, except if:

a) related to a repurchase agreement and securities lending; or

b) granted as collateral for a transaction with a financial derivative instrument part of the institution's own portfolio, in the case of using the SA-CCR approach.

Paragraph 7. The provision in item IV of Paragraph 6 does not eliminate the exposure related to the goods or rights recorded as assets by the institution.

Paragraph 8. In the determination of the value of the exposure related to the fidejussory guarantee linked to an operation not accounted for in the Balance Sheet, the lower FCC between those applicable to the guarantee or the guaranteed operation should be applied.

Art. 21-A. The value of the exposure mentioned in Art. 4, caput, item XII, must correspond to the value established by Art. 4, caput, item I, subitem 'i', and paragraphs 8 and 9, of Resolution CMN 4,955, of October 21, 2021, and by Art. 3, caput, item I, subitem 'i', and paragraphs 8 and 9, of Resolution BCB 199, of March 11, 2022, as applicable. (Included, as of January 31, 2025, by Resolution BCB 452, of 1/21/2025.)

TITLE III
RISK WEIGHT FACTORS APPLICABLE TO EXPOSURES
CHAPTER I
GENERAL PROVISIONS

Art. 22. In applying the FPR to exposures considered in the calculation of the RWA_{CPAD}, the following general provisions must be met:

I - an exposure for which there is no specific determination, under the terms of this Resolution, must have a 100% (one hundred percent) FPR;

II - an exposure characterized as a problem asset, according to Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable, regardless of the counterparty or type of operation, must be weighted as provided in Art. 66 or according to the specific provision of this Resolution, whichever is greater; (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

III - exposure to a non-financial private entity, not guaranteed by real estate, observed the provisions in items II and V of this art., must be classified in the following order:

a) retail exposure, if the requirements established in art. 46 are met; or

b) exposure to a non-financial corporation, if the requirements established in arts. 35, 36, and 41 are met;

IV - exposure guaranteed by real estate, regardless of the counterparty and observed the provision in item II of this art., must be weighted according to arts. 49 to 54, even if it results in a FPR higher than that applicable without the recognition of said guarantee;

V - exposure related to a non-financial private-sector entity must be weighted as provided in arts. 37 to 40, when meeting the concepts of specialized financing defined in the mentioned arts.; and

VI - the external credit risk rating, when provided for the determination of the applicable FPR, must be:

a) conferred by a credit rating agency registered or recognized in Brazil by the CVM;

b) the issuance rating, updated, for securities, if available; and

c) the highest degree of risk, if more than one is available, observed the precedence of item “b”.

Paragraph 1. If the estimation of expected losses associated with credit risk, as defined by Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable, indicates that the conferred external credit risk rating is not compatible with the risk of the exposure, the classification mentioned in item VI of the heading must have its risk degree increased, within the respective scale, to reflect the estimation made. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 2. For an institution classified in S2, S3, or S4, the application of the FPR mentioned in item I of the heading to an exposure for which there is a specific FPR established is optional, provided that:

I - it has not been characterized as a problem asset; and

II - the possibility of applying a FPR higher than that provided in item I of the heading is not foreseen.

Paragraph 3. The following are considered as a single counterparty:

I - entities that are part of the same prudential conglomerate, in the form of specific regulation, for the purposes of the provisions in arts. 29 to 33, except for investment funds and entities associated with securitization processes;

II - non-financial private entities that are connected counterparties through a control relationship, as per art. 22, Paragraph 2, of Resolution 4,557, of February 23, 2017, and art. 20, § 2, of Resolution BCB 265, of November 25, 2022, as applicable; and (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

III - natural and legal persons, classified under the criterion of retail exposures, as per art. 46, considered connected counterparties, as per art. 22 of Resolution 4,557, of February 23, 2017, and art. 20 of Resolution BCB No. 265, of 2022, as applicable. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 4. When the use of public domain information is provided for the determination of the FPR under the terms of this Resolution, the use of information up to 120 (one hundred and twenty) calendar days from the date referred to in the information is allowed.

CHAPTER II
FPR APPLIED TO EXPOSURES TO SOVEREIGN ENTITIES AND THEIR CURRENCIES

Art. 23. A 0% (zero percent) FPR must be applied to exposures:

I - to the federal government and the Central Bank of Brazil;

II - to cash held, in reais; and

III - to presumed credits, as dealt with in Laws 12,838, of July 9, 2013, and 14,257, of December 1, 2021, or Provisional Presidential Decree 992, of July 16, 2020.

Art. 24. The following exposures may receive the FPR applied by the regulatory authority of the foreign jurisdiction, regardless of their external risk classification:

I - transactions with central governments of foreign jurisdictions and their central banks, as well as securities issued by them, referenced in the local currency of the jurisdiction; and

II - cash held in the local currency of the jurisdiction, as well as exposures to an asset represented by said currency;

Sole paragraph. The treatment provided in the heading may only be applied if the following conditions are met:

I - the institution's fundraising is carried out in the local currency of the jurisdiction and in an amount compatible with the exposures mentioned in the heading; and

II - the exposures are registered on the balance sheet of the subsidiary located in the same jurisdiction.

Art. 25. The following FPR must be applied to exposures to central governments of foreign jurisdictions and their central banks, according to their respective external risk classification:

I - 0% (zero percent), for a classification equal to or higher than AA- or equivalent classification;

II - 20% (twenty percent), for a classification equal to or higher than A- and lower than AA- or equivalent classification;

III - 50% (fifty percent), for a classification equal to or higher than BBB- and lower than A- or equivalent classification;

IV - 100% (one hundred percent), for a classification equal to or higher than B- and lower than BBB- or equivalent classification, or when there is no classification;

V - 150% (one hundred and fifty percent), for a classification lower than B- or equivalent classification.

Sole paragraph. The provision of the heading applies to exposures related to cash held in foreign currencies issued in the respective jurisdictions, as well as exposures to an asset represented by said foreign currencies, according to the classification of the sovereign entity of the jurisdiction.

Art. 26. The FPR applicable to exposures related to cash held, as per arts. 23 to 25, cannot be less than 20% (twenty percent) if the cash is not in the direct possession of the institution.

Sole paragraph. The provision of the heading does not apply to exposures to cash held under the custody of an entity whose liquidation, bankruptcy, or similar measure does not impose restrictions on the transfer of the values to the direct possession of the institution.

CHAPTER III
FPR APPLIED TO EXPOSURES TO MULTILATERAL ORGANIZATIONS AND MULTILATERAL DEVELOPMENT ENTITIES

Art. 27. A 0% (zero percent) FPR must be applied to exposures to the following multilateral organizations and Multilateral Development Entities (MDE):

I - The World Bank Group, comprising the International Bank for Reconstruction and Development (IBRD), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Development Association (IDA);

II - The Inter-American Development Bank (IDB);

III - The African Development Bank (AfDB);

IV - The Asian Development Bank (ADB);

V - The European Bank for Reconstruction and Development (EBRD);

VI - The European Investment Bank (EIB);

VII - The European Investment Fund (EIF);

VIII - The Nordic Investment Bank (NIB);

IX - The Caribbean Development Bank (CDB);

X - The Islamic Development Bank (IsDB);

XI - The Council of Europe Development Bank (CEB);

XII - The Bank for International Settlements (BIS);

XIII - The International Monetary Fund (IMF);

XIV - The International Finance Facility for Immunisation (IFFIm);

XV - The Asian Infrastructure Investment Bank (AIIB);

XVI - The European Central Bank (ECB);

XVII - The European Union (EU);

XVIII - The European Stability Mechanism (ESM); and

XIX - The European Financial Stability Facility (EFSF).

Art. 28. The following FPR must be applied to the exposure to a MDE not mentioned in art. 27, according to its respective external risk classification:

I - 20% (twenty percent), for a classification equal to or higher than AA- or equivalent classification;

II - 30% (thirty percent), for a classification equal to or higher than A- and lower than AA- or equivalent classification;

III - 50% (fifty percent), for a classification equal to or higher than BBB- and lower than A- or equivalent classification, or when there is no classification;

IV - 100% (one hundred percent), for a classification equal to or higher than B- and lower than BBB- or equivalent classification; and

V - 150% (one hundred and fifty percent), for a classification lower than B- or equivalent classification.

Sole paragraph. For the purposes of this Resolution, a MDE is considered to be an institution constituted by a group of jurisdictions or international bodies, legally and operationally independent of its

founders and aimed at providing financial or professional advice for the development of economic or social projects.

CHAPTER IV
FPR APPLIED TO EXPOSURES TO FINANCIAL INSTITUTIONS AND OTHER SPECIFIED INSTITUTIONS
Section I
Classification into Risk Categories

Art. 29. For the purpose of calculating the RWA_{CPAD} portion, the following must be classified into risk categories A, B, or C:

I - financial institutions and other institutions authorized to operate by the Central Bank of Brazil subject to the norms listed in art. 30; (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - financial institutions headquartered abroad with which consolidated financial statements are not prepared, according to the Cosif;

III - clearinghouses or settlement service providers, as referred to in Law 10,214, of March 27, 2001, considered systemically important according to specific regulation; and

IV - entities that operate financial market infrastructures headquartered abroad and subject to regulation consistent with the principles established by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO).

Sole paragraph. The classification of the institutions mentioned in the heading, as well as the application of the respective FPR, according to art. 33, must be aligned with the institution's risk management framework, as defined by Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable, including the procedures for documentation and credit risk management. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Art. 30. The institution mentioned in art. 29 that complies with the minimum requirements and the Additional Tier 1 Capital, where applicable, dealt with in the following normative acts or, in the case of item II of art. 29, its equivalents abroad, must be classified in risk category A:

I - Resolution CMN 4,958, of 2021, when applicable to the counterparty;

II - Resolution 4,606, of October 19, 2017, when applicable to the counterparty;

III - Resolution 4,615, of November 30, 2017, when applicable to the counterparty;

IV - Resolution BCB 198, of March 11, 2022; (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

V - Resolution BCB 200, of 2022; and (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

VI - Resolution BCB 201, of March 11, 2022. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 1. In the absence of publicly available information within up to sixty days after the reference dates March 31, June 30, and September 30, or up to ninety days after the reference date December 31: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - related to compliance with the minimum requirements provided for in the heading, the institution must be classified in risk category C; or (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - related to compliance with the Additional Tier 1 Capital provided for in the heading, the institution must be classified in risk category B, if it complies with the minimum requirements. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 2. The provision in the heading does not include any additional requirements individually applicable to the counterparty that are not publicly disclosed.

Paragraph 3. Entities mentioned in items III and IV of art. 29 considered QCCP are classified in risk category A.

Paragraph 4. In the case of financial institutions headquartered abroad, information provided by the counterparty, even if not publicly available, may be considered. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 5. The institution that becomes subject to a normative act listed in this art. can be classified in risk category A until the first deadline mentioned in Paragraph 1 passes. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Art. 31. The institution mentioned in art. 29 that meets the conditions mentioned in art. 30 but does not comply with the Additional Tier 1 Capital, or its equivalent abroad, must be classified in risk category B.

Paragraph 1. (Revoked, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 2. The provision in the heading does not include any additional requirements individually applicable to the counterparty that are not publicly divulged.

Paragraph 3. If the counterparty is not subject to the observance of the Additional Tier 1 Capital, or its equivalent abroad, as per the current regulation, it may not be classifed in risk category B.

Art. 32. The institution mentioned in art. 29 that does not fit into the other risk categories or presents a high credit risk must be classified in risk category C.

Paragraph 1. Without prejudice to the adoption of the processes and procedures provided for in Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable, the following events imply a high credit risk: (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

I - non-compliance with the minimum requirements listed in the heading of art. 30, observed the provisions in Paragraphs 1 and 2 of that art.; and

II - the existence of a report from the independent auditor contained in the financial statements related to the most recent available calculation period in which there was an expression of an adverse opinion or significant doubt about the operational continuity of the counterparty.

Paragraph 2. Entities mentioned in items III and IV of art. 29 not considered QCCP are classified in risk category C.

Section II
FPR Applicable to Risk Categories

Art. 33. The following FPR must be applied to the exposure to the institution mentioned in art. 29, except if related to equity investments or subordinated debt instruments: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - if classified in risk category A:

a) 20% (twenty percent), in the case of an operation with an original maturity term of 90 (ninety) calendar days or less; and

b) 40% (forty percent), in other cases;

II - if classified in risk category B:

a) 50% (fifty percent), for an operation with an original maturity term of 90 (ninety) calendar days or less; and

b) 75% (seventy-five percent), in other cases; and

III - if classified in risk category C, 150% (one hundred and fifty percent).

Paragraph 1. The FPR referred to in item I, letter “b”, of the heading, may be 30% (thirty percent), provided that the following indicators of the counterparty are concurrently equal to or greater than:

I - 14% (fourteen percent), in the case of the Tier 1 Capital ratio; and

II - 5% (five percent), in the case of the Leverage Ratio (LR).

Paragraph 2. The FPR provided in Paragraph 1 may be applied when the counterparty headquartered abroad, under the terms of item II of art. 29, has equivalent indicators that meet the requirements demanded in that paragraph.

Paragraph 3. The 20% (twenty percent) FPR, for exposure to an institution classified in risk category A, or the 50% (fifty percent) FPR, for exposure to an institution classified in risk category B, must be applied to:

I - an operation linked to international trade of goods, in which the shipment of goods is associated with the operation's payment guarantee, with an original maturity term of up to 1 (one) year; and

II - the representative right of an operation performed by a singular cooperative, central cooperative, confederation, or cooperative bank that has an institution member of the same cooperative

system as counterparty, except if related to investment in equity.

Paragraph 4. For exposure resulting from a bilateral agreement for compensation and settlement of obligations, according to Circular 3,809, of 2016, the following must be applied:

I - 30% (thirty percent), for a counterparty classified in risk category A, meeting the provisions in Paragraphs 1 and 2;

II - 40% (forty percent), for a counterparty classified in risk category A; and

III - 75% (seventy-five percent), for a counterparty classified in risk category B.

Paragraph 5. The FPR applicable to the exposure mentioned in the heading shall not be lower than the FPR applicable to the central government of the jurisdiction where the obligation is registered when it is denominated or indexed in a currency different from the local currency of the jurisdiction.

Paragraph 6. The provision in Paragraph 5 does not apply to exposure related to an operation linked to international trade of goods, in which the shipment of goods is tied the operation's payment guarantee, with an original maturity term of up to 1 (one) year.

CHAPTER V
FPR APPLIED TO EXPOSURES TO SECURITIES WITH SPECIFIC CHARACTERISTICS (COVERED BONDS)

Art. 34. The FPR established in this art. must be applied to the exposure related to a security that permanently meets the requirements listed below:

I - when in Brazil, be issued by a universal bank, commercial bank, investment bank, finance company, savings bank, mortgage company, or savings and loan association;

II - when abroad, be issued by a bank or entity that provides mortgage credit;

III - be legally subject to specific regulation designed to protect its holders;

IV - have as underlying assets only:

a) exposures to:

1. The federal government, including the Central Bank of Brazil;

2. the central government of a foreign jurisdiction, including its central bank;

3. subnational public-sector entities; or

4. MDEs, as provided for in arts. 27 and 28;

b) exposures guaranteed by the entities mentioned in items 1 to 4 of subitem “a”;

c) exposures related to residential mortgage loans where the debtor balance of each loan is equal to or less than 80% (eighty percent) of the most recent valuation of the guarantee;

d) exposures related to non-residential mortgage loans where the debtor balance of each loan is equal to or less than 60% (sixty percent) of the most recent valuation of the guarantee;

e) financial derivative instruments, only if exclusively for hedging purposes, according to specific regulation applicable to these securities; or

f) financial availabilities from the assets comprising the asset portfolio;

V - the total value of the assets underlying the respective security verifiably exceeds, by at least 10% (ten percent), the total value of the security guaranteed by them;

VI - the rights associated with the security are fully covered by the underlying assets, according to specific regulation applicable to these securities; and

VII - in the event of discontinuation of the issuing institution, the assets underlying the security are to be used primarily for the payment of its charges and amortization.

Paragraph 1. The following FPR must be applied to the exposure mentioned in the heading:

I - in the case of the issuing institution classified in risk category A, as per art. 30:

a) 15% (fifteen percent), if the applicable indicators to the issuer meet the provisions in Paragraphs 1 and 2 of art. 33;

b) 20% (twenty percent), if not meeting the provisions in Paragraphs 1 and 2 of art. 33;

II - in the case of the issuing institution classified in risk category B, as per art. 31, 35% (thirty-five percent); or

III - in the case of the issuing institution classified in risk category C, as per art. 32, 100% (one hundred percent).

Paragraph 2. Instruments that do not meet the provisions in the heading are subject to the provisions in art. 33.

CHAPTER VI
FPR APPLIED TO EXPOSURES TO NON-FINANCIAL CORPORATE ENTITIES
Section I
FPR Applied to Exposures to Large Corporations With Low Credit Risk

Art. 35. A 65% (sixty-five percent) FPR must be applied to exposures to a large non-financial private-sector entity with low credit risk.

Paragraph 1. For the purposes of the heading, a large corporation presenting low credit risk is defined to be one that cumulatively meets the following requirements:

I - disclose financial statements related to the most recent available calculation period, audited by an independent auditor registered with the CVM or an equivalent authority abroad; (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - hold total assets greater than R$240,000,000.00 (two hundred and forty million reais) or annual gross revenue greater than R$300,000,000.00 (three hundred million reais) in the most recent available fiscal year; (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

III - not being a counterparty in an exposure characterized as a problem asset at the institution, according to Resolution 4,557, of February 23, 2017, and Resolution BCB No. 265, of November 25, 2022, as applicable; and (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

IV - have a Non-Performing Indicator (ID) in the Central Bank of Brazil's Credit Information System (SCR) equal to or less than 0.05% (five hundredths of a percent), determined according to the following formula: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

ID= (∑_(6 meses)▒(〖CV〗_(>14)+ 〖CB〗_48))/(∑_(6 meses)▒(CA+ 〖CB〗_48)), where:

a) CV>14 = credits overdue in the active portfolio for more than 14 (fourteen) calendar days;

b) CB48 = credits written off as loss within the last 48 (forty-eight) months; and

c) CA = active portfolio; and

V - have its shares or securities of its own issuance listed on a stock exchange or registered in an organized over-the-counter market subject to government regulation and supervision, in Brazil or abroad. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 2. The sums mentioned in the formula of item IV of Paragraph 1 include information available in the SCR related to the 180 (one hundred and eighty) calendar days preceding the month of calculating the RWA_{CPAD} portion.

Paragraph 3. For the purposes of meeting the requirement mentioned in item V of Paragraph 1, the shares or securities: (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - may be issued by an entity that holds control of the counterparty; and (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - must have been the subject of a public offer. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Paragraph 4. In the absence of information in the SCR for calculating the sums mentioned in the formula of item IV of Paragraph 1, a large corporation presenting low credit risk may be considered to be one that: (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

I - meets the requirements of items I, II, III, and V of Paragraph 1; and (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

II - demonstrates adequate capacity to meet its financial obligations in a timely and robust manner in the face of adverse changes in the economic cycle and its business environment conditions. (Included, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Section II
FPR Applied to Exposures to Small or Medium-Sized Enterprises

Art. 36. An 85% (eighty-five percent) FPR must be applied to exposures to small or medium-sized non-financial private-sector entities.

Sole paragraph. For the purposes of the heading, a small or medium-sized enterprise is considered to be a counterparty, not eligible under art. 46, whose total assets are less than R$240,000,000.00 (two hundred and forty million reais) and whose annual gross revenue is less than R$300,000,000.00 (three hundred million reais) in the most recent available fiscal year.

Section III
FPR Applied to Exposures to Specialized Financing

Art. 37. A 100% (one hundred percent) FPR must be applied to exposures related to specialized financing classified as specific object financing and commodities financing.

Paragraph 1. For the purposes of the heading, specific object financing is the operation for the acquisition of an asset with the following characteristics:

I - the main source of funds for the payment of obligations related to the financing consists of the incomes earned by the financed asset itself and not by the entity sponsoring it;

II - the main guarantee of the operation consists of the financed asset itself; and

III - the borrower does not have resources to settle the financing without the incomes earned by the financed asset.

Paragraph 2. For the purposes of the heading, commodities financing is the operation for the acquisition of commodities or receivables linked to commodities, with the following characteristics:

I - the main source of funds for the payment of obligations related to the financing consists of the revenue from the sale of the financed commodities or the receivables associated with them, as well as the cashflows generated by said receivables, and not from other incomes earned by the acquiring entity of the commodities; and

II - the borrower does not have resources to settle the financing without the revenue from the sale of the commodities or without the cashflows of the receivables associated with them.

Art. 38. A FPR of 130% (one hundred and thirty percent) must be applied to exposures related to specialized financing classified as project finance.

Sole paragraph. For the purposes of the heading, project finance is the operation with the following characteristics:

I - the main source of funds for the payment of obligations related to the financing consists of the incomes earned by the financed project itself and not by the entity sponsoring it;

II - the main guarantee of the operation consists of the incomes mentioned in item I; and

III - the borrower does not have resources to settle the financing without the income earned by the financed project.

Art. 39. A 100% (one hundred percent) FPR may be applied to the exposure related to project finance, as per art. 38, during the operational phase.

Sole paragraph. For the purposes of the heading, the project is considered in the operational phase if:

I - the current cash flows within 360 (three hundred and sixty) calendar days are positive and sufficient for the fulfillment of all contractual obligations to be paid in the same interval;

II - the projected cash flows are sufficient for the fulfillment of all future contractual obligations; and

III - the long-term liabilities of the counterparty are decreasing.

Art. 40. An 80% (eighty percent) FPR may be applied to the exposure related to high-quality project financing, as per art. 38, during the operational phase, in the form of the sole paragraph of art. 39.

Sole paragraph. For the purposes of the heading, the project is high quality if:

I - the counterparty:

a) possesses adequate capacity to timely honor its financial obligations under the terms agreed upon, according to the credit risk assessment carried out by the institution, during the course of the operation;

b) does not act detrimentally to the interests of creditors, including being prohibited from issuing new interest-paying liabilities without their consent; and

c) possesses financial resources or contracted lines of credit compatible with the projected financial demands of the financed project; (Amended, as of July 1, 2023, by Resolution BCB 240, of 9/1/2022.)

II - the profitability of the project:

a) is contractually defined and is not affected by the effective use of the service or the provision of the good resulting from the project; and

b) predominantly comes from an entity whose FPR applicable, under the terms of this Resolution, is equal to or lower than 80% (eighty percent);

III - the goods and rights of the project constitute a guarantee in favor of creditors;

IV - the majority investor, or the owner of controlling rights, of the counterparty has provided protection against losses, to which equally applies the requirement mentioned in item II, letter “b”, in case of early termination of the financed project; and

V - the institution, in case of liquidation, bankruptcy, similar measure, or default of the counterparty:

a) has preference in the list of creditors, at least over unsecured creditors; and (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

b) has the right to assume control of the project, including all assets and contracts necessary for its operation. (Amended, as of July 1, 2023, by Resolution BCB 323, of 6/14/2023.)

Section IV
FPR Applied to Exposures to Other Non-Financial Corporate Entities

Art. 41. A 100% (one hundred percent) FPR must be applied to exposures to non-financial private legal entities without a specific FPR.

CHAPTER VII
FPR APPLIED TO INVESTMENTS IN EQUITY PARTICIPATIONS OR IN SUBORDINATED DEBT INSTRUMENTS
Section I
FPR Applied to Significant Investments in Equity Participations Not Deducted from the Capital Requirement Calculation

Art. 42. A 250% (two hundred and fifty percent) FPR must be applied to exposures related to significant investments in equity participations not deducted in the capital requirement calculation, as per art. 8, paragraph 8, of Resolution CMN 4,955, from 2021, and art. 7, paragraph 7, of Resolution BCB 199, from 2022.

Section II
Other Equity Participations and Subordinated Debt Instruments

Art. 43. The following FPR must be applied to the exposure related to investment in equity participation:

I - 400% (four hundred percent) for equity participation, or title convertible into it, in an entity:

a) not listed on a stock exchange subject to governmental regulation and supervision, in Brazil or abroad; and

b) not operationally integrated into the activity of the investing institution;

II - 100% (one hundred percent), for equity participation in an entity that is part of the same cooperative system, when the participation is made by a singular cooperative, central cooperative, confederation, or cooperative bank; and

III - 250% (two hundred and fifty percent), in other cases.

Paragraph 1. For the purposes of the heading, direct or indirect equity participation is considered the investment in a private legal entity, with or without voting rights, including through derivative financial instruments, that:

I - is non-redeemable, offering return only through participation in profits, its sale, or the issuer's liquidation;

II - does not represent an obligation on the part of the issuer; and

III - represents a residual right over the issuer's assets.

Paragraph 2. The provision in item I of the heading does not apply to investments in equity participations classified in the Permanent Assets of the investing institution, under Cosif terms.

Art. 44. A 150% (one hundred and fifty percent) FPR must be applied to exposure related to a subordinated debt instrument.

Sole Paragraph. The provision in the heading also applies to exposures related to instruments not deducted from the capital requirement calculation that meet the provision in item V of art. 8 of Resolution CMN 4,955, from 2021, or in item V of art. 7 of Resolution BCB 199, from 2022.

Art. 45. A 1,250% (one thousand two hundred and fifty percent) FPR must be applied to the portion of exposure related to significant equity participation in a non-financial private-sector entity that exceeds:

I - individually, 15% (fifteen percent) of the investing institution's capital requirement; or

II - in aggregate, 60% (sixty percent) of the investing institution's capital requirement.

Paragraph 1. For the purposes of the provision in the heading, the equity participation is considered significant when the institution holds more than 10% (ten percent) of the investee's capital stock.

Paragraph 2. The treatment provided for in art. 43 must be applied to equity participations in non-financial private-sector entities that do not exceed the limits established in the heading.

CHAPTER VIII
FPR APPLIED TO RETAIL EXPOSURES

Art. 46. A 75% (seventy-five percent) FPR must be applied to retail exposures.

Paragraph 1. For the purposes of this Resolution, exposures are considered retail if they cumulatively have the following characteristics:

I - correspond to a financial product or service intended for natural persons or small business entities;

II - do not correspond to operations:

a) guaranteed by real estate;

b) of repurchase agreements;

c) of securities lending; and

d) involving derivative financial instruments;

III - do not exceed the total limit of BRL 5,000,000.00 (five million reais) per counterparty; and

IV - the sum of current exposures with any single counterparty less than 0.2% (two tenths of a percent) of the total retail exposures amount.

Paragraph 2. For verifying the limits referred to in paragraph 1, items III and IV:

I - the values of all operations with the same counterparty must be considered with the application of FCC and without the deduction of the respective provisions; and

II - must be disregarded:

a) the values of operations guaranteed by residential real estate; and

b) the effects of credit risk mitigation, as per Circular 3,809, from 2016.

Paragraph 3. For the purposes of this Resolution, a small business entity is considered a counterparty with an annual gross revenue less than BRL 15,000,000.00 (fifteen million reais) in the most recent available fiscal year.

Paragraph 4. In the case of natural persons and legal entities considered as a single counterparty, under the terms of art. 22, paragraph 3, item III, the limits set for classification as retail exposure must be met individually and collectively.

Paragraph 5. The FPR provided for in the heading also applies to the exposure where the counterparty is a natural person or a small business entity in the situations provided for:

I - in art. 52, item II, for exposure guaranteed by a finished real estate property;

II - in art. 54, item I, for exposure linked to a property where there is no dependence on the cash flow generated by the property to meet the financial obligation represented by the exposure.

Paragraph 6. In the case of paragraph 5, the value of the mentioned exposures remains disregarded in verifying the limits referred to in paragraph 1, items III and IV.

Art. 47. A 45% (forty-five percent) FPR must be applied to retail exposure related to:

I - postpaid payment instruments where there has been no delay, installment payment, or any other form of financing the invoice balance due in the last 360 (three hundred and sixty) calendar days; and

II – line of credit where there has been no withdrawal in the last 360 (three hundred and sixty) calendar days.

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ole Paragraph. For the purposes of the heading, the situation does not constitute delay, installment payment, or withdrawal that does not result in the accrual of interest or other charges, except tax charges.

Art. 48. A 100% (one hundred percent) FPR must be applied to exposure to a natural person that is not guaranteed by real estate and does not meet the requirements described in arts. 46 and 47.

CHAPTER IX
FPR APPLIED TO EXPOSURES GUARANTEED BY REAL ESTATE

Art. 49. For determining the applicable FPR to exposures guaranteed by real estate, the operation's characteristics must be considered, including:

I - the dependence on the cash flow generated by the property to meet the financial obligation represented by the exposure; and

II - the purpose of using the property.

Paragraph 1. For the purposes of this Resolution, the exposure is considered guaranteed by real estate when:

I - the property given as a guarantee is completed, verifiably through "habite-se" or an equivalent document for properties abroad, issued by a competent authority, except in the case of rural properties intended for agriculture, extraction, or environmental preservation;

II - the right to execute the guarantee represented by the property has legal enforceability in all relevant jurisdictions, including other countries where it must or may produce effects, being possible to be exercised in a timely fashion;

III - the guarantee provided is constituted:

a) in the form of a mortgage:

1. of the first degree, or

2. of a subordinate degree, provided that the institution is the creditor of all other preferential mortgages and if the contract allows, regardless of notice or judicial interpellation, to consider all other operations due in advance, in case of default of any of them; or

b) in the form of fiduciary lien of the property, provided that the institution may, in accordance with applicable legislation, initiate the procedure for execution of the property regardless of any other fiduciary creditors, subject to the provisions of § 11; (as amended by Resolution BCB No. 384, from 5/6/2024);

IV - the credit origination policy of the institution considers the debtors' payment capacity consistently over time;

V - the valuation of the guarantee on the date of the credit origination is:

a) used for determining the applicable FPR; and

b) obtained in a prudent, conservative manner, and independently from the credit origination process, not exceeding its market value, when this can be determined; and

VI - the information related to the credit granting process, including those regarding the guarantee valuation and the debtor's payment capacity, are documented by the institution, aligned with what

is established by Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 2. To fulfill the requirement established by item IV of paragraph 1, objective metrics must be adopted to assess the debtor's payment capacity and specify its limits, aligned with the institution's risk management framework, as defined by Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable, including the establishment of documentation and procedures for credit risk management. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 3. The financial obligation represented by the exposure must be considered dependent on the cashflow generated by the respective property when:

I - the cashflows generated by the property correspond to at least 50% (fifty percent) of the debtor's cashflow;

II - the debtor does not have other means to settle the financing under the agreed terms without the cashflow generated by the property; or

III - the deterioration of the cashflow generated by the property is a sufficient condition for the exposure to be characterized as a problem asset, under the terms of Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 4. The assessment of cashflow generation dependence provided in paragraph 3 must be performed on the date of the credit origination, being allowed its updating.

Paragraph 5. Among the forms of cashflow generation by the property are:

I - rental, leasing, or other operations with the same economic basis;

II - the commercialization of the production that takes place on it, in the case of rural properties, and

III - the expectation of the sale the property.

Paragraph 6. The dependence of cash flow generation by the property should not be considered when it serves as the residence of the natural person debtor.

Paragraph 7. The use of the property for residential purposes must be verified by the property's nature and adherence to all applicable laws and regulations to its occupation for this purpose, allowing mixed use provided that the non-residential use represents a area equal to or less than 20% (twenty percent) of the built area.

Paragraph 8. In the case of multiple credit operations secured by the same property, including those granted by other institutions, the outstanding balance, when necessary for the determination of the FPR, must be separately calculated for each exposure and include the sum of amounts owed in all operations that have guarantees with equal or superior priority in relation to the proceeds from the execution of the guarantee, in accordance with applicable legislation. (as amended by Resolution BCB No. 384, from 5/6/2024).

Paragraph 9. In the case of exposure guaranteed by multiple properties, only the exposure guaranteed by residential property should be treated as such when the criterion referred to in paragraph 7 is individually met by each property serving as a guarantee. (Included, as of 7/1/2023, by Resolution BCB 323, from 14/6/2023.)

Paragraph 10. The "habite-se" requirement provided in item I of paragraph 1 can be considered met by proving the construction registration in the property's registry at the registry office, in cases where the law waives the "habite-se" requirement. (Included, as of 7/1/2023, by Resolution BCB 323, from 14/6/2023.)

Paragraph 11. If the institution cannot, according to applicable legislation, initiate the procedure for execution of the property independently of any other fiduciary creditors, it is allowed as an alternative criterion, for the purposes of item III, subitem “b”, of paragraph 1, to consider as its own exposure the sum of exposures secured by fiduciary alienation of the respective property with priority in relation to the institution’s exposure and include it in the computation of metrics applicable for the duration of the contract related to the exposure held by the institution. (Included by Resolution BCB 384, from 5/6/2024.)

Paragraph 12. In calculating the outstanding balance mentioned in paragraph 8 and the sum referred to in paragraph 11, the values related to credit operations granted by other institutions must be updated, at least in June and December of each calendar year, allowing the use of information:

I - obtained through consultation with other creditor institutions, with the authorization of the fiduciary; or

II - registered in a notary, with the institution updating the values assuming the normal course of the operation. (Included by Resolution BCB 384, from 5/6/2024.)

Paragraph 13. For the purposes of item V of paragraph 1, the substitution or addition of real estate collateral is equivalent to the granting of a new credit operation, being prohibited an increase in the value of the original collateral property. (Included, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

Art. 50. The following FPR must be applied to the exposure guaranteed by residential real estate when there is no dependence on the cash flow generated by the property for meeting the obligation:

I - 20% (twenty percent), when the outstanding balance value is equal to or less than 50% (fifty percent) of the guarantee's valuation value;

II - 25% (twenty-five percent) when the outstanding balance value is more than 50% (fifty percent) and up to 60% (sixty percent) of the guarantee's valuation value;

III - 30% (thirty percent) when the outstanding balance value is more than 60% (sixty percent) and up to 80% (eighty percent) of the guarantee's valuation value;

IV - 40% (forty percent) when the outstanding balance value is more than 80% (eighty percent) and up to 90% (ninety percent) of the guarantee's valuation value;

V - 50% (fifty percent) when the outstanding balance value is more than 90% (ninety percent) and up to 100% (one hundred percent) of the guarantee's valuation value; or

VI - 70% (seventy percent) when the outstanding balance value is more than 100% (one hundred percent) of the guarantee's valuation value.

Art. 51. The following FPR must be applied to the exposure guaranteed by residential real estate when there is dependence on the cash flow generated by the property for meeting the obligation:

I - 30% (thirty percent), when the outstanding balance value is equal to or less than 50% (fifty percent) of the guarantee's valuation value;

II - 35% (thirty-five percent) when the outstanding balance value is more than 50% (fifty percent) and up to 60% (sixty percent) of the guarantee's valuation value;

III - 45% (forty-five percent) when the outstanding balance value is more than 60% (sixty percent) and up to 80% (eighty percent) of the guarantee's valuation value;

IV - 60% (sixty percent) when the outstanding balance value is more than 80% (eighty percent) and up to 90% (ninety percent) of the guarantee's valuation value;

V - 75% (seventy-five percent) when the outstanding balance value is more than 90% (ninety percent) and up to 100% (one hundred percent) of the guarantee's valuation value; or

VI - 105% (one hundred and five percent) when the outstanding balance value is more than 100% (one hundred percent) of the guarantee's valuation value.

Art. 52. The following FPR must be applied to the exposure guaranteed by non-residential real estate when there is no dependence on the cash flow generated by the property for meeting the obligation:

I - the lower value between 60% (sixty percent) and the FPR applicable to the debtor, when the outstanding balance value is equal to or less than 60% (sixty percent) of the guarantee's valuation value; or

II - the FPR applicable to the debtor, when the outstanding balance value is more than 60% (sixty percent) of the guarantee's valuation value.

Art. 53. The following FPR must be applied to the exposure guaranteed by non-residential real estate when there is dependence on the cash flow generated by the property for meeting the obligation:

I - 70% (seventy percent), when the outstanding balance value is equal to or less than 60% (sixty percent) of the guarantee's valuation value;

II - 90% (ninety percent), when the outstanding balance value is more than 60% (sixty percent) and up to 80% (eighty percent) of the guarantee's valuation value; or

III - 110% (one hundred and ten percent), when the outstanding balance value is more than 80% (eighty percent) of the guarantee's valuation value.

Art. 54. A 150% FPR must be applied to the exposure linked to real estate that does not meet the provisions in arts. 49 to 53.

Paragraph 1. In the case of exposure related to real estate development, the following FPR may be applied:

I - the FPR applicable to the counterparty, including legal entities, when the patrimony of affectation institute, as per Law 4,591, from December 16, 1964, is adopted; or

II - 100% (one hundred percent), when the following conditions are met:

a) regarding the operation's characteristics:

1. the exposure is related to residential real estate development;

2. the financed amount represents less than 50% (fifty percent) of the estimated value of the development when completed; and

3. the constitution of the guarantee meets the provision in item III of paragraph 1 of art. 49; and

b) regarding the institution's policies:

1. the institution's credit granting policy must consider the counterparty's payment capacity consistently over time, observed the provision in paragraph 2 of art. 49; and

2. the guarantee's valuation on the credit granting date must be obtained in a prudent, conservative manner, and independently from the credit granting process, not to exceed its market value, when this can be determined.

Paragraph 2. In the case of exposure related to an autonomous unit of real estate development already sold in construction, the provision in item I of paragraph 1 may be applied, provided that the buyer assumes the obligations related to the real estate financing.

Paragraph 3. In the case of exposure not related to real estate development, the FPR applicable to the counterparty may be optionally applied, provided that the fulfillment of the financial obligation represented by the exposure is not considered dependent on the cash flow generated by the respective property.

CHAPTER X
CURRENCY MISMATCH

Art. 55. The FPR applicable to retail exposures or exposures guaranteed by residential real estate denominated or indexed in a currency different from the currency in which the debtor's income source is denominated or indexed should correspond to the lesser between:

I - the original FPR multiplied by 150% (one hundred and fifty percent); and

II - 150% (one hundred and fifty percent).

Sole Paragraph. The provision in the heading does not apply to the exposure in which the debtor has protection against currency fluctuations covering at least 90% (ninety percent) of the installment

value.

CHAPTER XI
FPR APPLIED TO DERIVATIVES EXPOSURES AND THE PROVISION OF FIDEJUSSORY GUARANTEES
Section I
FPR Applied to Derivatives Exposures

Art. 56. The same FPR applicable to the counterparty, according to this Resolution, must be applied to the exposure to counterparty credit risk resulting from transactions with derivative financial instruments.

Art. 57. The same FPR applicable to the reference entity of the credit derivative must be applied to the exposure to a credit derivative where the institution acts as the risk receiver, according to this Resolution.

Paragraph 1. For a credit derivative referenced to a set of entities where the protection is fully triggered from a credit event of any referenced entity, the FPR corresponding to the sum of the respective FPR for each entity in the set, according to this Resolution, limited to 1,250% (one thousand two hundred and fifty percent), must be applied.

Paragraph 2. In the case of a credit derivative referenced to more than one entity where the protection is fully triggered only from more than one credit event, it is optional to exclude the lower FPR from the sum established in paragraph 1, limited to a number smaller than the number of credit events that trigger the protection established in the credit derivative.

Paragraph 3. A credit derivative referenced to more than one entity where the protection is limited to a percentage of the first losses, and the institution acts as the risk receiver, must be treated as a securitization instrument.

Section II
FPR Applied to the Provision of Fidejussory Guarantees

Art. 58. The FPR applicable to the operation of credit with the same counterparty, according to this Resolution, must be applied to the exposure related to the provision of guarantee, surety, or any other form of personal guarantee.

Sole Paragraph. The exposure in which the guarantee object includes more than one entity or more than one operation, when not covering the entirety of the losses, must be equated to the exposure to a credit derivative.

CHAPTER XII
ON THE FPR APPLIED TO EXPOSURES TO INVESTMENT FUNDS

Art. 59. In the case of exposure related to investment in an investment fund quota, the following should be applied:

I - the FPR applicable to the respective counterparty, as per this Resolution, when the exposure to the fund is identified or inferred through the procedures set forth in Arts. 17 and 18; or

II - a 1,250% (one thousand two hundred and fifty percent) FPR, when:

a) the value of the exposure corresponds to the book value of the acquired quota, as per the sole paragraph of Art. 16 or Paragraph 6 of Art. 18; or

b) the option established in Paragraph 8 of Art. 17 or Paragraph 4 of Art. 18 has been used.

Paragraph 1. It is optional for the institution to apply a 150% (one hundred and fifty percent) FPR to the portion of the fund's exposures identified in the form of Art. 17 of which any characterization as a problem asset, as per Art. 24 of Resolution 4,557, of February 23, 2017, and Art. 22 of Resolution BCB 265, of November 25, 2022, as applicable, is unknown, when cumulatively: (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

I - the exposures refer to a credit operation; and

II - the sum of these exposures is less than 5% (five percent) of the nominal total value of the fund's portfolio.

Paragraph 2. For institutions classified in S2, S3, or S4, the application of a 150% (one hundred and fifty percent) FPR is optional to the inferred exposure through the procedures established in Art. 18, provided that the possibility of applying a FPR higher than 150% (one hundred and fifty percent) is not foreseen.

Paragraph 3. The value resulting from the risk weighting of exposure to an investment fund identified or inferred through the procedures set forth in Arts. 17 and 18 is limited to the value obtained by applying a 1,250% (one thousand two hundred and fifty percent) FPR to the book value of the acquired quotas.

Art. 60. To exposures to investment funds not covered in Art. 59, a 100% (one hundred percent) FPR should be applied, even if the investment fund is part of a prudential conglomerate, as per the specific regulation.

CHAPTER XIII
ON THE FPR APPLIED TO EXPOSURES IN SECURITIZATION PROCESSES

Art. 61. For the application of the FPR to exposure to a securitization instrument, the following definitions should be used:

I - attachment point (A) is the percentage of accumulated losses in the value of the underlying assets from which there is a reduction in the remuneration in a specific class of payment prioritization of the securitization instrument;

II - detachment point (D) is the percentage of accumulated losses in the value of the underlying assets from which there is a total loss of value in a specific class of payment prioritization of the securitization instrument; and

III - default rate (W) is the percentage of the underlying assets in default.

Sole paragraph. The parameters A and D should consider all assets of the securitization process that absorb losses before the class of payment prioritization of the securitization instrument,

including reserve funds.

Art. 62. The FPR applicable to the value of exposure to a securitization bond should correspond to:

I - 1/F, if D ≤ KA, where:

a) D = detachment point; and

b) KA = hypothetical capital adjusted for default, as per art. 63;

II - 1/F * KSSFA(KA), if A ≥ KA, where:

a) A = attachment point;

b) KA = hypothetical capital adjusted for default, as per art. 63; and

c) KSSFA(KA) = capital applicable to securitization, as per art. 64; or

III - the result of the following formula:

FPR=[((K_A-A)/(D-A))* 1/F]+[((D-K_A)/(D-A))*1/F*K_SSFA(KA)], where:

a) A = attachment point;

b) D = detachment point;

c) KA = hypothetical capital adjusted for default, as per art. 63; and

d) KSSFA(KA) = capital applicable to securitization, as per Art. 64.

Paragraph 1. F corresponds to the factor defined in Art. 4 of Resolution CMN 4,958, of October 21, 2021, and in Art. 4 of Resolution BCB 200, of March 11, 2022, as applicable. (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

Paragraph 2. The FPR set forth in the heading should not be less than 25% (twenty-five percent).

Paragraph 3. The FPR mentioned in heading, item I, should also be applied if:

I - the underlying assets of the securitization bond cannot be fully identified;

II - the institution does not know the status in terms of default of underlying assets corresponding to more than 5% (five percent) of the nominal total value of the securitization instrument's portfolio; or

III - the securitization instrument is associated with resecuritization.

Art. 63. The hypothetical capital adjusted for default (KA) should correspond to the result of the following formula:

KA = (1 – W) * KSA + W * 0.5, where:

I - W = default rate; and

II - KSA = hypothetical capital, which should correspond to the result of the following formula:

K_SA=(RWA_HIP*F)/V, where:

a) RWAHIP = the amount of risk weighted assets calculated for the underlying assets, as per this Resolution;

b) F = factor defined in art. 4 of Resolution CMN 4,958, of October 21, 2021, and in Art. 4 of Resolution BCB 200, of March 11, 2022, as applicable; and (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

c) V = total value of the exposure corresponding to the underlying assets calculated as per this Resolution, disregarding any application of credit risk mitigation instruments.

Sole paragraph. If W cannot be determined, observed as set forth in art. 62, paragraph 3, item II, KA should correspond to the result of the following formula:

K_A=θ*K_A^'+(1-θ)*1, where:

I - θ = ratio between the nominal value of the underlying assets whose default condition is known by the institution and the total nominal value of the underlying assets; and

II - K'A = hypothetical capital adjusted for default calculated as per the formula established in the heading for the underlying assets whose default condition is known by the institution.

Art. 64. The capital applicable to securitization (KSSFA(KA)) should correspond to the result of the following formula:

K_SSFA(KA) =(e^(-1/K_A *(D-K_A))-e^(-1/K_A *maxf_0(A-K_A;0)))/(-1/K_A *(D-K_A-maxf_0(A-K_A;0))), where:

I - e = neperian constant;

II - KA = hypothetical capital adjusted for default, as per art. 63;

III - A = attachment point; and

IV - D = detachment point.

Art. 65. In the case of a synthetic securitization process in which the institution transfers risk to a counterparty, retaining a credit risk equivalent to the senior class, and the counterparty receiving the risk has made an advance payment that exempts it from any future disbursement obligation under the instrument associated with the securitization process, the FPR applicable to the exposure related to the underlying assets should correspond to the result of the following formula:

(1 – PP) * FPRSEC, where:

I - PP = percentage of the value of the underlying assets to which the institution whose credit risk the institution is no longer exposed to; and

II - FPRSEC = FPR related to a securitization instrument that replicates the credit risk retained by the institution after the synthetic securitization process.

Paragraph 1. For the treatment mentioned in the heading to be applied, the synthetic securitization process must meet the following requirements:

I - the institution must substantially transfer the credit risk associated with the underlying assets;

II - the transfer of the credit risk of the underlying assets cannot be subject to restrictions or conditions that modify the portion of risk transferred, for example:

a) establishment of conditions in which the risk transfer is not applicable, even in the event of a credit event;

b) the possibility of canceling the instrument associated with the synthetic securitization process due to the deterioration of the credit quality of the underlying assets;

c) the obligation to replace the underlying assets;

d) the provision of an increase in the cost of transferring the credit risk due to the deterioration of the credit quality of the underlying assets;

e) the provision of an increase in the return rate due to the deterioration of the credit quality of the underlying assets; and

f) the possibility of providing guarantees, real or personal of any nature, to the underlying assets after the substantial transfer of the credit risk associated with them;

III - the contracts related to the securitization process must be subject to a qualified legal opinion that supports their enforceability in any relevant jurisdiction;

IV - the contracts related to the securitization process must not provide for the right to repurchase the securitization bonds before their maturity;

V - the term of the instrument associated with the synthetic securitization process must be sufficient for the transfer of the credit risk of the underlying assets; and

VI - the instrument associated with the synthetic securitization process cannot have as its counterparty a related party, with which the institution prepares consolidated financial statements.

Paragraph 2. The substantial transfer of the credit risk of the underlying assets is verified by the same criteria applicable to the sale or transfer of assets, as per specific regulation.

Paragraph 3. In the case where the counterparty receiving the risk is an institution listed in Art. 27, the requirement mentioned in the heading of the counterparty receiving the risk making an advance payment that exempts it from any future disbursement obligation under the instrument associated with the securitization process is waived.

CHAPTER XIV
ON THE FPR APPLIED TO EXPOSURES TO PROBLEM ASSETS

Art. 66. The following FPR should be applied to exposure characterized as a problem asset as per Resolution 4,557, of February 23, 2017, and Resolution BCB 265, of November 25, 2022, as applicable: (Amended, as of January 1, 2025, by Resolution BCB 447, of 12/19/2024.)

I - 150% (one hundred and fifty percent), if the respective provision is less than 20% (twenty percent) of the outstanding balance or the value determined according to Art. 21, as appropriate, related to the exposure characterized as a problem asset; (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

II - 100% (one hundred percent), in the following cases:

a) if the respective provision is greater than or equal to 20% (twenty percent) and less than 50% (fifty percent) of the outstanding balance or the value determined according to Art. 21, as appropriate, related to the exposure characterized as a problem asset; or (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

b) the exposure has a residential property guarantee without dependence on the cash flow generated by the property for the fulfillment of the financial obligation, regardless of the amount of the respective provision; and

III - 50% (fifty percent), if the provision is greater than or equal to 50% (fifty percent) of the outstanding balance or the value determined according to Art. 21, as appropriate, related to the exposure characterized as a problem asset. (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

Sole paragraph. The outstanding balance or the value determined according to Art. 21, as appropriate, mentioned in this article must:

I - consider the net value of write-offs, carried out according to the criteria established in the Cosif; and

II - disregard the multiplication by the corresponding FCC, in the case of the exposures referred to in Art. 21. (Amended, as of January 2, 2025, by Resolution BCB 438, of 11/28/2024.)

CHAPTER XV
ON EXPOSURES TO BE SETTLED IN CENTRAL COUNTERPARTIES
Section I
Common Provisions

Art. 67. Exposures to central counterparties, whether qualified or not, should follow the provisions of this art. and arts. 68 to 77, when related to the assets and operations listed below:

I - participation in a mutual guarantee fund of a central counterparty;

II - the increase in participation in the fund mentioned in item I of a non-qualified central counterparty, which the institution has committed to make;

III - the repurchase operation, securities lending, or derivative instrument transaction that composes the institution's own portfolio, to be settled in a central counterparty;

IV - the asset owned by the institution provided as collateral in favor of a central counterparty, except if this asset:

a) is identified as owned by the institution; and

b) is promptly returned to the institution in the event of settlement, bankruptcy, or a similar provision of the counterparty;

V - the repurchase operation, securities lending, or derivative instrument transaction carried out on behalf of a client, with intermediation, clearing, or settlement performed in a clearinghouse or service provider, in which an entity intermediates as a central counterparty, as per art. 4, item VII, considered separately:

a) the exposure to counterparty credit risk concerning the client, as per art. 4, Paragraph 7, item I; and

b) the exposure to counterparty credit risk concerning a third party, including the central counterparty, except when the institution does not assume reimbursement obligations to the respective client, as per art. 4, Paragraph 7, item II; and

VI - the asset or right provided by a client due to the operations listed in item V, except when the institution does not assume any obligations, including reimbursing the client in the event of default by third parties, as per art. 4, item VIII.

Paragraph 1. A QCCP is considered to be an entity that intermediates as a central counterparty in transactions to be settled in clearinghouses or service providers, meeting the following characteristics:

I - its systems are authorized by the Central Bank of Brazil, as per Law 10.214, from 2001, and specific regulation;

II - it is subject to regulation and supervision consistent with the principles established by the CPMI and IOSCO; or

III - it is recognized as qualified by the Central Bank of Brazil, as per Circular 3,772, from December 1, 2015.

Paragraph 2. It is the institution's responsibility to document compliance with item II of Paragraph 1.

Paragraph 3. Should not be considered a QCCP:

I - the central counterparty whose recognition mentioned in item III of paragraph 1 has already been denied by the Central Bank of Brazil, as per art. 3 of Circular 3,772, from 2015; and

II - other central counterparties headquartered in the jurisdiction where the entity mentioned in item I of this paragraph is authorized to operate.

Paragraph 4. The institution may limit the value of the RWA_{CPAD} part related to the total exposures to a QCCP, including those from participation in a mutualized fund, to the value calculated if the central counterparty did not meet the requirements established in paragraph 1.

Paragraph 5. Exposures related to the operations mentioned in items III, IV, V, and VI of the heading to a central counterparty that has ceased to be recognized as a QCCP may continue to receive the treatment provided in arts. 69 to 74 for a period of 90 (ninety) days.

Section II
On the FPR Applied to Exposures in QCCP
Item I
On Participation in a Mutual Guarantee Fund

Art. 68. For the participation in a mutual guarantee fund of a QCCP, the value of ParcDF, as per art. 2, paragraph 2, should be calculated according to the following formula: (As amended, starting from 1/7/2023, by Resolution BCB 240, from September 1, 2022.)

ParcDF = max (12,5 x K_QCCP x[〖DF〗_próprio/(〖DF〗_QCCP+ 〖DF〗_CM)]; 2% x 〖DF〗_próprio), where:

I - KQCCP = hypothetical regulatory capital of the QCCP, as per the sole paragraph;

II - DFProprio = the value of the institution's participation in the fund;

III - DFQCCP = the value of the QCCP's participation in the fund; and

IV - DFCM = the total value of the fund, excluding the participation mentioned in item III.

Sole paragraph. The KQCCP, informed by the central counterparty, is calculated according to the following formula:

K_QCCP= ∑_i▒〖〖EAD〗_i×20%×8%〗, where:

EADi refers to the exposure to which the central counterparty is subject due to transactions to be settled before the clearing member “i”.

Item II
On Operations in QCCP
On Operations of Own Ownership

Art. 69. A 2% (two percent) FPR should be applied to the exposure related to the operation mentioned in art. 67, item III, carried out directly with a QCCP, to be settled in the systems mentioned in art. 67, paragraph 1.

Art. 70. The following FPR should be applied to the exposure related to the operation that is part of the institution's own portfolio, mentioned in Art. 67, item III, carried out with a QCCP through a

financial institution not part of the institution's prudential conglomerate:

I - 2% (two percent), if the following requirements are cumulatively met:

a) the operation is registered in the QCCP:

1. in the name of the operation's owner; or

2. in the name of the clearing member, in a segregated manner from that member's own operations, in the case of multiple clients in a single operation;

b) the terms of the contract between the parties allow for the necessary measures and procedures for the timely settlement or transfer of the assets, including any provided guarantees, in the event of settlement, bankruptcy, similar provision, or default of any entity part of the chain of responsibilities between the operation's owner and the QCCP;

c) the operation's owner is protected from any losses due to settlement, bankruptcy, similar provision, or default:

1. of any entity part of the chain of responsibilities between the operation's owner and the QCCP; and

2. of other clients, in the case of multiple clients in a single operation; and

d) the contract between the parties has legal force in all relevant forums, including in other jurisdictions where it may or must produce effects;

II - 4% (four percent), if the requirements mentioned in items "a," "b," and "d" of item I are met; or

III - FPR applicable to the financial institution counterpart, as per Chapter IV of this Title III, in other cases.

On Operations Carried Out on Behalf of Clients

Art. 71. The following FPR should be applied to the exposure mentioned in Art. 67, item V, subitem "b":

I - 2% (two percent), if the institution acts as a clearing member; or

II - as established in Art. 70, if the respective requirements are met, when carried out through a financial institution not part of the institution's prudential conglomerate.

Sole paragraph. For the purposes of item II of the heading, the client contracting with the institution is considered the operation's owner.

Art. 72. The FPR applicable to the counterpart, as per this Resolution, should be applied to the exposure mentioned in Art. 67, item V, subitem "a".

On Assets Provided as Collateral to QCCP

Art. 73. A 2% (two percent) FPR should be applied to the exposure related to the asset or right, owned by the institution or a client, provided or made available as collateral to a QCCP, mentioned in Art. 67, items IV and VI, respectively, if the institution acts as a clearing member.

Art. 74. The following FPR should be applied to the exposure related to the asset or right, owned by the institution or a client, provided or made available as collateral to a QCCP, mentioned in Art. 67, items IV and VI, respectively, through a financial institution not part of the prudential conglomerate:

I - 2% (two percent), if the following requirements are met:

a) the asset or right provided or made available as collateral is identified:

1. in the QCCP, as made available by the operation's owner; or

in a segregated manner from the own operations of the entities part of the chain of responsibilities between the multiple clients and the QCCP, in the case of multiple clients in a single operation;

b) the terms of the contract between the parties allow for the necessary measures and procedures for the timely settlement or transfer of the transacted assets, including any provided guarantees, in the event of settlement, bankruptcy, similar provision, or default of any entity part of the chain of responsibilities between the operation's owner and the QCCP;

c) the operation's owner is protected from any losses due to settlement, bankruptcy, similar provision, or default:

1. of any entity part of the chain of responsibilities between the operation's owner and the QCCP; and

2. of other clients, in the case of multiple clients in a single operation; and

d) the contract between the parties has legal force in all relevant forums, including in other jurisdictions where it may or must produce effects;

II - 4% (four percent), if the requirements “a,” “b,” and “d” mentioned in item I are met; or

III - FPR applicable to the financial institution counterpart, as per Chapter IV of this Title III, in other cases.

Section III
On the FPR Applied to Exposures in Non-Qualified CCP

Art. 75. A 1,250% (one thousand two hundred and fifty percent) FPR should be applied to the exposure related to the participation in a mutual guarantee fund of a non-qualified central counterparty, as per Art. 67, item I.

Sole paragraph. The treatment mentioned in the heading also applies to the increase in participation in a mutual guarantee fund of a non-qualified central counterparty, contingent and future that may be required by the central counterparty, as per Art. 67, item II.

Art. 76. The FPR applicable to the financial institution counterpart, as per Chapter IV of this Title III, should be applied to exposures to a non-qualified central counterparty mentioned in Art. 67, items III, IV, V, subitem “b,” and VI.

Art. 77. The FPR applicable to the counterpart, as per this Resolution, should be applied to the exposure mentioned in Art. 67, item V, subitem “a”.

CHAPTER XVI
ON OTHER EXPOSURES

Art. 78. In the calculation of the RWA_{CPAD} part related to an asset or right provided or made available by the institution to third parties, including due to the constitution of guarantees as mentioned in Art. 4, item X, should be risk weighted, concurrently:

I - the exposure related to the asset recorded in the institution's assets, multiplied by the corresponding FPR; and

II - the off-balance-sheet exposure mentioned in Art. 21, Paragraph 6, item IV, multiplied by the highest FCC, among those related to its restitution.

Art. 79. A 0% (zero percent) FPR should be applied to the following exposures:

I - investment in financial gold or currency instrument, as well as exposure to the asset represented by financial gold or currency instrument; and

II - advance contribution to the Fundo Garantidor de Crédito (FGC) or the Fundo Garantidor do Cooperativismo de Crédito (FGCoop).

Art. 80. A 20% (twenty percent) FPR should be applied to exposures related to:

I - rights resulting from the novation of debts of the Fundo de Compensação de Variações Salariais (FCVS), as per Law 10.150, from December 21, 2000; and

II - operations with a non-financial private legal entity part of the same cooperative system, when carried out by a singular cooperative, central cooperative, confederation, or cooperative bank.

Art. 81. A 50% (fifty percent) FPR should be applied to:

I - credit exposures to the FGC or FGCoop; and

II - credit exposures related to operations to be amortized based on the resources of the Conta de Desenvolvimento Energético (CDE), as foreseen in item XV of Art. 13 of Law 10.438, from April 26, 2002, included by Provisional Presidential Decree 950, from April 8, 2020, provided that the following conditions are cumulatively met:

a) the credit operations comply with the provisions set forth in Decree 10.350, from May 18, 2020, and the regulation of the National Electric Energy Agency (ANEEL);

b) the receivables owed by the CDE to the Conta-Covid must be fiduciarily assigned or

pledged in favor of the creditor institution; and

c) the receivables owed by the CDE to the Conta-Covid or the Conta Escassez Hídrica must be fiduciarily assigned or pledged in favor of the creditor institution; and (As amended, starting from 1/7/2023, by Resolution BCB 240, from September 1, 2022.)

d) the CDE quotas, specific for the amortization of credit operations, must be increased to establish a liquidity reserve equivalent to at least 10% (ten percent) of the sum of the principal, financial charges, and other administrative costs related to the operation.

Art. 82. A 100% (one hundred percent) FPR should be applied to exposures to tax credits from temporary differences that do not depend on future profitability for their utilization during the institution's operation.

Art. 82-A. A 100% (one hundred percent) FPR must be applied to the exposure related to the absolute value of the negative adjustment recorded in equity, as referred to in Art. 4, caput, item XII. (Included, as of January 31, 2025, by Resolution BCB 452, of 1/21/2025.)

Art. 83. A 250% (two hundred and fifty percent) FPR should be applied to exposures related to tax credits from temporary differences that depend on the generation of future profits or taxable revenues for their realization, not deducted in the calculation of PR, mentioned in Art. 8, Paragraph 8, of Resolution CMN 4,955, from 2021, or in Art. 7, Paragraph 7, of Resolution BCB 199, from 2022.

Art. 84. A 300% (three hundred percent) FPR should be applied to exposures related to tax credits from income tax loss carryforwards and negative CSLL basis, not deducted in the calculation of PR, as per Resolution CMN 4,955, from 2021, and Resolution BCB 199, from 2022.

Art. 84-A. Considering to the limit of 10% (ten percent) of the Common Equity Tier 1, the following should be applied:

I - a 100% (one hundred percent) FPR to the portion of exposure related to precatory writs issued against the Union, which does not exceed the limit mentioned in the heading;

II – a 150% (one hundred and fifty percent) FPR to the portion of exposure related to precatory writs issued against states, the Federal District, and municipalities, which does not exceed the limit mentioned in the heading;

III - a 200% (two hundred percent) FPR to the portion of exposure related to receivables in the execution process or in the sentence enforcement phase against the Union, which does not exceed the limit mentioned in the heading;

IV - a 300% (three hundred percent) FPR to the portion of exposure related to receivables in the execution process or in the sentence enforcement phase against states, the Federal District, and municipalities, which does not exceed the limit mentioned in the heading;

V – a 600% (six hundred percent) FPR to the portion of exposure related to precatory writs issued against the Union, states, the Federal District, and municipalities, which exceeds the limit mentioned in the heading;

VI – a 1,250% (one thousand two hundred and fifty percent) FPR to the portion of exposure

related to:

a) receivables in the execution process or in the sentence enforcement phase against the Union, states, the Federal District, and municipalities, which exceed the limit mentioned in the heading; and

b) precatory writs or receivables in the execution process or in the sentence enforcement phase against the Union, states, the Federal District, and municipalities, originating from assignment, which have not been subject to public registration.

Paragraph 1. The provisions of the heading include precatory writs issued or receivables in the execution process or in the sentence enforcement phase against autarchies, foundations, public companies, and mixed-economy societies subject to the precatory writs regime, observing the provisions of this art. regarding the respective federative entity.

Paragraph 2. For compliance with the limit established in the heading, exposures related to precatory writs issued or receivables in the execution process or in the sentence enforcement phase should be considered in an aggregated manner.

Paragraph 3. In cases where the aggregate of exposures related to precatory writs issued or receivables in the execution process or in the sentence enforcement phase exceeds the limit established in the heading, for the purposes of applying the FPR, the portions mentioned in items I to IV of the heading should be considered proportionally to the relative participation of the respective exposures in relation to the aggregate.

Paragraph 4. The treatment provided in this art. does not apply to precatory writs issued or receivables in the execution process or in the sentence enforcement phase recorded on the balance sheet up to the base date of June 30, 2023:

I - resulting from own legal actions; or

II - acquired from third parties, whose assignment has been subject to public registration up to June 30, 2023.

Paragraph 5. The application of the provisions of Paragraph 4 to precatory writs issued after June 30, 2023, is optional, provided that:

I - the receivables that originated these precatory writs have been recorded in the asset before June 30, 2023; and

II - the assignment of the receivables that originated these precatory writs has been subject to public registration before June 30, 2023, in the case of assets acquired from third parties.

Paragraph 6. Regardless of the acquisition date of the precatory writs or the receivables in the execution process or in the sentence enforcement phase by an unconsolidated investment fund, the FPRs established in the heading apply to the portions of the fund's exposures, observing the provisions of arts. 17, 18, and 59, item I. (Art. 84-A included, starting from January 2, 2024, by Resolution BCB 346, from October 4, 2023.)

TITLE IV
FINAL PROVISIONS

CHAPTER I
TRANSITIONAL PROVISIONS

Art. 85. For exposures related to equity participations, as provided in Article 43, the FPR must be applied according to the following schedule: (Amended, effective from July 1, 2023, by Resolution BCB No. 240, dated September 1, 2022.)

I - regarding the equity participations referred to in Article 43, item I:

a) until December 31, 2023, 100% (one hundred percent);
b) until December 31, 2024, 160% (one hundred and sixty percent);
c) until December 31, 2025, 220% (two hundred and twenty percent);
d) until December 31, 2026, 280% (two hundred and eighty percent);
e) until December 31, 2027, 340% (three hundred and forty percent); and
f) from January 1, 2028, the FPR determined under the terms of this Resolution; and

II - regarding the equity participations referred to in Article 43, item III:

a) until December 31, 2023, 100% (one hundred percent);
b) until December 31, 2024, 130% (one hundred and thirty percent);
c) until December 31, 2025, 160% (one hundred and sixty percent);
d) until December 31, 2026, 190% (one hundred and ninety percent);
e) until December 31, 2027, 220% (two hundred and twenty percent); and
f) from January 1, 2028, the FPR determined under the terms of this Resolution.

Art. 86. A 50% (fifty percent) FPR must remain applied to exposures related to financing for the construction of real estate, provided that:

I - they are secured by fiduciary alienation or first-degree mortgage, and the institution of the separate estate, as provided for in Law No. 4,591, of 1964, is adopted; and

II - they are contracted or acquired by December 31, 2023.

CHAPTER II
SUPPLEMENTARY PROVISIONS

Art. 87. A report detailing the calculation of the RWA_{CPAD} portion must be submitted to the Central Bank of Brazil, in the form established by it.

Sole paragraph. The information used for the calculation of the RWA_{CPAD} portion must be kept available to the Central Bank of Brazil for a period of 5 (five) years.

Art. 88. The following are hereby revoked:

I - Circular No. 3,644, dated March 4, 2013;

II - Circular No. 3,848, dated September 18, 2017; and

III - Circular No. 3,904, dated June 6, 2018.

Sole paragraph. References to Circular No. 3,644, of 2013, shall be deemed to refer to this Resolution.

Art. 89. This Resolution comes into force on July 1, 2023. (Amended, effective from December 1, 2022, by Resolution BCB No. 258, dated November 18, 2022.)

Otávio Ribeiro Damaso
Diretor de Regulação

ANNEX I TO THE RESOLUTION BCB 229, OF MAY 12, 2022

Establishes procedures for calculating counterparty credit risk exposure arising from derivative instruments trough the SA-CCR approach.

CHAPTER I
SCOPE OF APPLICATION

Art. 1. This Annex establishes procedures for calculating counterparty credit risk exposures arising from derivative instruments trough the SA-CCR approach.

CHAPTER II
DEFINITIONS AND CLASSIFICATIONS

Section I
The Exposure Value

Art. 2. The total credit risk exposure of a counterparty, arising from financial derivatives transactions, must be the sum of the exposure associated to each netting set, calculated as set forth in art. 3 of this Annex.

Art. 3. The exposure value for each netting set must be calculated as follows:

EXP = 1.4 * (RC + GPF), where:

I - RC = replacement cost; and

II - GPF = potential future exposure.

Paragraph 1. A netting set is composed by traded financial derivatives with the same counterparty, under scope of a single bilateral netting agreement for clearing and settlement of obligations that meets the requirements established in art. 13 of Circular 3,809 of 2016.

Paragraph 2. A derivative instrument not under scope of a bilateral netting agreement for clearing and settlement of obligations is considered a netting set containing a single instrument.

Paragraph 3. The notional and market values, denominated in or indexed to foreign currency are converted into national currency based on the exchange rate at the date of calculation of the exposure value.

Art. 4. The RC relative to a netting set consisting of derivative instruments without variation margin must be calculated as follows:

RC = Max {V - C; 0}, where:

I - V = sum of the market values of positions associated to the derivative instruments; and

II - C = net value of financial collaterals calculated as set forth in art. 5, paragraphs 1 and 3 of this Annex.

Sole Paragraph. Throughout this Annex, variation margin corresponds to the value of financial collaterals established with the aim of protecting the financial institution and its counterpart from fluctuations in the market values of financial derivatives.

Art. 5. The RC relative to a netting set consisting of derivative instruments with variation margin must be calculated as follows:

RC = Max {V - C; THMTA - NICA; 0}, where:

I - V = as defined in art. 4, item I of this Annex;

II - C = net value of financial collaterals, including those constituted as variation margin;

III - THMTA = maximum amount of cumulative financial results that does not trigger additional constitution of variation margin by the counterpart.

IV - NICA = net value of financial collaterals, except those constituted as variation margin.

Paragraph 1. The C is calculated as follows:

$C = \sum Crec\ (1 - Hc - Hfx) - \sum Cdep\ (1 + Hc)$, where:

I - Crec = market value of the financial collateral provided by the counterpart and held by the financial institution, including those constituted as variation margin;

II - Hc = standardized haircut applicable, as defined in art. 9, item V and paragraph 2 of Circular 3,809 of 2016, constituted as either Crec or Cdep.

III - Hfx = standardized haircut applicable, as defined in art. 9, item VI and paragraph 1 of Circular 3,809 of 2016, due to currency mismatch between collateral and exposure.

IV - Cdep = market value of financial collateral provided by the financial institution and held by the counterpart, including those constituted as variation margin.

Paragraph 2. The NICA is calculated as follows:

$NICA = \sum ICArec\ (1 - Hc - Hfx) - \sum ICAdep\ (1 + Hc)$, where:

I - ICArec = market value of financial collateral provided by the counterpart and held by the financial institution;

II - ICAdep = market value of financial collateral provided by the financial institution and held by the counterpart;

III - Hc = standardized haircut applicable, as defined in art. 9, item V and paragraph 2 of Circular 3,809 of 2016, relative to the financial collateral constituted as ICArec or ICAdep; and

IV - Hfx = as defined in paragraph 1, item III.

Paragraph 3. For calculating Cdep and ICAdep should be no consideration of financial collaterals which will be promptly returned to the financial institution in the event of resolution or bankruptcy of the counterpart.

Paragraph 4. Over-the-counter transactions, with a one-way margining agreement in favor of the counterpart must be treated as transactions without variation margin.

Paragraph 5. The financial collaterals must comply with the content set out in Circular 3,809 of 2016 to be considered in the calculation of the total credit risk exposure of a counterparty.

Art. 6. The exposure value relative to a netting set consisting of derivative instruments with variation margin may be capped at the exposure value as if they had been traded without variation margin.

Art. 7. The exposure value, relative to a traded sold option without variation margin may be set to zero, whenever the premiums have been received in full by the institution and the respective netting set contains only the option.

Art. 8. The counterparty credit risk exposure value, relative to a netting set consisting solely by a traded credit derivative without variation margin may be capped to the amount of unpaid premiums, whenever the financial institution is the protection seller.

Sole paragraph. For the purposes of the heading, the financial institution may remove a credit derivative from its netting set and treat it as a derivative without variation margin.

Section II
The Asset Classes

Art. 9. For the calculation of GPF, the derivative instruments must be allocated into at least one of the following asset classes:

I - interest rate;

II - foreign exchange;

III - credit;

IV - equity; or

V - commodities.

Paragraph 1. The allocation of derivative instruments into an asset class is driven by their respective primary risk drivers.

Paragraph 2. For the purposes of this Annex, primary risk driver corresponds to the variable that drives the market value of the derivative instrument’s underlying asset.

Paragraph 3. In the case the derivative instrument has more than one risk driver, the primary risk driver must be the one to which the market value of derivative is the most sensitive, according to a consistent and verifiable methodology.

Paragraph 4. The Central Bank of Brazil may require the simultaneous allocation of derivative instrument to more than one asset class.

Section III
The Hedging Sets

Art. 10. For the calculation of GPF, the derivative instruments must be allocated into one of the following hedging set categories, according to their asset classes:

I - basis hedging sets;

II - volatility hedging sets; and

III - regular hedging sets.

Paragraph 1. Basis hedging sets consist of derivative instruments whose:

I - respective cash flows depend on two different risk factors, both belonging to the same asset class; and

II - both legs are denominated in the same currency.

Paragraph 2. Each hedging set defined by Paragraph 1 consists of derivative instruments with the same pair of risk factors.

Paragraph 3. Volatility and regular hedging sets consist of derivative instruments according to the conditions below, for each asset class:

I - interest rate: one hedging set for each currency of reference of the derivative instruments;

II - foreign exchange: one hedging set for each pair of currencies of reference of the derivative instruments;

III - credit: one hedging set only;

IV - equities: one hedging set only;

V - commodities: one hedging set for each of four categories:

a) energy;

b) metal;

c) agricultural; and

d) other commodities.

Paragraph 4. Volatility hedging sets consist of derivative instruments referenced to the volatility of at least one risk factor.

Paragraph 5. Regular hedging sets consist of derivative instruments not allocated neither into basis hedging sets nor into volatility hedging sets.

Paragraph 6. A derivative instrument may only be allocated to one hedging set, except for the case set forth in art. 9, paragraph 4 of this Annex.

Section IV
The GPF Calculation

Art. 11. The GPF must be calculated according to the formula:

GPF = Multiplier * VAA, where:

I - Multiplier = Min {1; 0.05 + 0.95 $*$ exp((V-C)/(2*0,95*VAA))$*VAA$}, where:

V = sum of market values of the derivative instruments; and

C = net value of financial collaterals, calculated as set forth by art. 5, Paragraphs 1 and 3 of this Annex; and

II - VAA = aggregate add-on component.

Sole paragraph. The VAA is calculated according to the following formula:

VAA = 〖∑VA〗^((asset class)), where 〖VA〗^((asset class)) corresponds to the add-on component associated to each asset class.

CHAPTER III
ADD-ON COMPONENT CALCULATION

Section I
Interest Rate Add-on Component

Art. 12. The add-on of the interest rate asset class 〖VA〗^((interest rate)) must be the sum of the add-on (VA) relative to each hedging set, as per the formula:

〖VA〗^((interest rate)) = ∑ VA

Paragraph 1. The VA is calculated as per the formula:

VA = FS * VN, Where:

I - FS = multiplier relative to the hedging set; and

II - VN = notional value relative to the hedging set.

Paragraph 2. The FS is:

I - 0.5% (five tenths percent), for regular hedging sets;

II - 0.25% (twenty-five hundredths percent), for basis hedging sets; or

III - 2.5% (two and a half percent), for volatility hedging sets.

Paragraph 3. The VN is calculated as per the formula:

VN = [(VNE1)2 + (VNE2)2 + (VNE3)2 + 1.4 * VNE1 * VNE2 + 1.4 * VNE2 * VNE3 + 0.6 * VNE1 * VNE3]1/2, where VNEk is the effective notional value relative to the hedging set and time bucket "k".

Paragraph 4. The time bucket "k" is defined as remaining term of the derivative instrument, being equal to:

I - 1 (one), if the remaining term is less than one year;

II - 2 (two), if the remaining term is equal or higher than one year and less than five years;

III - 3 (three), if the remaining term is equal or higher than five years.

Paragraph 5. The VNEk is calculated as per the formula:

VNEk = $\sum \delta * VNA * MF$, where:

I - δ = standardized delta relative to the derivative instrument, as set forth in art. 19 of this Annex;

II - VNA = adjusted notional value, relative to the derivative instrument with term "k"; and

III - MF = maturity factor relative to the derivative instrument, calculated as set forth in art. 20 of this Annex.

Paragraph 6. The VNA is calculated as per the formula:

VNA = DS * VN, Where:

I - DS = standardized duration of the derivative instrument, as set forth in art. 21 of this Annex; and

II - VN = notional value of the derivative instrument, subject to the conditions set forth in art. 22 of this Annex.

Paragraph 7. The remaining term of the derivative instrument defined by Paragraph 4 corresponds to the period between the date of the computation and:

I - the expiry of the instrument;

II - the expiry of the underlying instrument, whenever the traded derivative instrument is an option; or

III - the next reset date, if intermediate settlement dates are previously established, provided that the market value of the traded derivative instrument equals zero on the reset date.

Section II
Foreign Exchange Add-on Component

Art. 13. The add-on of the foreign exchange asset class (VAforeign exchange) must be the sum of the add-on (VA) relative to each hedging set, as per the formula:

$$VA_{foreign\ exchange} = \sum VA$$

Paragraph 1. The VA is calculated as per the formula:

$VA = FS * |VNE|$, where:

I - $|VNE|$ = absolute effective notional value relative to the hedging set; and

II - FS = multiplier relative to the hedging set.

Paragraph 2. The FS is:

I - 4% (four percent), for regular hedging sets; or

II - 20% (twenty percent), for volatility hedging sets.

Paragraph 3. The VNE is the sum of the values computed to each derivative instrument, as per the formula:

$VNE = \sum \delta * VNA * MF$, where:

I - δ = standardized delta relative to the derivative instrument, as set forth in art. 19 of this Annex;

II - VNA = adjusted notional value, relative to the derivative instrument; and

III - MF = maturity factor relative to the derivative instrument “i”, calculated as set forth in art. 20 of this Annex.

Paragraph 4. The VNA is:

I - the notional value of the derivative instrument denominated or indexed to a foreign currency converted into national currency, as set forth in art. 4, paragraph 3 of this Annex, if the derivative instrument has only one leg denominated or indexed in a foreign currency; or

II - greater of the notional values relative to the two legs converted into national currency, as

set forth in art. 4, paragraph 3 of this Annex, if the derivative instrument has two legs denominated or indexed in foreign currencies.

Paragraph 5. In determining VNA, the conditions set forth in art. 24 of this Annex must be met.

Section III
Credit Add-on Component

Art. 14. The add-on of the credit asset class (VAcredit) must be the sum of the add-on (VA) relative to each hedging set, as per the formula:

VAcredit = ∑ VA

Paragraph 1. The VA is calculated as per the formula:

VA = [(∑t ρt * VAt)2 + ∑t (1- ρt2) * (VAt)2]1/2, where:

I - VAt = add-on relative to derivative instruments referenced to the entity “t” in the hedging set; and

II - ρt = correlation factor relative to derivative instruments referenced to entity “t”.

Paragraph 2. The factor ρt is:

I - 50% (fifty percent), if “t” is a single-name; or

II - 80% (eighty percent), if “t” is relative to an index.

Paragraph 3. The VAt is calculated as per the formula:

VAt = VNE * FS, where:

I - VNE = effective notional value relative to derivative instruments referenced to an entity in the hedging set; and

II - FS = multiplier relative to the entity “t” and the hedging set.

Paragraph 4. The FS for a single-name entity and a regular hedging set is:

I - 0.54% (fifty-four hundredths percent), if the entity:

a) has stocks included in relevant stock exchange indices, subject to governmental regulation and supervision; or

b) is associated to a risk weight (FPR) lower than or equal to 85% (eighty five percent), in accordance to the conditions set forth in this Resolution; or

II - 6% (six percent), otherwise.

Paragraph 5. The FS for a single-name entity and a basis hedging set is:

I - 0.27% (twenty-seven hundredths of a percent), if the entity satisfies at least one of conditions set forth in Paragraph 4, item I; or

II - 3% (three percent), if the entity satisfies none of the conditions set forth in Paragraph 4, item I.

Paragraph 6. The FS for a single-name entity and a volatility hedging set is:

I - 2.7% (two and seven tenths of a percent), if the entity satisfies at least one of conditions set forth in Paragraph 4, item I; or

II - 30% (thirty percent), if the entity satisfies none of the conditions set forth in Paragraph 4, item I.

Paragraph 7. The FS for a credit index hedging set is calculated as per the formula:

$FS = (\sum t\ \alpha t * FSt) * \mu$, where:

I - αt = share of the single-name "t" in the credit index;

II - FSt = multiplier relative to the single-name "t", as set forth in paragraph 4; and

III - μ = multiplier relative to the hedging set, as follows:

a) 1 (one), for regular hedging sets;

b) 0.5 (five tenths), for basis hedging sets; or

c) 5 (five), for volatility hedging sets.

Paragraph 8. The formula set forth in Paragraph 7 for FS computation may be replaced by: $FS = 0.0106 * \mu$.

Paragraph 9. The VNE is the sum of the values relative to each derivative instrument, on a per entity basis, as per the formula:

$VNE = \sum \delta * VNA * MF$, where:

I - δ = standardized delta relative to the derivative instrument, as set forth in art. 19 of this Annex;

II - VNA = adjusted notional value of the derivative instrument relative to the entity; and

III - MF = maturity factor relative to the derivative instrument, calculated as set forth in art. 20 of this Annex.

Paragraph 10. The VNAt is calculated as per the formula:

VNAt = DS * VNt, where:

I - DS = standardized duration relative to the derivative instrument, calculated as set forth in art. 21 of this Annex; and

II - VNt = notional value of the derivative instrument referenced to the entity “t”, subject to the conditions set forth in art. 22 of this Annex.

Section IV
Equity Add-on Component

Art. 15. The add-on of the equities asset class (VAequities) must be the sum of the add-on (VA) relative to each hedging set, as per the formula:

VAequities = ∑ VA

Paragraph 1. The VA is calculated as per the formula:

VA = [(∑t ρt * VAt)2 + ∑t (1- ρt2) * (VAt)2]1/2, where:

I - VAt = add-on relative to derivative instruments referenced to the entity “t” in the hedging set; and

II - ρt = correlation factor relative to derivative instruments referenced to entity “t”.

Paragraph 2. The factor ρt is:

I - 50% (fifty percent), if “t” is a single-name; or

II - 80% (eighty percent), if “t” is a stock index.

Paragraph 3. The VAt is calculated as per the formula:

VAt = VNE * FS, where:

I - VNE = effective notional value relative to derivative instruments referenced to the entity, included in the hedging set; and

II - FS = multiplier relative to the entity and the hedging set.

Paragraph 4. The FS for an entity of the regular hedging set is:

I - 32% (thirty two percent), for a single-name; or

II - 20% (twenty percent), for a stock index.

Paragraph 5. The FS for an entity in a basis hedging set is:

I - 16% (sixteen percent), for a single-name; or

II - 10% (ten percent), for a stock index.

Paragraph 6. The FS for an entity of the volatility hedging set is:

I - 160% (one hundred and sixty percent), for a single-name; or

II - 100% (one hundred percent), for a stock index.

Paragraph 7. The VNE is the sum of the values relative to each derivative instrument, by entity, as per the formula:

VNE = $\sum \delta * VNA * MF$, where:

I - δ = standardized delta relative to the derivative instrument, as set forth in art. 19 of thid Annex;

II - VNA = adjusted notional value of the derivative instrument referenced to the entity; and

III - MF = maturity factor relative to the derivative instrument, calculated as set forth in art. 20 of this Annex.

Paragraph 8. The VNA of the derivative instrument is calculated as follows:

I - for instrument in a regular or basis hedging set:

VNA = P * N, where:

a) P = market price of one unit of the stock issued by an entity, calculated as provided by Circular 3,082, of January 30, 2002, and Resolution 4,277, of October 31, 2013; and

b) N = number of units of the stock issued by the entity, relative to the derivative instrument in the hedging set; and

II - for instrument in a volatility hedging set:

VNA = VR * CN, where:

a) VR = volatility measure of the stock or stock index; and

b) CN = notional value under contract relative to the stock or stock index.

Paragraph 9. In determining the VNA, the conditions set forth in art. 22 of this Annex must be met.

Section V
Commodities Add-on Component

Art. 16. The add-on of the commodities asset class (VAcomm) must be the sum of the add-on (VA) relative to each hedging set, as per the formula:

VAcomm = ∑ VA

Paragraph 1. The VA is calculated as per the formula:

VA = [(0.4 * ∑v VAv)2 + 0.84 * ∑v VAv2]1/2, where VAv is the add-on relative to derivative instruments referenced to the commodities of type “v” in the hedging set.

Paragraph 2. The VAv is calculated as per the formula:

VAv = VNE * FS, where:

I - VNE = effective notional value relative to derivative instruments referenced to the commodities of type “v” in the hedging set; and

II - FS = multiplier relative to the commodities types included in the hedging set

Paragraph 3. The FS for regular hedging sets is:

I - 40% (forty percent), for the commodity type electricity; or

II - 18% (eighteen percent) for all other commodity types.

Paragraph 4. The FS for basis hedging sets is:

I - 20% (twenty percent), for the commodity type electricity; or

II - 9% (nine percent), for all other commodity types.

Paragraph 5. The FS for volatility hedging sets is:

I - 200% (two hundred percent), for the commodity type electricity; or

II - 90% (ninety percent), for all other commodity types.

Paragraph 6. The VNE is the sum of the values relative to each derivative instrument, by commodity type, as per the formula:

VNE = ∑ δ * VNA * MF, where:

I - δ = standardized delta relative to the derivative instrument, as set forth in art. 9;

II - VNA = adjusted notional value of the derivative instrument, relative to the commodity type in the hedging set; and

III - MF = maturity factor relative to the derivative instrument, calculated as set forth in art. 20.

Paragraph 7. The VNA of the derivative instrument is calculated as follows:

I - for instrument in a regular or basis hedging set:

VNA = P * N, where:

a) P = market price of one unit of the commodity, calculated as provided by Circular 3,082, of 2002, and in the Resolution 4,277, of 2013 ; and

b) N = number of units of the commodity, relative to the derivative instrument in the hedging set; and

II - for instrument in a volatility hedging set:

VNA = VR * CN, where:

a) VR = volatility measure of the commodity; and

b) CN = notional value under contract relative to the commodity.

Paragraph 8. In determining the VNA, the conditions set forth in art. 22 must be met.

CHAPTER IV
Multiple Margin Agreements

Art. 17. The exposure value relative to the netting set subject to multiple margin agreements must be calculated as per the formula:

EXP = ∑ EXPsub, where EXPsub is the exposure value relative to a sub-set containing derivative instruments subject to only one of these agreements.

Sole paragraph. EXPsub is calculated as set forth in art. 3 of this Annex.

Art. 18. When the financial institution has underwritten one margin agreement containing two or more netting sets, the exposure relative to these netting sets must be calculated as follows:

EXP = 1.4 * (RCdcc + GPFdcc), where:

I - RCdcc = replacement cost relative to the netting sets under scope of the netting agreement; and

II - GPFdcc = potential future exposure relative to the netting sets under scope of the netting agreement.

Paragraph 1. The RCdcc is calculated as per the formula:

RCdcc = max {∑cc max {Vcc ; 0} – max {Cam; 0}; 0} + max {∑cc min { Vcc ; 0} - min {Cam ; 0}; 0}, where:

I - Vcc = market value of the derivative instruments in one of the netting sets under scope of the netting agreement; and

II - Cam = net value of financial collaterals relative to all netting sets under scope of the agreement, calculated as set forth in art. 5, Paragraphs 1 and 3 of this Annex.

Paragraph 2. The GPFdcc is calculated as follows:

GPFdcc = ∑ GPFcc, where GPFcc is the potential future exposure relative to one of the netting sets under scope of the agreement.

Paragraph 3. If Cam is equal or lower than GPFdcc, calculated as set forth in Paragraph 2, the GPFcc is computed as it contained unmargined derivative instruments, consequently the GPFdcc must be recalculated.

CHAPTER V
STANDARDIZED PARAMETERS

Section I
Standardized Delta

Art. 19. The standardized delta relative to the derivative instrument (δ) is:

I – for call options, the result of the formula:

a) $\delta = \phi(((\ln((P+\lambda_j)/(K+\lambda_j))+0,5*\sigma^2*T)/(\sigma*\sqrt{T}))$, for long positions, where:

1. Φ = the standard normal cumulative distribution function;

2. P = market price of the option's underlying asset;

3. K = option strike;

4. λj = the lowest value to be added in a context of zero or negative interest rates, if P/K is non positive, which must be applied to all options in the interest rate asset class, denominated in the currency "j";

5. T = period until the latest possible exercise date of the option; and

6. σ = standardized volatility of the option, as set forth in the Sole Paragraph; or

b) $\delta = -\phi(((\ln((P+\lambda_j)/(K+\lambda_j))+0,5*\sigma^2*T)/(\sigma*\sqrt{T}))$, for short positions, subject to the provisions of art. 7 of this Annex.

II - for put options, the result of the formula:

a) $\delta = -\phi(-((\ln((P+\lambda_j)/(K+\lambda_j))+0,5*\sigma^2*T)/(\sigma*\sqrt{T}))$, for long positions;

b) $\delta = \phi(-((\ln((P+\lambda_j)/(K+\lambda_j))+0,5*\sigma^2*T)/(\sigma*\sqrt{T}))$, for short positions, subject to the provisions of art. 7 of this Annex.

III - for derivative instruments referenced to a securitization tranche, the result of the formula:

a) $\delta = 15/((1+14*A)*(1+14*D))$, for long positions, where:

1. A = attachment point of the tranche; and

2. D = detachment point of the tranche; or

b) δ = - 15/((1+14*A)*(1+14*D)) , for short positions; and

IV - for other derivative instruments:

a) δ = 1, for long positions; or

b) δ = - 1, for short positions.

Paragraph 1. The standardized volatility is:

I - 50% (fifty percent), for the interest rate asset class;

II - 15% (fifteen percent), for the foreign exchange asset class;

III - for the credit asset class:

a) 100% (one hundred percent), for options referenced to a single name; or

b) 80% (eighty percent), for options referenced to a credit index; and

IV - for the equity asset class:

a) 120% (one hundred and twenty percent), for options referenced to a single name; or

b) 75% (seventy-five percent), for options referenced to stock index; and

V - for the commodities asset class:

a) 150% (one hundred and fifty percent), for options referenced to the electricity commodity type; or

b) 70% (seventy percent), for options referenced to other commodity types.

Paragraph 2 If the position related to the traded derivative instrument cannot be readly identified, the financial institution must verify which risk drive most impacts its market value, as set forth in art. 9, paragraph 3 of this Annex, and classify the position as long, if this risk drive is on the long leg, or as short, if this risk drive is on the short leg.

Section II
Maturity Factor

Art. 20. The maturity factor relative to the derivative instrument (MF) must be calculated as per the formula:

I - MF = $\sqrt{}$((min{M;252})/252) , for transactions without variation margin; or

II - MF = MF = 3/2 √((min{M;252})/252) , for transactions with variation margin.

Paragraph 1. M corresponds to the period, in business days, between the date of the computation and:

I - the expiry date of the instrument;

II - the expiry date of the underlying derivative instrument, if the derivative instrument is an option; or

III - the next reset date, if intermediate settlement dates are previously established, provided that the market value of the derivative instrument transacted equals zero on the reset date.

Paragraph 2. For the purposes of computing the formula set forth in item I of the heading, M is, at a minimum, ten business days.

Paragraph 3. The MPOR is:

I - five business days for centrally cleared derivative instruments subject to daily remargining;

II - (5 + RPM - 1), for centrally cleared derivative instruments;

III - ten business days for derivative instruments not centrally cleared, subject to daily remargining;

IV - (10 + RPM - 1) for derivative instruments not centrally cleared and included in a netting set consisting of less than five thousand derivative instruments; and

V - twenty business days for derivative instruments not centrally cleared, included in netting sets consisting of more than five thousand derivative instruments.

Paragraph 4. The RPM is the established period, in business days, until the settlement date of the exposure relative to the derivative instrument.

Paragraph 5. The MPOR established in Paragraph 3 is doubled for the netting set in which at least two divergences have occurred, within two quarters, between the institution and the counterparty regarding the exposure values, provided that at least one of the divergences does not had been resolved by the scheduled maturity.

Section III
Duration Calculation

Art. 21. The standardized duration of the derivative instrument (DS) must be calculated as follows:

$DS = (\exp(-0.05 * S) - \exp(-0.05 * E))/0.05$

Paragraph 1. The S is:

I - the period between the date of the computation of the exposure and the start date of the:

a) derivative instrument underlying the traded instrument; or

b) traded derivative, otherwise; or

II - zero, after the start date of the derivative instrument.

Paragraph 2. The E is the period between the date of the computation of the exposure and the expiry of the:

I - derivative instrument underlying the traded instrument; or

II - traded derivative, otherwise.

Paragraph 3. For the purposes of applying the formula defined in the heading, the value of E is, at least, S plus ten business days.

Section IV
Specifics of Notional Values

Art. 22. When the notional value (VN) is not clearly stated or is not stable until maturity, it must be calculated in accordance with specific terms and conditions established in contract.

Paragraph 1. When the financial profit or loss depends on a formula, the VN must be calculated on the current date using the formula, the market values of the assets and their maturities, when necessary.

Paragraph 2. For swaps whose notional is variable over time following a contractual trajectory, VN is the time-weighted average of the contractual notional value over the remaining life.

Paragraph 3. For leveraged swaps, VN is the notional contractual value multiplied by the respective leverage factor.

Paragraph 4. For derivative instruments with multiple exchanges of principal, VN is the notional contractual value multiplied by the number of instalments to occur.

Paragraph 5. For derivative instruments with periodic resets, VN equals zero in the reset dates.

Paragraph 6. If a digital or binary option, that is, an option to be exercised when the underlying asset price exceeds the strike, can be represented by long or short positions in two or more European options, VN must consider the options of the representation, as they were separately traded.

Paragraph 7. For options to be exercised in predetermined dates, whose underlying asset is a swap, VN must consider that the start date S is the period between the date of computation up to the earliest allowed exercise date.

Paragraph 8. For options whose strike price, not known at the date of the premium payment, is a multiple of the underlying’s price at a future date, VN is calculated considering:

I - S = period from the computation date up to the date when the strike price is set; and

II - T = period from the date when the strike price is set up to the option expiry date.

Paragraph 9. For options which establish caps or floors for the fluctuation of underlying prices or interest rates, at pre-established intervals, which can be represented by a combination of European options, VN is computed using the sum of the notional values of these European options, while for the options establishing caps or floors during a specific coupon period:

I - S = T = period from the date of computation up to the start of the coupon period; and

II - E = period from the date of computation up to the end of the coupon period, subject to the provisions of art. 21, paragraph 3 of this Annex.

ANNEX II TO THE RESOLUTION BCB 229, OF MAY 12, 2022

Establishes procedures for calculating counterparty credit risk exposure arising from derivative instruments trough the CEM approach.

CHAPTER I
SCOPE OF APPLICATION

Art. 1. This Annex establishes procedures for calculating counterparty credit risk exposures arising from derivative instruments trough the CEM approach.

CHAPTER II
THE EXPOSURE VALUE

Art. 2. The counterparty credit risk exposure value arising from derivative instrument, other than credit derivative, correspond to the replacement cost, if positive, plus the potential future exposure, as set forth in art. 3 of this Annex.

Art. 3. The potential future exposure related to derivative instrument transactions is equal to its notional value multiplied by the future potential exposure factor (FEPF).

Paragraph 1. The notional and market values, denominated in or indexed to foreign currency are converted into national currency based on the exchange rate at the date of calculation of the exposure value.

Paragraph 2. The FEPF is the greater of the values of the long and short positions of the derivative instrument, according to the remaining maturity.

Paragraph 3. For transaction with previously established intermediate settlement dates, as long as the market value of the traded derivative instrument is equal to zero on the reset date and the terms are updated, the remaining maturity is the period until the next reset date and a FEPF floor of 0.5% (fifty hundredths percent) applies for the transaction with remaining maturity greater than one year.

Paragraph 4. When the reference is either “interest rate” or “price index”, the FEPF is 0% (zero percent), 0.5% (five tenths percent) and 1.5% (one and five tenths percent), for remaining maturities of less than one year, between one and five years and over five years, respectively.

Paragraph 5. When the reference is either “foreign exchange” or “gold”, FEPF is 1% (one percent), 5% (five percent) and 7.5% (seven and five tenths percent), for remaining maturities of less than one year, between one and five years and over five years, respectively.

Paragraph 6. When the reference is “equities”, FEPF is 6% (six percent), 8% (eight percent) and 10% (ten percent), for remaining maturities of less than one year, between one and five years and over five years, respectively.

Paragraph 7. For other references other than those mentioned in Paragraphs 3 to 6, FEPF is 10% (ten percent), 12% (twelve percent) and 15% (fifteen percent), for remaining maturities of less than

one year, between one and five years and over five years, respectively.

Paragraph 8. For the purposes of this article, the remaining maturity corresponds to the period between the date of the computation and:

I - the expiry of the traded derivative instrument;

II - the expiry of the underlying instrument, whenever the traded derivative instrument is an option; or

III - the next reset date, if intermediate settlement dates are previously established, provided that the market value of the traded derivative instrument equals zero on the reset date.

CHAPTER III
CREDIT DERIVATIVES

Art. 4. The counterparty credit risk exposure value arising from traded credit derivative instruments corresponds to the replacement cost, if positive, plus the potential future exposure, as set forth in art. 5 of this Annex.

Art. 5. The potential future exposure relative to traded credit derivative instruments is equal to their notional value multiplied by the respective future potential exposure factor (FEPF).

Paragraph 1. The notional value denominated in or indexed to foreign currency is converted into national currency based on the exchange rate at the date of calculation of the exposure value.

Paragraph 2. The FEPF is equal to:

I - 5% (five percent), for underlying assets representing exposures to financial institutions and other institutions licensed by the Central Bank of Brazil; and

II - 10% (ten percent), for other underlying assets.

Paragraph 3. When the financial institution is the protection seller, the potential future exposure relative to a traded credit swap may be capped to the amount of unpaid premiums.

CHAPTER IV
DERIVATIVES UNDER SCOPE OF NETTING AGREEMENTS

Art. 6. The counterparty credit risk exposure value arising from traded derivative instruments, including credit derivatives, under scope of a bilateral netting agreement for clearing and settlement of obligations that satisfies the conditions established in art. 13 of Circular 3,809 of 2016, is the sum:

I - of the net replacement cost, if positive; and

II - of the net potential future exposure (GPFLíq), calculated as set forth in art. 7 of this Annex.

Paragraph 1. The exposure value mentioned in the heading is computed for all derivative instruments under the same bilateral netting agreement for clearing and settlement of obligations.

Paragraph 2. The net replacement cost is the sum of replacement costs of all derivative instruments under the same bilateral netting agreement for clearing and settlement of obligations.

Art. 7. The net potential future exposure (GPFLíq) must be calculated according to the formula:

GPFLíq = GPFBruto * (0.4 + 0.6 * NGR), where:

I - GPFBruto = sum of potential future exposures calculated for all transactions with the same counterpart in accordance with arts. 3 and 5; and

II - NGR = ratio between the net replacement cost, if nonnegative, and the sum of replacement costs of transactions under a bilateral netting agreement for clearing and settlement of obligations, if nonnegative, calculated according to the formula:

NGR = (Max(∑_(i=1)^(i=n)⁡〖M_t M_i; 0)〗)/(∑_i^n⁡〖Max (〗 M_t M_i; 0)) where:

a) n = number of transactions with the same counterpart; and

b) MtMi = replacement cost of derivative instrument “i”.

Sole Paragraph. The NGR is zero, when the net replacement cost is no positive.