



BANCO CENTRAL DO BRASIL

CIRCULAR 3,644 OF MARCH 4, 2013

Establishes procedures for calculating the component of risk-weighted assets (RWA) relative to credit risk in the standardized approach (RWA_{CPAD}), as instituted by Resolution 4,193 of March 1, 2013.

The Board of Directors of the Central Bank of Brazil, in a special meeting held on March 1, 2013, based on art. 9, on art. 10, item IX, and on art. 11, item VII, of Law 4,595 of December 31, 1964, as well as on art. 3, Paragraph 2, and on art. 15 of Resolution 4,193 of March 1, 2013,

RESOLVES:

TITLE I PRELIMINARY DISPOSITIONS

SOLE CHAPTER PURPOSE AND SCOPE OF APPLICATION

Art. 1. This Circular establishes procedures for calculating the component of risk-weighted assets (RWA) relative to credit risk in the standardized approach (RWA_{CPAD}), as instituted by Resolution 4,193 of March 1, 2013.

TITLE II THE RWA_{CPAD} COMPONENT AND DEFINITION OF EXPOSURES AMOUNTS

CHAPTER I THE RWA_{CPAD} COMPONENT

Art. 2. The component of risk-weighted assets (RWA) relative to exposures to credit risk subject to calculation of capital requirement using the standardized approach (RWA_{CPAD}), as instituted by Resolution 4,193 of 2013, must be equal to the sum of the products of exposures by their respective Risk Weighting Factors (FPR).

CHAPTER II DEFINITION OF EXPOSURE

Art. 3. In the calculation of the RWA_{CPAD} component, the following items qualify as exposures:

I - the acquisition of assets and rights, and expenditures or expenses registered as assets in the balance sheet;

II - a line of credit that is not cancellable unconditionally and unilaterally by the institution;



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III - committed funds to be released in up to 360 days;

IV - a guaranty, collateral, co-obligation or any other type of personal pledge of fulfillment of a third party's financial obligation;

V - any advance granted;

VI - collateral posted in a central counterparty (CCP) and not separated from the net worth of the entity acting as depositary; and

VII - default fund contributions to reduce losses of the central counterparty.

Paragraph 1. The calculation of an exposure value shall consider the deduction of advances received, provisions made and income to be appropriated.

Paragraph 2. The following items do not qualify as exposures:

I - co-obligations and other types of substantial risks and benefits retained in sale or transfer of financial assets that remain fully registered in the institution's balance sheet, according to the regulation in force; and

II - quotas of investment funds, including Funds for Investment in Credit Rights (FIDC), resulting from sale or transfer of financial assets that remain fully registered in the institution's balance sheet, according to the regulation in force, proportionally to the amount of assets transferred that remains registered in the institution's balance sheet and the total value of the fund's assets.

Paragraph 3. In the calculation of the exposure value related to an investment in Specially Constituted Investment Funds (FIE) linked to open pension plans such as the Free Benefit Generator Life Insurance Plan (VGBL) or the Free Benefit Generator Plan (PGBL), the values of the technical provisions pertaining to the plan must be deducted.

CHAPTER III EXPOSURE VALUES

Section I On-Balance Sheet Items

Art. 4. The exposure value relative to the acquisition of assets or rights, and to expenses or expenditures registered as assets in the balance sheet, as indicated in art. 3, item I, shall be determined according to the criteria established in the Accounting Plan for Financial Institutions – Cosif.

Section II Outstanding Transactions for Prompt or Cash Settlement



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Art. 5. In outstanding operations of purchase or sale of foreign currency and gold for prompt settlement, or in outstanding transactions with securities to be settled on the spot open market, the calculation of RWA_{CPAD} shall take into account:

I - the exposure to counterparty credit risk, in case of a sale operation; and

II - the exposure to the underlying asset and the exposure to the counterparty credit risk, in case of a purchase operation.

Paragraph 1. The value of the exposure to the underlying asset shall correspond to the book value of such asset.

Paragraph 2. The value of the exposure to counterparty credit risk shall be determined by multiplying the operation value by an adjustment factor for outstanding transactions (FCL) corresponding to the underlying asset, as follows:

I - for interest rate or price index, the FCL is equal to 0.5% (zero point five percent);

II - for foreign exchange rate or gold, the FCL is equal to 1% (one percent);

III - for stock price or stock index, the FCL is equal to 6% (six percent); and

IV - for an underlying asset not mentioned in items I to III, the FCL is equal to 10% (ten percent).

Paragraph 3. Underlying assets or funds delivered beforehand are deemed advance operations.

Section III Leasing Operations

Art. 6. The exposure value relative to a financial lease shall correspond to the total present value of unpaid installments added to the guaranteed residual value, which is to be calculated according to Cosif criteria.

Art. 7. In an operational lease, the calculation of RWA_{CPAD} must consider the exposure to the underlying asset and the exposure to counterparty credit risk.

Paragraph 1. [Revoked by Circular 3,660 of Oct. 29, 2015]

Paragraph 2. The value of the exposure to counterparty credit risk shall correspond to the overdue installments to be received.

Paragraph 3. The value of the exposure to the underlying asset shall correspond to the book value of the asset, to be determined according to Cosif criteria.

Section IV Repurchase Agreements and Securities Lending



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Art. 8. In repurchase agreements and securities lending, the calculation of RWA_{CPAD} shall consider:

I - the exposure to counterparty credit risk in the following operations:

- a) reverse repurchase agreement;
- b) repurchase agreement (repo); and
- c) securities lending.

II - the exposure to the underlying asset in the following operations with a proprietary asset:

- a) repurchase agreement (repo); and
- b) securities lending.

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

Paragraph 2. The exposure value to counterparty credit risk shall correspond to:

I - the resale book value of the underlying asset, in the case of a reverse repurchase agreement; or

II - the book value of the underlying asset of the operation, in the case of repurchase agreement (repo) or a securities lending.

Section V Lines of Credit

Art. 9. The exposure value relative to a line of credit that is non-cancellable unilaterally and unconditionally by the bank, mentioned in art. 3, item II, shall be calculated by multiplying the value of the line granted, deducted of the portion already converted into a credit operation, by the respective Credit Conversion Factor (FCC).

Paragraph 1. A formal commitment, including through an adhesion contract, is deemed a line of credit non-cancellable unilaterally and unconditionally by the bank in the presence of the following characteristics:

I - the operation consists of a commitment of disbursement to a counterparty up to a specified amount;

II - the amount to be drawn by the counterparty is uncertain; and

III - the disbursement up to the agreed-upon amount cannot be unilaterally and unconditionally denied by the bank.



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Paragraph 2. The FCC shall correspond to:

- I - 20% (twenty percent) for lines of credit with an original maturity up to one year;
- and
- II - 50% (fifty percent) for lines of credit with an original maturity over one year.

Section VI Undrawn Committed Funds

Art. 10. The exposure value relative to undrawn committed funds, according to art. 3, item III, must be equal to the sum of the disbursements to take place within 360 days, counted from the date of the calculation of RW_{ACPAD} .

Sole paragraph. Future disbursements relative to contracted credit operations are to be deemed undrawn committed funds, regardless of whether the disbursement is conditioned or not to pre-established requisites.

Section VII Guaranties Provided

Art. 11. The exposure value relative to any endorsement, pledge, co-obligation or any other form of a personal guaranty of compliance of a third party's financial obligation, according to art. 3, item IV, shall be determined by multiplying the value of the guaranty provided by the institution, deducted of any portion already honored, by a Credit Conversion Factor (FCC) of:

- I - 20% (twenty percent) for operations related to international trade in which the shipment of goods represents the guaranty of the operation;
- II - 50% (fifty percent) for operations related to:
- a) guaranty of bidding (bid bonds) in procurements and in auctions;
 - b) warranty for the provision of services or execution of works (performance bonds), including clauses of perfect operation and compliance of service levels;
 - c) warranty for the supply of goods;
 - d) warranty for the distribution of securities to primary and secondary markets through public offering, in accordance with regulation in force; and
 - e) endorsement or pledge in judicial or administrative proceedings of a fiscal nature;
- III - 100% (one hundred percent) for other operations.



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Sole paragraph. The value of the exposure relative to the provision of a guaranty, according to the heading, related to an operation not registered in the balance sheet, shall correspond to the multiplication of the value of the guaranty provided, deducted of any portion already honored, by the smallest FCC applicable to the guaranty or the guaranteed operation.

Section VIII OTC Derivatives, except Credit Derivatives

Art. 12. The exposure value to counterparty credit risk derived from transactions involving financial derivatives, except for credit derivatives, shall be equivalent to its replacement cost, if positive, added to the potential future exposure calculated according to art. 13.

Sole paragraph. Transactions involving financial derivatives include the purchase or sale of foreign currency, gold or securities with a future settlement, marked to market.

Art. 13. The potential future exposure stemming from a financial derivative shall be calculated by multiplying the reference value of the operation by the respective Future Potential Exposure Factor (FEPF).

Paragraph 1. The reference value denominated in foreign currency must be converted into national currency based on the exchange rate on the date of calculation of the future potential gain.

Paragraph 2. The FEPF shall correspond to the higher value associated to each underlying asset in the derivative operation, according to the remaining maturity.

Paragraph 3. In case of derivatives whose values are settled in periodic adjustments, with the respective update of their terms and conversion of their market values to zero, the remaining maturity shall be considered up to the date of the subsequent adjustment, limiting FEPF to the minimum of 0.5% (zero point five percent) for operations with a remaining maturity over one year.

Paragraph 4. The values relative to the referentials “interest rate” and “price index” are 0% (zero percent), 0.5% (zero point five percent) and 1.5% (one point five percent) for a remaining maturity up to one year, between one and five years and over five years, respectively.

Paragraph 5. The values relative to the referentials “foreign exchange rate” and “gold” are 1% (one percent), 5% (five percent) and 7.5% (seven point five percent) for a remaining maturity up to one year, between one and five years and over five years, respectively.

Paragraph 6. The values related to the referential “equity” are 6% (six percent), 8% (eight percent) and 10% (ten percent) for a remaining maturity up to one year, between one and five years and over five years, respectively.

Paragraph 7. The values relative to other referentials not mentioned in paragraphs 3 to 6 above are 10% (ten percent), 12% (twelve percent) and 15% (fifteen percent) for a remaining maturity up to one year, over one to five years and over five years, respectively.



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Section IX Credit Derivatives

Art. 14. The exposure value relative to a credit derivative transaction shall correspond to:

I - the reference value of the contract, for the institution that assumes the risk;

II - the sum of its replacement cost, if positive, and the potential future exposure calculated according to art. 15, for the institution that transfers the risk and does not hold the underlying asset; and

III - zero, for the institution that transfers the risk and holds the underlying asset.

Paragraph 1. The FPR applicable to the exposures mentioned on item I is the same applicable to the counterparty holding the underlying asset.

Paragraph 2. If the institution that transfers the risk holds the underlying asset at a value lower than the reference value of the credit derivative, the exposure relative to the exceeding portion shall observe the item II of the heading.

Art. 15. The potential future exposure stemming from a credit derivative shall be calculated by multiplying the reference value of the transaction by the respective FEPP.

Paragraph 1. The reference value denominated in foreign currency shall be converted into national currency based on the exchange rate on the date of calculation of the potential future gain.

Paragraph 2. The FEPP shall be equivalent to the following values:

I - 5% (five percent) for underlying assets that represent exposures to financial institutions and other institutions licensed by the Central Bank of Brazil; and

II - 10% (ten percent) for other underlying assets.

Section X Advances

Art. 16. The value of the exposure relative to any advancement granted by the institution, as mentioned in art. 3, item V, shall correspond to the amount advanced.

Section XI Investment Funds

Art. 17. Concerning the acquisition of investment fund shares, the exposures of the investment fund shall be considered as held by the acquirer, proportionally to its participation in the net worth of the fund.



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Paragraph 1. For the purpose of identifying the fund's exposures, the latest information available and disclosed in a maximum period of 31 days before the date of calculation must be used.

Paragraph 2. The use of information collected up to ninety days prior to the date of the calculation is permitted, in case the fund holds positions or transactions in progress that could be harmed by their disclosure, as defined by the Securities and Exchange Commission.

Paragraph 3. In case the identification of a fund's exposures is not possible, they may be estimated by multiplying the minimum limits for investment as established in the fund's investment mandate by the total amount of the fund asset, as long as these limits allow for the identification of an applicable FPR.

Paragraph 4. If the sum of the minimum limits mentioned in paragraph 3 amounts to less than 100% (one hundred percent) of the fund exposures, the highest FPR prescribed in this Circular must be applied to the remaining portion.

Paragraph 5. If an investment fund holds derivative instruments in its portfolio, the calculation of exposure value must consider the potential future exposure, in the terms of arts. 13 and 15.

Paragraph 6. In case the option established in paragraph 3 is exercised and the determination of specific values for FCL and FEPP factors is not possible, they must assume the values of 10% (ten percent) and 15% (fifteen percent), respectively.

Paragraph 7. In case the identification of the assets comprised in the fund's portfolio is not possible and the option established in paragraph 3 is not exercised, the highest FPR prescribed in this Circular shall be applied to the amount of shares acquired.

Paragraph 8. The highest FPR established by this Circular shall be applied to the exposures related to the acquisitions of shares of investment funds held by investment funds through investment fund shares, which, in turn, also have shares held by investment funds that invest in investment funds.

Paragraph 9. The exposures mentioned in art. 29, item I, must not be considered in the calculation of the exposures referred to in the heading.

Section XII Securitization

Art. 18. For the purpose of determining the value of an exposure resulting from securitization, the underlying assets shall be considered as being held by the investing institution.

Paragraph 1. An exposure is deemed as resulting from securitization when its payments are linked to the cash flow of creditor rights, other securities or credit derivatives.



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Paragraph 2. In case the identification of the underlying assets in a securitization exposure is not possible, the highest FPR established by this Circular shall be applied to the total exposure.

Paragraph 3. The exposures mentioned in art. 29, item II, must not be considered in the calculation of the exposures referred to in the heading.

TITLE III THE RISK-WEIGHTING FACTORS

CHAPTER I THE 0% FPR

Art. 19. A 0% (zero percent) FPR applies to the following exposures:

I - values held in cash in the domestic currency;

II - values held in cash, in a foreign currency issued by the countries listed in item VII, as well as exposures whose underlying assets are denominated in such a foreign currency;

III - investments in gold as a financial asset and exchange instrument, as well as exposures whose underlying asset is represented by gold as a financial asset and exchange instrument;

IV - operations with the National Treasury and with the Central Bank of Brazil, credit lines non-cancellable unconditionally and unilaterally by the institution provided to those entities, as well as securities issued by them;

V - operations with the following multilateral organizations and Multilateral Development Entities (EMD), credit lines non-cancellable unconditionally and unilaterally by the institution provided to those entities, as well as the guaranties provided to them and securities issued by them:

a) World Bank Group, comprised of the International Bank for Reconstruction and Development (Bird) and the International Finance Corporation (IFC);

b) Inter-American Development Bank (IADB);

c) African Development Bank (AfDB);

d) Asian Development Bank (ADB);

e) European Bank for Reconstruction and Development (EBRD);

f) European Investment Bank (EIB);

g) European Investment Fund (EIF);



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- h) Nordic Investment Bank (NIB);
 - i) Caribbean Development Bank (CDB);
 - j) Islamic Development Bank (IsDB);
 - k) Council of Europe Development Bank (CEDB);
 - l) Bank for International Settlements (BIS);
 - m) International Monetary Fund (IMF); and
 - n) National Bank for the Economic and Social Development (BNDES);
- VI - contributions in advance to the Credit Guarantor Fund (FGC); and

VII - operations with central governments of foreign countries and their respective central banks, as well as securities issued by them, whose external rating assigned by a credit rating agency registered or recognized by the Brazilian Securities Commission (CVM) is:

- a) equal to or better than AA- or equivalent rating; or
- b) equivalent to investment grade, provided that:

1. the reference currency of the operation or security is the local currency of the foreign country;

2. the institution's fundraising is referenced in the local currency of the foreign country.

Sole paragraph. The external rating mentioned in item VII must be:

- I - the highest risk grade, if more than one is available;
- II - the one assigned to the issuance of securities, if available.

CHAPTER II THE 2% FPR

Art. 20. A 2% (two percent) FPR applies to exposures settled on central counterparties with the following characteristics:

I - licensed by the Central Bank of Brazil, in the terms of Law 10,214 of March 27, 2001, and of regulation in force;



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II - subject to regulation consistent with the principles established by the Committee on Payment and Market Infrastructures (CPMI) and by the International Organization of Securities Commissions (IOSCO); or

III - recognized as a qualifying one by the Central Bank of Brazil, in the terms of Circular 3,772 of December 1, 2015.

Paragraph 1. Compliance with the conditions mentioned in item II of the heading must be documented by the institution.

Paragraph 2. The treatment provided for the entities mentioned in item II of the heading does not apply to:

I - central counterparties whose recognition as qualifying has already been denied by the Central Bank of Brazil, in the terms of art. 3 of Circular 3,772 of 2015;

II - other central counterparties based in a jurisdiction in which the entities mentioned in item I are incorporated or authorized to carry out their activities.

CHAPTER III THE 20% FPR

Art. 21. A 20% (twenty percent) FPR applies to the following exposures:

I - demand deposits in the domestic currency;

II - demand deposits in a foreign currency issued by the countries listed in art. 19, item VII;

III - rights resulting from renewing of debts of the Fund for the Compensation of Salary Variations (FCVS), according to Law 10,150 of December 21, 2000;

IV - operations maturing within three months, in domestic currency, conducted with financial institutions and other institutions licensed by the Central Bank of Brazil, with which financial statements are not prepared on a consolidated basis, provided that these institutions are not under a special regime;

V - securities maturing within three months issued by the institutions mentioned in item IV;

VI - credit operations maturing within three months, in domestic currency, carried out with CCPs in accordance with Law 10,214 of 2001, deemed systemically important in accordance with regulation in force;

VII - credit operations maturing within three months carried out with entities that operate financial market infrastructures abroad and are subject to regulation consistent with the principles established by CPMI and by the International Organization of Securities Commissions (IOSCO) held in:



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a) domestic currency; or

b) local currency of any of the countries listed in art. 19, item VII;

VIII - rights representing operations performed by single cooperatives, central cooperatives, confederations and cooperative banks involving an institution within the same cooperative system as a counterparty;

IX - [Revoked by Circular 3,714 of August 20, 2014]

X - operations maturing within three months conducted with financial institutions located in any of the countries listed in art. 19, item VII, with which financial statements are not prepared on a consolidated basis, provided these institutions are not under a special regime or similar treatment abroad and held in:

a) domestic currency; or

b) local currency of any of the countries listed in art. 19, item VII;

XI - securities issued by the institutions mentioned in item X, maturing within three months.

Sole paragraph. The provision of item VIII does not apply to equity holdings between the institutions referred to therein.

CHAPTER IV THE 35% FPR

Art. 22. A 35% (thirty-five percent) FPR applies to exposures relative to house financing, either of a new property or otherwise, whose loan-to-value ratio was up to 80% (eighty percent) on the date the credit was granted, when the operation is guaranteed by:

I - a fiduciary lien on the financed property, if located in Brasil;

II - mortgage, in first degree, if the property is located in countries listed in art. 19, item VII, and the foreclosure period is lower than 24 (twenty four) months.

Paragraph 1. A 35% (thirty-five percent) FPR applies to exposures relative to housing loans, either of a new property or otherwise, that are guaranteed in the form of the heading and whose outstanding debt was up to 80% (eighty percent) of the value of the guaranty on the date that the credit was granted and the present value of the guaranty is not less than its value on the date that the credit was granted.

Paragraph 2. For the purpose of verifying compliance with paragraph 1:

I - a new evaluation of the property shall be made, subject to legal and regulatory provisions in force; or



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II - a statistical methodology that is consistent, verifiable, documented and stable over time shall be developed.

Paragraph 3. The information necessary to verify the effective term of foreclosures shall be readily available to the Central Bank of Brazil.

Paragraph 4. The exercise of the right established in paragraph 1 implies that the 35% FPR (thirty five percent) must be applied for the duration of the exposure.

CHAPTER V THE 50% FPR

Art. 23. A 50% (fifty percent) FPR applies to the following exposures:

I - operations with financial institutions and other institutions licensed by the Central Bank of Brazil, with which financial statements are not prepared on a consolidated basis, provided that these institutions are not under a special regime, as well as equity or bonds issued by them;

II - operations with financial institutions located in countries listed in art. 19, item VII, with which accounting statements are not prepared on a consolidated basis, provided that these institutions are not under a special regime or similar treatment abroad;

III - credit operations with CCPs, according to Law 10,214 of 2001, deemed systemically important in the terms of the regulation in force;

IV - credit operations with entities abroad that operate financial market infrastructures and are subject to regulation consistent with the principles established by CPMI and IOSCO;

V - housing loans relative to properties encumbered with a fiduciary lien, either of a new property or otherwise, whose loan-to-value ratio was up to 50% (fifty percent) on the date that the credit was granted;

VI - housing loans relative to properties encumbered with a first-degree mortgage lien, either of a new property or otherwise, whose loan-to-value ratio did not exceed 80% (eighty percent) on the date that the credit was granted;

VII - construction loans relative to properties encumbered with a first-degree mortgage lien or a fiduciary lien, provided that the encumbrance complies with the provisions of Law 10,931 of August 2, 2004;

VIII - credit operations granted to FGC; and

IX - housing loans relative to properties encumbered with a first-degree mortgage lien, either of a new property or otherwise, whose loan-to-value ratio was up to 50% (fifty per-



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cent) on the date that the credit was granted, in case the property is located in countries listed in art. 19, item VII, subject to the provisions established in art. 22, item II and paragraph 3.

CHAPTER VI THE 75% AND 85% FPR

Art. 24. A 75% (seventy-five percent) FPR applies to retail exposures.

Paragraph 1. For the purposes of this Circular, operations qualify for retail if they have the following characteristics simultaneously:

I - their counterparty is a natural person or a small-sized private legal entity;

II - they take the form of a financial instrument directed at the counterparties mentioned in item I, with the exception of equity and bonds;

III - the sum of exposures with the same counterparty does not exceed 0.2% (zero point two percent) of the retail portfolio of the institution; and

IV - the sum of current exposures with the same counterparty does not exceed:

- a) R\$1,500,000.00 (one million and five hundred thousand reais), when the counterparty is a natural person; or
- b) R\$3,000,000.00 (three million reais), when the counterparty is a small-sized private legal entity.

Paragraph 2. For the purposes of Paragraph 1, the following definitions apply:

I - a single counterparty is a natural person or legal entity, or a group of individuals acting either separately or jointly when representing a common economic interest; and

II - a private legal entity is considered a small-sized counterparty if its yearly gross revenue does not exceed R\$15,000,000.00 (fifteen million reais).

Paragraph 3. The provision of the heading does not apply to exposures for which a specified FPR is established.

Paragraph 4. For the purpose of verifying compliance with the limits established on Paragraph 1, items III and IV:

I - the value of all operations with the same counterparty must be calculated without applying a FCC and without deducting any provisions; and

II - housing loans relative to properties encumbered with a fiduciary lien or a mortgage, either of a new property or otherwise, are waived.



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Art. 24-A. An 85% (seventy-five percent) FPR applies to retail exposures resulting from operations in which:

I - the counterparty is a legal entity whose outstanding credit portfolio registered in the Brazilian Central Bank Credit Information System (SCR) is over R\$100,000,000.00 (one hundred million reais); and

II - the outstanding balance of credit operations with the legal entity mentioned in item I does not exceed 10% (ten percent) of the financial institution's Regulatory Capital (PR), as established by Resolution 4,192 of March 1, 2013.

CHAPTER VII THE 100% FPR

Art. 25. A 100% (one hundred percent) FPR applies to the exposures for which there is not a specified FPR.

CHAPTER VIII THE 150% FPR

Art. 26. [Revoked by Circular 3,714 of August, 20, 2014]

CHAPTER IX THE 300% FPR

Art. 27. A 300% (three hundred percent) FPR applies to deferred tax assets relative to fiscal losses in income taxes and to a negative base in the social levying over net profits as well as those deferred tax assets originated from this levy relative to the calculation period ending in December 31, 2008, which are calculated in the terms of Art. 8 of the Executive Act 2.158-35 of August 24, 2001, and that are not deducted from regulatory capital, as instructed in the regulation in force.

Art. 28. [Revoked by Circular 3,714 of August, 20, 2014]

CHAPTER X THE 1,250% FPR

Art. 29. A 1,250% (one thousand two hundred and fifty percent) FPR applies to the following exposures:

I - relative to the acquisition, from the date of publication of this Circular onwards, of subordinated tranches of FIDC and other investment funds;

II - relative to the acquisition, from the date of publication of this Circular onwards, of subordinated tranches of securitization structures; and

III - investment in the funds mentioned in art. 3, item VII.



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Sole paragraph. In order to obtain the value of RWA_{CPAD} relative to the exposures mentioned in items I to III of the heading, the result of the multiplication of the exposure value by the FPR mentioned in the heading must be multiplied by $0.08/F$, being F the factor defined in art. 4 of Resolution 4,193 of 2013.

CHAPTER XI THE FPR APPLICABLE TO VALUES NON DEDUCTIBLE FROM PR

Art. 30. The exposures related to values nondeductible from PR, as mentioned in art. 5, Paragraph 2 of Resolution 4,192 of 2013, receive a FPR of 250%.

CHAPTER XII THE FPR APPLICABLE TO REPURCHASE TRANSACTIONS

Art. 31. For the purpose of applying a FPR to an exposure to counterparty credit risk in repurchase agreements (repo) and securities lending, the following instruments shall be considered credit risk mitigators:

I - the underlying asset received in a reverse purchase agreement or a lending operation; and

II - the financial resources received in a repurchase agreement (repo) or a lending operation.

CHAPTER XIII THE FPR APPLICABLE TO ENDORSEMENTS, SURETIES AND CO-OBLIGATION OPERATIONS

Art. 32. The FPR applicable to an exposure related to an endorsement, a pledge or any other form of personal guaranty is the same FPR applicable to a credit operation with the same counterparty.

TITLE IV EXCLUDED EXPOSURES, CREDIT VALUATION ADJUSTMENT (CVA) AND THE USE OF MITIGATORS IN THE CALCULATION OF THE RWA_{CPAD}

CHAPTER I EXPOSURES TO BE EXCLUDED FROM THE RWA_{CPAD}

Art. 33. For the calculation of RWA_{CPAD} , the following exposures shall not be considered:

I - inter-branch operations and other operations performed with entities within the scope of consolidation used to calculate regulatory capital (PR);

II - those relative to the assets and liabilities deducted in the calculation of PR, as set in Art. 5 of Resolution 4,192 of March 1, 2013, including associated deferred tax liabilities that were subtracted in calculation of PR;



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III - those relative to the risk of the underlying asset that results from an investment in equity and commodities, if covered by the RWA component for exposures to market risk subject to the calculation of capital requirements under the standardized approach (RWA_{MPAD}) or by the RWA component for market risk exposures subject to the calculation of capital requirements under an internal model approved by the Central Bank of Brazil (RWA_{MINT}), according to Resolution 4,193 of 2013;

IV - derivatives in which the institution acts solely as an intermediary, not assuming any rights or obligations before the parties;

V - those relative to the clearing of checks deposited in clients' accounts, when the availability of the resources depends on the conclusion of the clearing procedures, according to the regulation in force; and

VI - linked asset operations, conducted under the provisions of Resolution 2,921 of January 17, 2002.

Art. 34. The RWA_{CPAD} component may be deducted of the result of the following formula:

$$\sum_i \max\{(1.250\% \times DF_i - 18\% \times TE_i); 0\}, \text{ where:}$$

I - DF_i = contributions to default fund of central counterparties, as indicated in art. 20; and

II - TE_i = total of the exposures relative to operations to be cleared in a CCP, as indicated on art. 20.

Sole paragraph. The values of TE_i and DF_i mentioned in the heading must be calculated by each entity "i" mentioned in art. 20.

CHAPTER II THE CREDIT VALUATION ADJUSTMENT (CVA)

Art. 35. The value of RWA_{CPAD} relative to derivatives shall be added by the credit valuation adjustment (CVA) associated with a deterioration in the creditworthiness of the counterparty, obtained through the following formula:

$$2,33 * 0,01 * \frac{1}{F} * \sqrt{(\sum_i 0,5 * (d_i * EXP_i - \sum_h d_i^h * B_i^h) - \sum_{ind} d_{ind} * B_{ind})^2 + \sum_i 0,75 * (d_i * EXP_i - \sum_h d_i^h * B_i^h)^2}$$

where:

I - F = factor defined in art. 4 of Resolution 4,193 of 2013;

II - d_i = discount factor of the exposure value, calculated by counterparty "i" according to the following formula:



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$d_i = [(1 - e^{-0.05 \cdot 8 \cdot M_i}) / 0.05]$, where M_i is the weighted average maturity, in years, calculated by counterparty “i”, according to the following formula:

$$M_i = \sum (M_0 * R_0) / \sum R_0$$

where:

a) M_0 = remaining maturity of the derivative, in years, or the result of the following formula, if the institution so chooses:

$M_0 = \text{Max}((\sum t [(t * CF_t)]) / (\sum t CF_t), 1)$, where CF_t corresponds to the installments envisaged for the “t” period, including principal and charges;

b) R_0 = notional value of the derivative;

III - EXP_i = exposure mentioned in arts. 12 and 14, calculated by counterparty “i”;

IV - d_i^h = discount factor of the credit derivative “h” related to counterparty “i”, calculated according to the following formula:

$d_i^h = [(1 - e^{-0.05 * M_i^h}) / 0.05]$, where M_i^h is the remaining maturity, in years, of the credit derivative “h”, relative to counterparty “i”, used as a hedge to CVA;

V - B_i^h = notional value of the credit derivative “h”, relative to counterparty “i”, used as a hedge to CVA;

VI - d_{ind} = discount factor of the credit derivatives index “ind”, calculated according to the following formula:

$d_{ind} = [(1 - e^{-0.05 * M_{ind}}) / 0.05]$, where M_{ind} is the remaining maturity, in years, of the credit derivatives index “ind” used as a hedge to CVA; and

VII - B_{ind} = notional value of the credit derivatives index “ind” used as a hedge to CVA.

Paragraph 1. The following operations shall not be considered in the calculation mentioned in the heading:

I - those to be cleared in a CCP;

II - those performed with the entities mentioned in art. 19, items IV and V; and

III - credit swaps in which the institution appears as the risk-taking counterparty, subject to the provision established in art. 14, item I.

Paragraph 2. Alternatively, the addition to the value of the RWA_{CPAD} mentioned in the heading may be calculated according to the following formula:



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$$0,1 * \frac{1}{F} * \sqrt{0,25 \left(\sum_i EXP_i \right)^2 + 0,75 \sum_i EXP_i^2}$$

CHAPTER III THE USE OF MITIGATORS

Section I General Requirements

Art. 36. [Revoked by Circular 3,809 of August 25, 2016.]

Section II Exposures risk-weighted at 0% and 10%

Art. 37. [Revoked by Circular 3,809 of August 25, 2016.]

Art. 37-A. [Revoked by Circular 3,809 of August 25, 2016.]

Section III Exposures risk-weighted at 20%

Art. 38. [Revoked by Circular 3,809 of August 25, 2016.]

Section IV Exposures risk-weighted at 50%

Art. 39. [Revoked by Circular 3,809 of August 25, 2016.]

TITLE V FINAL DISPOSITIONS

CHAPTER I INFORMATION DISPATCH

Art. 40. A report detailing the calculation of RWA_{CPAD} must be provided to the Financial System Monitoring Department (Desig) of the Central Bank of Brazil in the form established by the said unit.

Sole paragraph. The information used in calculating RWA_{CPAD} must be made available to the Central Bank of Brazil for five years.

CHAPTER II OTHER PROVISIONS



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Art. 41. The arts. 10, 11, 12, 13, 14, 15-A, 15-C, 20, 21 and 22 of Circular 3,360 of September 12, 2007, are amended as follows:

“Art. 10.

II - values held in cash, in the foreign currencies issued by the countries listed in art. 11, item VI, as well as exposures having such foreign currencies as their underlying asset:

V -

o) National Bank for the Economic and Social Development (BNDES);”
(NR)

“Art. 11.

II - demand deposits in a foreign currency issued by the countries listed in item VI:

.....

VI - operations with central governments of foreign countries and respective central banks, as well as securities issued by them, in relation to which there has been no occurrence, over the past five years, of any of the following events:

- a) a suspension of any payment relative to a foreign obligation;
- b) a unilateral change of contractual terms relative to the payment of a foreign obligation;
- c) a moratorium or any other form of refusal to accredit a foreign obligation;
or
- d) a payment in advance of a foreign obligation resulting from the application of a contractual clause; and

VII - operations maturing within three months, conducted with financial institutions based on countries listed on item VI, with which the financial statements are not prepared on a consolidated basis, provided that they are not under a special regime or a similar treatment abroad.”
(NR)

“Art. 12.....

I - housing loans, either of a new property or otherwise, encumbered with a fiduciary lien, whose loan-to-value ratio is up to 80% (eighty percent) on the date that the credit was granted.” (NR)



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“Art. 13.....

III - operations with financial institutions based on countries listed on art. 11, item VI, with which the financial statements are not prepared on a consolidated basis, provided that they are not under a special regime or similar treatment abroad, with an original maturity of over three months;

.....

V - housing loans relative to properties encumbered with a first-degree mortgage, either of a new property or otherwise, whose loan-to-value ratio is over 50% (fifty percent) and lower than 80% (eighty percent) on the date the credit was granted.” (NR)

“Art. 14. A 75% (seventy-five percent) FPR applies to the following exposures:

I - with the following characteristics, cumulatively:

a) their counterparty is a legal entity whose credit portfolio in the domestic financial system is over R\$100,000,000.00 (one hundred million reais); and

b) the amount of the credit portfolio of the institution with the counterparty is lower than 10% (ten percent) of the Regulatory Capital (PR), as established in Resolution 3,444 of February 28, 2007; and

II - retail operations.

Paragraph 1.

.....

IV - the total amount of exposures with the same counterparty does not exceed R\$600,000.00 (six hundred thousand reais).

Paragraph 2.

.....

II - a private legal entity qualifies for a small-sized counterparty if its yearly gross revenue does not exceed R\$3,600,000.00 (three million six hundred thousand reais).” (NR)

“Art. 15-A.

II - payroll-linked credit with an original maturity of up to sixty months;” (NR)



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“Art. 15-C. A FPR of 300% (three hundred percent) applies to exposures relative to operations of personal credit without a specific destination, excluding the operations of payroll-linked credit, contracted or renegotiated with natural person from November 11, 2011, with an original maturity of over sixty months.” (NR)

“Art. 20.....

Paragraph 3.....

V - demand deposits, term deposits, financial bills issued by the institution, savings deposits, and deposits in gold or federal public securities that comply with each of the following requirements:” (NR)

“Art. 21.....

VII - demand deposits, term deposits, financial bills issued by the institution, savings deposits, and deposits in gold or federal public securities, as established in art. 20, paragraph 3, item V; and

VIII - guaranty provided with resources of the Participation Fund for the States (FPE) or of the Participation Fund for the Municipalities (FPM), mentioned in art. 159 of the Federal Constitution.” (NR)

“Art. 22.

II - guaranty provided by countries and central banks according to art. 11, item VI;
.....

IV - deposit of securities issued by the entities mentioned in art. 11, items VI and VII, and art. 13, item I, which comply with the following requirements cumulatively:” (NR)

Art. 42. This Circular enters into force on October 1, 2013, except for arts. 41 and 43, item I, which enter into force on the date of the publication.

Art. 43. The following dispositions are hereby revoked:

I - from this Circular publishing date, art. 13, item II, of Circular 3,360 of September 12, 2007;

II - from October 1, 2013:

a) Circulars 3,360 of September 12, 2007, 3,425 of December 17, 2008, 3,471 of October 16, 2009, and 3,563 of November 11, 2011; and

b) art. 2 of Circular 3,549 of July 18, 2011.



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Sole paragraph. Any references to Circular 3,360 of 2007, shall be construed as references to this Circular.

Luiz Awazu Pereira da Silva
Deputy Governor for Financial System Regulation