



BANCO CENTRAL DO BRASIL

CIRCULAR 3,641, OF MARCH 4, 2013

Establishes procedures to calculate the component of risk-weighted assets (RWA) relative to exposures in gold and in foreign exchange, for which the capital requirement is calculated using the standardised approach (RWA_{CAM}), 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 the provisions of art. 9, 10, item IX, and 11, item VII, of Law 4,595 of December 31, 1964, and in arts. 3, paragraph 2, and 15 of Resolution 4,193 of March 1, 2013,

DECIDED:

Art 1. The calculation of the daily value of risk-weighted assets (RWA) component relative to the exposures in gold and in foreign exchange for which capital requirement is calculated using the standardised approach (RWA_{CAM}), as instituted by Resolution 4,193 of March 1, 2013, is based on the following formula:

$$RWA_{CAM} = \frac{F'' \cdot EXP}{F}, \text{ where:}$$

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

II - F'' = factor applicable to exposures in gold and in foreign exchange, defined in paragraph 3 of this article;

III - EXP = foreign exchange exposure calculated according to the following formula:

$$EXP = Exp_1 + H \cdot Exp_2 + G \cdot Exp_3, \text{ where:}$$

a) Exp_1 = foreign exchange exposure calculated according to the following formula:

$$Exp_1 = \sum_i^n |EC_i - EV_i|, \text{ where:}$$

1. n = number of currencies, including gold, to which the exposures mentioned in the heading are calculated;
2. EC_i = total of long exposures in currency "i";
3. EV_i = total of short exposures in currency "i";



BANCO CENTRAL DO BRASIL

b) H = factor applicable to the total of the smallest value of the excess of long or short exposures (Exp_2), defined in paragraph 3 of this article;

Exp_2 = foreign exchange exposure calculated based on the following formula:

$$Exp_2 = \min \left\{ \sum_{i=1}^{n_1} |ExC_i|; \sum_{i=1}^{n_1} |ExV_i| \right\}, \text{ where:}$$

1. n_1 = number of currencies, considering only exposures in United States dollar, Euro, Swiss franc, yen, pound sterling, Canadian dollar and gold;

2. ExC_i = excess of long exposures in relation to short exposures, calculated for currency "i"; and

3. ExV_i = excess of short exposures in relation to long exposures, calculated for currency "i";

d) G = factor applicable to the amount of opposing positions in gold and in foreign exchange, in Brazil and abroad, defined in paragraph 3; and

e) Exp_3 = foreign exchange exposure calculated according to the following formula:

$$Exp_3 = \min \left\{ \sum_{i=1}^{n_2} |ElB_i|; \sum_{i=1}^{n_3} |ElE_i| \right\}, \text{ where:}$$

1. n_2 = number of currencies, including gold, to which exposures are calculated in Brazil;

2. n_3 = number of currencies, including gold, to which exposures are calculated abroad, including subsidiaries and dependencies located abroad;

3. ElB_i = net exposure in Brazil in currency "i", resulting from the difference between the total long positions and the total short positions in Brazil; and

4. ElE_i = net exposure abroad in currency "i", resulting from the difference between the total long positions and the total short positions abroad, including subsidiaries and dependencies located abroad.

Paragraph 1. The RWA_{CAM} value equals zero for the exposures in gold and in foreign exchange (EXP) equal or lower than 0.02 (two cents) of the Regulatory Capital (PR), defined by Resolution 4,192 of March 1, 2013, within the period from April 30, 2012, to December 31, 2013.

Paragraph 2. The exposures must be calculated in Brazilian reais, by converting their respective values, using the sale exchange rates available in the application PTAX800, option 5, of the Information System of the Central Bank (Sisbacen), relative to the day immediately before the date of the calculation.

Paragraph 3. For the calculation of RWA_{CAM} , it must be considered:

I - F'' defined by the ratio between the exposures in gold and in foreign exchange (EXP) and the Regulatory Capital (PR), defined in the terms of Resolution 4,192 of 2013, considering the following graduation:

- a) $F'' = 0.40$ (forty cents), if the EXP/PR ratio is equal to or lower than 0.05 (five cents);
- b) $F'' = 0.60$ (sixty cents), if the EXP/PR is equal to or lower than 0.10 (ten cents);
- c) $F'' = 0.80$ (eighty cents), if EXP/PR ratio is equal to or lower than 0.15 (fifteen cents); and
- d) $F'' = 1.00$ (one), if the EXP/PR ratio is higher than 0.15 (fifteen cents);

II - $H = 0.70$ (seventy cents); and

III - $G = 1.00$ (one), if $\sum_i^{n2} EIB_i$ and $\sum_i^{n3} EIE_i$ present opposite positions, and $G = 0$ (zero), on the contrary.

Paragraph 4. In order to calculate Exp_1 and Exp_3 , the exposure in United States dollar, Euro, Swiss franc, yen, pound sterling, Canadian dollar and gold must be considered altogether, as a single currency.

Paragraph 5. In order to calculate the Exp_3 , it must not be considered exposures related to transactions carried out between consolidated institutions, including dependencies, except exposures related to fund raised abroad and used in credit and leasing operations, contracted with individuals and legal entities in the country, observing that:

I – the net equity of the institutions, subsidiaries and dependencies abroad subject to the consolidation in the terms of the regulation in force, must be considered as a sold position abroad, for the EIE_i calculation; and

II – the value corresponding to investment in institutions, subsidiaries and dependencies abroad, in percentage terms, subject to the consolidation in the terms of the regulation in force, may be considered, total or partially, as a long position for the EIB_i and the EIE_i calculation, if a net short exposure in equivalent or higher value is maintained, observed that:

- a) a short position can be composed of one or more foreign currencies, as established by the institution;



BANCO CENTRAL DO BRASIL

b) the option for the prerogative must be deliberated in a meeting of the board of directors, defining the percentage of the investment to be considered as a long position, the respective participation percentage of each currency and the date from which the referred definition is to be considered;

c) the option for the prerogative cannot be changed before the first semiannual financial statement following its deliberation;

d) the net short exposure in equivalent or higher value must be maintained during the period in which this option is used;

e) the percentage base and the currency composition of the long position, effective on the last day of each semester, must be automatically considered for the following semester, except in the event of further deliberation of the institution in the terms of sub-item “b”, to be taken through the current semester, in order to prevail in the subsequent semester ; and

f) the information concerning the option for the prerogative must be documented and kept available to the Central Bank of Brazil.

Paragraph 6. The contracted operations that bring, at any time, foreign exchange risk for the institution must be considered in the calculation of the RWA_{CAM} .

Article 2. To calculate the daily value of RWA_{CAM} , as well as the limit on the net open position as defined by Resolution 3,488 of August 29, 2007, it is defined:

I – long exposure: the sum of the asset positions that have its value in national currency increased and of the liability positions in derivatives that have its value in national currency decreased, due to a depreciation of the national currency in relation to the foreign currency in which the positions are referenced

II – short exposure: the sum of the asset positions in derivatives that have its value in national currency decreased and of the liability positions that have its value in national currency increased, due to a depreciation of the national currency in relation to the foreign currency in which the positions are referenced;

Paragraph 1. The flows referenced in gold and in foreign currency must be marked to market, for the remaining period of each contract, by means of a term structure of interest rates regarding the currency being negotiated.

Paragraph 2. The value of the derivatives referenced in gold and in foreign exchange must be calculated based on the total amount of the underlying asset.

Paragraph 3. In case of open positions on options referenced in gold or in foreign exchange, the calculation with respect to each position must be performed separately and the results must be included in the calculation of the relative net exposure to the underlying asset.



BANCO CENTRAL DO BRASIL

Paragraph 4. For the purpose of determining the representative value of the option positions, it must be considered the value of the change in the price of the option relative to a change in the price of the underlying asset (delta) multiplied by the number of contracts and by their size.

Paragraph 5. The values of the positions held as a result of acquisitions of shares of investment funds must consider the proportional composition of the funds' portfolios or, if not feasible, they must be treated as a position in a currency, not being permitted the netting with any short position.

Paragraph 6. The following operations are not included in the RWA_{CAM} calculation:

I – those in which the institution acts exclusively as a mediator, not assuming any rights or obligations with the parties; and

II – those maturing until the next business day, since settled by the exchange rate of the calculation day.

Paragraph 7. The methodology for calculating the rates used to mark to market the exposures in gold and in foreign exchange must be based on consistent and verifiable criteria, in accordance with rules in force.

Article 3. The value corresponding to participations, on a percentage basis, of foreign investments in the equity of financial institutions and other institutions licensed by the Central Bank of Brazil can be considered, totally or partially, as a short position in foreign currency, if a net long exposure in equivalent or higher value is maintained.

Paragraph 1. The short position established in the heading may be composed of one or more foreign currencies, at the discretion of the institution.

Paragraph 2. The option for the prerogative established in the heading must be deliberated in a meeting of the board of directors, defining the percentage of the investment to be considered as long position, the respective participation percentage of each currency and the date from which the referred definition is to be considered.

Paragraph 3. The option for the prerogative cannot be changed before the first semi-annual financial statement following its deliberation.

Paragraph 4. The percentage base and the currency composition of the short position, effective on the last day of each semester, must be automatically considered for the following semester, except in the event of further deliberation of the institution in the terms of paragraph 2 of this article, to be taken through the current semester, in order to prevail in the subsequent semester.

Paragraph 5. The information concerning the option for the prerogative established in the heading must be documented and kept available to the Central Bank of Brazil.

Article 4. The short position in foreign currency aimed at providing hedge for investments abroad of financial institutions and other institutions licensed by the Central Bank of



BANCO CENTRAL DO BRASIL

Brazil shall consider the amount necessary to provide the effective protection of the referred long position in foreign currency, also including the tax effect, for purposes of calculating RWA_{CAM} .

Paragraph 1. The parameters for determining the value of the hedge mentioned in the heading must be documented and established based on criteria consistent with the hedge strategy adopted.

Paragraph 2. The option for the prerogative established in the heading must be deliberated in meeting of the board of directors, observing that it shall not be changed before the first semiannual finance statement following its deliberation.

Paragraph 3. The information about the option for the prerogative mentioned in the heading must be documented and kept available for the Central Bank of Brazil.

Article 5. A report detailing the calculation of RWA_{CAM} must be forwarded to the Central Ban of Brazil, in accordance with the form to be established.

Paragraph 1. The consolidated calculation of RWA_{CAM} is imputed to the institution in the conglomerate in charge of forwarding accounting information to the Central Bank of Brazil.

Paragraph 2. Institutions must keep available to the Central Bank of Brazil, for five years, the data used to calculate the daily value of RWA_{CAM} , as well as the methodology used to calculate the market value of the involved transactions.

Article 6. The following accounting titles remain in the Accounting Plan for the Financial Institutions (Cosif): 3.0.9.97.00-4 –NET EQUITY REQUIRED TO COVER THE MARKET RISK and 9.0.9.97.00-6 – REQUIRED NET EQUITY TO COVER MARKET RISK, for the record of the value calculated for RWA_{CAM} in the monthly and annual balances.

Article 7. This Circular enters into force on October 1, 2013.

Article 8. As of October 1, 2013, the Circulars 3,389 of June 25, 2008 and 3,608 of August 47, 2012 shall be revoked.

Sole paragraph. Citations to Circular 3,389 of 2008, must be replaced with a reference to this Circular.

Luiz Awazu Pereira da Silva
Financial System Regulation Director