



# BANCO CENTRAL DO BRASIL

CIRCULAR 3,640 OF MARCH 4, 2013

Establishes procedures to calculate the component of risk-weighted assets (RWA) relative to exposures subject to operational risk, for which the capital requirement is calculated using the standardised approach ( $RWA_{OPAD}$ ), as instituted by Resolution 4,193 of March 1, 2013.

The Board of Directors of the Central Bank of Brazil, in a special session 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 3, paragraph 2, and 15 of Resolution 4,193 of March 1, 2013,

## DECIDED:

Art. 1. The calculation of the risk-weighted assets (RWA) component relative to the capital requirement for operational risk through a standardized approach ( $RWA_{OPAD}$ ), according to Resolution 4,193 of March 1, 2013, must be based on one of the following methodologies: [\(As amended from January 1, 2014 by Circular 3,675 of October 31, 2013.\)](#)

I - Basic Indicator Approach;

II - Alternative Standardized Approach; or

III - Simplified Alternative Standardized Approach.

Sole paragraph. The methodology used must be included in the report mentioned in art. 4 of Resolution 3,380 of June 29, 2006.

Art. 2. The value of the  $RWA_{OPAD}$  must be calculated every six months, considering the last three annual fiscal periods.

Paragraph 1. An annual period is defined as the data set corresponding to two consecutive semesters.

Paragraph 2. The value of the  $RWA_{OPAD}$  must be calculated with information regarding the base dates of June 30 and December 31.

Paragraph 3. The value of the  $RWA_{OPAD}$  calculated with information on each base date must be maintained until the following base date.

Art 3. In order to calculate the  $RWA_{OPAD}$ :

I – the Operational Risk Exposure Indicator (IE) corresponds, for each annual period, to the total of the six-month period value of the income from financial intermediation and revenue from services, deducting the expenses from financial intermediation;



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II – the Alternative Operational Risk Exposure Indicator (IAE) corresponds, for each annual period, to the arithmetic average of the semester balance of credit operations, including leasing operations, other transactions with characteristics of credit concession and the book value of securities in the banking book, multiplied by the factor 0.035; and

III – (Revoked from January 1, 2014 by Circular 3,675 of October 31, 2013.)

Paragraph 1. Losses or gains relative to the sale of securities and derivative instruments in the banking book, in accordance with Circular 3,354 of June 27, 2007, must be excluded from the IE composition.

Paragraph 2. In the IE calculation, expenses of incorporation, as well as revenues from reversion of provisions, must be disregarded.

Paragraph 3. In the IAE calculation, the balances of the constituted provisions must be disregarded.

Article 4. In order to calculate the  $RWA_{OPAD}$  the following business lines must be considered:

I – retail banking;

II – commercial banking;

III – corporate finance;

IV – trading and sales;

V – payment and settlement;

VI – agency services;

VII – asset management; and

VIII – retail brokerage.

Paragraph 1. The business line “retail banking” includes operations in the credit portfolio corresponding to retail credit in the terms of Circular 3,644 of March 4, 2013, and to house financing.

Paragraph 2. The business line "commercial banking" includes:

I – operations in the credit portfolio not considered in the “retail banking” business line; and

II – the transactions with securities in the banking book, in the terms of Circular 3,354 of 2007.

Paragraph 3. The business line "corporate finance" includes the operations related to:

- I – mergers and acquisitions;
- II – financial and corporate restructuring;
- III – capital subscription (Initial Public Offering – IPOs);
- IV – privatisations;
- V – public or private placement of securities;
- VI – securitization;
- VII – own emission;
- VIII – long-term project financing;
- IX – research and advisory services;
- X – revenue from services of syndicated loan; and
- XI – advisory in cash management.

Paragraph 4. The business line “trading and sales” includes operations related to:

- I – international fund raising and loan;
- II – securities brokerage not included in the business line “retail brokerage”;
- III – international treasury;
- IV – equity and other investments;
- V – securities in the trading book;
- VI – interbank deposits; and
- VII – derivatives.

Paragraph 5. The business line "payments and settlements" includes operations related to:

- I – assets transfer;
- II – clearing and settlement;



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III – payment systems;

IV – pay roll service;

V – tax receipt service; and

VI – collection service.

Paragraph 6. The business line “agency services” includes operations related to:

I – custody of securities;

II – issuer and paying agents; and

III – letter of credit, guarantee and warranty.

Paragraph 7. The business line “asset management” includes operations related to the administration of third party funds.

Paragraph 8. The business line “retail brokerage” includes operations related to the brokerage of shares, securities and commodities.

Art. 5. For the Basic Indicator Approach listed in art. 1, item I, the following formula must be used:

$$RWA_{OPAD} = \frac{1}{F} \cdot \frac{\sum_{t=1}^3 \max [0, 15 \times IE_t; 0]}{n}, \text{ where:}$$

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

II -  $IE_t$  = Operational Risk Exposure Indicator in the annual period “t”; and

III - n = number of times in the last three annual periods, in which the IE value is higher than zero.

Article 6. For the Alternative Standardised Approach listed in art. 1, item II, the following formula must be used:

$$RWA_{OPAD} = \frac{1}{F} \cdot \frac{\sum_{t=1}^3 \max \left[ \left( \sum_{i=1}^2 IAE_{i,t} \times \beta_i \right) + \left( \sum_{i=3}^8 IE_{i,t} \times \beta_i \right); 0 \right]}{3}, \text{ where:}$$

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



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II -  $IAE_{i,t}$  = Alternative Operational Risk Exposure Indicator, in the annual period “t” and , calculated for the business lines “i” listed in the heading of art. 4, items I and II;

III -  $IE_{i,t}$  = Operational Risk Exposure Indicator, in the annual period “t”, calculated for the business lines “i” listed in the heading of art. 4, items III to VIII; and

IV -  $\beta_i$  = weighting factor applied to the business line “i”.

Paragraph 1. The value of the weighting factor ( $\beta_i$ ) equals:

I – 0.12 for the business lines “retail banking”, “asset management” and “retail brokerage”, listed, respectively, in the heading of art. 4, items I, VII and VIII;

II – 0.15 for the business lines "commercial banking" and "agency services", listed, respectively, in the heading of art. 4, items II and VI; and

III – 0.18 for the business lines “corporate finance”, “trading and sales” and “payment and settlement”, listed, respectively, in the heading of art. 4, items III, IV and V.

Paragraph 2. All the institution’s operations shall be distributed on the business lines mentioned in art. 4, according to consistent and verifiable criteria.

Paragraph 3. If an operation cannot be distributed in one of the business lines mentioned in art. 4, it must be allocated in one of the business lines whose weighting factor ( $\beta_i$ ) equals 0.18.

Paragraph 4. The distribution process of operations on the business lines described in art. 4 must be documented, including in details the policy and the procedures used, previously approved by the board of directors.

Paragraph 5. The process mentioned in paragraph 4 must be reviewed and adjusted in case of changes in the operations of the institution ([Included from January 1, 2014 by Circular 3,675 of October 31, 2013.](#))

Article 7. For the Simplified Alternative Standardised Approach, mentioned in art. 1, item III, the following formula must be used:

$$RWA_{OPAD} = \frac{1}{F} \cdot \frac{\sum_{i=1}^3 \max \{[(IAE_i \times 0,15) + (IE_i \times 0,18)]0\}}{3}, \text{ where:}$$

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

II -  $IAE_t$  = Alternative Operational Risk Exposure Indicator, in the annual period “t”, calculated in aggregate for the business lines mentioned in the heading of art. 4, items I and II; and



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III -  $IE_t$  = Operational Risk Exposure Indicator, in the annual period “t”, calculated in aggregate for the operations not included in the business lines mentioned in the heading of art. 4, items I and II.

Paragraph 1. All the operations of the financial institution must be distributed between IAE and IE, according to consistent and verifiable criteria.

Paragraph 2. The process of distributing the aggregate operations must be documented, including details with respect to policies and procedures used, previously approved by the board of directors.

Art. 7-A. The use of the Alternative Standardized Approach and the Simplified Alternative Standardized Approach is conditioned to:

I – a previous authorization by the Central Bank of Brazil for the institutions mentioned in art. 1 of Circular 3,477 of December 24, 2009; and

II – the observance of the following minimum criteria:

a) the senior management and the board, when such an instance is in place, must be actively involved in the supervision of the management structure for operational risk, according to the provisions of art. 3, paragraph, 1, of Resolution 3,380 of June 29, 2006;

b) the management structure for operational risk must be conceptually sound and must be integrally implemented, as prescribed by Resolution 3,380 of 2006;

c) the institution must have enough resources to use the approaches mentioned in the heading, in business lines and also in the areas of control and auditing;

d) the unit that performs the management of operational risk must have clearly assigned responsibilities, according to the provisions of arts. 5 and 6 of Resolution 3,380 of 2006;

e) the material losses related to operational risk must be documented and stored by business line;

f) the institution must adopt incentives for improvement of operational risk management;

g) regular reports that include the losses mentioned in item “e” must be submitted to each business line management, to the senior management and to the board, when such an instance is in place, which must take appropriate measures in accordance with the provisions of art. 3, items II and III, and paragraphs 2 and 3 of Resolution 3,380 of 2006;

h) the structure for operational risk management must ensure the adequate documentation of the compliance of its policies, processes and internal controls, prescribing the treatment of nonconformities;



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i) the processes of the operational risk management and the systems for control of operational risks must be validated and reviewed by an independent unit, encompassing the activities of business areas and the unit in charge of operational risk management, in accordance with the provisions of art. 2, paragraph 2, of Resolution 2,554 of September 24, 1998; and

j) the operational risk management structure must be periodically assessed by internal audit, according to the provisions of art. 2, paragraph 2, of Resolution 2,554, of 1998.

Sole paragraph. Institutions that use the approaches mentioned in the heading may only employ the Basic Indicator Approach to calculate the  $RWA_{OPAD}$  component under previous authorization by the Central Bank of Brazil.

(Article 7-A included from January 1, 2014 by Circular 3,675 of October 31, 2013.)

Article 8. For institutions in beginning of activity, the  $RWA_{OPAD}$  calculation must consider the estimations included in the business plan established based on Resolution 3,859 of May 27, 2010, for credit unions, and on Resolution 4,122 of August 2, 2012, for the other institutions.

Article 9. For the financial institution resulting from a merger and acquisition process, the calculation of the  $RWA_{OPAD}$  must use the sum of IE and IAE of each original institution.

Article 10. For the financial institutions resulting from a demerger process, the calculation of the  $RWA_{OPAD}$  must use values for the respective IE and IAE proportionally to the division verified in the assets of the original institution.

Article 11. The procedure defined in arts. 8, 9 and 10 may only be used for the annual periods wherein the information regarding the new institution is not available.

Article 12. (Revoked from January 1, 2014 by Circular 3,675 of October 31, 2013).

Article 13. The Central Bank of Brazil may require:

I – that the calculation of  $RWA_{OPAD}$  component uses the Basic Indicator methodology, due to a occasional need of correction or improvement in the use of the Alternative Standardized Approach or the Simplified Alternative Standardized Approach, including in the cases in which the process of allocation in business lines does not follow adequate, consistent and verifiable criteria and in the case of noncompliance with provisions of art. 7-A; and (As amended from January 1, 2014 by Circular 3,675 of October 31, 2013.)

II – increase in the  $RWA_{OPAD}$  value whenever the calculated value is not compatible with the operational risks incurred by the institution.

Article 14. A report detailing the calculation of the  $RWA_{OPAD}$  must be forwarded to the Central Bank of Brazil, in accordance with the form to be established.



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Sole paragraph. Institutions must make available to the Central Bank of Brazil, for five years, the information used to calculate the  $RWA_{OPAD}$ .

Article 15. The data used to calculate the  $RWA_{OPAD}$  must be reconciled with the annually and semiannually audited accounting information.

Article 16. This Circular enters into force on October 1, 2013.

Article 17. From October 1, 2013, Circulars 3,383 of April 30, 2008 and 3,476 of December 24, 2009 shall be revoked.

Sole paragraph. The citations to Circular 3,383 of 2008 must be replaced with a reference to this Circular.

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