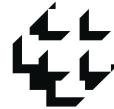


BANCO CENTRAL DO BRASIL

CIRCULAR 3,749 OF MARCH 5, 2015

Establishes the methodology for calculating the Liquidity Coverage Ratio (LCR) and provides for the disclosure of information related to the LCR.

The Board of Governors of the Central Bank of Brazil, in a session held on March 5, 2015, based on art. 10, item IX, and art. 11, item VII, of Law 4,595 of December 31, 1964, and in art. 8 of Resolution 4,401 of February 27, 2015, and considering the provisions of Resolution 4,090 of May 24, 2012,

R E S O L V E S:

CHAPTER I
PURPOSE AND SCOPE OF APPLICATION

Art. 1. This Circular establishes the methodology for calculating the Liquidity Coverage Ratio (LCR) and provides for the disclosure of information relating to the LCR, in accordance with the provisions of Resolution 4,401 of February 27, 2015.

CHAPTER II
LCR CALCULATION

Art. 2. The LCR is the ratio of the stock of High Quality Liquid Assets (HQLA) to the total net cash outflows expected for a period of thirty days, calculated according to a stress scenario standardized for the purposes of the LCR, as defined in art. 3 of this Circular.

Sole paragraph. The total net cash outflows corresponds to the total cash outflows minus the lesser value of the total cash inflows and 75% (seventy five percent) of the total cash outflows.

CHAPTER III
STANDARDIZED STRESS SCENARIO FOR THE LCR

Art. 3. The standardized stress scenario mentioned in art. 2 considers idiosyncratic and market-wide shocks that, in a thirty-day period, would impose the following conditions on the institution:

I - a partial loss in retail funding;

II - a partial loss in wholesale funding capacity;

III - a partial loss in ability to raise short-term financing;

IV- additional contractual outflows, due to a downgrade in the institution's credit risk rating up to three levels, including a possible requirement of additional collateral;

V - an increased volatility of prices, rates or indices that impact collateral quality or potential future exposure in derivatives positions, resulting in the application of larger collateral haircuts, additional collateral posting or other liquidity needs;

VI - higher than expected draws on credit and liquidity facilities provided; and

VII - the potential need for the bank to buy back debt or honor non-contractual obligations in order to mitigate reputational risk.

CHAPTER IV
DEFINITION OF HIGH QUALITY LIQUID ASSETS (HQLA)

Art. 4. Assets are considered HQLA if they remain liquid during periods of stress and meet the following minimum requirements:

I - they are easily and immediately converted into cash with little or no loss in market value;

II - they are free from any legal, regulatory, statutory or contractual restriction capable of obstructing their negotiation;

III - they present low risk;

IV - their valuation is present easy and certain;

V - they have low correlation with high-risk assets or assets issued by financial institutions;

VI - they are traded in a stock exchange, if they are shares of a company;

VII - they are traded in an active and significant market, with low bid-ask spreads, high trading volume and a large number of participants;

VIII - they are, historically, highly-sought assets during systemic crisis; and

IX - they do not constitute an obligation of a financial institution or an entity in a prudential conglomerate, as defined by Resolution 4,280 of October 31, 2013.

Paragraph 1. Securities received as collateral or in reverse repo transactions, in borrowing agreements with a right of use, or in collateral swap transactions with a right of use may be included in the stock of HQLA if they are held by the institution and have no restrictions to be sold finally or under repurchase agreements or to be offered as collateral.

Paragraph 2. The following assets must not be considered in the stock of HQLA:

I - assets with operational restrictions that may prevent timely monetization during stress, given that:

a) the stock of HQLA is placed under control of the unit responsible for managing the liquidity of the institution, with authority established in internal policies to monetize any asset in the stock, observing that such control must be evidenced by maintaining the assets segregated with the sole objective of them being used as a contingent source of liquidity, or by demonstrating that the unit is operationally capable of timely monetizing them in the next thirty days without directly affecting the institution's risk management policies and the continuity of its business; and

b) institutions must establish policies and have procedures and controls in place to identify and monitor the entity, the geographic location, the currency and the custodial or bank accounts where their HQLA are held, in order to be able to timely monetize them;

II - assets that, if converted into cash within thirty days, incur in a significant price loss;

III - assets that must be contractually held in the portfolio;

IV - assets received as collateral, including from collateral swap transactions, or securities borrowed with a maturity of less than thirty days, or assets whose beneficial owners have the right of withdrawal within thirty days regardless of consent from the institution;

V - assets held by entities in the prudential conglomerate that have no access to the markets where they are traded and that cannot transfer them to other institutions in the conglomerate with access to these markets;

VI - Revoked by Circular 3,762 of August 20, 2015;

VII - Revoked by Circular 3,762 of August 20, 2015.

Paragraph 3. The liquidity needs of the institution must be managed in each currency of expected cash outflows.

Paragraph 4. A representative sample of the assets included in the stock of HQLA must be periodically monetized through repurchase agreements or final sale operations, in order to test the institution's access to market, the effectiveness of the process and the liquidity of assets.

Paragraph 5. The stock of HQLA must consider only assets held by the institution on the day of the LCR calculation.

Paragraph 6. The calculation of the LCR must recognize HQLA assets at an amount no greater than their market value.

Paragraph 7. For the purposes of item IX of the heading, the following exceptions apply:

I - obligations of institutions classified in art. 6, item VIII, sub-item "b";

II - securities referred to in art. 8, item III; and

III - securities referred to in art. 9, item II.

Paragraph 8. Assets received in reverse repo transactions do not fall within the provisions of paragraph 2, item IV.

Paragraph 9. For the purposes of evaluating the requirement referred to in item III of the heading, the institution must consider, among other elements, regarding the assets, the volatility, the presence or not of market risk hedges, the credit quality of the issuers, the degree of subordination, the capacity of the institution to obtain liquidity by way of sale or repo, and the relative stability of market terms, such as prices and trading volumes, taking into account the characteristics of the markets and the jurisdictions where the assets are traded.

Paragraph 10. When considering the elements mentioned in paragraph 9, the institution must consider consistent and verifiable criteria.

Art. 4º-A. HQLA surplus held by a legal entity being consolidated can only be included in the stock of HQLA if:

I - there are no restrictions as regards to its availability to the consolidated (parent) entity, including in stress periods; and

II - it is free from any legal, regulatory, statutory or contractual restriction to its transfer to entities within the prudential conglomerate.

Sole paragraph. The HQLA surplus referred to in the heading must be measured as the difference between the stock of HQLA held by the legal entity being consolidated and the total net cash outflows of that entity expected for the next thirty days.

Art. 4º-B. The institution must have policies and procedures in place to identify and monitor potential liquidity transfer restrictions as referred to in item II of article 4º-A and to assess potential liquidity risks arising from these restrictions to the prudential conglomerate as a whole.

CHAPTER V
COMPOSITION OF THE STOCK OF HQLA

Art. 5. The stock of HQLA is comprised of Level 1 and Level 2 assets.

Section I
Level I HQLA

Art. 6. Level 1 HQLA consists of:

I - amounts held in cash in any currency;

II - excess reserves held at central banks and required reserves that will become excess reserves in the next thirty days;

III - required reserves held at the Central Bank of Brazil relative to savings and demand deposits, limited to the total amount of cash outflows estimated for each of these deposit types;

IV - other required reserves held at the Central Bank of Brazil, limited to the amount to be returned to the institution as a result of the cash outflows defined in arts. 13 to 28;

V - required reserves held at foreign central banks not considered in item II, limited to the amount allowed to be drawn by the local regulation;

VI - securities issued by the Brazilian federal government and accepted by the Central Bank of Brazil in intraday rediscount operations;

VII - Brazilian federal government liquid securities issued in foreign currency, up to the limit of the net cash outflows in the respective currency arising from the operations of the institution in Brazil;

VIII - liquid securities issued or guaranteed by:

a) central governments of foreign countries, their central banks and public sector entities (PSEs) with a risk rating better than, equal or equivalent to AA-, awarded by a credit rating agency registered or recognized in Brazil by the Securities and Exchange Commission (CVM); and

b) multilateral organizations and Multilateral Development Entities (MDEs), referred to in art. 19, item V of Circular 3,644 of March 4, 2013.

IX - liquid securities issued in local or foreign currency by the central government or the central bank of foreign countries, up to the limit of the net cash outflows, in the respective currency, of the subsidiaries located in that country;

X - reserve requirements held at the Central Bank of Brazil and not considered in the amounts mentioned in sections II, III and IV, limited to 30% (thirty percent) of the institution's Level 1 assets in Brazil.

XI - Revoked by Circular 3,762 of August 20, 2015.

Paragraph 1. The central bank reserves referred to in item II of the heading correspond to the amount deposited at a central bank, either in cash or securities, in excess of the required value as defined in art. 23, paragraph 5.

Paragraph 2. The required reserves referred to in items III, IV and X of the heading do not include the amounts deposited at the Central Bank of Brazil due to noncompliance with earmarked credit requirements.

Paragraph 3. The amount of cash considered for compliance with reserves requirements must be deducted in the calculation of the estimated cash outflows of the demand deposits referred to in item III of the heading.

Paragraph 4. The amount of required reserves to be considered as Level 1 HQLA ac- cording to item III of the heading is limited to the balances kept at the Central Bank of Brazil, deducted of the amounts referred to in item II of the heading according to the category of the reserve requirement.

Paragraph 5. The other required reserves mentioned in item IV of the heading comprising the stock of Level 1 HQLA are defined as the percentage of cash outflows of deposits subject to reserve requirements applied to the respective balances kept at the Central Bank of Brazil, deducted of the amounts referred to in item II of the heading according to the category of reserve requirement.

Paragraph 6. The amount of required reserves to be considered as Level 1 HQLA ac- cording to item X of the heading is limited to the balances kept at the Central Bank of Brazil, deducted of the amounts mentioned in items II, III and IV of the heading.

Paragraph 7. The securities referred to in item VI of the heading include:

I - securities deposited as collateral in excess of requirement by a clearing houses in Brazil, comprising the deposited amount of collateral, deducted of the value required, when positive; and

II - securities portfolio of investment funds of which the institution is the sole shareholder.

Paragraph 8. For the purposes of this Circular, PSEs are government bodies below the federal level, including regional governments and local authorities such as states, municipalities and their controlled entities.

Section II
Level 2 HQLA

Art. 7. Level 2 HQLA consists of:

I - Level 2A assets; and

II - Level 2B assets.

Paragraph 1. Level 2 HQLA assets are limited to 40% (forty percent) of the overall stock of HQLA, considering Level 1 and Level 2 assets after weight factors have been applied.

Paragraph 2. Level 2B HQLA assets are limited to 15% (fifteen percent) of the overall stock of HQLA, considering Level 1 and Level 2 assets after weight factors have been applied.

Section III
Level 2A HQLA

Art. 8. Level 2A assets consists of:

I - liquid securities issued or guaranteed by central governments of foreign countries or their central banks, with a risk rating better than, equal or equivalent to A-, awarded by a credit rating agency registered or recognized in Brazil by the CVM;

II - corporate debt securities issued by nonfinancial institutions or entities not belonging to a prudential conglomerate and that meet the minimum requirements set out in paragraphs 3 and 4; and

III - securities backed by assets of the issuing institution issued by other than the institution itself or an entity in its prudential conglomerate, that meet the minimum requirements set out in paragraphs 3 and 4.

Paragraph 1. Assets not considered in the Level 1 category because they exceed the net cash outflows referred to in art. 6, item IX, may be considered in item I of the heading, provided that they meet all the eligibility criteria for Level 2A assets.

Paragraph 2. An 85% (eighty five percent) weight factor must be applied to the values of the securities referred to in item I to III of the heading, in order to reduce the considered value of the assets.

Paragraph 3. In order to be considered Level 2A assets, the securities referred to in items I to III of the heading must be deemed a source of liquidity in markets even during stress, characterized by the fact that a decline in their value does not exceed 10% (ten percent) over any thirty-day period since issuance or, at least, in the last five years of trading;

Paragraph 4. In order to be considered Level 2A assets, the securities mentioned in sections II and III of the heading must comply with the following conditions:

I - securities have a long-term risk rating better than, equal or equivalent to AA-, as awarded by a credit rating agency registered or recognized in Brazil by the CVM; or, in the absence of a long-term risk rating, they have been conferred an equivalent short-term risk rating; or, in the absence of a risk rating awarded by a credit rating agency registered or recognized in Brazil by the CVM, they have been assigned an internally calculated Probability of Default (PD) that corresponds to a risk rating better than, equal or equivalent to AA-;

II - securities have been traded on the secondary market through final sale or repurchase agreements in at least 75% (seventy five percent) of days in the last twelve months; and

III - Level 2A assets must not exceed 25% (twenty five percent) of the securities' aver- age monthly trading volume in the last ninety days.

Paragraph 5. In the case of securities issued in the local currency of a particular jurisdiction, the risk rating referred to in paragraph 4, item I, may consider the domestic scale of ratings of this jurisdiction, if available.

Paragraph 6. The HQLA classified according to paragraph 5 may only be used to cover net cash outflows liable and denominated in the same currency of the jurisdiction where the institution is located.

Paragraph 7. The volume of securities referred to in item II of the heading that exceed the limit established in paragraph 4, item III, may be considered Level 2B assets up to 25% (twenty five percent) of their average monthly volume in the last ninety days, taking into account the weighting factor defined in art. 9, paragraph 5.

Section IV
Level 2B HQLA

Art. 9. Level 2B assets consists of:

I - liquid securities issued or guaranteed by central governments of foreign countries or their respective central banks with a risk rating better than, equal or equivalent to BBB-, as awarded by a credit rating agency registered or recognized in Brazil by the CVM, and which, furthermore, are a source of liquidity even during stress, characterized by the fact that a decline in their value does not exceed 20% (twenty percent) over any thirty-day period since issuance or, at least, in the last five years of trading;

II - residential mortgage backed securities (RMBS) that meet the following minimum requirements:

a) they were not issued by the institution itself or an entity belonging to its prudential conglomerate;

b) the residential mortgages must not have been originated by the institution itself or an entity belonging to its prudential conglomerate;

c) their long-term risk rating is better than, equal or equivalent to AA, as awarded by a credit rating agency registered or recognized in Brazil by the CVM; or, in the absence of a long- term risk rating, they have been conferred a short-term risk rating equivalent to the long-term one, as awarded by a credit rating agency registered or recognized in Brazil by the CVM;

d) they are deemed a source of liquidity in the markets even during stress, characterized by the fact that a decline in their value does not exceed 20% (twenty percent) over any thirty- day period since their issuance or, at least, in the last five years of trading;

e) they have been traded on the secondary market in at least 60% (sixty percent) of days in the last twelve months;

f) they do not have structured products as a collateral;

g) they are collateralized by mortgages whose debt is not extinguished if the proceeds from sales after foreclosure are insufficient;

h) their underlying assets are collateralized by the property financed, where the contract value is capped at 80% (eighty percent) of the appraised value of the collateral at the time of credit concession;

i) they refer to transactions whose risk is retained by the issuer; and

j) the amount of Level 2B assets cannot exceed 25% (twenty five percent) of the securities' average monthly trading volume in the last ninety days;

III - corporate debt securities issued by nonfinancial institutions or entities not belonging to a prudential conglomerate that meet the following minimum requirements:

a) they have a long-term risk rating between A+ and BBB-, or an equivalent rating, as awarded by a credit rating agency registered or recognized in Brazil by the CVM; or, in the absence of a long-term risk rating, they have been conferred an equivalent short-term risk rating; or in the absence of risk rating awarded by a credit rating agency registered or recognized in Brazil

by the CVM, they have been assigned an internally calculated Probability of Default (PD) that corresponds to a risk rating between A+ and BBB- or its equivalent;

b) they are deemed a source of liquidity in the markets even during stress, characterized by the fact that a decline in their value does not exceed 20% (twenty percent) over any thirty-day period since their issuance or, at least, in the last five years of trading;

c) they must have been traded on the secondary market in at least 60% (sixty percent) of days in the last twelve months; and

d) the amount of Level 2B assets must not exceed 25% (twenty five percent) of the securities' average monthly trading volume in the last ninety days.

IV - liquid shares of nonfinancial institutions or an entity not belonging to a prudential conglomerate and its controlled entities that meet the following minimum requirements:

a) they are traded on a stock exchange and settled in a clearinghouse;

b) they are a constituent of the main stock indexes in their home jurisdiction or where the liquidity risk is incurred;

c) they are denominated in the domestic currency or in the currency of the jurisdiction where the liquidity risk is incurred;

d) investments in equity funds may only be considered if the institution is the sole investor in the fund and to the extent that the portfolio of the fund meets the requirements set out in this item;

e) they are deemed a source of liquidity in the markets even during stress, characterized by the fact that a decline in their value does not exceed 40% (forty percent) over any thirty-day period since issuance or, at least, in the last five years of trading;

f) they have been traded on the secondary market at in least 60% (sixty percent) of days in the last twelve months; and

g) Level 2B assets must not exceed 25% (twenty five percent) of the securities' average monthly trading volume in the last ninety days.

Paragraph 1. Institutions must have appropriate systems in place to measure and control risks of the assets referred to in the heading, as well as to assess their HQLA eligibility.

Paragraph 2. Assets not considered in Level 1 HQLA referred to in art. 6, item IX, due to exceeding the net cash outflows may be considered as complying with item I of the heading, provided that all eligibility criteria for Level 2B are met.

Paragraph 3. Securities referred to in art. 6, item IX, that are not included in the Level 1 category due to exceeding net cash outflows and that do not meet levels 2A and 2B eligibility criteria may not be included in the institution's stock of HQLA.

Paragraph 4. A 75% (seventy five percent) weight factor must be applied to the values of the assets referred to in item II.

Paragraph 5. A 50% (fifty percent) weight factor must be applied to the values of the assets referred to in item I, III and IV.

Paragraph 6. For securities issued in the local currency of a particular jurisdiction, the risk rating referred to in item II, sub-item "c" and item III, sub-item "a" of the heading may consider the domestic rating scale of this jurisdiction, when available.

Paragraph 7. The HQLA classified according to paragraph 6 may only be used to cover net cash outflows liable and denominated in the same currency of the jurisdiction where the institution is located.

CHAPTER VI
DEFINITION AND COMPOSITION OF CASH OUTLOWS

Art. 10. Total cash outflow is calculated by applying weight factors to outstanding balances of liabilities and off-balance sheet commitments.

Section I
Retail Funding

Art. 11. For the purposes of this Circular, retail funding is defined as the amount of deposits held at a financial institution in which the counterparty is:

I - a natural person; or

II - a private legal entity which meets the following requirements:
a) is managed by the institution as a retail client;

b) the sum of the institution's current exposures to the entity and the sum of the funding provided from the entity to the institution, calculated separately, including debits and credits arising from derivative transactions, is less than R$3,000,000.00 (three million reais); and

c) has yearly gross revenue not exceeding the limit established in art. 24, paragraph 1, item I, of Circular 3,644 of 2013.

Paragraph 1. The net exposure resulting from derivatives operations must be considered for the calculation referred to in item II, subitem "b".

Paragraph 2. Revoked by Circular 3,826 of January 26, 2017.

Paragraph 3. For the purposes of the heading, a counterparty is a natural person or a private legal entity or connected counterparties which pose credit or liquidity risk towards the institution, including by means of control, according to the criteria established in article 22, paragraph 2, of Resolution 4,557, of 2017.

Paragraph 4. For the purposes of the LCR, retail funding includes demand and term deposits.

Paragraph 5. For the purpose of the heading, funding equivalent to deposits can be considered as retail funding if:

I - they represent funds directly raised from the institution's clients, without resorting to capital markets; and

II - they are redeemable directly at the institution at the value of issuance, at least.

Paragraph 6. Revoked by Circular 3,869 of 19 December, 2017.

Art. 12. Stable funding is defined as those liabilities denominated in the currency of the country where they were raised, insured by the Credit Fund Guarantor (FGC), by the Cooperative Credit Fund Guarantor (FGCoop) or by some other effective deposit insurance scheme, and collected from clients with a strong relationship with the institution, so as to make withdrawals highly unlikely, being characterized by compliance with at least one of the following criteria:

I - in the case that the counterparty is a natural person:

a) the client has had a checking or savings account at the institution for at least three years;

b) the client receives regular benefits through the institution, such as salaries or pensions; or

c) the client makes use of regular schedule payments through automatic debits to a checking account at the institution;

II - in the case that the counterparty is a private legal entity as referred to in item II of art. 11:

a) the client has had a checking or savings account at the institution for at least three years; or

b) the client performs his cash management activities at the institution, as defined in art. 15, paragraph 13.

Paragraph 1. The effective deposit insurance referred to in the heading is one that:

a) is able to promptly honor offered;

b) has the object of its coverage clearly defined;

c) is of publicly acknowledged; and

d) has legal powers to fulfill its mandate, is operationally independent and transparent and is clearly accountable.

Paragraph 2. Retail funding that does not meet any of the criteria established in this article is considered less stable

Art. 13. The following items are considered retail cash outflows:

I - Revoked by Circular 3,841 of July 27, 2017.

II - 5% (five percent) of the outstanding balances of retail funding considered stable; and

III - the following less stable retail funding:

a) 20% (twenty percent) of outstanding balances owned by a natural person whose sum of funds at the institution is equal to or greater than R$1,500,000.00 (one million, five hundred thousand reais);

b) 10% (ten percent) of the remaining balances.

Paragraph 1. The balances considered in item II of the heading are limited to the amount covered by the deposit insurance.

Paragraph 2. The balances referred to in item II of the heading that exceed the deposit insurance coverage limit must be considered within the balances referred to in item III of the heading.

Paragraph 3. The provisions of items II and III of the heading apply to retail funding:

I - regardless of the existence of collateral;

II - with a residual maturity or in a withdrawal notice period of thirty days;

III - with a residual maturity greater than thirty days, of daily liquidity is granted to the client;

IV - with a residual maturity greater than thirty days, if there is no legal, regulatory or contractual impediment for early withdrawal, or if there is no substantial penalty charge, defined as the loss of value greater than the real yield of the operation, for early withdrawal.

Paragraph 4. Even if there are legal, regulatory or contractual impediments or significant penalty charges for early withdrawal, the total balance of deposits with maturity greater than 30 days must be included in the retail funding cash outflows if the institution allows, not exceptionally, an early withdrawal without a significant penalty charge.

Paragraph 5. Institutions must establish controls and appropriate criteria to identify the exceptionality referred to in paragraph 4, which must be documented and verifiable.

Paragraph 6. The Central Bank of Brazil may determine the reclassification of deposits with a residual maturity over 30 days and that have legal, regulatory or contractual impediments or substantial penalty charge for early withdrawal, if the controls or the criteria referred to in paragraph 5 are deemed inadequate.

Paragraph 7. In the calculation of the sum of funds mentioned in item III, sub-item "a" of the heading, the resulting net exposure of a client's derivative transactions must be considered, when positive.

Paragraph 8. When the deposit insurance provides coverage for more than one type of funding, the institution must consider as covered firstly the liabilities with longer residual maturities or those in which the right to withdraw is acquired in a longer time frame.

Section II
Wholesale funding

Art. 14. Wholesale funding is defined as the one raised from legal entities and not collateralized against credit risk, in the terms of the heading of art. 20.

Paragraph 1. Revoked by Circular 3,826 of January 26, 2017.

Paragraph 2. The balances to be considered in the calculation of cash outflows are those that may be withdrawn within thirty days and those with a residual maturity greater than thirty days, if a daily liquidity or a withdrawal option within thirty days is granted to the client, considering that:

I - reputational factors must be taken into account if they may limit the institution´s ability to exercise or not exercise options that allow early redemption or renewal of its funding;

II - if market participants expect the institution to redeem the funding before its maturity, the institution must consider this withdrawal possibility for the purposes of LCR calculation.

Paragraph 3. The cash outflows referred to in arts. 14 to 18 must not include those already considered in art. 24, paragraph 7 and art. 37, paragraph 7.

Paragraph 4. The funding raised in accordance with the definition in the heading and classified as retail funding must not be considered as wholesale funding.

Subsection I
Operational Deposits

Art.15. Operational deposits are defined as resources held at one institution by wholesale customers for the purposes of clearing, custody or cash management, on the condition that such services are provided by the institution itself.

Paragraph 1. The services referred to in the heading must meet the following requirements:

I - the client relies on the institution to perform them over the next thirty days;

II - they are provided under a specific contract, subject to a thirty-day notice period prior to termination or under a penalty clause for termination without a notice in the next thirty days;

III - deposits are held in accounts meant for supporting the operational activities referred to in the heading and no incentives are offered for balances held in excess of the necessary for carrying out such activities.

Paragraph 2. The items below do not qualify as operational deposits:

I - funds related to products that offer a yield as their which main objective;

II - balances held in excess of the necessary for rendering the services referred to in the heading;

III - balances deriving from correspondent banking services; and

IV - balances deriving from brokerage services.

Paragraph 3. Institutions must establish a methodology for identifying excess deposits that are excluded from the treatment of operational deposits, provided that such methodology meets the following requirements:

I - it must be documented and verifiable;

II - it is sufficiently granular to adequately allow for the assessment of the risk of withdrawal due to an idiosyncratic stress event; and

II - it takes into account the likelihood that wholesale customers maintain above-average balances relative to their payment needs, establishing indicators to identify the customers that do not manage their account balances efficiently.

Paragraph 4. When developing the methodology referred to in paragraph 3, if the institutions are unable to determine the amount of excess deposits, the entire amount of deposits must be considered non-operational.

Paragraph 5. As an alternative to developing the methodology referred to in paragraph 3, institutions may consider as operational deposits the lesser amount between the sum of the demand deposits balances from wholesale clients considered in the LCR calculation date and the average of the five smallest demand deposits of those same clients during the thirty days prior to the LCR calculation date, as long as the provisions of this article are taken into account.

Paragraph 6. The amount of demand deposits above the balance calculated in paragraph 5 cannot be considered as operational deposits and must be treated as wholesale deposits.

Paragraph 7. The methodology referred to in paragraph 3 must be submitted to a process of validation, carried out independently from its development process, which assesses, at least, the suitability of the methodology to the criteria listed in this article.

Paragraph 8. The responsibility over the validation referred to in paragraph 7 is assigned exclusively to the institution, which must revamp the process whenever a change in the methodology occurs.

Paragraph 9. The use of the methodology referred to in paragraph 3 must be timely communicated to the Central Bank of Brazil upon implementation and when methodological changes are implemented

Paragraph 10. The Central Bank of Brazil may determine a reclassification of deposits from operational to non-operational if the methodology referred to in paragraph 3 is deemed in- adequate.

Paragraph 11. For the purposes of this article, clearing services are those that allow the indirect transfer funds or securities by a client of the institution to final recipients through direct participants of the domestic payment system, limited to the following activities:

I - transmission, reconciliation and confirmation of payment orders;

II - intraday credit facility, overnight financing and safekeeping of post-settlement balances; and

III - definition of positions for intraday settlement and for final settlement.

Paragraph 12. For the purposes of this article, custody services include safekeeping, reporting, processing of assets or related operational and administrative procedures, carried out on behalf of the customer in the process of transacting and safekeeping financial assets, limited to the following activities:

I - settlement of securities transactions; II - transfer of contractual payments; III - processing of collateral;

II - provision of custody-related to cash management services; V - collection of dividends and other income;

III - subscription and redemption on behalf of clients; and

IV - asset and corporate-trust services, treasury services, escrow management, funds transfer, stock transfer and agency services, including payment and settlement services, and depository receipts.

Paragraph 13. For the purposes of this article and of art. 12, item II, sub-item “b”, cash management services include the provision products and services for cash flow management, for assets and liabilities management and for financial transactions necessary to clients’ ongoing operations, limited to the following activities:

I - payments remittance;

II - collection of payments;

III - payroll administration; and

IV - control of the disbursement of funds.

Art. 16. The following items are considered as cash outflows from operational deposits:

I - Revoked by Circular 3,841 of July 27, 2017.

II - 5% (five percent) of the balances of operational deposits insured by the FGC or by the FGCoop or by some other effective deposit insurance scheme, according to the criteria set out in art. 12, paragraph 1;

III - 25% (twenty five percent) of the balances of other operational deposits.

Paragraph 1. The balances referred to in item II of the heading are limited to the amount of the deposit insurance, considering the average value per client of the total balance of operational deposits.

Paragraph 2. The balances referred to in item III of the heading must include all funding derived from operational deposits not covered in item II of the heading, including the amount of such funding exceeding the cap for deposit insurance.

Subsection II
Affiliated Credit Unions Deposits

Art. 17. An amount of 25% (twenty five percent) of deposits in affiliated credit unions must be considered cash outflows, provided that these balances can be withdrawn within thirty days, as defined in art. 14, paragraph 2.

Paragraph 1. The institution that considers the cash outflow rate defined in the heading must provide cooperative banking services, taking deposits from affiliated cooperatives due to:

I - requirements of a minimum deposit; or

II - centralization of financial services, defined either contractually or statutorily, including deposits from affiliated credit unions in which the cooperative bank as a deposit taker and the credit union as a depositor participate in the same deposit guarantee scheme.

Paragraph 2. The Central Bank of Brazil may determine the reclassification of the affiliated credit union deposits if they are not placed in accordance with the provisions of paragraph 1, items I and II.

Subsection III
Other Wholesale Funding

Art. 18. The following items are considered as other wholesale funding cash outflows:

I - 40% (forty percent) of the balances of the wholesale funding referred to in art. 14 provided by non-financial corporate clients, central governments and their respective central banks, multilateral organizations and MDEs mentioned in art. 19, item V of Circular 3,644 of 2013, and PSEs, including funds constituted with public resources aiming specifically at promoting national or regional development;

II - 20% (twenty percent) of the balances of funding obtained from the counterparties referred to in item I, if the total balance of the counterparty, including operational deposits,

does not exceed the value covered by FGC, FGCoop, or other entity that provides an effective deposit insurance, subject to the provisions of art. 12, paragraph 1;

III - 100% (one hundred percent) of the balances of other wholesale funding not mentioned in arts. 15 to 17 or in items I and II of this article.

Paragraph 1. Item III of the heading must include all the securities issuances that mature within thirty days, regardless of the counterparty that provided the funds, taking into account the provisions of art. 14, paragraph 4.

Paragraph 2. When the deposit insurance provides coverage for more than one type of funding, the institution must consider covered firstly the liabilities with longer residual maturities or those in which the right to withdraw funds is acquired in a longer time frame.

Art. 19. The following items are considered cash outflows referring to term deposits covered by FGC's special guarantee (DPGE) and maturing within thirty days:

I -100% (one hundred percent) of the balance, if there is no regulatory limit restricting renewal within thirty days; or

II - 0% (zero percent) of the balance, if there is a regulatory limit restricting renewal within thirty days.

Section III
Secured Funding

Art. 20. Secured wholesale funding is defined as the liabilities and general obligations collateralized against credit risk in case of bankruptcy, insolvency, liquidation or declaration of a special regime.

Paragraph 1. The funding transactions referred to in the heading are limited to repurchase agreements, security lending, collateral swaps and equivalent transactions.

Paragraph 2. The funding collateralized by instruments issued by an entity belonging to the same prudential conglomerate of the funding taker must not be considered secured funding.

Art. 21. The following items are considered cash outflows from secured wholesale funding, when facing maturity or likelihood of settlement in the next thirty days:

I - 0% (zero percent) of the balances if the collateral is eligible to Level 1 HQLA, as defined in art. 6;

II - 15% (fifteen percent) of the balances if the collateral is eligible to Level 2A HQLA, as defined in art. 8;

III - 25% (twenty five percent) of the balances if the collateral is eligible to Level 2B HQLA, as defined in art. 9, item II;

IV - 50% (fifty percent) of the balances if the collateral is eligible to Level 2B HQLA, as defined in art. 9, items I, III and IV;

V - 100% (one hundred percent) of the balances if the collateral does not fall under items I to IV.

Paragraph 1. The funding referred to in item I to V of the heading includes those liabilities and general obligations in which the collateral is owned by a third party and has been received as a guarantee for another transaction maturing in over thirty days.

Paragraph 2. If the funding is provided by the Central Bank of Brazil or by the central bank of the country where the subsidiary collected it, the cash outflow from secured wholesale funding must be 0% (zero percent) of the balance, regardless of the collateral posted.

Paragraph 3. If the funding is provided by the domestic central government or the multilateral organizations and MDEs referred to in art. 19, item V of Circular 3,644 of 2013, or by domestic PSEs, 25% (twenty five percent) of the balance is be considered secured wholesale funding cash outflow, when collateralized according to items IV and V of the heading.

Paragraph 4. The provision of paragraph 3 applies only to domestic PSEs that have a risk rating better than, equal or equivalent to A-, as awarded by a credit rating agency registered or recognized in Brazil by the CVM.

Paragraph 5. For the purposes of paragraph 4, domestic PSEs are those located in the jurisdiction where the institution is headquartered or has a subsidiary.

Paragraph 6. Repurchase agreements maturing within thirty days are not considered in the calculation of LCR, if a third party owns the collateral and that same collateral has been used as a guarantee for another operation also maturing in the next thirty days.

Paragraph 7. Revoked by Circular 3,826 of January 26, 2017.

Section IV
Issuances in the Financial Market

Art. 22. An amount of 100% (one hundred percent) of the balances of structured financing instruments should be considered as cash outflows if they mature within thirty days or if an early settlement is permitted in case of a longer maturity.

I - Revoked by Circular 3,826 of January 26, 2017.

II - Revoked by Circular 3,826 of January 26, 2017.

Paragraph 1. Revoked by Circular 3,826 of January 26, 2017.

Paragraph 2. Revoked by Circular 3,826 of January 26, 2017

Paragraph 3. The operations referred to in the heading include:

I - funding that results from asset securitization;

II - issuance of bonds backed by the issuer's assets, such as the Guaranteed Real Estate Bills (Letras Imobiliárias Garantidas - LIG) instituted by Law 13,097 of January 19, 2015, as well as covered bonds in general; and

III - issuance of structured notes, such as the Structured Operations Certificates (COE) regulated by Resolution 4,263 of September 5, 2013, along with other similar structured financing instruments.

Section V
Contractual Cash Outflows

Art. 23. The following items should be considered contractual cash outflows:

I - 100% (one hundred percent) of disbursements in the next thirty days from contractual obligations, considering, at least:

a) the amount of loans and financing already contracted but not yet released to clients, including those related to letters of credit, trade finance operations, on-lending and earmarked credit operations;

b) the amount of trade finance operations to be contracted or the one to be deposited in correspondent banks;

c) the amount to be paid within thirty days due to maturing obligations with funding providers of on-lending and trade finance operations;

d) the amount to be transferred to the assignees regarding payments related to assigned credit, when such credit remain under the institution’s management;

e) the amount to be paid to banks within thirty days due to credit portfolio purchase transactions already contracted; and

f) the amount to be transferred to retailers or to issuers of postpaid payment instruments, as defined in art. 2, item II of Circular 3,683 of November 4, 2013, related to purchases of clients made using postpaid payment instruments, as defined in art. 6, item V of Law 12,865 of October 9, 2013, combined with art. 2, item II of Circular 3,680 of November 4, 2013

II - 100% (one hundred percent) of disbursements related to the settlement of structured operations maturing in the next thirty days or those that allow an early settlement in case of a longer maturity;

III - 100% (one hundred percent) of the amount to be held at central banks or to be released in the form of earmarked credit to be contracted within thirty days to fulfill reserve requirements and earmarked credit operations on LCR calculation date;

IV - 100% (one hundred percent) of other contractual obligations not captured in items I to III maturing in the next thirty days;

V - a variable percentage of the amount of HQLA to be linked to any obligation of the institution in the next thirty days, not included in arts. 11 to 25:

a) 100% (one hundred percent) of the market value of the securities to be linked to an obligation if the asset is considered to be Level 1 HQLA for the calculation of LCR, as defined in art. 6;

b) 85% (eighty five percent) of the market value of the securities to be linked to an obligation if the asset is considered to be Level 2A HQLA for the calculation of LCR, as defined in art. 8;

c) 75% (seventy five percent) of the market value of the securities to be linked to an obligation if the asset is considered to be Level 2B HQLA for the calculation of LCR, as defined in

art. 9, item II; and

d) 50% (fifty percent) of the market value of the securities to be linked to an obligation if the asset is considered to be Level 2B HQLA for the calculation of LCR, as defined in art. 9, items I, III and IV; and

VI - 100% (one hundred percent) of the minimum payments contractually due in the next thirty days of principal, fees and interest in funding with no specific maturity or maturing beyond the next thirty days.

Paragraph 1. For the purposes of item II of the heading, structured operations are those representing a single and indivisible set of rights and obligations that fall outside the scope of art. 22.

Paragraph 2. The amount referred to in item III of the heading corresponds to the amount of reserve requirements and earmarked credit due on the date of LCR calculation minus the respective sum already held at central banks.

Paragraph 3. The required amounts referred to in paragraph 2 must be adjusted considering:

I - the credit portfolio, including operations maturing within thirty days, regarding deductible operations and earmarked credit operations;

II - the amounts to be released in deductible and earmarked credit operations already contracted; and

III - cash and the other items considered for the purposes of compliance with earmarked credit and reserve requirements.

Paragraph 4. The calculation referred to in paragraph 2 must consider future amounts of reserve requirements and earmarked credit when, on the date of LCR calculation, the computation periods have been finalized, but their periods of adjustment begins within thirty days.

Paragraph 5. If, in the calculation referred to in paragraph 2, the amount deposited exceeds the amount needed to comply with reserve requirements or for the fulfillment of ear- marked credit, such difference is considered as excess reserves or reserves to be released as mentioned in art. 6, item II.

Paragraph 6. The cash outflows considered in item V of the heading include assets and collateral to be delivered by the institution within thirty days in collateral swap or securities borrowing transactions already contracted and to be settled within thirty days.

Section VI
Derivatives Cash Outflows

Art. 24. The amount of cash outflows must consider 100% (one hundred percent) of the sum of payments related to derivative transactions expected to be made over the next thirty days, calculated per counterparty.

Paragraph 1. For transactions subject to daily adjustments, the expected payments referred to in the heading refers to the daily settlement value to be paid, regardless of the maturity of the transaction.

Paragraph 2. For transactions not subject to daily adjustments, the expected payments referred to in the heading must consider:

I - transactions likely to be settled within thirty days; and

II - contractual cash flows expected in the next thirty days.

Paragraph 3. For the transactions referred to in paragraph 2, item I, the expected value of the payments referred to in the heading must be equal to the disbursement that would be made if the contracts were to be settled at the LCR calculation date.

Paragraph 4. For the transactions referred to in paragraph 2, item II, the expected value of the payments referred to in the heading must be equal to the disbursement that would be needed to honor the expected contractual cash flows in the next thirty days.

Paragraph 5. The calculation of the expected value of the payments referred to in the heading must assume that an option embedded in a derivative contract will always be exercised if the result is favorable to the holder of the option.

Paragraph 6.When estimating the cash outflows of the operations that may be settled within thirty days referred to in this article, the institution must:

I - deduct, from the expected payments, the restitution of HQLA posted as collateral by the institution, considering the applicable weighting factors set out in arts. 6 to 9; and

II - add, to the expected payments, the returning HQLA received as collateral by the

institution, considering the applicable weighting factors set out in arts. 6 to 9.

Paragraph 7. If the collaterals mentioned in paragraph 6, items I and II, are demand deposits or term deposits held at the counterparty, the amount to be deducted or added to the expected payments referred to in paragraph 6 is 100% (one hundred percent) of the value of such collaterals.

Paragraph 8. For the purposes of paragraph 6, item I, the institution must be legally allowed and operationally able to re-use the received collateral in new cash raising transactions.

Paragraph 9. The net amount to be received from a counterparty under a valid master netting agreement may be used to calculate the expected payments referred to in this article.

Section VII
Additional Requirements of Collateral

Art. 25. The following items are considered as cash outflows related to requirements of collateral:

I - 100% (one hundred percent) of the additional margin call or the amount to be disbursed in derivatives transactions or other transactions with trigger clauses in the event of a downgrading of the long-term credit rating of the institution of up to three levels or, in the absence of a long-term credit rating, an equivalent short-term rating, as awarded by a credit rating agency registered or recognized in Brazil by the CVM;

II - 20% (twenty percent) of the value of assets posted as collateral and not eligible as Level 1 HQLA;

III - 100% (one hundred percent) of the excess collateral received by the institution and included in its stock of HQLA, after weighting factors have been applied, when it can be withdrawn by the counterparty at any time;

IV - 100% (one hundred percent) of the additional collateral call contractually required by the institution's counterparty, but not yet posted;

V - 100% (one hundred percent) of the value of the assets received as collateral that comprise the institution's stock of HQLA, after weighting factors have been applied, when they can be substituted by the counterparty for non-HQLA assets without the institution's prior consent;

VI - 100% (one hundred percent) of the difference between the value of the assets received as collateral that comprise the stock of HQLA and the value of the other HQLA assets of inferior quality, after weighting factors have been applied, when the assets posted as collateral can be substituted, by the counterparty, for other HQLA assets of inferior quality, without the institution's prior consent;

VII - 100% (one hundred percent) of the expected additional margin call, by counterparty, arising from market valuation changes in derivatives positions or other transactions.

Paragraph 1. The cash outflows referred to in this article are limited to those related to derivatives or other financial transactions subject to additional margin calls arising from changes in the market value of the transaction or the collateral itself.

Paragraph 2. The expected cash outflows referred to in item VII of the heading must be equal to 30% (thirty percent) of the required margin at the LCR calculation date.

Paragraph 3. For the purposes of item VI of the heading, if HQLA of different liquidity levels may be substituted for HQLA received as collateral, the institution must assume that the substitute collateral will be the one that has the lowest liquidity in the LCR and is contractually liable of being substituted by the counterparty.

Paragraph 4. The impact of the downgrade referred to in item I of the heading must consider impacts on all types of margin collateral and contractual triggers which change rehypothe cation rights for non-segregated collateral.

Section VIII
Credit and Liquidity Facilities

Art. 26. The following items must be considered cash outflows related to credit and liquidity facilities:

I - a variable percentage of the unconditionally irrevocable and conditionally revocable credit facilities in the next thirty days, granted and not used, as follows:

a) 5% (five percent) of the undrawn portion of these facilities, if the counterparty is a retail customer;

b) 10% (ten percent) of the undrawn portion of these facilities, if the counterparty is a non-financial corporate, a PSE, a central government or its respective central bank, or a multilateral organization or MDE mentioned in art. 19, item V of Circular 3,644 of 2013;

c) 40% (forty percent) of the undrawn portion of these facilities, if the counterparty

is a financial institution, a security brokerage company, a security distribution company, a consortium manager, an insurance and reinsurance company, a clearing house that acts as central counterparty, a fiduciary company, including pension funds and other collective investment entities, or a beneficiary institution; and

d) 100% (one hundred percent) of the undrawn portion of these facilities, if the counterparty is an institution not included in sub-items "a" to "c";

I - a variable percentage of the unconditionally irrevocable and conditionally revocable liquidity facilities in the next thirty days, granted and not used, as follows:

a) 5% (five percent) of the undrawn portion of these facilities, if the counterparty is a retail customer;

b) 30% (thirty percent) of the undrawn portion of these facilities, if the counterparty is a non-financial corporate, a PSE, a central government or its respective central bank, or a multilateral organization or MDE mentioned in art. 19, item V of Circular 3,644 of 2013;

c) 40% (forty percent) of the undrawn portion of these facilities, if the counterparty is a banking institution or a clearinghouse that acts as a central counterparty that is subject to prudential regulation; and

d) 100% (one hundred percent) of the undrawn portion of these facilities, if the counterparty is an institution not included in sub-items "a" to "c", including hedge funds, money market funds and SPEs.

Paragraph 1. For the purposes of items I and II of the heading, the following definitions must be considered:

I - liquidity facilities are the contractual obligation to provide funds for clients so that they are able to honor their obligations maturing in the next thirty days, until the conclusion of new funding transactions;

II - credit facilities are the contractual obligations to provide funds for customers at a future date with the possibility of drawing the funds at any time during the duration of the contract, as long as they are not considered liquidity facilities.

Paragraph 2. Facilities extended to hedge funds, money market funds and SPEs must

be considered in their entirety as liquidity facilities.

Paragraph 3. In the calculation of the credit and liquidity facilities granted but not used, the value of the collateral that guarantee those facilities and are eligible to be HQLA can be dis- counted, considering the applicable weighting factors set out in arts. 6 to 9, provided that:

I - the collateral has already been posted and is not being considered in the institution's stock of HQLA or is required to be posted by the counterparty when it draws any portion of the facilities;

II - the institution is legally allowed and operationally able to use the collateral in funding transactions, once the facilities have been drawn; and

III - there is no correlation between the probability of drawing the facilities and the market value of the collateral.

Paragraph 4. With respect to the credit card limit granted to customers, only the withdrawal limit must be considered as cash outflows for the purposes of the definitions in this article.

Paragraph 5. For the purposes of item I of the heading, the following entities must be considered:

I - fiduciary entities: legal entities authorized to manage rights and assets in the name and on behalf of third parties, including managers and asset managers, investment funds, investment clubs and pension funds, complementary pension entities and other collective investment vehicles;

II - beneficiaries entities: legal entities that receive or may be entitled to receive the benefits of the resources as a result of the law or any contracts, including wills, insurance policies, pension plans, annuities and trusts.

Section IX
Contingent Funding Obligations

Art. 27. The following items are considered cash outflows from contingent funding obligations:

I - 100% (one hundred percent) of the value of the assets received in securities borrowing agreements that have been sold outright or posted as collateral in operations maturing over thirty days, in which the maturity of the securities borrowing agreements are of less than thirty days or in which the beneficial owners have the right to withdraw the assets within thirty days without the institution's prior consent;

II - 100 % (one hundred percent) of the value of the assets received as collateral, including those received in collateral swap transactions, that have been sold outright or posted as collateral in operations maturing over thirty days, whose beneficial owners have the right to withdraw the assets within thirty days, without the institution's prior consent;

III - 2% (two percent) of the undrawn amount of credit and liquidity facilities unconditionally revocable;

IV - the greater of the two values consisting of the largest non-judicial guarantee provided, including sureties and endorsements, and 1% (one percent) of the total balance of these transactions, including judicial guarantees;

V - the greater of the two values consisting of the largest guarantee related to trade finance obligations and 5% (five percent) of the total balance of these transactions;

VI - 100% (one hundred percent) of the clients' short positions in which the assets sold or pledged as collateral, by the institution, are owned by a third party;

VII - the greater of the two values consisting of the total assets received by the institution in order to carry out market-making operations and the largest disbursement observed, in any thirty-day period over the last five years, related to market-making operations.

VIII - 100% (one hundred percent) of the cash outflows expected for the next thirty days due to the potential provision of financial support to unconsolidated entities.

IX - 1% (one percent) of the balances of judicial deposits.

X - 100% (one hundred percent) of the cash outflows expected for the next thirty days related to contractual or non-contractual contingent obligations not mentioned in item I to VIII.

Paragraph 1. The cash outflow referred to in item II of the heading must not include the collateral received in the operations defined in art. 31, item II.

Paragraph 2. Only the amount that can be disbursed within thirty days must be considered when determining the highest guarantee provided and the total balance of the transactions referred to in item IV.

Paragraph 3. The cash outflow referred to in item VIII must be calculated when there is the expectation that the institution will be the main liquidity provider when the entity is in liquidity stress.

Paragraph 4. The methodology to calculate the cash outflows referred to in item VIII and IX must be verifiable, and defined and applied consistently by the institution.

Section X
Other Cash Outflows

Art. 28. 100% (one hundred percent) of the value of other obligations with the possibility of settlement within thirty days not included in arts. 10 to 27 must be considered cash outflows.

Art. 29. The following items are not be considered as cash outflows for the purposes of calculating the LCR:

I - Revoked by Circular 3,841 of July 27, 2017.

II - the institution's own operating costs and expenses;

III - the institution's obligations related to linked operations carried out according to the provisions of Resolution 2,921 of January 17, 2002.

CHAPTER VII
DEFINITION AND COMPOSITION OF CASH INFLOWS

Art. 30. Total cash inflows are calculated multiplying the outstanding balances of various categories of receivables by weighting factors that represent expected inflows, taking into account a stress scenario for a thirty-day period.

Paragraph 1. For the purposes of the LCR, the only cash inflows that must be considered are those related to receivables that are fully performing and for which there is no expectation of default, by the counterparty, within thirty days.

Paragraph 2. Cash inflows are considered available at the latest possible date of payment, based on the contractual rights of the counterparties.

Section I
Secured Lending

Art. 31. The following items must be considered cash inflows related to secured lending:

I - a variable percentage of secured lending operations maturing within thirty days:

a) 0 % (zero percent) of the receivables, if the collateral is being considered as Level 1 HQLA in the calculation of the LCR, as defined in arts. 4 and 6;

b) 15% (fifteen percent) of the receivables, if the collateral is being considered as Level 2A HQLA in the calculation of the LCR, as defined in arts. 4 and 8;

c) 25% (twenty five percent) of the receivables, if the collateral is being considered as Level 2B HQLA in the calculation of the LCR, as defined in arts. 4 and 9, item II;

d) 50% (fifty percent) of the receivables, if the collateral is being considered as Level 2B HQLA in the calculation of the LCR, as defined in arts. 4 and 9, items I, III and IV;

e) 100% (one hundred percent) of the receivables, if the transaction is backed by any other type of asset not mentioned in items “a” to “d”;

II - 0% (zero percent) of the amount of secured lending transactions, including reverse repo transactions maturing within thirty days in which the asset has been sold outright or has been given as collateral in another transaction maturing over thirty days or that may be extended beyond the next thirty days.

Paragraph 1. The lending transactions referred to in item I of the heading are limited to reverse repurchase agreements, security borrowing, collateral swaps and equivalent transactions.

Paragraph 2. The transactions in which the underlying collateral is issued by the borrowing institution or an entity belonging to its prudential conglomerate must not be considered secured lending operations.

Paragraph 3. Collateral received from the transactions referred to in items I and II of the heading must be properly managed in order to assure that the institution is able to return the collateral whenever the counterparty decides not to renew the transaction.

Paragraph 4. If the lending transactions referred to in item I of the heading have been granted for the purpose of taking leveraged market positions, only 50% (fifty percent) of the

amounts resulting from the calculation performed in items “b” to “e” must be considered as cash inflows.

Paragraph 5. Reverse repo transactions maturing within thirty days must not be considered in the calculation of the LCR if the underlying asset has been posted as collateral in another transaction also maturing in the next thirty days.

Section II
Fully Performing Loans Transactions

Art. 32. Only payments related to loans and financing transactions that are fully performing and for which there is no expectation of default in the next thirty days can be considered as cash inflows, provided that:

I - credit portfolio overdue and expected to be paid within fourteen days are considered as fully performing and not expected to default in the next thirty days, given that the provisions for credit impairment are deducted from its gross value;

II - interest payments can be included as cash inflows; and

III - contingent inflows and pre-payment expectations cannot be considered as cash inflows.

Art. 33. The following items must be considered cash inflows, when arising from fully performing transactions maturing in the next thirty days:

I - 50% (fifty percent) of the amount of operations extended to retail customers;

II - 100% (one hundred percent) of the amount of operations extended to financial institutions and to central banks;

III - 50% (fifty percent) of the amount of operations extended to the other wholesale counterparties, including non-financial corporates, central governments, multilateral organizations and the MDEs referred to in art. 19, item V of Circular 3,644 of March 4, 2013, and PSEs;

IV - 0% (zero percent) of the amount of operations extended as earmarked credit that need to be redirected in the next thirty days;

V - 100% (one hundred percent) of the amount of operations extended as earmarked credit that do not need to be redirected in the next thirty days;

VI - 100% (one hundred percent) of the amount of the following operations not included in items I to V:

a) receivables from clients, related to onlending operations, in which the institution is an intermediary between the provider and the borrower of funds and retains the credit risk;

b) receivables from clients, related to trade finance operations;

c) receivables from clients, related to assigned credits in which the receivables are managed by the assignor institution.

Sole paragraph. Minimum contractual payments of principal, fee or interest, can be considered in the amounts referred to in items I to VI of the heading if due within thirty days and associated with loans with no specific maturity.

Section III
Deposits and Marketable Securities

Art. 34. 100% (one hundred percent) of the amount of the institution's deposits in other financial institutions or central banks, with the possibility of withdrawal within thirty days, must be considered cash inflows, with the exception of the cash inflows already considered in art. 37, paragraph 7.

Sole paragraph. The deposits mentioned in the heading include those that are held in correspondent banks and refer to funds raised for trade finance operations or funds received from customers related to trade finance operations.

Art. 35. The following items must be considered cash inflows related to marketable securities maturing within thirty days:

I - 100% (one hundred percent) of the amount, when the securities are not considered in the stock of HQLA and are not subordinated;

II - 75% (seventy-five percent) of the amount, when the securities are not considered in the stock of HQLA and are subordinated.

Art. 36. A variable percentage of the amount of receivables expected within thirty days, related to shares in investment funds, must be considered cash inflow, as follows:

I - 75% (seventy-five percent) of the amount, when the quota is subordinated; and

II - 100% (one hundred percent) of the amount, when the quota is not subordinated.

Paragraph 1. The cash inflows referred to in the heading are those related to the following payments expected within thirty days:

I - dividends, interest income and other proceeds;

II - recurring distributions; and

III - expected redemption of shares according to the investment fund's rules or the fund manager's practices.

Paragraph 2. The shares in investment funds referred to in the heading are those that are not consolidated in the institution's financial statements as provided by Resolution 4,280 of October 31, 2013.

Section IV
Derivatives Cash Inflows

Art. 37. 100% (one hundred percent) of the sum of expected net cash inflows over the next thirty days, related to derivatives transactions and calculated per counterparty, must be considered cash inflows.

Paragraph 1. For the transactions that are subject to daily adjustments, the expected inflows referred to in the heading will consist of the daily settlement value to be received, regardless of the maturity of the transaction.

Paragraph 2. For transactions that are not subject to daily adjustments, the expected inflows referred to in the heading must consider:

I - transactions maturing within thirty days, or those with the possibility of being settled in the next thirty days, in the case of options, if the institution has the right to exercise those options; and

II - the expected contractual cash flows for the next thirty days.

Paragraph 3. For the transactions referred to in paragraph 2, item I, the expected inflows referred to in the heading must consider the amount that would be receivable if the con- tracts were to be settled at the LCR calculation date.

Paragraph 4. For the transactions referred to in paragraph 2, item II, the expected inflows referred to in the heading must correspond to the contractual cash flows expected to be received during the next thirty days.

Paragraph 5. The calculation of the expected inflows referred to in the heading must assume that an option embedded in a derivative contract will always be exercised if the result is favorable to the holder of the option.

Paragraph 6. Regarding the estimation of the cash inflows resulting from transactions with the possibility of being settled within thirty days referred to in this article, the institution must:

I - deduct, from the expected inflows, the returning HQLA received as collateral, if they have been considered in the stock of HQLA, considering the applicable weighting factors set out in arts. 6 to 9; and

II - add to the expected inflows the returning HQLA posted as collateral, considering the applicable weighting factors set out in arts. 6 to 9.

Paragraph 7. If the collaterals mentioned in paragraph 6, items I and II, are demand or term deposits held at the counterparty, the amount to be deducted or added to the expected inflows referred to in paragraph 6 must correspond to 100% (one hundred percent) of the value of these collaterals.

Paragraph 8. For the purposes of paragraph 6, item II, the institution must be legally allowed and operationally able to re-use the received collateral in new funding transactions.

Paragraph 9. For the expected inflows referred to in this article, the net amount by counterparty can be used when a clearing or settlement agreement of obligations exists.

Section V
Other Cash Inflows

Art. 38. The following items must be considered as additional cash inflows:

I - a variable percentage of the value of the assets that will become unencumbered and eligible as HQLA in the next thirty days:

a) 100% (one hundred percent) of the market value of the securities that will become unencumbered, if those assets also meet the other eligibility requirements for Level 1 HQLA, as defined in art. 6;

b) 85% (eighty five percent) of the market value of the securities that will become unencumbered, if those assets also meet the other eligibility requirements for Level 2A HQLA, as defined in art. 8;

c) 75% (seventy five percent) of the market value of the securities that will become unencumbered, if those assets also meet the other eligibility requirements for Level 2B HQLA, as defined in art. 9, item II; and

d) 50% (fifty percent) of the market value of the securities that will become unencumbered, if those assets also meet the other eligibility requirements for Level 2B HQLA, as defined in art. 9, items I, III and IV;

II -100% (one hundred percent) of the expected value to be received from post-paid payment instruments over the next thirty days, considering:

a) as the expected inflow: the current confirmed balance of post-paid payment instruments to be received during the next thirty days multiplied by the lowest monthly percentage value of those bills received during the last twelve months, considering the total balance of issued invoices; and

b) the expected inflow mentioned in sub-item "a" may include receivables from purchases made in one or more installments, cash withdrawals, granted loans, revolving credits, payments of bills and their respective fees;

III - 100% (one hundred percent) of the following cash inflows related to credit portfolio purchases:

a) the amount to be received from the assignors, related to the payment of the installments of the acquired credit portfolios, when the installments remain under originators management; and

b) the amount to be received from the assignee bank due to credit assignments already contracted that will be settled within thirty days.

IV - Revoked by Circular 3,826 of January 26, 2017.

V - Revoked by Circular 3,762 of August 20, 2015.

Paragraph 1. The cash inflows considered in item I of the heading include:

I - the assets that the institution expects to receive during the next thirty days from col- lateral swap transactions already contracted that will be settled within thirty days;

II - the assets that the institution has delivered in collateral swap transactions that will be settled within thirty days;

III - the assets that the institution has to receive within thirty days from securities borrowing transactions already contracted that will be settled in the next thirty days;

IV - the assets that the institution has delivered in securities borrowing transactions that will be settled within thirty days, or that the institution has the right to withdraw in the next thirty days; and

V - the other assets and collateral pledged by the institution in which the underlying contracts will terminate within thirty days, or those assets and collateral that the institution has the right to withdraw in the next thirty days, excluding the assets and collateral already considered in:

a) art. 21;

b) art. 24, paragraph 6, item I;

c) art. 31, item II; and

d) art. 37, paragraph 6, item II.

Paragraph 2. When the institution's assets are rented, delivered in collateral swap trans- actions, or made available to customers for the purpose of entering into short positions, the cash inflows mentioned in item I of the heading and in paragraph 1, items II and IV, must receive a 0% (zero percent) weighting factor.

Paragraph 3. The assets referred to in item I of the heading and in paragraph 1, items II and IV, may not be included in the institution’s stock of HQLA at the LCR base calculation date.

Art. 39. The following items must not be considered as cash inflows:

I - operational deposits held at other financial institutions;

II - deposits of affiliated credit unions held at central credit unions;

III - credit facilities, liquidity facilities or any other contingent funding facilities held at other financial institutions;

IV - payments from revolving credit facilities, except those referred to in art. 38, item II;

V - payments of loans with no specific maturity, subject to the provisions of art. 31, sole paragraph;

VI - cash inflows related to non-financial revenues;

VII - contingent cash flows; and

VIII - payments related to linked operations carried out according to the provisions of Resolution 2,921 of January 17, 2002.

CHAPTER VIII
ADDITIONAL REQUIREMENTS

Art. 40. In case an asset considered as HQLA fails to meet the minimum requirements mentioned in arts. 4, 5, 6, 7, 8 or 9, the institution is permitted to keep such asset in its stock of liquid assets for an additional 30 days.

Art. 41. The institutions must have strategies and limits in place to prevent HQLA con- centration in certain instruments as well as in specific issuers, types of issuers, and currencies.

Art. 42. The concentration of cash inflows from wholesale counterparties must be monitored in order to ensure that there is no overreliance on cash inflows coming from a limited number of counterparties.

Art. 43. The institution's ability to meet its liquidity needs in each currency to which it is exposed must be assured, considering that:

I - the LCR must be calculated and monitored in each relevant currency;

II - the institution must maintain a stock of HQLA consistent with its liquidity needs in each relevant currency; and

III - possible currency mismatches between the institution's stock of HQLA and its

expected net cash outflows must be identified.

Sole paragraph. The institution must define and adopt consistent and verifiable criteria to rank each currency's relevance.

Art. 44. The liquidity risk exposure and the funding needs of each entity belonging to the same prudential conglomerate and of each foreign branch or subsidiary, as well as of the conglomerate as a whole, must be actively monitored and controlled taking into account the le- gal, regulatory and operational limits governing the transfer of liquid assets.

Art. 45. When calculating the LCR, no items must be double counted.

Art. 45-A. When determining its LCR, the institution may resort to estimates of certain parameters and values that are operationally complex to calculate on a daily basis, provided that those estimates are not expected to vary significantly in a short time periods so as to put at risk an adequate assessment of the institution's short term liquidity position, as measured by the LCR

Paragraph 1. The parameters and values referred to in the heading must be updated at least once a month or upon the occurrence of a relevant unexpected event.

Paragraph 2. The methodology employed in obtaining the estimates referred to in the heading must be based on consistent and verifiable criteria, and any relevant modification and information must be documented.

Paragraph 3. The use of the estimates mentioned in the heading must be reported to the Central Bank of Brazil in accordance with art. 50.

Art. 45-B. The Central Bank of Brazil may request adjustments in the manner in which an institution determines its LCR if the processes and methodologies employed by the institution are found to be inadequate.

Art. 45-C. In the calculation of the consolidated LCR, for subsidiaries or agencies of the prudential conglomerate located in foreign jurisdictions, which are members of the Basel Committee on Banking Supervision, it should be used, when existent, the retail funding definitions and the respective cash outflows established by the LCR regulation of this jurisdiction instead of the provisions of this Circular.

Art. 45-D. The institution must notify the Central Bank of Brazil immediately if it

expects not to comply with the minimum limits of the LCR established in art. 5 of Resolution 4401, of 2015.

CHAPTER IX
THE DISCLOSURE OF INFORMATION RELATED TO THE LCR

Art. 46. Revoked, as from January 1, 2020, by Circular 3,930 of February 14, 2019.

Art. 47. Revoked, as from January 1, 2020, by Circular 3,930 of February 14, 2019.

Art. 48. Revoked, as from January 1, 2020, by Circular 3,930 of February 14, 2019.

Art. 49. Revoked, as from January 1, 2020, by Circular 3,930 of February 14, 2019.

CHAPTER X
INFORMATION REPORTING

Art. 50. A report detailing the calculation of the LCR, following specific requirements, must be submitted to the Central Bank of Brazil.

Sole paragraph. The information used to calculate the LCR must be readily available to the Central Bank of Brazil for, at least, a twelve-month period.

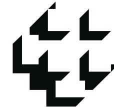
Art. 51. The director appointed by the institution, in accordance with art. 9 of Resolution 4,090 of May 24, 2012, is responsible for the information required by this Circular.

CHAPTER XI
OTHER PROVISIONS

Art. 52. This Circular enters into force on October 1, 2015.

Luiz Awazu Pereira da Silva
Deputy Governor for Regulation

Anthero de Moraes Meirelles
Deputy Governor for Supervision



Annex revoked, as from January 1, 2020, by Circular 3,930 of February 14, 2019.