### Republic of Panama Superintendency of Banks

RULE N°. 2-2018<sup>1</sup> (dated 23 January 2018)

"Whereby the provisions on liquidity risk management and the liquidity coverage ratio are established"

#### THE BOARD OF DIRECTORS

in use of its legal powers and,

### **WHEREAS:**

Due to the issuance of Decree Law 2 dated 22 February 2008, the Executive Branch re-edited Decree Law 9 dated 26 February 1998 and all its amendments as a consolidated text, and this text was approved by means of Executive Decree 52 dated 30 April 2008, hereinafter referred to as the Banking Law;

Pursuant to the provisions of paragraphs 1 and 2 of Article 5 of the Banking Law, safeguarding the soundness and efficiency of the banking system and strengthening and fostering favorable conditions for the development of the Republic of Panama as an international financial center are objectives of the Superintendency of Banks;

Pursuant to paragraph 5 of Article 11 of the Banking Law, establishing the administrative interpretation and scope of the legal provisions and regulations on banking matters is a technical duty of the Board of Directors;

Pursuant to paragraph 1 of Article 6 of the Banking Law, ensuring that the banks maintain sufficient liquidity and solvency ratios to discharge their obligations is one of the functions of the Superintendency;

According to the provisions of Article 72 of the Banking Law, the Superintendency may take into account and evaluate other risks to determine capital adequacy ratios;

Article 73 of the Banking Law provides that all general license and international license banks that are subject to the home supervision of the Superintendency of Banks must at all times maintain minimum liquid assets equivalent to a percentage of the total gross deposits in Panama or abroad that will be periodically set by the Superintendency of Banks;

In accordance with the provisions of paragraph 10 of Article 75 of the Banking Law, the Superintendency may determine other assets as part of the assets making up the banks' liquid assets portfolio;

During the financial crisis that began in 2007, many banks — despite having appropriate capital levels — faced difficulties because they did not manage their liquidity in a prudent manner. The crisis drove home the importance of liquidity to the proper functioning of financial markets and the banking sector;

In recent years, the Basel Committee on Banking Supervision has made key reforms to develop a more resilient banking sector, for which it drafted the Liquidity Coverage Ratio (LCR), whose objective is to promote the short-term resilience of the liquidity risk profile of banks;

For the Basel Committee, the short-term liquidity coverage ratio (LCR) ensures that banks will have an adequate fund of unencumbered high-quality liquid assets that can be converted easily and immediately in private markets into cash to meet their liquidity needs under a 30 calendar day liquidity stress scenario;

The Basel Committee has strengthened its liquidity framework by introducing minimum financial liquidity standards developing the Liquidity Coverage Ratio (LCR), to ensure that banks have

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<sup>&</sup>lt;sup>1</sup> Amended by Rule 4-2018 dated 3 April 2018.

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sufficient high-quality liquid funds to overcome a significant stress scenario lasting an entire month and designed as a key component of the supervisory approach on liquidity risk;

The Liquidity Coverage Ratio (LCR) will improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector into the real economy;

During its working sessions, the Board of Directors determined it necessary and advisable to provide a prudent risk management-based regulatory framework to establish a short-term liquidity coverage ratio pursuant to international regulatory standards.

### **RESOLVES:**

### CHAPTER I SCOPE AND DEFINITIONS

**ARTICLE 1. SCOPE.** The provisions of this Rule are applicable to:

- 1. State-owned banks;
- 2. General license banks: and
- 3. International license banks whose home supervisor is the Superintendency of Banks.

**ARTICLE 2. TERMS AND DEFINITIONS.** For the purposes of applying the provisions herein, the following terms will be understood as:

- 1. Intraday liquidity: Having the necessary funds to cover all transactions on any day and during all of the hours the bank is open for business;
- 2. Repo (Repurchase agreement): The sale of a financial asset with the seller's commitment to repurchase it at a future date, at a determined price higher than that of the sale;
- 3. Secured funding: In the context of this Rule, secured funding refers to repo financing. Any funding that is not part of the repo transaction is called unsecured funding.

### CHAPTER II LIQUIDITY RISK MANAGEMENT

ARTICLE 3. GENERAL PRINCIPLES OF LIQUIDITY RISK MANAGEMENT. Liquidity risk management principles aim to ensure, with a high level of trust, that a bank is equipped to meet its liquidity obligations, both intraday and during a major liquidity stress scenario affecting funding, whether originating in the bank itself or in the market. For such purposes, in addition to maintaining good corporate governance and sound liquidity risk management practices, the bank must ensure that it complies with the following requirements:

- 1. To maintain sufficient liquidity, composed of assets easily tradable in the market, putting it in a position to survive periods of liquidity stress;
- 2. To achieve a liquidity position matching the complexity of its on- and off-balance sheet operations, its assets and liabilities liquidity, the scale of financing gaps, the diversity of its business model and its funding strategy;
- To use sufficiently conservative assumptions on the possibility of trading the assets making up its liquidity position in the market and on its access to funding during stress scenarios;
- 4. To not allow competition-related stress to compromise the integrity of the bank's management, control functions and liquidity risk limitation systems, nor its liquidity position.

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**ARTICLE 4. DEVELOPING A LIQUIDITY RISK MANAGEMENT STRATEGY.** Top management is responsible for developing and applying a liquidity risk management strategy in accordance with the bank's risk tolerance. This strategy should include specific policies for liquidity management, such as:

- 1. The composition and expiration of assets and liabilities;
- 2. The diversity and stability of funding sources;
- 3. The liquidity management approach in different currencies, countries, business lines and legal entities;
- 4. The intraday liquidity management approach;
- 5. The assumptions on asset liquidity and their ability to be traded in the market;
- 6. The liquidity needs under normal conditions and the repercussions on liquidity during liquidity stress scenarios, whether the origin is internal, systemic or both.

The board of directors of the bank will be responsible for approving the strategy, policies and key practices and reviewing them at least once a year. Similarly, the board of directors of the bank must ensure that top management implements the strategy through policies, regulations and procedures, as well as including the information and control systems.

**ARTICLE 5. A STRATEGY MATCHING THE BANK'S NATURE AND COMPLEXITY.** The liquidity strategy must match the nature, scale and complexity of the bank's operations. When designing this strategy, the bank must take into consideration the legal structures, its main business lines, the scale and diversity of markets, products and jurisdictions where it has operations and the regulatory framework of the home and host countries.

ARTICLE 6. STRUCTURE, RESPONSIBILITY AND CONTROLS. Top management must determine the structure, responsibilities and controls for liquidity risk management and must monitor the liquidity positions of all legal entities, branch offices and affiliated entities within the jurisdictions where the bank has operations, and to clearly include these elements in the bank's liquidity policies. The degree of centralization or decentralization of the bank's liquidity risk management must take into account any legal, regulatory or operational restriction to the transfer of funds.

For bank holding companies whose structure includes banking and nonbanking entities, the group's top management must be aware of the different liquidity risk characteristics of the entity itself, both related to the business nature and the regulatory context.

The group's top management must be able to continuously monitor the liquidity risks of the whole group and each of its entities, to adopt processes ensuring that the group's top management actively monitors and rapidly responds to all of the important events that happen within the group, informing the board of directors in a timely manner, when applicable.

**ARTICLE 7. COMMUNICATING THE STRATEGY.** Top management must communicate the liquidity strategy, the basic policies for applying the strategy and the organizational structure for liquidity risk management to the entire organization.

Top management must make sure that all business units performing activities affecting liquidity are aware of the liquidity strategy and operate within the framework of approved policies, regulations, procedures, limits and controls.

The people responsible for liquidity risk management must maintain a close communication with those monitoring market conditions and with other individuals having access to critical information, such as the credit risk managers.

**ARTICLE 8. INTERNAL CONTROLS.** Top management must make sure that the bank has appropriate internal controls to guarantee the integrity of the liquidity risk management process and that the people responsible for applying internal controls are competent and have the proper training and operational independence.

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Top management must ensure the timely application of necessary changes when these are significant and affect the efficiency of controls, or when revisions or improvements to internal controls are necessary.

Internal auditing must examine the application and efficiency of the adopted framework for controlling liquidity risk frequently.

**ARTICLE 9. MONITORING MARKET TRENDS.** Top management must closely monitor market trends and potential events that might pose substantial, unprecedented and complex problems to liquidity risk management, to introduce changes to the liquidity strategy in a timely manner. Additionally, top management must comply with the following tasks:

- To define procedures and specific approvals for permitting exceptions to the policies and limits, including reinforcement procedures and follow-up measures to be adopted after accepting determined exceptions to limits;
- 2. To ensure the effectiveness and adequacy of the bank's stress tests, contingent funding plans and the portfolio of liquid assets that define the liquidity position;

The board of directors must review periodic reports on the bank's liquidity position and be immediately informed of new or increasing liquidity issues including, among others:

- 1. Increasing funding costs and greater concentration thereof;
- 2. Increasing liquidity deficit;
- 3. Exhausting alternative liquidity funds;
- 4. Significant and/or persistent cases exceeding limits;
- 5. A significant reduction in unencumbered high-quality liquid assets;
- 6. Changes in external market conditions that tend to indicate future difficulties.

The board of directors must ensure that top management adopts corrective measures to remedy these problems in a timely manner.

**ARTICLE 10. LIQUIDITY AND BUSINESS MODEL.** The bank must define and identify the liquidity risk to which it is exposed in all of its legal structures, branch offices and affiliated entities within the jurisdictions in which it has operations. The bank's liquidity needs and available sources of funding to meet the former significantly rely on its business model and product portfolio, its balance structure and the cash flow profile resulting from its on- and off-balance obligations.

ARTICLE 11. FUNDING LIQUIDITY RISK AND MARKET LIQUIDITY RISK. The bank must consider the interaction between funding liquidity risk and market liquidity risk exposures. The bank allocating liquidity in capital markets must be aware that these sources might be more volatile than the traditional retail deposits. The bank must not assume that financial markets will function perfectly and retain their liquidity, given that assets and funding markets can disappear in stress scenarios. The lack of market liquidity may put the bank in a complicated position in obtaining funds by the sales of assets, increasing the need for maintaining fund liquidity.

**ARTICLE 12. PRUDENT VALUATION.** The bank must make sure that all assets are valued in a prudent manner, pursuant to the financial information and supervisory standards.

The bank's risk management framework must include the possibility of a deterioration of value in stressed market scenarios when evaluating the viability of selling assets in stressed conditions and its impact in the entity's liquidity position.

**ARTICLE 13. LIQUIDITY RISK MEASUREMENT.** Measuring the bank's liquidity implies comparing inflow and outflow of cash and evaluating its assets liquidity in order to detect the possibility of future net liquidity deficits. The bank must be able to measure and project future cash flows deriving from assets, liabilities, off-balance obligations and derivatives for a series of temporary horizons, both in normal conditions and stress scenarios, including high stress scenarios.

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For temporary horizons where it is necessary to identify, measure, monitor and control liquidity risk, the bank must ensure that its liquidity risk management practices include and cover a series of factors, including:

- 1. The vulnerabilities to intraday changes in liquidity needs and funding capacity;
- 2. The daily liquidity needs and the daily funding capacity in the short- and medium-term up to one year;
- 3. The liquidity needs beyond one year;
- 4. The vulnerabilities to events, activities and strategies that can significantly alter the internal capacity to generate cash flow;

The bank must identify, measure, monitor and control its liquidity risk derived from:

- Future assets and liabilities cash flows;
- 2. The sources of contingent liquidity demand and its relevant triggers associated with off-balance sheet positions;
- 3. The currencies in which the bank has operations;
- 4. Corresponding, custodial and settlement activities.

**ARTICLE 14. RELATIONSHIP OF LIQUIDITY RISK TO OTHER RISKS.** The bank must know and consider all current interactions between liquidity risk and other types of risks to which it is exposed that can affect the bank's risk profile. The liquidity risk is usually the result of the actual or presumed existence of deficiencies, failures or problems in managing other types of risk.

The bank must identify the circumstances that might affect the perception that the market and the general public maintain on its soundness, especially in the wholesale markets. There is a close relationship between credit and liquidity risk and large increases in bank delinquency or the lowering of the credit rating from rating agencies, which can be translated into highly stressed situations for the bank's funding.

**ARTICLE 15. CASH FLOW PREDICTION.** For the purpose of estimating cash flows to which the bank is exposed, the bank must take the following actions:

- Have a sound liquidity risk management framework that provides future dynamic predictions of cash flow and includes an analysis of possible scenarios with sufficient disaggregation levels on the potential reactions of the main counterparties to changes in conditions;
- 2. Formulate realistic assumptions on the future short- and long-term liquidity needs showing the complexity of business, products and trading markets;
- 3. Analyze the quality of assets that may be used as collateral, in order to evaluate their potential support in obtaining secured funding in stress scenarios;
- 4. To try to manage the temporary profile of cash inflow in connection with known cash outflow in order to have an appropriate matching of deadlines in current status and fund application.

When estimating the cash flow resulting from liabilities, the bank must evaluate:

- 1. The "endurance" of funding sources, i.e., its tendency to not quickly exhaust itself under stressed conditions:
- 2. For important wholesale suppliers of secured and unsecured funds, the possibility of renewing the lines of funding and the potential maintenance of the fund supplier's behavior in stressed conditions must be evaluated, taking into consideration both the possibility of disappearing secured (repos) and unsecured funding in stress scenarios;

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- 3. For secured funding with a one-day deadline, automatic renewal must not be supposed;
- 4. Evaluate the possibility of financial assistance through term funding facilities and the circumstances in which they could be collected;
- 5. Consider factors influencing the "endurance" of retail deposits, such as volume, sensitivity to interest rate, geographic location of depositors and allocation channel.

ARTICLE 16. CASH FLOW WITH OFF-BALANCE SHEET SOURCES. The bank must identify, measure, monitor and control possible cash flow from irrevocable off-balance sheet obligations and other contingent liabilities. For that, the bank must make available a sound projection framework of the potential results of activating previously inactive obligations, considering the nature of the obligation, the solvency of the counterparty and the exposures to economic sectors and geographic areas, considering counterparties of the same sectors and areas might see each other simultaneously affected by the stress.

**ARTICLE 17. POSITIONS IN FOREIGN CURRENCY.** For the evaluation of liquidity risk in foreign currency, the bank must comply with the following:

- Evaluate the added liquidity requirements in the foreign currency and determine the collateral exposure for acceptable currencies;
- 2. Perform a separate analysis of the bank's strategy for each currency in which it has a significant stake, including the potential restrictions in stress scenarios. The scale of collateral exposure for the currency must take into account:
  - a. The bank's capacity to capture funds in currency markets;
  - b. The ability to acquire financial terms backed by foreign currency in one's own national market;
  - c. The ability to transfer liquidity surpluses of one currency to another, as well as between jurisdictions and legal entities;
  - d. The possible convertibility scenarios for currencies in which the bank has operations, including the possibility of deterioration or total closure of currency swaps markets for certain currency pairs.
- Understand and be capable of managing exposures coming from using deposits and short-term lines of credit denominated in a foreign currency to fund assets in the national currency, as well as those resulting from funding assets in foreign currency with national currency;
- Take into account sudden risk fluctuations in exchange or market liquidity rates, or both, given their potential to sharply expand the liquidity gaps and alter the efficiency of currency coverage and coverage strategies;
- 5. Evaluate the possibility of losing access to currency markets, as well as the possible convertibility of currencies in which the bank trades.

If the bank has significant exposures to liquidity risk in a given currency, the bank must negotiate a backup liquidity terms in that currency or develop a contingency strategy.

**ARTICLE 18. LIQUIDITY RISK MEASURING TOOLS.** The bank must use a wide range of measuring tools or indicators, considering that no indicator can, by itself, quantify the liquidity risk as a whole. To have a prospective view of the bank's exposures to liquidity risk, the bank must use indicators evaluating the structure of the balance and others projecting the cash flows and future liquidity positions, taking into consideration the off-balance sheet risks, which must include existing vulnerabilities for diverse temporary horizons both in normal business conditions and stress scenarios.

Under normal business conditions, the prospective measures must identify the needs that could be derived from the current relationship between estimated cash outflows and current funding sources.

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Under stress scenarios, the prospective measures must allow identifying liquidity gaps for various horizons and at the same time be the basis for establishing limits on liquidity risks and for providing early warning signs.

The bank's top management must adjust liquidity risk measurement and analysis to the entity's business model, complexity and risk profile. For these purposes, top management must ensure that:

- 1. Measurement and analysis are comprehensive, to include repercussions on the cash flow and liquidity of all assets, liabilities, relevant off-balance sheet positions and other bank activities;
- 2. The analysis is prospective, ensuring recognition of potential future funding gaps in such a way that the bank can evaluate its exposure to those risks and identify liquidity sources that extenuate potential risks.

During the regular performance of measuring, monitoring and analyzing the origin and application of funds, the bank must estimate its cash flow over time in a series of alternative scenarios. These pro forma cash flow statements are the key instrument for proper liquidity risk management, and are used to conduct an analysis of cash outflows or liquidity deficits that should be based on assumptions on the evolution of future assets, liabilities and off-balance sheet items that can be used for the calculation of net liquidity surpluses or deficits during the temporary horizon covered.

Measurement must consider increasing periods of time to identify estimated and contingent flows, based on the underlying assumptions associated with the potential changes in assets and liabilities cash flows. Thus, the bank must make sure that its assumptions are reasonable, appropriate, fully documented and subjected to regular reviews and approvals.

Assumptions on the duration of time deposits and assets, liabilities and off-balance sheet items with uncertain cash flows and on the availability of alternative sources of funding in liquidity stress scenarios, are of great importance and the assumptions on the market liquidity for those positions must be reviewed based on the market conditions or the bank's own situation.

**ARTICLE 19. LIQUIDITY RISK LIMITATIONS.** The bank must establish liquidity risk limits, in order to control its exposure and vulnerability to liquidity risk and to periodically check these limits and the relevant reinforcement procedures.

Related to the establishment of limits, the bank must ensure that they meet the following:

- 1. The limits are adapted to the business, taking into consideration the location, the complexity of their activities and the nature of the products, currencies and markets where the bank has operations;
- 2. Under normal conditions, the limits must be used in the ordinary course of business within each business line and legal entity, as well as bank-wide;
- 3. Include measures to ensure that the bank can keep operating under market stress conditions, the bank's own stress conditions and a combination of both.

ARTICLE 20. EARLY WARNING SIGNS. In addition to the responsibility top management and the bank's staff have to use sound judgment to identify and manage underlying risk factors, the bank must design a set of indicators that will support this process, aimed at recognizing the incidence of additional risks or vulnerabilities to its liquidity position or possible financing requirements.

The early warning indicators must identify any negative tendencies and trigger the evaluation and possible response of senior management, in order to reduce the bank's exposure to emerging risk. These indicators can be either qualitative or quantitative, and may include, among others, the following:

- 1. Rapid increase in assets, especially when funded through liabilities that could be volatile;
- 2. Increasing asset or liability concentrations;

- 3. Increases in collateral exposures in currency;
- 4. Reduction of the average weighted maturity for liabilities;
- 5. Reiterated position incidents reaching or surpassing internal or regulatory limits;
- 6. Negative trends or increases in risks related to a determined line of products, such as increasing delinquency;
- 7. Significant deterioration of the benefits, the quality of assets and the bank's overall financial condition:
- 8. Dissemination of negative news about the bank;
- 9. Lowered credit rating;
- 10. Share prices dropping or increasing indebtedness costs;
- 11. Increases in debt differentials or credit default swap premiums;
- 12. Increasing wholesaling or retailing costs;
- 13. Counterparties that begin to request or demand additional collateral to cover their credit exposure or that avoid making new transactions;
- 14. Correspondent banks eliminating or reducing their lines of credit;
- 15. Increasing withdrawals of retail deposits;
- 16. Increasing advanced amortization of certificates of deposits;
- 17. Difficulties in accessing long-term funding;
- 18. Difficulties in placing short-term liabilities.

**ARTICLE 21. INFORMATION SYSTEM.** The bank must have a reliable information system for risk management, designed to facilitate timely and prospective information on the bank's liquidity position to the board of directors, top management and other suitable staff.

The bank must ensure that its information system has the following components:

- 1. The capacity to calculate liquidity position in all currencies in which the bank has operations, including the affiliated entities/branch offices in all of the jurisdictions where the bank has a presence, as well as in the banking group as a whole;
- 2. The capacity to include all liquidity risk sources, as well as those made by new activities;
- 3. The capacity to offer frequent, detailed information during stress scenarios.

To efficiently manage and monitor its net funding needs, the bank must be able to calculate intraday liquidity positions, with greater accuracy when the projections include the nearest time horizons and with less accuracy when the projections are more distant. The information management system must be used in the daily liquidity risk management to monitor compliance with the policies, procedures and limits set up by the bank.

Top management must agree to a set of information criteria to facilitate liquidity risk monitoring, specifying the scope, form and frequency of this notification to the board of directors, the Assets and Liabilities Committee and the parties responsible for reporting. In addition, top management must compare current liquidity risk exposures to the established limits, in order to identify any emerging stress and moderate any overrun of the limits, which must be notified.

ARTICLE 22. DIVERSIFICATION OF FUNDING SOURCES. The bank must diversify the founding sources available in the short, medium and long term. The purpose of diversification

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must be part of the medium- to long-term funding plans and must be consistent with the budgetary and business planning processes.

The bank must ensure that funding plans include existing correlations between funding sources and market conditions, and that intended diversification includes limits by counterparty, secured and unsecured market funding, type of instrument, securitization instrument, currency and geographic market.

As a general rule, banks must limit their concentration in a determined funding source or expiration term when managing liquidity and must also pay attention when their reliance on wholesale funding increases. Consequently, banks must make sure that their wholesale funding sources are sufficiently diversified so as to maintain a timely availability of funds at appropriate expiration terms and at reasonable costs.

In the event a bank has operations with many currencies, the bank must have access to liquidity sources for each of the currencies because banks are not always able to easily transfer liquidity from one currency to another.

Top management must be aware of the composition, characteristics and diversification of the bank's assets and funding sources. Similarly, the bank must regularly examine its funding strategy based on internal or external environmental changes.

**ARTICLE 23. INTRADAY LIQUIDITY MANAGEMENT.** The bank must bear in mind that intraday liquidity management is a key element to the bank's overall liquidity management and, at the same time, it is a key factor when applying other long-term properties to that strategy. Besides, the bank must bear in mind that effective liquidity management will allow it to honor its payment obligations at the right time without affecting its own or a third party's liquidity position.

For these purposes, the bank, when managing its intraday liquidity, must establish the objectives that will permit it to:

- 1. Identify and give priority to the obligations with a specific temporary limit and to other crucial obligations, in order to honor them at the planned time;
- 2. Settle other less critical obligations as soon as possible.

In addition, the bank must consider the way its liquidity risk profile changes throughout the day as payments are sent and received and new contractual obligations are formalized, including risks related to positions that usually are settled at the end of the day.

ARTICLE 24. OPERATING ASPECTS OF INTRADAY LIQUIDITY MANAGEMENT. When managing intraday liquidity, banks must comply with the following operating aspects:

- To be capable, daily, of measuring the expected gross liquidity inflows and outflows for that day;
- 2. To anticipate the temporary intraday profile for these flows to the extent possible and to predict the range of variation of the potential net liquidity deficits that could arise at different times of the day. To confront these difficulties, the bank must meet the following:
  - a. To understand the regulations for all the payment and settlement systems in which it participates;
  - b. To identify the main counterparties, correspondents and depositaries acting as gross liquidity inflow and outflow sources;
  - c. To identify the times, days and key circumstances in which liquidity flows and potential intraday credit needs could be especially high;
  - d. To understand the business requirements underlying the temporary liquidity flow profile and the intraday credit needs for the internal and main customer business lines. To facilitate this process, the bank must request its main customers, including its new clientele, provide forecasts for their own payment traffic.

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- 3. To be able to monitor intraday liquidity positions, correlating them to expected operations and available resources (balances, remaining intraday credit capacity and collateral available), to permit the bank to recognize when to obtain additional intraday liquidity or restrict liquidity outflow in order to honor critical payments. In addition, it will permit the bank to effectively allocate intraday liquidity between the entity's own needs and its customer banks and companies. Similarly, it will facilitate a rapid response to unexpected payments and an adjustment in its one-day funding positions;
- 4. To be able to manage and move collateral when necessary to obtain intraday funding positions;
- 5. To make sufficient collateral available to receive the necessary intraday liquidity volume to meet its intraday objectives;
- 6. To implement operating procedures to pledge or deliver the collateral to correspondents, depositaries and counterparties;
- 7. To be aware of the necessary time required to move different modalities of collateral, including those held in cross-border jurisdictions;
- 8. To have a sound capacity for managing the profile of its temporary liquidity outflow consistent with its intraday objectives;
- 9. To be able to manage the liquidity outflows resulting from payments made by its main customers and, if granting intraday credit to its clientele, that the credit-granting procedures permit timely decision-making, given that internal coordination among the different business lines is important in achieving effective liquidity outflow control;
- 10. To be prepared to face unexpected disruptions in intraday liquidity flows;
- 11. To ensure that the bank's stress-testing programs and contingency funding plans show intraday considerations pursuant to liquidity management standards;
- 12. To be aware of the volume and temporary profile of liquidity needs that could arise as a result of compensation failures in the payment and settlement systems in which the bank has direct participation;
- 13. To bear in mind that the existence of solid procedures for operating risk management and business continuity are essential for the bank's intraday liquidity management.

**ARTICLE 25. LIQUIDITY RISK STRESS-TESTING.** Stress-testing must permit the bank to analyze the impact of stress scenarios on the liquidity position of the consolidated banking group, the different entities and the business lines that belong to it, as well as to analyze the impact of these scenarios for the different temporary horizons, including intraday.

The scope and frequency of tests must be consistent with the bank's size and liquidity risk exposure, as well as the entity's relative importance to the financial system in which it has operations.

For these purposes, regardless of its organizational structure and the degree of liquidity risk management centralization, the bank must know the potential source of risk and evaluate the need for additional testing for determined entities of the group (i.e., affiliates and branch offices) that are exposed to substantial liquidity risk.

Banks must be able to increase the frequency of tests under special circumstances, such as volatility in markets or upon supervisor's request.

Top management will actively take part in the stress-testing program and must require taking into consideration demanding and rigorous stress scenarios, even in periods of abundant liquidity.

**ARTICLE 26. STRESS-TESTING SCENARIO.** The bank must ensure that the design of stress scenarios is consistent with the nature of the bank's business, operations and vulnerabilities, such that the scenarios include the major funding liquidity and market liquidity risks to which the bank is exposed, including the risks related to its business operations, products and funding sources.

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The scenarios the bank includes must permit it to assess the potential adverse impact of these factors on its liquidity position.

While conducting the stress-testing, the bank must cover short- and longer-term scenarios, both internal and market-wide, including:

- 1. The simultaneous exhaustion of liquidity in various markets that were very liquid before;
- 2. The existence of strong restrictions to secured and unsecured funding;
- 3. Limitations to currency convertibility and severe operating or settlement process disruption affecting one or more clearance or settlement systems;
- 4. An analysis of the potential effects of severe stress scenarios, regardless of the apparent soundness of the existing liquidity situation.

The bank must especially take into account the existing link between a reduction in market liquidity and funds liquidity restrictions. During stress-testing of its liquidity position, the bank must also consider the results and conclusions obtained from the stress-testing conducted for other risk modalities and include potential interactions with these other risks.

The bank must recognize that stress events may produce liquidity needs in various currencies and in many payment and settlement systems simultaneously and at a critical moment, which could derive from operations of the entity itself, its customer banks and companies and/or the specific duties the bank may perform in a determined settlement system.

Stress-testing must holistically show the necessary time frame to complete the settlement cycles of the assets that would be sold and the precise time to transfer liquidity among jurisdictions. Besides, if the bank relies on liquidity outflows coming from one system to honor its obligations in another, it must consider the risk that disruptions in operations or in the settlement processes could prevent or delay the expected flows among systems.

The bank must adopt a conservative attitude when setting up the stress-testing assumptions. With regard to the type and seriousness of the scenario, the bank must consider the advisability of using a series of assumptions. The bank must come up with a set of assumptions adapted to its business. They could include the following items, which are illustrative, but not all-inclusive:

- 1. The absence of market liquidity and the erosion of liquid asset value;
- 2. The disappearance of retail funding;
- 3. The unavailability of secured and unsecured wholesale funding sources;
- 4. The correlation between funding markets or the effectiveness of diversification of the different funding sources;
- 5. The requirement to provide additional collateral;
- 6. Funding expiration terms;
- 7. Contingent obligations and more specifically the potential disbursement of committed lines granted to third parties or to the bank's affiliated entities, branch offices or headquarters;
- 8. The liquidity absorbed by off balance sheet instruments and operations, including funding through financial structures;
- 9. The availability of contingent lines granted to the bank;
- 10. The liquidity outflows related to products and/or complex transactions;
- 11. The impact induced by a review of credit ratings;
- Convertibility and the access to currency markets;

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- 13. The capacity to transfer liquidity among entities, sectors and jurisdictions, taking into account legal, regulatory, operational and time zone restrictions and limitations;
- 14. The access to the central bank's facilities when the bank has operations in a centralized banking jurisdiction;
- 15. The bank's operational capacity to transform assets through outright sale or repo;
- 16. The bank's remedial actions and the availability of necessary documentation and the operational knowledge and experience to adopt them, bearing in mind the potential effect of their adoption on its reputation;
- 17. The estimates on the future growth of the balance sheet.

**ARTICLE 27. CONTINGENCY FUNDING PLAN.** The bank must implement a contingency funding plan (CFP) that will cover the compilation of policies, regulations, procedures and action plans to respond to severe disruptions of the bank's capacity to fund all or part of its operations in a timely manner and at a reasonable cost.

The contingency funding plan (CFP) must be consistent with the bank's complexity, risk profile and scale of operations, as well as its role in the financial systems in which it has operations. This contingency funding plan must contain:

- A clear description of a diversified set of potential contingent funding measures that are viable, easy to make and flexible, oriented towards maintaining liquidity and eliminating treasury deficits under different adverse situations;
- 2. Identification of the potentially available contingent funding sources and the volume of funds that the bank believes could be available from these sources;
- 3. Clear reinforcement and prioritization procedures describing when and how any of the measures could and should be activated, as well as the necessary time period for obtaining additional funds from each of the contingent sources;
- 4. A very flexible framework that permits the bank to react rapidly in very diverse situations.

The bank must ensure that the contingency funding plan (CFP) design, plans and procedures implemented are closely connected with the continuous liquidity risk analysis process of the bank and with the results of the scenarios and assumptions used in stress-testing. To this end, the plan must be operative for a series of different temporary horizons, including intraday.

**ARTICLE 28. LIQUIDITY RISK MANAGEMENT ACTION PLAN.** Any bank subject to this Rule shall prepare a Liquidity Risk Management Action Plan that translates the previous general principles into policies, regulations and procedures consistent with its business model. This plan must include the contingency funding plan (CFP).

The bank will maintain the action plan duly documented and will advise the Superintendency of Banks.

**ARTICLE 29. BANKING GROUPS.** The company holding the banking shares of banking groups whose home supervisor is the Superintendency of Banks must ensure it manages the global liquidity risk.

The Superintendency shall have access to information that permits it to evaluate the banking group's compliance with liquidity risk management.

### CHAPTER III SHORT-TERM LIQUIDITY COVERAGE RATIO

**ARTICLE 30. SHORT-TERM LIQUIDITY COVERAGE RATIO.** The short-term liquidity coverage ratio (LCR) is defined by the ratio of two quantities. The first quantity is the high-quality liquid asset

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fund and the second one is the 30-day total net cash outflow, with the ratio defined by the expression:

LCR = High-quality liquid asset funds

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Total net cash outflows over the next 30 calendar days

The entities identified in Article 1 must comply at all times with the short-term liquidity coverage ratio requirement with a minimum LCR of 100% or 50% as provided for in Article 40 below.

**ARTICLE 31. HIGH-QUALITY LIQUID ASSET FUND.** The high-quality liquid asset fund will be comprised of three levels: Level 1, Level 2A and Level 2B. The characteristics of the assets of each of level are defined below:

#### Characteristics of the Level 1 assets:

- Coins and banknotes:
- Demand deposits or term deposits with an expiration date of no more than 30 calendar days in the United States Federal Reserve Banks, the Bank for International Settlements or any other finance entity holding similar characteristics authorized by the Superintendency of Banks;
- 3. Marketable securities representing claims on or guaranteed by sovereigns, central banks, public sector entities, the Bank for International Settlements, the European Central Bank and European Community, the International Monetary Fund (IMF), the International Bank for Reconstruction and Development (IBRD), the United States Agency for International Development, the International Finance Corporation (IFC), the Inter-American Development Bank (IADB), the European Investment Bank (EIB), the Asian Development Bank (ADB), the African Development Bank (ADB), International Fund for Agricultural Development (IFAD), the Andean Development Corporation (CAF), and any other multilateral development bank approved by the Superintendency of Banks and satisfying all of the following conditions:
  - a. Assigned an international credit rating of between AAA and AA-;
  - b. Traded in active repo or cash markets; operations having a low level of concentration;
  - c. Have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed financial conditions;
  - d. Not an obligation of a financial institution (except for the aforementioned institutions) or any entity belonging to a banking group. Even the securities issued with public approval by a financial institution are not accepted in the fund.
- 4. Marketable securities issued by the Panamanian state.

### **Characteristics of the Level 2A assets:**

- 1. Marketable securities representing claims on or guaranteed by sovereigns, central banks, public sector entities, or the entities mentioned in paragraph 3 of Level 1 herein, when satisfying all of the following conditions:
  - a. Assigned an international credit rating of between A+ and A-;
  - b. Traded in active repo or cash markets; operations having a low level of concentration:
  - c. Have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions. Not an obligation of a financial institution or any entity belonging to a banking group;
- 2. Corporate debt securities (including commercial papers):

- a. Not issued by a financial institution or any entity belonging to a banking group;
- b. Assigned an international credit rating of at least AA-;
- c. Traded in active repo or cash markets; operations having a low level of concentration;
- d. Have a proven record as a reliable source of liquidity in the markets (repo or cash) even during stressed market conditions.
- 3. Demand deposits, as well as term deposits with an expiration within 30 calendar days, held by Banco Nacional de Panamá, as long as they are unencumbered and not part of settlement operations.

### Characteristics of the Level 2B assets:

Three types of assets are included in this level: i) securitization bonds; ii) corporate debt securities; and iii) common equity shares, when satisfying all of the following conditions:

- 1. Residential mortgage backed securities (RMBS) that satisfy the following conditions:
  - a. Not issued by, nor have the underlying assets been originated by the bank itself or any member of its banking group;
  - b. Have an international credit rating of AA or higher;
  - c. Traded in active repo or cash markets; operations having a low level of concentration;
  - d. Have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions;
  - e. The underlying asset pool is restricted to residential mortgages and cannot contain structured products;
  - f. The underlying mortgages are full recourse personal loans (i.e. in the case of foreclosure, the mortgage owner remains liable for any shortfall between sales proceeds from the property and the value of the mortgage);
  - g. Have a maximum loan-to-value ratio (LTV) of 80% on average at issuance;
  - h. The securitizations are subject to "risk retention" regulations that require issuers to retain an interest in the assets they securitize;
- 2. Corporate debt securities (including commercial papers) that satisfy all of the following conditions:
  - a. Not issued by a financial institution or any member of its banking group;
  - b. Assigned an international credit rating of BBB- or higher;
  - c. Traded in active repo or cash markets; operations having a low level of concentration;
  - d. Have a proven record as a reliable source of liquidity in the markets (repo or cash) even during stressed market conditions.
- 3. Common equity shares that satisfy all of the following conditions:
  - a. Not issued by a financial institution or any member of its banking group;
  - b. Exchange traded and centrally cleared;

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- c. A constituent of the major stock index in the home jurisdiction or where the liquidity risk is taken, as determined by the supervisor in the jurisdiction where the index is located:
- d. Denominated in the domestic currency of a bank's home jurisdiction or in the currency of the jurisdiction where the bank's liquidity risk is taken;
- e. Traded in active repo or cash markets; operations having a low level of concentration;
- f. Have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions.

ARTICLE 32. HAIRCUTS APPLICABLE TO LEVEL 1, 2A AND 2B ASSETS. To calculate the high-quality liquid asset fund, the bank must apply the asset weighting coefficient in the following table:

Types of assets	Weighting ratio			
Level 1 assets	100%			
Level 2A assets	85%			
Level 2B assets				
Securitizations bonds	75%			
Corporate debt securities	50%			
Common equity shares	50%			

**ARTICLE 33. CALCULATION OF THE HIGH-QUALITY LIQUID ASSET FUND.** The high-quality liquid asset fund is calculated by adding the assets according to level and multiplied by the weighting ratios in the table in Article 32.

The amount of Level 2A assets, once the weighting ratio is applied, cannot exceed 40% of the high-quality liquid asset fund, and the amount of Level 2B assets, once the weighting ratios are applied, cannot exceed 15% of the high-quality liquid asset fund. The sum of Level 2A and 2B assets, once the weighting ratios are applied, cannot exceed 40% of the high-quality liquid asset fund.

**ARTICLE 34. 30-DAY NET CASH OUTFLOW.** Thirty-day net cash outflow that must be considered for the short-term liquidity coverage ratio is defined as follows:

Total net cash outflow is the difference of two quantities. The first is the total cash outflow and the second is the result of deducting the total cash inflow or 75% of the total cash outflow, whichever is the lesser.

### Cash outflow:

Total cash outflow is the sum of the following items:

- 1. The amount of contractual interest payable in the 30-day period;
- 2. Ten percent (10%) of retail (personal) demand deposits (including checking and savings accounts);
- 3. Ten percent (10%) of retail (personal) term deposits with a residual maturity of 30 days or less:
- 4. Ten percent (10%) of demand deposits from legal entities not included in paragraphs 7 and 14 (including checking and savings accounts);
- 5. Twenty percent (20%) of term deposits with a residual maturity of 30 days or less from legal entities not included in paragraphs 7 and 14;

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- 6. Ten percent (10%) of retail (personal) term deposits with a residual maturity of more than 30 days but including an advance cancellation clause, applicable during the 30-day period, with no penalties or with penalties less than the interest avoided by the depositor due to early cancellation;
- 7. Forty percent (40%) of all types of unsecured funding including demand deposits and term deposits with a residual maturity of 30 days or less, and received from sovereigns, multilateral development banks, public entities and private companies not included in paragraph 5;
- 8. Twenty-five percent (25%) of demand deposits and term deposits with a residual maturity of 30 days or less, resulting from clearing, custodial and treasury management activities;
- 9. Zero percent (0%) of secured funding with a residual maturity of 30 days or less, received from any counterparty and secured with Level 1 assets;
- 10. Fifteen percent (15%) of secured funding with a residual maturity of 30 days or less, received from any counterparty and secured with Level 2A assets;
- 11. Twenty-five percent (25%) of secured funding with a residual maturity of 30 days or less, received from sovereigns, multilateral development banks and public entities, and secured with assets other than Level 1 or Level 2A assets;
- 12. Fifty percent (50%) of secured funding with a residual maturity of 30 days or less received from any counterparty and secured with Level 2B assets;
- 13. One hundred percent (100%) on any other secured funding operation with a residual maturity of 30 days or less;
- 14. One hundred percent (100%) of unsecured funding with residual maturity of 30 days or less, received from banks and other financial entities. This group includes all types of funding, including deposits;
- 15. One hundred percent (100%) of expected cash outflows in current derivative contracts, taking into consideration the payments that must be made within the thirty-day period. The cash flow can be counterparty compensated; i.e. income can be compensated with outflows only if there is an existing current compensation framework agreement. As for the options that could be executed within the 30-day period, those considered "in the money" from the option buyer's perspective are applicable;
- 16. Twenty percent (20%) of the non-Level 1 assets that were provided as a guarantee in derivative contracts against the possibility of a change in their valuation;
- 17. One hundred percent (100%) of liquidity requirements related to guarantees that the bank will have to provide in derivative operations within the 30-day period;
- 18. Five percent (5%) of contractual obligations for funding (including credit cards and any other credit facility) to retail (individual) clients;
- 19. Thirty percent (30%) of contractual obligations for funding (including credit cards and any other credit facility, such as irrevocable promissory notes) to nonfinancial and public entities, executable within less than 30 days;
- 20. Forty percent (40%) of contractual obligations for funding to financial entities within the 30-day period.

**ARTICLE 35<sup>2</sup>. TOTAL CASH INFLOW.** Total cash inflow is the sum of following numbered items:

<sup>&</sup>lt;sup>2</sup> Amended by Article 1 of Rule 4-2018 dated 3 April 2018.

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- 1. One hundred percent (100%) of all interest receivable within 30 days on contractual obligations that are up to date on payments and for which there is no reason to expect a failure to comply within the next 30 days;
- 2. Zero percent (0%) of secured credit operations coming due within 30 days and backed by Level 1 assets;
- 3. Fifteen percent (15%) of secured credit operations coking due within 30 days and backed by Level 2A assets;
- 4. Twenty-five percent (25%) of secured credit operations coming due within 30 days and backed by Level 2B securitization bonds;
- 5. Fifty percent (50%) of secured credit operations coming due within 30 days and backed by Level 2B assets other than shares or securitization bonds;
- 6. Fifty percent (50%) of financing credit operations to individuals and micro and small enterprises coking due within 30 days;
- 7. One hundred percent (100%) of cash inflow coming from derivatives within the 30-day period;
- 8. One hundred percent (100%) of any cash inflow coming from active operations with medium and large enterprises coming due within 30 days;
- 9. One hundred percent (100%) of demand and term deposits with residual maturity of 30 days or less held by financial entities in other jurisdictions having an international credit rating between AAA and A- or its equivalent credit rating;
- 10. Eighty percent (80%) of demand and term deposits with residual maturity of 30 days or less held by financial entities in other jurisdictions having an international credit rating between BBB+ to BBB- or its equivalent;
- One hundred percent (100%) of demand and term deposits with residual maturity of 30 days or less held by domestic banks having a domestic credit rating between AAA and A- or its equivalent credit rating;
- 12. Fifty percent (50%) of demand and term deposits with residual maturity of 30 days or less held by domestic banks having a domestic credit rating between BBB+ and BBB- or its equivalent.
- 13. One hundred percent (100%) of any other cash inflow, expected within the 30-day period, with the requirement to specify the nature of this inflow.

**ARTICLE 36. CALCULATION OF NET CASH OUTFLOW.** To calculate the net cash outflow, a 75% cap is established for total cash outflows. Therefore, net cash outflow is calculated as follows:

- 1. If the Total Cash Inflow (TCI) is greater than 75% of Total Cash Outflow (TCO), the Net Cash Outflow (NCO) is 25% of Total Cash Outflow;
- 2. If the Total Cash Inflow (TCI) is less than 75% of Total Cash Outflow (TCO), the Net Cash Outflow (NCO) is the difference between Total Cash Outflow and Total Cash Inflow.

The above is summarized as follows:  $NCO = Max (TCO - TCI; 25\% \times TCO)$ , or otherwise:

If  $TCI \le 75\% \times TCO$  NCO = TCO - TCIIf  $TCI \ge 75\% \times TCO$  NCO =  $25\% \times TCO$ 

## CHAPTER IV REQUEST FOR INFORMATION

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ARTICLE 37. FREQUENCY OF CALCULATION AND REPORTING OF THE SHORT-TERM LIQUIDITY COVERAGE RATIO. For the purposes of providing information to the Superintendency of Banks, the short-term liquidity coverage ratio will be calculated at the end of the month and the reporting with the relevant data and calculations will be adapted to the criteria and procedures the Superintendency of Banks may determine.

Given that the liquidity ratio must be satisfied on a daily basis, an entity failing to comply with the ratio must immediately inform the Superintendency and provide a substantiated explanation for the non-compliance.

However, the board of directors of the Superintendency may periodically vary the frequency with which the short-term liquidity ratio must be calculated and reported.

The Superintendent may request the calculation and reporting of the short-term liquidity coverage ratio from any bank at any time the bank's risk profile makes it advisable.

### CHAPTER V SANCTIONS

**ARTICLE 38. SANCTIONS.** Failing to comply with the liquidity provisions prescribed in this Rule and its Appendix, as well as any delay in reporting the liquidity coverage ratio or any incorrect LCR information, will be penalized as provided for in Title IV of the Banking Law.

### CHAPTER VI FINAL PROVISIONS

ARTICLE 39. ENACTMENT. This Rule shall become effective on 1 July 2018.

Notwithstanding the above, the prospective reports for the LCR calculation established herein will be made pursuant to the provisions of Article 40 herein.

ARTICLE 40. LIQUIDITY COVERAGE RATIO AND ADJUSTMENT PERIOD. The liquidity coverage ratio (LCR) will be applicable on a percentage of 100% or 50%. The Superintendency will determine, pursuant to internal criteria and the supervisor's judgment, the application percentage that will be given to each particular bank.

The banks will have an adjustment period to meet the LCR provided herein. For these purposes, the bank must ensure compliance with these provisions as follows:

	December 2018	December 2019	December 2020	December 2021	December 2022
Banks with a 50% indicator	12.50%	25%	37.50%	44%	50%
Banks with a 100% indicator	25%	50%	65%	80%	100%

**PROVISO.** In exceptional cases and according to the entity's business model, the Superintendent may waive any bank's compliance with the short-term liquidity coverage ratio either partially or *In Toto*.

Given in the city of Panama on the twenty-third (23<sup>rd</sup>) day of January, two thousand eighteen (2018).

FOR COMMUNICATION, PUBLICATION AND ENFORCEMENT.

THE CHAIRMAN,

THE SECRETARY,

L.J. Montague Belanger

Nicolas Ardito Barletta

#### **APPENDIX**

# CHARACTERISTICS OF ASSETS THAT ARE ACCEPTABLE FOR THE LIQUIDITY COVERAGE RATION ACCORDING TO THE BASEL COMMITTEE ON BANKING SUPERVISION (BCBS)

#### 1. Low risk

BCBS considers that low risk assets have a higher probability of being negotiable in stress periods. There is strong evidence that an issuer's high credit rating and a low degree of subordination increase an asset's liquidity. The BCBS associates low risk assets with the following factors, although it is not necessary for them to be met simultaneously.

- High credit rating of the issuer. This characteristic is a must and must be met;
- Low degree of subordination. This characteristic reinforces the above;
- Low duration. Duration is a relevant parameter to measure market risk but not so much so for credit risk. It could be contradictory because in market stress scenarios central banks tend to relax interest rates. If this measure is transmitted, to a greater or lesser degree, to the entire interest rate curve, the value of assets with a higher duration will tend to increase more as long as their credit is of high quality, because in other cases the risk premiums could increase despite the more flexible interest rates determined by the central bank;
- Low legal risk. Obviously, any doubt on the economic rights linked to a financial asset makes its tradability more difficult;
- Low inflation risk. Interest rates are nominal rates that are affected by inflationary expectations, and an important source of these is realized inflation. The increase in nominal rates decreases the price of securities and provides less liquidity if the securities are sold. Bonds linked to inflation are the instruments providing greater coverage to high inflation:
- Denomination in a convertible currency with low foreign exchange risk. If assets are denominated in a currency other than the functional currency of the financial entity's balance sheet, the exchange risk could be relevant and decrease liquidity obtained from selling the asset.

### 2. Ease and certainty of valuation

Assets that are not easily valuated may be difficult to sell in stressed market conditions. The BCBS dismisses the presence of structured products in the high-quality liquid asset fund—particularly those formed by implicit derivatives, both *vanilla* and exotics. Not all assets that could be part of the fund are necessarily actively traded. The need to use valuation methods that are complex, or use unobservable inputs, is a barrier to trading an asset rapidly.

### 3. Low correlation with risky assets

The concept of wrong-way risk arose in the context of counterparty risks, but the BCBS broadens it to the correlation of any two instruments. Essentially, it is the existence of a high level of correlation by credit events among two risky assets. The BCBS believes that assets issued by banks are not eligible to be part of the high-quality liquid asset fund. In a system risk context, when banks have difficulties obtaining liquidity it is not easy to sell assets issued by banks.

### 4. Low volatility

This condition is, in part, a consequence of the previous factors. High-quality credit assets and low duration indicate a lower variability in price than that of the remaining assets.

### 5. Listed on a developed exchange

The asset should have active outright sale or repo markets at all times. The degree of activity must be verified by the existence of reduced differentials between demand and supply prices, by high trading volumes and a diverse number of market participants. An element that reinforces this aspect is the presence of market makers.

### 6. Refuge Assets under flight to quality scenarios

This characteristic mentioned by the BCBS is also a consequence of the previous factors—especially the characteristic of being assets with high-quality credit, which is specific to assets issued by governments, central banks and multilateral development banks with the highest credit rating.

The BCBS also indicates other characteristics it considers that an asset must comply with to be eligible for the high-quality liquid asset fund. These requirements are thought to ensure that the entity may immediately use the assets to convert them into cash, whether by their outright sale or repo. The BCBS calls the following conditions Operational Requirements:

### **Operational requirements**

### 7. Convert assets into cash periodically

This condition requires the bank to periodically convert a representative portion of the fund's assets into cash. The conversion into cash could be made by outright sales or repo operations. The objective is to verify that the assets actually have the essential property of being liquid, i.e. that the bank can obtain cash.

### 8. Assets in the fund must be unencumbered

For the BCBS, "unencumbered" means free of legal, regulatory, contractual or other restrictions on the ability of the bank to liquidate, sell, transfer, or assign the asset. Explicitly, an asset in the fund may not be pledged (either explicitly or implicitly) to secure, collateralize or enhance the credit of any transaction.

However, assets received in reverse repo and in financing transactions using assets that are held by the bank, have not been pledged, and are legally and contractually available of the bank's use, can be considered part of the high-quality liquid asset fund.

### 9. Control of the fund by a unit in charge of managing the liquidity of the bank

The BCBS requires the existence of an operational unit that has the continuous authority and legal and operational capability to monetize any asset in the fund. This possibility should not enter into conflict with the bank's stated business model or strategy on the free disposal of assets in the fund.

## 10. Assets are freely transferable by the parent company if liquidity management is conducted on a consolidated basis

When assets are held in entities other than the parent company, they can only be included in the high-quality liquid asset fund to calculate the liquidity coverage ratio if they are freely transferable to the consolidating parent company. There should not be any regulatory, legal, tax, accounting or other impediment to the transfer to the parent company and therefore to its monetization.

The inclusion of liquid assets other than those of the parent company in the high-quality liquid asset fund requires the net cash outflow to be measured for the consolidated group.