

# SUPERVISORY AND REGULATORY GUIDELINES Management of Liquidity Risk

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# **GUIDELINES FOR THE MANAGEMENT OF LIQUIDITY RISK, 2025**

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#### INTRODUCTION

- 1. The Central Bank of The Bahamas ("the Central Bank") is responsible for the licensing, regulation and supervision of supervised financial institutions ("SFIs") operating in and from within The Bahamas pursuant to the Central Bank of The Bahamas Act, 2020 ("CBA"), the Banks and Trust Companies Regulation Act, 2020 ("BTCRA").
- 2. All SFIs are expected to adhere to the Central Bank's licensing, regulation and prudential requirements and ongoing supervisory programmes, including periodic on-site inspections, and required regulatory reporting. SFIs are also expected to conduct their affairs in conformity with all other Bahamian legal requirements.

#### **PURPOSE**

- Maintaining an adequate level of liquidity depends on the SFI's ability to efficiently meet both expected and unexpected cash flows and collateral needs, without adversely affecting either daily operations or the financial condition of the SFI.
- 4. A SFI's obligations and the funding sources used to meet them depend significantly on its business mix, balance sheet structure, and the cash-flow profiles of its on- and off-balance sheet obligations. In managing their cash flows, SFIs confront various situations that can give rise to increased liquidity risk. These include funding mismatches, market constraints on the ability to convert assets into cash or in accessing sources of funds (i.e., market liquidity), and contingent liquidity events. Changes in economic conditions or exposure to credit, market, operation, legal, and reputation risks can also affect a SFI's liquidity risk profile.
- 5. Lessons learned from past events in the financial markets have pointed to the importance of liquidity and the need for improvement in liquidity risk management in financial institutions. For a comprehensive understanding of the domestic liquidity framework these Guidelines are to be read in conjunction with the:
  - (a) Basel Committee on Banking Supervision Core Principles for Effective Banking Supervision
  - (b) Basel Committee on Banking Supervision Liquidity Coverage Ratio
  - (c) Basel Committee on Banking Supervision Net Stable Funding Ratio
  - (d) The Bahamas Guidelines for the Management of Capital and the Calculation of Capital Adequacy
  - (e) The Bahamas Guidelines for the Internal Capital Adequacy Assessment Process for Licensees
  - (f) The Bahamas Guidelines for the Management of Credit Risk

These Guidelines have incorporated the updated Basel III Core Principles and Liquidity Standards to further enhance the SFIs' liquidity risk management.

6. These revised Guidelines provide guidance to SFIs in relation to the Central Bank's expectations of their liquidity risk management practices, inclusive of outlining the Central Bank's approach to assessing the adequacy of SFIs' liquidity risk management frameworks and their liquidity positions.

#### **APPLICABILITY**

7. These Guidelines apply to banks, and bank and trust companies. The Central Bank recognises that the degree of sophistication of a SFI's liquidity risk management framework will depend on the nature, scale of complexity of a SFI's activities, as well as the level of liquidity risk assumed. The Central Bank equally accepts that in the supervision of internationally active banks, the global liquidity risk management frameworks of the head office and the home supervisor's assessment of the overall liquidity risk management framework and liquidity positions should be considered to enhance the effectiveness of cross border supervision.

#### **DEFINITIONS**

- 8. For the purpose of these Guidelines: -
  - "Liquidity" is a SFI's ability to fund increases in assets or meet collateral obligations at a reasonable cost as they fall due, without incurring unacceptable losses;
  - "Liquidity Risk" is the risk that a SFI's financial condition or overall safety and soundness is adversely affected by an inability—real or perceived—to meet its contractual obligations;
  - "Liquid Assets" have the same meaning as defined in Regulation 18 of the CBA, 2020;
  - "High Quality Liquid Assets" or "HQLA" have the same meaning as defined in Regulation 2 of the Liquidity Risk Management Regulations;
  - "Liquidity Coverage Ratio" or "LCR" and its components have the same meaning as defined in Regulation 2 of the Liquidity Risk Management Regulations;
  - "Net Stable Funding Ratio" or "NSFR" and its components have the same meaning as defined by Regulation 2 of the Liquidity Risk Management Regulations.

#### SOUND PRACTICES OF LIQUIDITY RISK MANAGEMENT

9. Due to its critical importance to the viability of a SFI, liquidity risk management should be fully integrated into the SFI's risk management processes. Therefore, SFIs should have a comprehensive management process for identifying, measuring, monitoring, and controlling liquidity risk that is appropriate for the operations of the SFI. Critical elements of sound liquidity risk management are highlighted below:

- Corporate governance consists of effective oversight by the Board of Directors ("the Board") and senior management is actively involved in the SFI's liquidity risk management;
- ii. Appropriate strategies, policies, procedures, and limits are used to manage and mitigate liquidity risk;
- iii. Comprehensive liquidity risk measurement and monitoring systems (including assessments of the current and prospective cash flows or sources and uses of funds) are commensurate with the complexity and business activities of the SFI:
- iv. Intraday liquidity and collateral are actively managed;
- v. There exists an appropriately diverse mixture of both current and potential funding sources;
- vi. The SFI maintains adequate levels of highly liquid marketable securities free of legal, regulatory, or operational impediments that can be used to meet liquidity needs in stressful situations;
- vii. Internal controls and internal audit processes are sufficient to determine the adequacy of the SFI's liquidity risk management process; and
- viii. The SFI's contingency funding plan ("CFP") appropriately and sufficiently address any potential adverse liquidity events to which the SFI may be exposed, inclusive of emergency cash flow requirements.
- 10. The Central Bank will review these critical elements in its assessment of a SFI's liquidity risk management framework, during the course of its on-site examination and the risk assessment process, generally.

### LIQUIDITY RISK MANAGEMENT FRAMEWORK

#### **Board and Senior Management Responsibilities**

- 11. Ultimate responsibility for the liquidity risk assumed by a SFI and the manner in which this risk is managed rests with the Board. For branches of international banks, the responsibilities set forth in these Guidelines should be assumed by the head office of the local branch. Senior managers at the head office should ensure that the senior management of the local branch appropriately addresses the standards set forth in these Guidelines. Where the Board of a subsidiary or head office of a local branch utilises liquidity risk management programmes applicable to all group companies, such liquidity risk management programmes must be consistent with the requirements of these Guidelines and should be tailored to the local environment. In undertaking this responsibility, the Board should, inter alia:
  - i. approve the SFI's liquidity risk strategy and other significant policies related to liquidity risk management, including contingency fund planning;
  - ii. review policies and procedures periodically, but at least annually;
  - iii. establish and approve senior management lines of authority and responsibility for managing the SFI's liquidity risk;

- iv. understand the nature of the liquidity risks of the SFI and the tools used by senior management to monitor and control liquidity risk;
- v. ensure appropriate processes and systems are in place to identify, measure, monitor and control sources of liquidity risk; and
- vi. regularly monitor the performance and liquidity risk profile of the SFI, through periodic and timely reporting by senior management and internal auditors.
- 12. Senior management is responsible for ensuring that the Board approved strategies, polices, and procedures for the day-to-day and long-term liquidity management are appropriately executed within the lines of authority and responsibility designated for managing and controlling liquidity risk. This involves overseeing the development, implementation and maintenance of:
  - i. Appropriate policies and procedures that translate the Board's approved objectives and risk tolerances into operating standards;
  - ii. Management information and other systems that adequately identify, measure, and control liquidity risk; and
  - iii. Effective internal controls over the liquidity risk management process, including review and assessment by an appropriately trained, competent and independent party, (e.g., internal or external auditors).
- 13. Senior management must fully understand the nature and level of liquidity risk assumed by the SFI as well as the means of managing that risk. Senior management must promptly communicate any material changes in the SFI's liquidity position to the Board, given that maintenance of adequate liquidity is fundamental to the ongoing viability of the SFI.
- 14. The close links between liquidity risks and other risks, such as credit, market, climate-related, operational and reputational risks, can significantly affect a SFI's liquidity risk strategy; therefore, senior management should communicate the liquidity strategy, key policies for implementing the strategy, and the liquidity risk management framework throughout the organisation. Additionally, senior management should coordinate the SFI's liquidity risk management with its business continuity arrangements (see also Contingency Planning below).

#### **Liquidity Risk Management Structure**

15. SFIs should have in place an appropriate liquidity management structure to effectively execute their liquidity risk management strategy, policies and procedures. While the specific structure chosen by a SFI will depend on the nature, scale and complexity of its operations, responsibility for managing overall liquidity should be delegated to a specific group or individual within the SFI; this might be in the form of an Asset Liability Committee ("ALCO"), comprised of senior management, the treasury function or the risk management department. Ideally, the ALCO should have broad representation across major business and operational lines that can influence, directly or indirectly, the SFI's liquidity risk. It is important that members of the ALCO have clear authority over the units responsible for executing liquidity-related transactions, so that ALCO directives reach these line units unimpeded.

16. Liquidity risk may be managed on a group or sub-group basis, in the case of subsidiaries and branches of an international banking group. However, the SFI's local Board and senior management (in the case of a subsidiary) or head office (in the case of a branch) retains ultimate responsibility for ensuring compliance with these Guidelines, by having arrangements in place to ensure that any liquidity issues specific to the SFI are appropriately identified and addressed by the SFI or those delegated with responsibility for managing the SFI's liquidity risk.

#### **Internal Controls and Audit**

- 17. SFIs should have appropriate internal controls addressing relevant elements of the risk management process, including adherence to policies and procedures, the adequacy of risk identification, measurement, reporting and compliance with applicable rules and regulations.
- 18. Senior management should ensure periodic reviews and assessment of various components of the SFI's liquidity risk management processes. A qualified independent party (e.g., internal or external auditors), should perform such reviews and assessments. Any weaknesses or problems identified in the review should be brought to the attention of senior management for prompt corrective action.
- 19. The reviews and assessment should, inter alia, cover the following areas:
  - Adequacy of risk identification, measurement, reporting and compliance with supervisory guidance (including statutory liquidity ratios/limits) and industry sound practices;
  - ii. Suitability of the underlying assumptions for conducting cash flow and stress scenario analyses;
  - iii. Integrity and usefulness of the management information system reports; and
  - iv. Adherence to established liquidity policies and procedures.

#### **Management Information Systems**

- 20. SFIs should have a reliable management information system ("MIS"), consistent with the size, nature, and complexity of their operations to measure, monitor and control liquidity risk under normal and stressed conditions. The MIS should be able to capture all sources of liquidity risk, including contingent risks and the related triggers and those arising from new activities. The MIS should also have the ability to deliver more granular and time sensitive information during periods of stress. The MIS should particularly be able to:
  - i. analyse liquidity positions in all currencies in which the SFI conducts significant business<sup>1</sup>, both on a stand-alone and on an aggregate group basis;

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<sup>&</sup>lt;sup>1</sup> A currency is considered "significant" if the aggregate liabilities denominated in that currency amount to 5% or more of the bank's total liabilities.

- ii. calculate liquidity positions, both on an intraday and day-to-day basis and over a series of more distant time periods;
- iii. calculate and project various liquidity related limits and ratios, including statutory requirements, and for internal risk management purposes;
- iv. clearly set out the assumptions and limitations underlying cash flow management reports and stressed scenario analyses;
- v. generate timely reports on risk measures and liquidity trends for management; and
- vi. check compliance with established liquidity policies and limits, and generate exception reports.
- 21. While the precise content and format of MIS reports will largely depend on a SFI's liquidity management framework and the size, nature, and complexity of its activities, the reports should enable the Board and senior management to review and monitor the following:
  - The maturity profiles of SFI's cash flows under normal and stressed conditions;
  - ii. The stock of liquid assets available and their market values;
  - iii. The concentration in sources and uses of funds:
  - iv. The stock of liabilities expected to become due over the one-year time horizon under normal and stressed conditions;
  - v. The compliance with liquidity management strategies and risk tolerance levels set by the Board;
  - vi. Compliance with both internal and prudential liquidity ratios;
  - vii. The ability to borrow or undertake asset sales in various markets;
  - viii. The potential sources of volatility in assets and liabilities (and claims and obligations arising from off-balance sheet activities);
  - ix. The analysis of intra-group cash flows and accessibility to such funding;
  - x. The capacity of providers of standby facilities to meet their obligations; and
  - xi. The impact of adverse trends (e.g., decline in asset quality, market or operational disruptions etc.) on future cash flows and market confidence.
- 22. Reporting of risk measures should be done frequently (e.g., daily reporting to senior management/ALCO and at each Board meeting during normal times, with reporting increasing during periods of liquidity stress).

# Liquidity Strategy, Policies and Procedures

- 23. SFIs should have comprehensive strategies for managing liquidity risk, which should be clearly documented in their policies and procedures for limiting and controlling risk exposures that appropriately reflect the SFI's risk tolerances.
- 24. A SFI's liquidity strategy should be appropriate to the nature, size, and complexity of its activities, taking into consideration such issues as legal structures, key business lines, the breadth and diversity of markets, products and jurisdictions in which the SFI operates, and

statutory/regulatory requirements. The strategy should address specific policies on particular aspects of liquidity risk management such as:

- i. the composition and maturity of assets and liabilities;
- ii. the diversity and stability of funding sources;
- iii. the approach to managing liquidity in different currencies, across borders, and across business lines and legal entities;
- iv. the approach to intraday liquidity management; and
- v. the assumptions on the liquidity and marketability of assets.
- 25. The strategy should also take account of liquidity needs under normal conditions as well as under periods of liquidity stress, the nature of which may be institution-specific or market-wide, or a combination of the two.
- 26. While the specific details of liquidity policies and procedures will vary across SFIs according to the nature, scale, and complexity of their activities, elements of liquidity policies should include, but are not limited to the following:
  - i. General liquidity strategy (short and long-term), specific goals and objectives in relation to liquidity risk management, process for strategy formulation, and at which level within the SFI it is approved;
  - ii. Roles and responsibilities of individuals performing liquidity risk management functions, including structural balance sheet management, pricing, marketing, contingency planning, management reporting, lines of authority and responsibility for liquidity decisions;
  - iii. Liquidity risk management structure for monitoring, reporting and reviewing liquidity;
  - iv. Liquidity risk management tools for identifying, measuring, monitoring and controlling liquidity risk (including the types of liquidity limits and ratios in place and the rationale for establishing them);
  - v. Policies with respect to transferring a liquidity surplus across jurisdictions and legal entities and from one currency to another; and
  - vi. Contingency plan for handling liquidity crises.
- 27. To be effective, the liquidity policy must be communicated throughout the firm. As stated above, it is important that the Board and senior management/ALCO review these policies, at least annually, and when there are any material changes in the SFI's current and prospective liquidity risk profile. Such changes could stem from internal circumstances (e.g., changes in business focus) or external circumstances (e.g., changes in economic conditions). Reviews provide the opportunity to fine-tune the SFI's liquidity policies in light of its liquidity management experience and development of its business. Any significant or frequent exception to the policy is an important barometer to gauge its effectiveness and any potential impact on the SFI's liquidity risk profile.

28. The procedural manual should explicitly articulate the necessary operational steps and processes to execute the relevant liquidity risk controls. The manual should be periodically reviewed and updated to take into account new activities, changes in risk management approaches, and systems.

# LIQUIDITY RISK MEASUREMENT AND MONITORING

# **Funding Requirements**

- 29. The process for measuring liquidity risk should include robust methods for comprehensively projecting cash flows arising from assets<sup>2</sup>, liabilities and off-balance sheet activities over meaningful and multiple time horizons and under different operating conditions. All SFIs would be required to implement the LCR and NSFR requirements, which would improve the minimum standards for liquidity risk management and create a more flexible regime for liquidity management under stress.
- 30. The assumptions underlying the behaviour of assets, liabilities and off-balance sheet activities should be consistent, reasonable, and appropriate to a SFI's business profile and be adequately documented in the liquidity risk management policies given their significance in constructing cash flow projections. Senior management/ALCO should periodically review and formally approve these assumptions.
- 31. SFIs should ensure that either a positive cash flow position is maintained or otherwise sufficient cash can be generated to satisfy their daily funding requirements. SFIs are therefore required to measure, monitor their net funding requirements by constructing a maturity profile—which must be reported to the Central Bank (maturity-wise analysis of liabilities and assets)<sup>3</sup>—that projects future cash flows arising from assets, liabilities and off-balance sheet commitments and other contingent liabilities. However, senior management/ALCO may approve the exclusion of certain cash flows from the maturity profile, if they are deemed immaterial. The rationale for such exclusions should be adequately documented in the liquidity risk management policies and periodically reviewed to ensure that they remain appropriate.
- 32. SFIs should set realistic and appropriate internal limits to control the size of their cumulative net mismatch positions (i.e., where cumulative cash inflows exceed cumulative outflows)<sup>4</sup> for the short-term time buckets (i.e., "sight--less than 8 days", "8 days--less than one month" and "1 month--less than 3 months"), commensurate with the nature, scale, and complexity of the firm's activities, as well as risk tolerances. Maturity mismatch limits should also be set for individual currencies in which a SFI has significant activity. The maturity mismatch limits should be adequately documented in the liquidity risk

<sup>&</sup>lt;sup>2</sup> Assets should be prudently valued according to relevant financial reporting standards and supervisory standards.

<sup>&</sup>lt;sup>3</sup> See "Central Bank Reporting Requirements"

<sup>&</sup>lt;sup>4</sup> A cumulative net mismatch position is derived by accumulating the net mismatch position in each successive time bucket.

- management policies and periodically reviewed to ensure that they remain appropriate. Any exceptions to the imposed limits should be approved by senior management/ALCO.
- 33. The Central Bank will discuss the appropriateness and adequacy of the internal limits and actual mismatches of SFIs on a case-by-case basis, during an on-site examination, or risk assessment process, taking into account various factors, including:
  - i. A SFI's stock and quality of liquid assets;
  - ii. The volatility and diversity of deposits;
  - iii. The quality and diversity of the loan book;
  - iv. Contingent liabilities and loan commitments
  - v. The availability and reliability of undrawn standby facilities;
  - vi. The extent to which liquidity is managed and supervised, on an integrated global basis;
  - vii. The ability and willingness of the parent/head office to provide liquidity; and
  - viii. A SFI's market standing and the quality of its treasury management.

# **Liquidity Ratios and Limits**

- 34. SFIs should maintain an appropriate cushion of HQLA<sup>5</sup> that can be sold or pledged for meeting liquidity needs in crises. While the amount and composition of these assets should be commensurate with the nature, scale and complexity of the SFI's activities, as well as its liquidity risk tolerances, key considerations include assumptions about the size of cash flow mismatches, the duration and severity of the stress event and the liquidation or borrowing value of the assets in stress situations. For applicable SFIs, the statutory reserve requirement, although included in a SFI's HQLA, will not be accessible without the explicit approval of the Central Bank.
- 35. SFIs should establish a variety of ratios and limits to control the nature and amount of liquidity risk that they are willing to assume, taking into account the nature of a SFI's business (in terms of location, complexity of activities, nature of products, currencies and markets served), historical performance, and the level of earnings and capital available to absorb potential losses. These ratios and limits, including corresponding escalation procedures, should also be properly documented and periodically reviewed (see Internal Controls and Audit) and adjusted, as conditions or risk tolerances of a SFI change.
- 36. Liquidity ratios and limits used in isolation will not prevent a liquidity crisis, but when used in conjunction with more qualitative information, such as a SFI's funding capacity (e.g., in terms of a reduction in credit lines or an increase in requests for early withdrawals of deposits), exceptions or breaches can be early warning indicators of excessive risk or inadequate liquidity risk management. Accordingly, monitoring of ratios and limits should

<sup>&</sup>lt;sup>5</sup> See Regulation 2 of the Liquidity Risk Management Regulations, for the definition of "HQLA".

be assigned to a function independent of the funding areas, with breaches and exceptions appropriately escalated to senior management/ALCO.

### **Liquidity Coverage Ratio (LCR)**

- 37. The LCR, as defined in Regulation 2 of the Liquidity Risk Management Regulations, promotes the short-term resilience of the liquidity risk profile of SFIs. It does this by ensuring that SFIs have an adequate stock of unencumbered HQLA that can be converted easily and immediately in private markets into cash to meet their liquidity needs for a 30-calendar day liquidity stress scenario. It should be emphasised that the LCR standard establishes a minimum level of liquidity for internationally active banks. The Central Bank may require an individual SFI to adopt more stringent standards or parameters to reflect its liquidity risk profile and the assessment of its compliance with the sound principles.
- 38. At a minimum, the stock of unencumbered HQLA should enable the SFI to survive the 30-day stress scenario, by which time it is assumed that appropriate corrective actions can be taken by management and supervisors, or that the SFI can be resolved in an orderly way. Furthermore, it gives the Central Bank additional time to take appropriate measures, should they be regarded as necessary. As noted in the LCR Standard, given the uncertain timing of outflows and inflows, SFIs must identify any potential mismatches within the 30-day period and ensure that sufficient HQLA are available to meet any cash flow gaps throughout the period.
- 39. The LCR builds on traditional liquidity "coverage ratio" methodologies used internally by SFIs to assess exposure to contingent liquidity events. The total net cash outflows for the scenario are to be calculated for 30-calendar days into the future. The standard requires that, absent a situation of financial stress, the value of the ratio be no lower than 100% (i.e., the stock of HQLA should at least equal total net cash outflows) on an ongoing basis because the stock of unencumbered HQLA is intended to serve as a defence against the potential onset of liquidity stress. During a period of financial stress, however, SFIs may use their stock of HQLA, thereby falling below 100%, as maintaining the LCR at 100% under such circumstances could produce undue negative effects on the SFI and other market participants.

#### **Net Stable Funding Ratio ("NSFR")**

40. The NSFR, as defined in Regulation 2 of the Liquidity Risk Management Regulations, requires that SFIs maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. A sustainable funding structure is intended to reduce the likelihood that disruptions to a SFI's regular sources of funding will erode its liquidity position in a way that would increase the risk of its failure and potentially lead to broader systemic stress. The NSFR limits overreliance on short-term wholesale funding,

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<sup>&</sup>lt;sup>6</sup> The 100% threshold is the minimum requirement absent a period of financial stress, and after the phase-in arrangements are complete. References to 100% may be adjusted for any phase-in arrangements in force.

encourages better assessment of funding risk across all on- and off-balance sheet items, and promotes funding stability.

- 41. The amount of **Available Stable Funding** ("ASF") is measured based on the broad characteristics of the relative stability of an SFI's funding sources, including the contractual maturity of its liabilities and the differences in the propensity of the different types of funding providers to withdraw their funding. The amount of ASF is calculated by first assigning the carrying value of an SFI's capital and liabilities to one of five categories outlined in the Liquidity Risk Management Regulations *First Schedule*. The amount assigned to each category is then multiplied by an ASF factor, and the total ASF is the sum of the weighted amounts. Carrying value represents the amount at which a liability or equity instrument is recorded before the application of any regulatory deductions, filters or other adjustments.
- 42. The amount of **Required Stable Funding** ("RSF") is measured based on the broad characteristics of the liquidity risk profile of an SFI's assets and on balance sheet exposures. The amount of the RSF is calculated by first assigning the carrying value of an institution's assets to the categories listed in the Liquidity Risk Management Regulations *First Schedule*. The amount assigned to each category is then multiplied by its associated RSF factor, and the total RSF is the sum of the weighted amounts added to the amount of on balance sheet activity (or potential liquidity exposure) multiplied by its associated RSF factor.
- 43. Typical examples of ratios and limits used by SFIs for liquidity risk monitoring and control include:
  - i. Target liquidity ratio—SFIs are encouraged to set a target liquidity ratio above the statutory requirement as an early warning indicator. This might be particularly useful for commercial banks, as they may be more vulnerable to early withdrawals of deposits in a liquidity crisis and those SFIs that normally maintain a liquidity ratio relatively close to the statutory requirement;
  - ii. Maturity mismatch limits for local and major foreign currencies;
  - iii. Concentration limits in respect of the mix of assets and liabilities—this includes limits to avoid excessive exposure to market and other risks within the asset portfolios in respect of asset type, counterparty, geographic location and economic sector:
  - iv. Loan to deposit ratio or other ratios appropriate to a SFI's business activities.

# **Foreign Currency Liquidity Management**

44. SFIs should assess their foreign currency liquidity needs on an aggregate basis, and have adequate systems in place for measuring, monitoring and controlling cash flow and acceptable mismatch positions in each foreign currency in which they have significant

activity<sup>7</sup>. Mismatch positions in foreign currencies should be analysed under both normal and stressed conditions. In managing individual currency funding needs, SFIs should take into account the nature of their business activities and funding strategies. The size of mismatches for individual foreign currencies should take into account, inter alia, the following factors:

- i. The ability to transfer a liquidity surplus from one currency to another, and across jurisdictions and legal entities;
- ii. The availability of foreign currency back-up facilities to cater for circumstances in which normal access to individual currencies is disrupted;
- iii. The "stickiness" of foreign currency deposits under stressed conditions;
- ability of borrowers to repay their foreign currency obligations under stressed conditions;
- v. The ability to raise funds in foreign currency markets; and
- vi. The convertibility of currencies in which the SFI is active, including the potential for impairment or complete closure of foreign exchange swap markets for particular currency pairs.
- 45. Additionally, SFIs are required to report their LCR in significant currencies. The Central Bank, at its discretion, will determine whether the LCR output is appropriate based on the size and complexity of the SFIs operations.

### **Concentration of Funding**

- 46. SFIs should establish a funding strategy that provides effective diversification in the sources and tenor of funding, by maintaining an ongoing presence in its chosen funding markets and building strong and lasting relationships with key fund providers. As such, SFIs should regularly gauge their capacity to raise funds rapidly from each fund provider, as well as frequently assess and closely monitor the most important factors affecting its ability to raise funds, to ensure that estimates of its funding capacity remain valid. The objective is to identify and build-up an appropriate level of "core" funding and to minimise reliance on volatile funding sources. In particular, SFIs with a large deposit base should have systems to carry out statistical and behavioural analysis to detect any signs that the average life of retail deposits is shortening or that the deposit base is becoming volatile. SFIs should also be cautious about attracting deposits mainly by way of offering above market interest rates or promotional gift items, as such deposits may prove to be highly volatile.
- 47. As a general liquidity risk management practice, SFIs should avoid any potential concentration in funding sources. Available funding sources should be diversified over multiple time horizons (e.g., short-, medium- and long-term). Diversification targets should be part of medium- to long- term funding plans and should be aligned with budgeting and

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<sup>&</sup>lt;sup>7</sup> The Central Bank will normally regard a foreign currency position to be significant, if the aggregate liabilities denominated in that currency amount to 5% or more of the bank's total liabilities.

business planning processes, as well as take into account correlations between sources of funds and market conditions. Funding should also be diversified across a full range of retail as well as secured and unsecured wholesale sources of funds, consistent with the nature and complexity of a SFI's business activities. Concentration limits should be established, together with systems for monitoring compliance, so that over-reliance on a single counterparty (or group of related counterparties), secured versus unsecured market funding, instrument type, securitisation vehicle, currency and geographic market, may be prevented.

- 48. An essential component of ensuring funding diversity is maintaining market access. Market access is critical for effective liquidity risk management as it affects both the ability to raise new funds and to liquidate assets. Senior management should ensure that market access is being actively managed, monitored, and tested by the appropriate staff. Such efforts should be consistent with the SFI's liquidity risk profile and sources of funding.
- 49. SFIs should identify alternative sources of funding that strengthen their capacity to withstand a variety of severe institution-specific and market-wide liquidity shocks. Depending upon the nature, severity, and duration of the liquidity shock, potential sources of funding include, but are not limited to, the following:
  - i. Deposit growth;
  - ii. Lengthening of maturities of liabilities;
  - iii. Issuance of debt instruments:
  - iv. Intra-group transfers, new capital issues, sales of subsidiaries or lines of business;
  - v. Asset Securitisation;
  - vi. Sale (outright or through repurchase agreements) or pledging of unencumbered highly liquid assets;
  - vii. Drawing-down committed facilities; and
  - viii. Borrowing

# **Intra-day Liquidity Position Management**

50. Structural and operational changes in payment systems have increased the importance of monitoring intra-day liquidity for SFIs engaged in significant payment, settlement, and clearing activities. In this respect, failure by a SFI to manage intra-day liquidity effectively, under normal and stressed conditions, could leave it unable to meet payment and settlement obligations in a timely manner, adversely affecting its own liquidity position and that of its counterparties. Among large, complex firms, the interdependencies that exist among payment systems and the inability to meet certain critical payments has the potential to lead to systemic disruptions that can prevent the smooth functioning of all payment systems and money markets. SFIs should take account of this in their stress testing and scenario analysis. Therefore, SFIs with material payment, settlement and clearing activities should actively manage their intra-day liquidity positions and risks to

meet payment and settlement obligations on a timely basis, under both normal and stressed conditions, in all of the financial markets and currencies in which they have significant payment and settlement flows. Senior management should develop and adopt an intra-day liquidity strategy that allows the SFI to:

- monitor and measure expected daily gross liquidity inflows and outflows;
- ii. identify and prioritize time-specific and other critical obligations in order to meet them when expected;
- iii. settle other less critical obligations as soon as possible;
- iv. control credit to customers, when necessary; and
- ensure that liquidity planners understand the amounts of collateral and liquidity needed to perform payment-system obligations when assessing the institution's overall liquidity needs.
- 51. Where a SFI relies on correspondents or custodians to conduct payment and settlement activities, it should ensure that this arrangement allows it to meet its obligations on a timely basis and to manage its intra-day liquidity risks under a variety of circumstances. In particular, such SFIs should recognise the potential for operational or financial disruptions at its correspondent or custodian to disrupt its own liquidity management, and therefore should have alternative arrangements in place to ensure fulfilment of its obligations under such situations.

### **Intra-group Liquidity**

- 52. Intra-group fund transfers could affect a SFI's liquidity in various ways. For example, a SFI may have to provide support to group companies experiencing liquidity shocks, while funding provided by other related entities to the SFI may be withdrawn in an emergency. SFIs should therefore have adequate policies and systems to manage their intra-group liquidity arrangements, including by establishing internal limits on intra-group liquidity risk to mitigate the risk of contagion in periods of stress. Internal limits may also be set for each currency in which the SFI operates.
- 53. SFIs should specify in their liquidity management strategy the treatment of intra-group liquidity and assumptions on intra-group dependencies. They should also be able to monitor and analyse how the funding positions of other group companies might affect their own liquidity, and to address any regulatory or legal impediments to accessing liquidity on a group basis.
- 54. SFIs should ensure that where they provide significant funding or liquidity support to other group or related entities (e.g., in the form of explicit guarantees or funding lines to be drawn at times of need), such support is appropriately accounted for in the measurement of their own liquidity positions.
- 55. Subsidiaries and branches of international banking groups should generally be able to rely on the support of their parent or head office in a liquidity crisis affecting only The Bahamas operations. Such support could however be called into question if the crisis affected the

group as a whole. The local Board and senior management (in the case of a subsidiary) or head office (in the case of a branch) must demonstrate to the Central Bank how the liquidity of The Bahamas operation is to be supported and the degree of commitment of the parent or head office to provide liquidity in support in the event of a crisis.<sup>8</sup> (See also para. 14)

56. The Central Bank will monitor the level and trend of intra-group transactions. Where the Central Bank has reason to doubt the financial or liquidity position of the group, the Central Bank may set limits on intra-group transactions, which may include requiring that a SFI becomes self-sufficient in terms of its own liquidity adequacy.

### **Stress Testing and Scenario Analysis**

- 57. SFIs should conduct stress tests on a regular basis for a variety of short-term and protracted institution-specific and market-wide events across multiple time horizons, including on an intraday basis. The range and frequency of stress testing that is conducted by a particular firm should be commensurate with the nature, scale, complexity of the SFI's activities, size of a SFI's liquidity risk exposure, as well as the SFI's relative importance to the financial system in which it operates.
- 58. Stress test outcomes should be used to identify and quantify sources of potential liquidity strain and to analyse possible adverse impacts on the SFI's cash flows, liquidity position, profitability, and solvency. Stress tests should consider the effects that losses and the resulting reduction in capital can have on the SFI's ability to maintain funding relationships. Stress tests should also be used to ensure that current exposures are consistent with the SFI's established liquidity risk tolerance. There should be an independent review (e.g., internal or external audit) of the adequacy of the design and effectiveness of the operations of a SFI's stress testing programme. The Central Bank will discuss the results of SFIs' stress tests during the course of its on-site examinations.
- 59. SFIs should develop and use rigorous and challenging stress scenarios—the underlying assumptions should be reasonable and appropriate—when conducting stress tests and examine resultant cash-flow needs. Stress scenarios, as well as their underlying assumptions, should be properly documented.
- 60. While SFIs are encouraged to cover stress scenarios of different types and levels of adversity commensurate with the nature, scale, and complexity of their activities, they should, at a minimum, include the following:
  - i. Institution-specific scenario—covering situations that might arise from a SFI experiencing problems (real or perceived), such as asset quality problems, solvency concerns, rumours about a SFIs credibility, or management fraud etc. This should represent the SFI's "worst-case" view of its cash flows in a crisis.

<sup>&</sup>lt;sup>8</sup> The Central Bank may require parental guarantees to be in place, depending on the circumstances, as proof of this commitment.

- Subsidiaries and branches of international banking groups should consider two types of institution-specific scenarios, namely, a crisis affecting only The Bahamas operations and a crisis affecting the global operations of the group. In the latter case, no intra-group or head office support should be assumed as available.
- ii. Market-wide scenario—involves events where liquidity at numerous financial institutions in one or more markets is affected.
- 61. The Board (in the case of subsidiaries) or head office (in the case of branches) has ultimate responsibility for the overall stress-testing programme and should be aware of the key findings from stress tests. Senior management's active involvement and support is critical to the effectiveness of the stress testing process. Senior management should discuss the results of stress tests and take remedial or mitigating actions to limit the SFI's exposures, build up a liquidity cushion, and adjust its liquidity profile to fit its risk tolerance. Given that stress testing and contingency planning are closely correlated, the results of stress tests should be incorporated into the SFI's CFP.
- 62. Liquidity risk may be managed on an integrated basis in the case of subsidiaries and branches of an international banking group, with stress tests conducted on a group or subgroup level. In these instances, the Central Bank may regard these arrangements for complying with stress test requirements as acceptable, provided that the SFI's local Board and senior management (in the case of a subsidiary) or head office (in the case of a branch) can demonstrate that the stress scenarios employed appropriately address specific risk characteristics of the SFI concerned. SFIs having such arrangements in place should discuss this with the Central Bank.

### **Contingency Funding Plan ("CFP")**

- 63. All SFIs are expected to have a comprehensive CFP that clearly sets out the strategies for addressing liquidity shortfalls during crises. Comprehensive contingency plans delineate specific policies and procedures to manage a wide range of stress events, establish clear lines of responsibility, and articulate clear implementation and escalation procedures. The CFP should be regularly tested to ensure that it remains relevant and operationally sound. Senior management should also review and update the CFP, at least annually, for the Board's approval, or more often, as warranted by business or market conditions.
- 64. A CFP should cover at least the following components:
  - i. Specific reporting procedures to ensure timely and uninterrupted information flows to senior management. A clear division of responsibility should be in place so that all personnel understand their roles in a crisis situation. This should include recognising designated personnel who would be responsible for crisis management and identifying crises as well as those for promptly notifying the Inspector of Banks and Trust Companies ("the Inspector");

- ii. Early warning indicators<sup>9</sup> that are used to signal an approaching crisis event as well as the mechanisms to facilitate constant monitoring and reporting of these signals. SFIs should tailor these indicators to its specific risk profile;
- iii. Action plans for altering asset and liability behaviours (i.e., market assets more aggressively, sell assets intended to hold, raise interest rates on deposits etc.) to deal with crisis events, which should include assessing the likely impact of particular courses of action;
- iv. Procedures for funding cash flow shortfalls during a crisis; this should include identifying various sources of liquidity (including unused credit facilities), their availability, the conditions for their use, their reliability and the order of priority in which they are to be used. SFIs should also assess the cost of alternative funding sources and the potential impact on capital;
- Procedures for determining the priority of customer relationships during a crisis (e.g., the order in which credit lines would be withdrawn from specific customers);
- vi. A communication plan for effectively communicating with employees, clients, market participants, creditors, counterparties, shareholders, the media and the Central Bank; and
- vii. A detailed retail run management plan that incorporates a SFI's stressed balance sheet composition and operational requirements.
- 65. The results of stress tests and scenario analyses should be incorporated into the CFP. These results should be used as the basis for identifying various crises that could affect the SFI's liquidity and estimating its severity.
- 66. In the case of commercial banks, with extensive branch networks, the CFP should include contingencies to ensure the delivery of currency to their operations within a short period in a crisis. They may also consider the extent to which assets held with the Central Bank, pursuant to the statutory reserve and liquid assets requirements of Sections 18 and 19, respectively, of the CBA, are eligible to secure funding under the Central Bank's discount window.
- 67. For subsidiaries and branches of international banking groups, the CFP should outline how the management of The Bahamas operation's liquidity is integrated into the global liquidity management of their respective parents or head office. The CFP should also set out how the local operations will be supported and the degree of commitment of the parent institution or head office to provide liquidity support in the event of a crisis.<sup>10</sup>

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<sup>&</sup>lt;sup>9</sup> See also <u>Principles for Sound Liquidity Risk Management and Supervision</u>, Basel Committee on Banking Supervision (September 2008) for an indicative list of early warning indicators, which a SFI may wish to consider. <sup>10</sup> See footnote 7.

68. The CFP should be consistent with a SFI's business continuity plans and should be operational under situations where business continuity arrangements have been activated. Therefore, senior management should ensure effective coordination between teams managing liquidity crises and business continuity. As with business continuity plans, SFIs should ensure that CFPs are readily accessible by liquidity crisis teams, both on- and off-site to facilitate quick implementation.

#### CENTRAL BANK REPORTING REQUIREMENTS

# **Monitoring**

69. The Central Bank will monitor the liquidity position of a SFI on an ongoing basis to satisfy itself that the institution appropriately manages its liquidity risk, taking into account its nature, scale, and complexity. As a part of this process, SFIs must provide the Central Bank with a copy of their liquidity risk management strategy in addition to Form 7 (Profit and Loss) and the Maturity-Wise Analysis of Liabilities and Assets of the Excel Reporting System.

#### **Notification**

- 70. Any change in a SFI's liquidity risk management strategy should be communicated to the Inspector within two weeks of being approved by the Board.
- 71. In addition, SFIs should inform the Inspector immediately of any concerns about their current or future liquidity position, as well as their plans to address these concerns. Where a SFI's liquidity ratio is below the statutory requirement, it should immediately notify the Inspector and provide the necessary details concerning the deficiency. The Inspector may enter into discussions with the SFI to determine what remedial action is required and should be taken.

#### **Public Disclosure**

72. Public disclosure improves transparency, facilitates valuation, reduces uncertainty in markets, and strengthens market discipline; therefore, the Central Bank encourages SFIs, as part of their periodic financial reporting, to disclose both quantitative and qualitative information regarding their liquidity risk management frameworks to enable relevant stakeholders, particularly major creditors and counterparties, to make an informed judgment concerning their ability to meet liquidity needs.

#### SUPERVISION OF LIQUIDITY RISK MANAGEMENT

73. In fostering the establishment of sound and prudent liquidity risk management frameworks within SFIs, the Central Bank, as a part of its ongoing supervisory responsibilities, intends to assess the degree of SFIs' compliance with the principles set forth in these Guidelines, taking into account the nature, scale, and complexity of the SFI's activities. Consequently,

during the course of its on-site examinations of SFIs, the Central Bank will examine the effectiveness, relevance of the strategies, policies and procedures adopted by SFIs, including the quality of the supervision and control exercised by the Boards and senior management.

74. The Central Bank will use the liquidity ratios as specified in the Liquidity Risk Management Regulations, amongst other indicators, for monitoring and assessing the overall liquidity positions of these SFIs and will be subject to discussion during the quarterly meetings held with these firms.

