



Liquidity Risk Management Framework

Bank of China – Combined U.S. Operations

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1. General Provisions

1.1. Introduction

This Combined U.S. Operations of Bank of China Limited (“CUSO”) Liquidity Risk Management Framework (“Policy”) is a subordinate policy and framework to the “Bank of China Combined U.S. Operations Risk Management Framework” (“Framework”) and the “Liquidity Risk Management Policy of Bank of China Limited”. This Policy adheres to the EPS Tailoring Rule¹, as well as FRB, OCC and FDIC other liquidity requirements². It is also consistent with Basel Committee principles for liquidity risk management³ (“BCBS Principles”).

Liquidity is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. The fundamental role of banks in the maturity transformation of short-term deposits into long-term loans makes banks inherently vulnerable to liquidity risk. Effective liquidity risk management helps ensure a bank’s ability to meet cash flow obligations, which are uncertain as they are affected by external events and other agents’ behavior.

Bank of China Limited (“BOC” or “BOC Group”) is responsible for the sound management of liquidity risk and this Policy is part of BOC’s robust liquidity risk management framework. It includes the governance structure, roles and responsibilities of key committees and senior management, the liquidity risk tolerance for its business strategy and its role in the financial system, methods of measurement for their liquidity risk exposure, management strategies for the exposure including holding a cushion of unencumbered, high liquid assets to withstand a range of stress events, and an contingency funding plan containing emergency delegations and procedures in case of a liquidity crisis event.

1.2. Scope and Applicability

This Policy applies to the CUSO entities defined in the “Bank of China Combined U.S. Operations Risk Management Framework”, Section 1.3 *Scope*.

2. Governance Structure of Liquidity Risk Management

2.1. Key Activities

Defining the Liquidity Risk Appetite

- The U.S. Chief Risk Officer (“CRO”) will define the CUSO tolerance for liquidity risk. This will cascade from the overall BOC Group risk appetite statement to ensure alignment across the whole conglomerate entity;
- The liquidity risk appetite will be developed in consultation with the risk departments of all the CUSO entities and reviewed by BOCNY Asset-Liability

¹ For the purposes of this Policy, the term “EPS Tailoring Rule” is defined in the “Prudential Standards for Large Bank Holding Companies, Savings and Loan Holding Companies, and Foreign Banking Organizations, Final Rule”, FRB, 2019.

² “Interagency Policy Statement on Funding and Liquidity Risk Management”, FRB, OCC and FDIC, 2010.

³ “Principles for Sound Liquidity Risk Management and Supervision”, Basel Committee on Banking Supervision, 2008.

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Committee (“ALCO”), BOCNY Market and Liquidity Risk Committee (“MLRC”) and BOCNY Risk Management and Internal Control Committee (“RMICC”) to ensure alignment with the BOCNY strategic plan;

- The risk appetite statement is also required to be approved annually by the U.S. Risk and Management Committee (“USRMC”).

Maintain and Develop the Liquidity Risk Policy and Framework

- The U.S. CRO is responsible for maintaining and developing the Liquidity Risk Management Framework for the CUSO;
- It will define roles and responsibilities, policies, measurement and management processes to ensure that the CUSO can fulfil its financial obligations even during times of idiosyncratic and/or market stress;
- The liquidity risk policy is required to be approved annually by the USRMC.

Liquidity Risk Reporting

- BOCNY Treasury (“TRY”) is responsible for developing and maintaining a regular reporting capability to transparently show the liquidity risk exposure of the branch and CUSO;
- Reports will be produced periodically. This includes daily reporting for operational management, monthly reporting for ALCO, and MLRC, and quarterly reporting for the RMICC and USRMC.

Liquidity Stress Testing

- TRY is responsible for developing a liquidity stress test model in order to determine the minimum size of the unencumbered, high liquid asset portfolio. The stress tests consider balance sheet exposures, off-balance sheet exposures, business and product complexity and other characteristics that affect the liquidity risk profile;
- Stress test results will be reported monthly to ALCO and MLRC, and quarterly to RMICC and USRMC, for review.
- Stress testing results will be reported to FRB annually.

Risk Analysis / Independent Review

- BOCNY Market Risk Management Department (“MRD”) is responsible for providing insight and commentary on the liquidity risk exposure. MRD is additionally responsible for analyzing the potential impact of market-wide trends and strategic decisions, such as new products and business lines in accordance with related internal policies, on the CUSO liquidity risk exposure
- BOCNY MRD is responsible for providing effective challenge as the second line of defense in the liquidity risk management framework;
- The risk analysis is an ongoing process which must report quarterly to the USRMC.

Liquidity Risk Model Validation

- BOCNY Enterprise Risk Management Department (“ERM”) is responsible for ensuring that the liquidity risk model(s) (e.g. liquidity stress test model) are validated in accordance with BOCNY’s Model Risk Management Policy and

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Procedure. The model owner is responsible for notifying ERM of any planned model changes before promoting the changes for production usage (e.g. model assumption updates). ERM will assess the model change and advise the appropriate model risk governance or validation activities.

Contingency Funding Planning

- TRY is the leading department for developing and maintaining the Contingency Funding Plan (“CFP”) for BOCNY. The CFP will detail procedures and define the authority for turning on and off the emergency delegation, action plans and communication plans to handle a funding crisis, and an up to date list of key stakeholders;
- The CFP is required to be approved by ALCO annually and is required to be tested regularly.

Daily Liquidity Operation and Early Warning Indicator System

- TRY is responsible for the day-to-day liquidity management. This includes management of the account with the FRB and maintenance of a portfolio of unencumbered, high liquid assets;
- TRY will establish an early warning indicator system to identify the emergence of liquidity and funding vulnerabilities arising from a deterioration in the market of funding sources. This system will be the basis for an escalation process to ALCO.

Audit of the Liquidity Risk Management Framework

- CUSO Internal Audit Departments (“CUSO IADs”) will periodically examine and evaluate the adequacy and effectiveness of the internal controls surrounding the liquidity risk management processes and system. CUSO IADs will evidence their reviews in audit reports or other documentation and, as required, conduct follow-up audits or examinations of implementation of rectification measures.

2.2. Alignment to “Three Lines of Defense” Model

The three lines of defense for risk governance is detailed in “Bank of China Combined U.S. Operations Risk Management Framework”, Section 2.1 *Three Lines of Defense*.

The segregation of duties prescribed by this model applies to liquidity risk management as follows:

Role	Department
First line of defense	TRY MKD FMD Lines of business of all CUSO entities
Second line of defense	MRD ERM Other Risk Management of CUSO entities
Third line of defense	CUSO IADs

2.3. Responsibilities of the USRMC

The responsibilities of the USRMC, including liquidity risk management specific responsibilities, are outlined in the “U.S. Risk and Management Committee Charter”.

2.4. Responsibilities of the U.S. CRO

The responsibilities of the U.S. CRO, including liquidity risk management specific responsibilities, are outlined in “Bank of China Combined U.S. Operations Risk Management Framework”, Section *U.S. Chief Risk Officer*.

2.5. Responsibilities of Certain CUSO Departments

2.5.1. BOCNY Treasury (TRY)

TRY’s major responsibilities with respect to liquidity risk management mainly in BOCNY are as follows:

High Liquid Asset & Investment Plan Management

- Manage the BOCNY's investment plan based on overall asset and liability condition, regulatory asset pledge needs, excess fund management, liquidity risk, interest rate and foreign exchange risk management requirements;
- Modify BOCNY's investment guidance based on the prevailing market conditions, asset and liability structure, and regulatory and internal risk management if necessary;
- Provide investment plan to improve asset yield, considering BOCNY's overall liquidity condition, various limits and regulatory requirements;
- Monitor BOCNY's end of day balance with the FRB on a daily basis to maintain sufficient liquidity and avoid overnight overdraft;
- Monitor relevant liquidity and funding measures to satisfy BOCNY's liquidity buffer needs.

Contingency Funding Plan

- Maintain BOCNY CFP and its component parts, and ensure BOCNY CFP is reviewed and approved at least annually by ALCO;
- Identify, measure, and monitor liquidity and funding risks for BOCNY during a liquidity event;
- Monitor early warning indicators (“EWI”) on daily basis with respect to the EWI framework, and communicate with senior management when necessary;
- Coordinate the execution of BOCNY CFP, and provide suggestion and assistance in relevant tactical and strategic measures.

Liquidity Stress Test Execution and Buffer Identification

- Obtain on and off balance sheet data for stress testing from T24 system (or future core banking system) for BOC U.S. Branches;
- Collect other U.S. Entities stress testing data coordinated by ERM;

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- Perform stress tests under different scenarios for CUSO and BOCNY;
- Interpret stress test results and present critical messages to senior management;
- Calculate and define liquidity buffer based on stress test results;
- Interpret, present, and communicate the buffer to the relevant committees;
- Regularly revisit assumptions and scenarios based on changes in balance sheet portfolios and products.

Cash Flow Projection

- Develop daily and monthly cash flow projections for BOCNY;
- Interpret and present the BOCNY cash flow projection result to the relevant departments.

Intraday Liquidity Management

- Monitor non-USD position and project end of day balance of USD position.

ALCO Support

- Provide ALCO package.

2.5.2. BOCNY Global Market Department (MKD)

MKD's major responsibilities with respect to liquidity risk management are as follows:

Investment Portfolio and Liquidity Support

- Manage BOCNY's bond investment portfolio as per authorizations from ALCO and investment plan;
- Execute money market transactions requested by TRY to satisfy BOCNY's liquidity buffer needs.

2.5.3. BOCNY Financial Management Department (FMD)

FMD's major responsibilities with respect to liquidity risk management are as follows:

Data Support

- Notify related departments if any new accounting entries is added or any material change in data system and provide accounting code correspondingly.

2.5.4. BOCNY Clearing Department (CLD)

CLD major responsibilities with respect to liquidity risk management are as follows:

Monitor Fed Fund accounts balance:

- Set up the Fed account overdraft limit in its system and monitor the accounts balance periodically considering critical fund payment;

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- Monitor Fed account real-time balance, send out alerts timely to TRY, OSD and MRD when threshold triggers, and report or escalate to executive management if needed.

2.5.5. BOCNY Market Risk Management Department (MRD)

MRD major responsibilities with respect to liquidity risk management are as follows:

Liquidity Risk Framework Maintenance

- Responsible for the maintenance and annual update of the CUSO liquidity risk management framework. The framework must also be updated with any change in corporate structure (e.g. who belongs to the CUSO or internal changes in roles and responsibilities) or risk appetite in a timely manner;
- Coordinate with owners of sub-parts of the framework (e.g. TRY with stress testing, CUSO IADs with the audit plan or examination scope, U.S. CRO with the risk appetite) to ensure the framework is updated for current practices for approval by the USRMC;
- Propose the liquidity risk metrics and limits, ensuring alignment with the CRO defined risk appetite and suitability for the size and complexity of the organization for approval by the USRMC.

Liquidity Risk Analysis

- Responsible for the analysis of any new product introduced in the CUSO that may impact the liquidity risk exposure assessment;
- Independently ensure that TRY fully captures all known liquidity risk exposures;
- Pro-actively analyze the potential impact of regulatory or market change that may alter the CUSO liquidity risk profile;
- Coordinate with ERM for enterprise risks consolidation and reporting.

ALCO Support

- Independently assess any liquidity actions proposed by TRY to support the CRO as a member of ALCO.

USRMC Support

- Provide commentary on the CUSO liquidity risk exposure as it developed over the previous quarter;
- Provide commentary of any new products or any market/regulatory developments that will impact the CUSO liquidity risk profile.

Regulatory Agency Liaison

- Coordinate responses to regulatory authorities on the liquidity risk management framework;
- Coordinate on-site reviews by regulatory authorities when they are assessing BOC liquidity risk management practices.

2.5.6. BOCNY Enterprise Risk Management Department (ERM)

ERM's major responsibilities with respect to liquidity risk management are as follows:

- Responsible for maintaining the risk management framework at the CUSO level, and supporting the USRMC and the US CRO in fulfilling their oversight responsibilities on the CUSO. ERM facilitates communications between MRD and non-banking entities, and supports MRD on the governance process for the liquidity risk management related matters at the CUSO-level.
- Responsible for validation of liquidity risk models according to the tier of models, and also responsible for any model change assessment/validation (e.g. model assumption updates assessment/validation) in accordance to BOCNY Model Risk Management Policy and Procedure, and sharing the assessment/validation results with model owner and MRD.

2.5.7. Other CUSO Entities

- Each CUSO entity is responsible for its own liquidity risk management, monitoring and managing relevant risk metrics, and assessing its own EPS related requirements, data and other related information.
- Each senior risk officer or chief risk officer within the CUSO Entities has an informational reporting line to the US CRO of the CUSO, and is responsible for reporting relevant risk-related information. To assist US CRO, BOCNY related departments will only collect and consolidate the information for CUSO risk reporting purpose.

3. Liquidity Risk Management Strategy and Appetite

3.1. Liquidity Risk Management Strategy

The CUSO's overarching strategy to manage liquidity risk will incorporate the following considerations as appropriate:

- To be prudent by matching illiquid long-term assets with funding from stable liabilities;
- To have sufficient liquidity buffers in place in the form of highly liquid and/or central bank eligible assets and overnight deposits with central banks in order to deal with unexpected cash outflows;
- To restrict short-term cash outflow positions by a limit and control system.

In alignment with the above considerations, liquidity risk management strategies will be developed with the objective of optimizing the relationship between liquidity risk and other forms of risk (such as interest rate risk, credit risk and capital risk) while providing maximum returns to shareholders. These strategies will:

- Identify the primary sources of funding;
- Provide for alternative responses to business scenarios;
- Deal with temporary, short-term and long-term liquidity disruptions;
- Operate within liquidity risk tolerance levels;
- Incorporate periodic review of assumptions used in liquidity projections;

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- Utilize cash flow projections;
- Maintain target levels of unpledged liquid asset reserves;
- Consider and manage volatile liability dependence;
- Address funding concentrations;
- Consider contingent exposures like undrawn credit lines;
- Provide management reporting of the type and frequency specified in the policy.

3.2. Liquidity Risk Appetite Statement

The CUSO adopts a low appetite on liquidity risk. It maintains this position by:

- Maintaining sufficient liquid assets cover the projected net stressed cash-flow need of the U.S. branches over the first 14 days of a stress test with a 30-day planning horizon;
- Undertaking stress tests for 30-day, 90-day and 1-year planning horizons to understand longer term liquidity risk exposure;
- Diversifying its funding sources by instrument type, counterparties, counterparty type, secured and unsecured funding (where applicable);
- Limiting off-balance sheet exposure and other exposure that could create a funding need during a liquidity stress event;
- Establishing and regularly testing the BOCNY Contingency Funding Plan to operationally manage a liquidity crisis.

As a minimum standard, the liquidity risk appetite is defined with limits established, which take into account the following:

- Concentrations in sources of funding by instrument type, single counterparty, counterparty type, secured and unsecured funding;
- The amount of liabilities that mature within various time horizons;
- Off-balance sheet exposures and other exposures that could create funding needs during liquidity stress events.

The established liquidity risk tolerance reflects the capital structure, risk profile, complexity, activities, and size of the BOC CUSO.

The appetite is further defined by the following liquidity metrics and limits:

Metric name	Applicable Entities	Warning Line	Limit
Cumulative Gap Ratio (ratio of assets to liabilities maturing within 90 days)	BOCNY	No less than 40%	No less than 25%
Cushion Above the Monthly Liquidity Stress Test ⁴ Defined Buffer	CUSO	No less than 10%	No less than 5%

⁴ Liquidity stress test accounts for maturity across different time horizons and applies appropriate factors based on instrument type and counterparty type for both on-balance sheet and off-balance sheet exposures.

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Single Third Party Provider Funding Concentration as a Percentage of Total Assets (excluding CDB and PBOC)	BOCNY	No greater than 10%	No greater than 15%
Ratio of Highly Liquid Assets to Buffer Portfolio Size	CUSO	No less than 90%	No less than 85%
Ratio of Brokered Deposits to Total Deposits	BOCNY	No greater than 25%	No greater than 30%

4. Identification of Liquidity Risk

BOC shall identify, measure, monitor and control liquidity risk by total domestic and foreign currencies and major currencies, and adopt appropriate management means in light of different currency business development strategies, market situations and funding methods.

BOC U.S. Branches represent a majority of consolidated U.S. assets. The other CUSO entities – BOC Aviation (USA) Corporation (“BOCA USA”), 7 Bryant Park LLC (“7BP”), and BOC International (USA) Holdings Inc. (“BOCI USA Holdings”) and its subsidiaries, BOC International (USA) Inc. (“BOCI USA”) and BOCI Commodities & Futures (USA) LLC (“BOCI CFUS”), represented the remaining small portion of assets. BOC does not currently operate any agencies in the U.S.⁵

BOC U.S. Branches

The branches offer a range of liability and off-balance sheet products to customers that exposed BOC to liquidity risk. These include time deposits, demand deposits, call loans, brokered certificates of deposits, letters of credit, committed facilities etc.

BOC U.S. branches are the primary source of liquidity risk in the CUSO as well as the only material entity. Descriptions of the other CUSO entities are given below.

BOCA USA

BOCA USA is a wholly-owned subsidiary of BOC Aviation Limited (“BOCA”), based in Singapore, a global aircraft operating leasing company listed on the Hong Kong Stock Exchange.

BOCA USA borrows from BOCA and related companies as well as from financial institutions for any funding needs. Any shortfall of funding is met by borrowing from BOCA or its related companies and thus BOCA USA will always be in positive cash balance position. BOCA USA does not have any off-balance sheet exposure and creates no liquidity exposure for the CUSO.

7BP

7BP was incorporated in New York as a Limited Liability Company, and a subsidiary of Bank of China Group Investment Limited, a Hong Kong-based entity. The entity was established for the purpose of taking ownership of a commercial real estate building located at 7 Bryant Park in New York City. The building was purchased for \$600 million in 2015. BOC has occupied around

⁵ As of December 31, 2020 BOC U.S. Branches represented 95% of consolidated U.S. assets. The other CUSO entities – BOC Aviation (USA) Corporation (“BOCA USA”), 7 Bryant Park LLC (“7BP”), and BOC International (USA) Holdings Consolidated represented the remaining 5% of consolidated U.S. assets.

62% of the available office space and leased the other 32% to third parties. 7BP has no liability products or other off-balance sheet exposures and creates no liquidity exposure for the CUSO.

BOCI USA Holdings

BOCI USA Holdings is a wholly-owned subsidiary of BOC International Holdings Limited, a Hong Kong based company which is ultimately owned by BOC. BOCI USA Holdings wholly owns BOCI USA and BOCI CFUS. The primary purpose of the entity is to have a separate legal entity in the U.S. that provides support functions to BOCI USA and BOCI CFUS. The entity is a holding company and creates no liquidity exposure for the CUSO.

BOCI USA

BOCI USA is a Delaware-incorporated entity that is wholly-owned by BOCI USA Holdings. BOCI USA is registered as a broker-dealer with the Securities and Exchange Commission (“SEC”) and is a member of the Financial Industry Regulatory Authority (“FINRA”). BOCI USA provides brokerage services, connecting institutional investors in North America with entities in Hong Kong and Mainland China. It has no liability products or other off-balance sheet exposures and creates no liquidity exposure for the CUSO.

BOCI CFUS

BOCI CFUS is a limited liability company incorporated in Delaware. The company is a wholly-owned subsidiary of BOCI USA Holdings. BOCI CFUS’s primary business is in acting as an agent in the trading of futures and options contracts.

BOCI CFUS is registered and regulated as a Futures and Commodities Merchant (“FCM”) by the Commodities and Futures Trading Commission (“CFTC”) and BOCI CFUS’s commodities and futures activities are subject to regulation and oversight by the CFTC and the Chicago Mercantile Exchange (“CME”) Group-owned exchanges. BOCI CFUS is a clearing member of the CME Group. As a clearing member of the CME Group, BOCI CFUS must meet certain capital requirements and is responsible for the financial and performance of all transactions executed by BOCI CFUS through the CME Group. This activity introduces an intraday liquidity exposure to the CUSO.

This liquidity exposure is managed through a \$150m of funding support provided by BOCNY. The \$150 million is based on the history of margin calls with other clearing brokers as well as projected business volume for the next three years. Furthermore, BOCI CFUS conducts the liquidity stress testing on a daily basis to assess their operational maximum position limit.

5. Measurement of Liquidity Risk

There are two key tools used for the measurement of liquidity risk exposure; (a) cash flow projections to assess business and usual exposure, and (b) liquidity stress test to assess crisis scenario needs.

5.1. Cash Flow Projections⁶

BOCNY will produce comprehensive cash-flow projections that project cash flows arising from assets, liabilities, and off-balance sheet exposures. This includes a short-term report projecting daily cash needs and a long-term report projecting monthly cash needs, that:

⁶ Cash Flow Projection is not required for CUSO per the requirements under the EPS Tailoring Rule. However, it is still required for BOCNY per FRB, OCC and FDIC other liquidity requirements.

1. Includes cash flows arising from contractual maturities, intercompany transactions, new business, funding renewals, customer options, and other potential events that may impact liquidity;
2. Includes reasonable assumptions regarding the future behavior of assets, liabilities, and off-balance sheet exposures;
3. Identifies and quantifies discrete and cumulative cash-flow mismatches over these time periods;
4. Includes sufficient detail to reflect the risk profile, complexity, currency exposure, and activities as appropriate.⁷

5.2. Liquidity Stress Testing and Scenario Analysis

TRY will produce monthly liquidity stress test results for:

- The CUSO as a whole; and
- BOCNY

It will consider three scenarios:

1. A scenario reflecting systemic stress events;
2. A scenario reflecting idiosyncratic stress events;
3. A scenario reflecting combined market and idiosyncratic stresses.

The above are sufficient for satisfying the minimum scenarios required in BCBS Principles and commensurate with the BOCNY's current business profile and complexity. TRY and MRD will ongoing monitor and review the scenarios at least annually to determine if additional liquidity stress scenarios need to be incorporated based on the Bank's financial condition, size, complexity, risk profile, scope of operations, or activities.

The planning horizon for the liquidity stress tests shall at include overnight, 14-day, 30-day, 90-day and 1-year planning horizons.

The liquidity buffer is defined by the liquidity stress test projected net stressed cash-flow needs over the first 14 days.⁸

6. Monitoring of Liquidity Risk

6.1. Monitoring and Reporting

TRY uses daily cash flow projections to manage the short-term cash needs of the BOC US Branches, and uses the monthly cash flow projections together with ALCO to manage the overall portfolio.

The monthly liquidity stress test run by TRY is reported to ALCO and is used to set the minimum required liquidity buffer.

⁷ Further details of the cash flow projection tools are found in "Cash Flow Projections Documentation".

⁸ Further details of the liquidity stress test tools are found in "Liquidity Stress Test Documentation".

6.2. Early Warning Indicators (EWIs)

The contingency funding plan for BOCNY includes procedures for monitoring emerging liquidity stress events. The procedures identify EWIs that are tailored to BOCNY and are based on certain liquidity stress test scenarios.

Further details of the EWI and the monitoring and escalation process can be found in “BOCNY Contingency Funding Plan”, section 5.2. *Early Warning Indicator Framework* and Appendix C: *Early Warning Indicators*.

7. Control of Liquidity Risk

7.1. Intraday Liquidity Management

BOCNY shall ensure it has enough intraday liquidity positions and relevant financing arrangements to meet the intraday liquidity management demands against normal conditions and under stress scenarios.

TRY will monitor non-USD position and project end of day balance of USD position.

1. Monitor and measure expected daily non-USD inflows and outflows, and coordinate the foreign currency position reporting and manage the position centrally;
2. Project the end of day balance with the FRB, assess funding adequacy and report or escalate to executive management when necessary;
3. If any USD intraday liquidity shortfall occurs, TRY and other related business departments shall take actions to fulfill the gap.

CLD establishes and maintains procedures and processes to monitor Fed Fund accounts balance, and monitors clients' overdraft usage:

1. Set up the Fed account overdraft limit in its system and monitor the accounts balance periodically considering critical fund payment;
2. Monitor clients overdraft usage, suspend payments and notify clients when clients breach their overdraft limits;
3. Monitor Fed account real-time balance, send out alerts timely to TRY, OSD and MRD when threshold triggers, and report or escalate to executive management if needed;
4. Manually release payments based on requested payment type, payment amount and BOCNY's Fed account balance, and suspend payments by following the instruction of executive management when the Fed account balance is insufficient.

Operation Service Department's responsibilities include:

1. Settle funds transfer requests from MKD;
2. Reconcile statements of Nostro account, report to TRY any outstanding transactions of the previous day, Notify TRY immediately any insufficient account balance or overdrawn if found.
3. Provide information to CLD on custodian security settlement payments need to process when necessary.

Other Business Departments and Satellite Branches:

1. Communicate in advance with TRY should foreign currency be involved in new business, new product, external service agreements or contracts, and comply with position reporting requirements;
2. Report position information timely based on business situation, solve problems in position proactively, and check the status of the position regularly;
3. Develop departmental procedures or guidance for position reporting and provide training to relevant employees;
4. Report to TRY usage of overdraft facility of non-financial institution Vostro account.

Sources of intraday funds are from but not limited to the following:

- Reserve balances at the FRB;
- Collateral pledged that can be freely converted into intraday liquidity;
- Unencumbered assets that can be freely converted into intraday liquidity;
- Secured and unsecured, committed and uncommitted credit lines available intraday;
- Balances with other banks that can be used for intraday settlement;
- Payments received through correspondent banking services;
- Set up process for applying and utilizing the Net debit cap from the FRB based on funding needs.

Uses of intraday funds include but are not limited to the following:

- Payments made through correspondent banking services;
- Secured and unsecured, committed and uncommitted credit lines offered intraday;
- Contingent payments relating to a payment and settlement system's failure;
- Deposit withdrawals.

7.2. Management of High Liquid Assets

The Bank shall hold adequate high liquid assets to timely meet liquidity demands defined under the stress scenarios. High liquid assets shall be unencumbered assets, which may include liquid assets that can be liquidated by sale or pledge.

7.2.1. Buffer Location

The buffer is managed by TRY and must be held in an account physically located in the United States of America which they can operate unhindered.

7.2.2. Buffer Composition

The buffer must consist of unencumbered, high liquid assets that may include:

- A. Cash;
- B. Securities issued or guaranteed by the United States, a U.S. government agency, or a U.S. government-sponsored enterprise; or
- C. Any other asset that the foreign banking organization demonstrates to the satisfaction of US regulatory requirements:

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1. Has low credit risk and low market risk;
2. Is traded in an active secondary two-way market that has committed market makers and independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a reasonable time period conforming with trade custom;
3. Is a type of asset that investors historically have purchased in periods of financial market distress during which market liquidity has been impaired.

In calculating the amount of a highly liquid asset included in the liquidity buffer, BOCNY must discount the fair market value of the asset to reflect any credit risk and market price volatility of the asset.

The liquidity buffer must not contain significant concentrations of highly liquid assets by issuer, business sector, region, or other factor related to the foreign banking organization's risk, except with respect to cash and securities issued or guaranteed by the United States, a U.S. government agency, or a U.S. government-sponsored enterprise.

7.3. Investment Collateral Management

BOCNY must maintain policies and procedures to monitor investments that have been or are available to be pledged as collateral.

1. FMD monitors the levels of sufficiency of regulatory required pledge assets by branches and conducts due diligence for regulatory reporting.
2. When the collateral is insufficient or the securities need to be replaced, FMD shall inform TRY and TRY will select security to meet regulatory requirement.
3. OSD is responsible for security settlement and tracking operational and timing requirements associated with accessing collateral at its physical location (for example, the custodian or securities settlement system that holds the collateral).

7.4. Contingency Funding Plan⁹

The "BOCNY Contingency Funding Plan" is an ALCO approved document.

It serves as an operating plan during a liquidity crisis to ensure obligations are met in a timely manner. The CFP defines the emergency management framework and delegations that allows BOCNY to rapidly respond in stressed liquidity situations. This rapid response enables the BOCNY to protect depositors, creditors and the investors. The document outlines various tactical and strategic countermeasures which may be used in different levels of liquidity stress.

The CFP outlines the methodology BOCNY will use to identify liquidity concerns promptly and provide appropriate and timely responses to minimize and manage risk exposures for BOCNY. These early warning indicators for liquidity stress scenario identification in conjunction with the

⁹ Contingency Funding Plan ("CFP") is not required for CUSO per the requirements in the EPS Tailoring Rule. However, it is still required for BOCNY per FRB, OCC and FDIC other liquidity requirements.

monthly liquidity stress testing results will alert management to the emergence of potential liquidity events.

Components of the BOCNY CFP will be regularly tested to ensure its readiness in the event of a liquidity crisis. This includes the convening of the Liquidity Crisis Management Team under a simulated crisis scenario to test the operational effectiveness of the CFP. Tactical countermeasures are also regularly tested to ensure readiness for the timely access of funds.

8. Management Information Systems

The “Liquidity Risk Management Policy of Bank of China Limited”, Chapter V, *Management Information Systems*, outlines requirements for a MIS to provide accurate, timely and comprehensive measurement, monitoring and reporting of liquidity risk profile. The requirements include the ability to:

1. Calculate cash inflow, outflow and gap by currency on a daily basis;
2. Calculate liquidity risk supervision and monitoring indicators in time and increase monitoring frequency if necessary;
3. Support the monitoring and control of liquidity risk limits;
4. Support the monitoring of large-value cash flows constantly;
5. Support the monitoring of such information as category, quantity, currency, region and institution and custody account relative to high liquid assets and other unencumbered assets;
6. Support the monitoring of such information as category, quantity, currency, region and institution and custody account relative to financing collaterals;
7. Support the stress test under different assumed scenarios.

9. Exceptions

Any exception to this Policy must be formally requested, and approved by the US CRO in writing with a stated end date for the exception. Exceptions must be reviewed periodically by the US CRO to ensure they remain appropriate. Any exceptions to this Policy approved by the US CRO must be reported to the USRMC in the next scheduled meeting. The USRMC has the authority to revoke any exception.

10. Appendix

10.1. Overview of Roles and Responsibilities

The following table provides an overview of the roles and responsibilities of various committees and positions as they relate to the management of liquidity risk. The table illustrates who is the accountable (A), who is the responsible (R) officer or committee to execute the task, who is consulted (C) in the process, and who gets informed (I) of the key activity. The specific roles and responsibilities are detailed in the following sections.

CUSO Liquidity Risk Management Framework

Role for each key activity in liquidity risk management:

	<i>Define risk appetite</i>	<i>Policy and Framework</i>	<i>Risk reporting</i>	<i>Risk analysis/ Independent Review</i>	<i>Stress testing</i>	<i>Model validation</i>	<i>Contingency planning/E WI</i>	<i>Daily liquidity Operation</i>	<i>Audit</i>	<i>CUSO Entity Scope</i>
<i>U.S. Risk and Management Committee</i>	A	A	A	A	A	A	I	I	I	CUSO
<i>U.S. CRO</i>	R	R	I	I	I	C	C	I	C	CUSO
<i>BOCNY ALCO (*)</i>	C	C	I	I	I	I	R	R	C	BOCNY
<i>BOCNY RMICC/ MLRC (*)</i>	R	R	R	R	I	R	C	C	C	BOCNY
<i>BOCNY MRD</i>	C	C	C	R	C	C	C	C	C	BOCNY
<i>BOCNY ERM</i>	C	C	I	I	I	R	I	I	C	BOCNY
<i>BOCNY TRY (*)</i>	I	C	R	C	R	C	R	R	C	BOCNY
<i>BOCNY FMD (*)</i>	I	C	C	I	C	C	C	C	C	BOCNY
<i>BOCNY MKD (*)</i>	I	C	I	I	C	C	C	C	C	BOCNY
<i>BOCNY Lines of business (*)</i>	I	I	I	C	I	C	C	C	C	BOCNY
<i>BOCNY IAD (*)</i>	-	-	-	-	-	-	-	-	A, R	BOCNY
<i>BOCI USA Holdings/BOCA USA/7BP</i>	C	C	R	R	R	R	R	R	C	BOCI USA Holdings/ BOCA USA/7BP
<i>Other CUSO IADs</i>	-	-	-	-	-	-	-	-	A, R	Other CUSO Entities

(R) = Responsible, (A) = Accountable, (C) = Consulted, (I) = Informed

(*) Responsible for the related liquidity risk management practices in the US Branches (“BOCNY”)

10.2. Glossary

Abbreviation	Name
ALCO	BOCNY Asset Liability Management Committee
Board of Directors	Bank of China Limited Board of Directors
BOC/BOC Group	Bank of China Limited
BOCNY	Bank of China New York Branch or Bank of China U.S Branches
BOCA USA	BOC Aviation (U.S.A.) Corporation
BOCI USA	BOC International (U.S.A.) Incorporated
BOCI CFUS	BOCI Commodities & Futures (U.S.A.) LLC
BOCI USA Holdings	BOC International (U.S.A.) Holdings Incorporation
CFTC	Commodities and Futures Trading Commission
CLD	BOCNY Clearing Department
CME	Chicago Mercantile Exchange
CRO	Chief Risk Officer
CUSO	Bank of China Limited's Combined U.S. Operations
EPS	Enhanced Prudential Standards Rule
ERM	BOCNY Enterprise Risk Management Department
FCM	Futures and Commodities Merchant
FDIC	Federal Deposit Insurance Corporation
FRB	Federal Reserve Board
FINRA	Financial Industry Regulatory Authority
FMD	BOCNY Financial Management Department
HO	Bank of China Limited Head Office
IADs	CUSO Internal Audit Departments
MKD	BOCNY Global Market Department
MLRC	BOCNY Market and Liquidity Risk Management Committee
MRD	BOCNY Market Risk Management Department
OCC	Office of Comptroller of the Currency
ORD	BOCNY Operational Risk Department
OSD	BOCNY Operational Service Department
RMICC	BOCNY Risk Management and Internal Control Committee
SEC	Securities and Exchange Commission
TRY	BOCNY Treasury
USRMC	U.S. Risk and Management Committee

10.3. Related Policies & Guidelines

Document Title	Owner
CUSO Risk Management Framework	ERM
Liquidity Stress Test Documentation	TRY
BOCNY Contingency Funding Plan	TRY
BOCNY Cash Flow Projection Documentation	TRY
BOCNY Liquidity Risk Management Policy	MRD
BOCNY Model Risk Management Policy	ERM
Liquidity Risk Management Policy of Bank of China Limited	BOC HO