|  |  |
| --- | --- |
| **Date** | Oct 29, 2019 |
| **MRA Project Manager** | Charlie Peng |

|  |  |
| --- | --- |
| **MRA Issued Date** | May 6, 2019 |

|  |  |
| --- | --- |
| **FED MRA** | |
| **Description of MRA** | **MRA: Support for and Transparency of ILST Assumptions**  **Issue**: *BOC’s support for and transparency of internal liquidity stress testing (ILST) assumptions for the branch’s financial institution (FI) deposits and off-balance-sheet (OBS) credit commitment facilities are insufficient and are not consistent with Regulation YY and SR Letter 10-6 supervisory standards and expectations, given the branch’s risk profile. Specifically, for FI deposits, BOC provided limited and insufficient support for the reactiveness factors used to derive the overnight and 14-day outflow rates. For the branch’s material OBS credit commitment exposures, the branch lacked sufficient support, analysis, and segmentation for sizable exposure assumption.*  **Impact**: *The lack of support, segmentation, and documentation of key assumptions to fully explain how assumptions are derived and why they are appropriately stressful, given the scenario conditions, could lead to ILST results that do not account for liquidity vulnerabilities under stress.*  **Required Action**:*By October 31, 2019, BOC is required to improve assumption support and segmentation for all of the branch’s material assumptions, notable the firm’s sizable FI deposits and unfunded credit commitment exposures. Management is required to provide a clear data, and studies influencing the runoff rates used. In addition, the support and segmentation of unfunded credit commitments needs to be reasonable and to consider key risk factors and appropriate portfolio segmentation granularity.* |
| **Description of Action Item(s) and Detailed Step(s)** | **BOC USA Response**: While relevant data and studies have been analyzed during the development of runoff rates and reactiveness factors for financial institution deposits, BOC USA Management (the “Management”) concurs that the Bank needs to improve the support for the reactiveness factors used to derive the overnight and 14-day outflow rate.  In addition, the Bank currently applies the runoff rates from Liquidity Coverage Ratio (LCR) rules for OBS credit commitment due to the limitation of the Bank’s own historical data. The Bank currently segments corporate and financial sectors to reflect the Bank’s business profile, and is in the progress of segmenting liquidity and credit facilities to enhance the runoff rates. The Management concurs with the finding and will consider additional key risk factors and appropriate portfolio segmentation granularity to reasonably support the OBS unfunded credit commitment runoff rates.  **BOC USA Action Plan and Timeline**: The Management will collect and analyze the Bank’s internal historical data, and leverage any available external data and studies to derive the financial institution deposits runoff rates and reactiveness factors under different stressed scenarios. The Management will articulate the linkage of factors, data and studies influencing the runoff rates.  Moreover, the Management will perform analysis with key risk factors and appropriate portfolio segmentation granularity to support OBS unfunded credit commitment runoff rates. The internal and external data will be considered and utilized in the development of runoff rates for the additional segmentations. The Management will document the appropriate segmentations and their corresponding runoff rates with sufficient details.  Independent Risk Management functions will review and validate the data analysis & segmentation methodology and documentation to ensure that the runoff rates are well-supported, well-documented and based on sound rationale.  The Management will then obtain the appropriate levels of approval, implement the MRA remediation action and submit the remediation package by October 31st, 2019. |

|  |
| --- |
| **Part 1 – Evidence of Project Execution from the First Line of Defense** |

| **Department** | **Description** | **Evidence** |
| --- | --- | --- |
| TRY | The Bank’s First Line of Defense unit Treasury Department (“TRY”) has enhanced the internal liquidity stress testing (ILST) methodology and provided adequate supporting evidence for FI deposits runoff and OBS credit commitment drawdown assumptions. The updated assumptions have been implemented in the internal stress testing as of August month-end, 2019, with approval of the Bank’s Market and Liquidity Risk Committee (MLRC).  In response to the Fed’s comments on BOC’s support for and transparency of internal liquidity stress testing (ILST) assumptions, the Bank drew up a remediation plan including researches on BOC’s historical data and references to external benchmarks. The Bank also involved business units that own FI deposits and OBS credit commitment products to gain a thorough understanding on the nature of business and products and the impact on cash flow under stress scenarios. All the aforementioned work has been reflected in the proposed resolution.  With the researches on the Bank’s historical data, and evidence from external studies, BOC established new segmentation methodology and developed internal empirical data based approach to produce updated runoff and drawdown assumptions. The proposed assumptions are designed to fit the particularity of the Bank’s products, and are applied to FI deposits and OBS credit commitments under the three stressed scenarios corresponding at different percentiles respectively.  Attached is the TRY’s remediation resolution document. TRY has adopted some of second line’s recommendations and made corresponding adjustments to the proposed resolution, where appropriate. |  |

|  |
| --- |
| **Part 2 – Second Line of Defense Review Results** |

| **Department** | **Description** | **Evidence** |
| --- | --- | --- |
| MRD | As an Independent Risk Management (“IRM”) under Second Line of Defense, the Bank’s Market Risk Management Department (“MRD”) has conducted the independent review and effective challenge on FLU’s proposal of FI deposits runoff and OBS credit commitment drawdown assumptions. MRD’s review scope covered the data quality and sources, theory and assumptions, analysis and calculation, results and impacts.  The FI deposits runoff and OBS credit commitment drawdown assumptions are developed primarily based on historical observations, management judgement, industrial practice, and regulatory guidance. After the review and challenge, MRD concludes the methodology, assumptions and runoff rates for FI deposits and OBS credit commitment are acceptable. FLU has reflected MRD’s recommendations into the final proposal and documentation.  Attached is MRD’s review report. |  |

|  |
| --- |
| **Part 3 – IAD Validation Review Results** |

| **Department** | **Description** | **Evidence** |
| --- | --- | --- |
| IAD | Internal Audit Department (IAD) conducted independent validation on the Bank’s remediation for the MRA by assessing whether corrective actions were implemented to address the actions required by the FRB to improve assumption support and segmentation for FI deposits and OBS credit commitment and assessing second line of defense’s validation results.  **Overall conclusion:** IAD concluded that the FRB MRA related to assumptions on FI Deposits and OBS Credit Commitments was fully addressed and therefore resulted in the “Pass” rating for the validation.  Attached is the internal audit validation report. |  |

|  |
| --- |
| **Part 4 – Evidence of Risk Governance (Risk Committee Approval)** |

| **Number** | **Description** | **Evidence** |
| --- | --- | --- |
| 1 | BOCNY Market and Liquidity Risk Committee (MLRC) reviewed and approved Fed MRA remediation resolution on August 22nd, 2019.  Attached is the MLRC meeting minutes. |  |