Bank of China USA

OTTI Procedure

Market Risk Management Department

February 2020

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Reviewed by		
Charlie Peng **SVP, Head of MRD**		2/24/2020
	Signature	Date

Contents

1. Executive Summary

This procedure is developed for Bank of China New York Branch and its satellite branches (collectively "BOCNY" or "Bank") to evaluate other–than-temporary impairment (OTTI) for debt securities on a quarterly basis, including OTTI recognition, determination, methodology, process, and roles and responsibilities based on related policies and procedures.

1.1. Rationale

Currently, the Bank classifies all investment in debt securities as available-for-sale (AFS) securities that are recorded at fair value with unrealized gains or losses due to changes in fair value deferred to other comprehensive income (OCI) in equity. General Accepted Accounting Standard (U.S. GAAP) requires the Bank to determine whether declines in the fair value below the amortized cost basis (i.e., impairments) of debt securities classified as AFS are other-than-temporary-impaired. This procedure provides a standard process for BOCNY Front Line Units ("FLUs") and Independent Risk Management ("IRM") to evaluate the OTTI for debt securities the Bank holds.

1.2. Related Policies & Procedures

The following policies and procedures provide the governance, guidelines, and references to this procedure.

Related Policies and Procedures

- BOCNY Risk Governance Framework
- BOCNY Credit Risk Management Policy
- BOCNY Market Risk Management Policy
- BOCNY Investment Policy

2. The Scope

This Procedure applies to FLUs and IRM departments of BOCNY as guidance on OTTI evaluation. The Bank shall conduct its OTTI evaluation within the scope of this procedure, its Risk Governance Framework, related regulations, other policies as well as those of Head Office.

3. Roles & Responsibilities

3.1. Procedure Governance

This procedure is drafted by Market Risk Management Department (MRD). Market and Liquidity Risk Committee (MLRC) has approval authorities. MRD is the owner of this procedure.

This procedure should be periodically reviewed and updated by MRD at least every three years or more frequently to reflect the changes in the related policies and procedures and the risk management practice. Reviews and updates are expected frequently until the procedure matures.

3.2. Procedure Implementation

3.2.1 Middle Office Department

The Middle Office Department (MOD) is responsible for:

- Continuously monitoring the market price and credit ratings, initiating the OTTI procedure when the market price is lower than the amortized cost on a quarterly basis.

- Reviewing the documents of OTTI proposal and estimation received from MKD and submitting them to MRD for further review.

- Maintaining the documents of OTTI proposal and other related working documents such as the date and the scope of impairment assessment, assessment results, etc.

3.2.2 Global Market Department

Upon request from MOD, the Global Market Department (MKD) is responsible for determining if a debt security has objective evidence of impairment and evaluating whether the impairment is other than temporary. MKD will submit the assessment to MOD. If an OTTI is considered to have occurred, MKD will prepare OTTI proposal with OTTI estimation and submit them to MOD for review.

3.2.3 Market Risk Management Department

The Market Risk Management Department (MRD) is responsible for establishing the cross-departmental procedure and methodology of OTTI for debt securities, and providing independent review from risk management perspective on the OTTI proposal and data including OTTI estimation submitted by MOD.

3.2.4 Operational Service Department

Back office in Operational Service Department (OSD) is responsible for calculating the discount cash flow to determine the OTTI based on the methodology developed by MRD, recording journal entries and notifying MKD, MOD, MRD the results of OTTI calculation.

4. Procedure Instructions

4.1. Impairment Determination

The evaluation of debt security impairment should follow the principles of comprehensiveness, objectivity and prudence.

- **Principle of Comprehensiveness.** The Bank should conduct the impairment assessment on the debt security investments in accordance with the requirements prescribed in this procedure.

- **Principle of Objectivity.** A debt security is identified as impaired only if there is objective evidence to prove that its future cash flows will be affected; the provision should truthfully reflect the risk exposure and the supporting documents should be reliable.

  The objective evidence of the impairment refers to the event in which the credit risk of the issuer is increasing with negative impacts on the future cash flow of the debt security. Impairment indicators include, but are not limited to the following quantitative and qualitative evidences:

  - Quantitative evidences of the impairment, such as:

    1) The fair value of a debt security has been continuously less than 10% or more of its amortized cost for six months or more due to the credit factors.

    2) The fair value of a debt security has decreased more than 20% within three months due to credit factors.

  - Qualitative evidences of the impairment, such as:

    1) A significant deterioration in the earnings performance, credit rating, asset quality, or business prospects of the issuer;

    2) A significant adverse change in the regulatory, economic, or technological environment of the issuer;

    3) A significant adverse change in the general market condition of either the geographic area or the industry in which the issuer operates;

    4) A bona fide offer to purchase (whether solicited or unsolicited), an offer by the issuer to sell, or a completed auction process for the same or similar security for an amount less than the cost of the investment;

    5) Factors that raise significant concerns about the issuer's ability to continue as a going concern, such as negative cash flows from operations, working capital deficiencies, or noncompliance with statutory capital requirements or debt covenants.

  If the fair value of a debt security declines only due to fluctuation of market interest rates or market liquidity issues, the debt security cannot be identified as impaired.

- **Principles of Prudence**. From a comprehensive and prudent point of view, the standards for impairment provision should also consider the Bank’s internal risk rating of the issuer and the impairment levels of other products the Bank sold to the issue, etc. In addition, each debt security may have different risks due to different issuer or product, and it should be considered differently when evaluating the impairment.

Impairment assessment of debt securities and test of whether objective evidence for impairment exists should be conducted quarterly. If there is a major emergency or credit loss event, the impairment assessment and provision shall be conducted in a timely manner to mitigate the risk.

4.2. OTTI Assessment

An individual debt security is impaired when its fair value is less than its amortized cost. Amortized cost basis includes adjustments made to the cost of an investment for accretion, amortization, collection of cash and previous other-than-temporary impairments recognized in earnings. An OTTI is considered to have occurred if the Bank ascertains the following for debt security for which fair value is less than amortized cost:

- **Situation 1:** The Bank intends to sell the impaired security (i.e., management has decided to sell the security);
- **Situation 2:** If the Bank does not intend to sell the debt security, but it is more likely than not the Bank will be required to sell the security before recovery of its amortized cost basis less ;
- **Situation 3:** The Bank does not expect to recover the entire amortized cost basis if the management does not intend to sell the security.

For debt securities with objective evidence of impairment, the impairment shall be assessed at the individual security level.

If an OTTI has occurred, the amount of the OTTI recognized in earnings depends on whether the Bank intends to sell the security or more likely than not will be required to sell the security before recovery of its amortized cost basis less any current-period credit loss.

If the Bank intends to sell the security or more likely than not will be required to sell the security before recovery of its amortized cost basis less any current-period credit loss (situation 1 or 2 above), the OTTI shall be recognized in earnings equal to the entire difference between the security’s amortized cost basis and its fair value at the balance sheet date.

If the Bank does not intend to sell the security and it is not more likely than not that the Bank will be required to sell the security before recovery of its amortized cost basis less any current period credit loss (situation 3 above), the OTTI shall be separated into both of the following:

- The amount representing the credit loss, which shall be recognized in earnings;
- The amount related to all other factors, which shall be shall be recognized in other comprehensive income (OCI), net of applicable taxes.

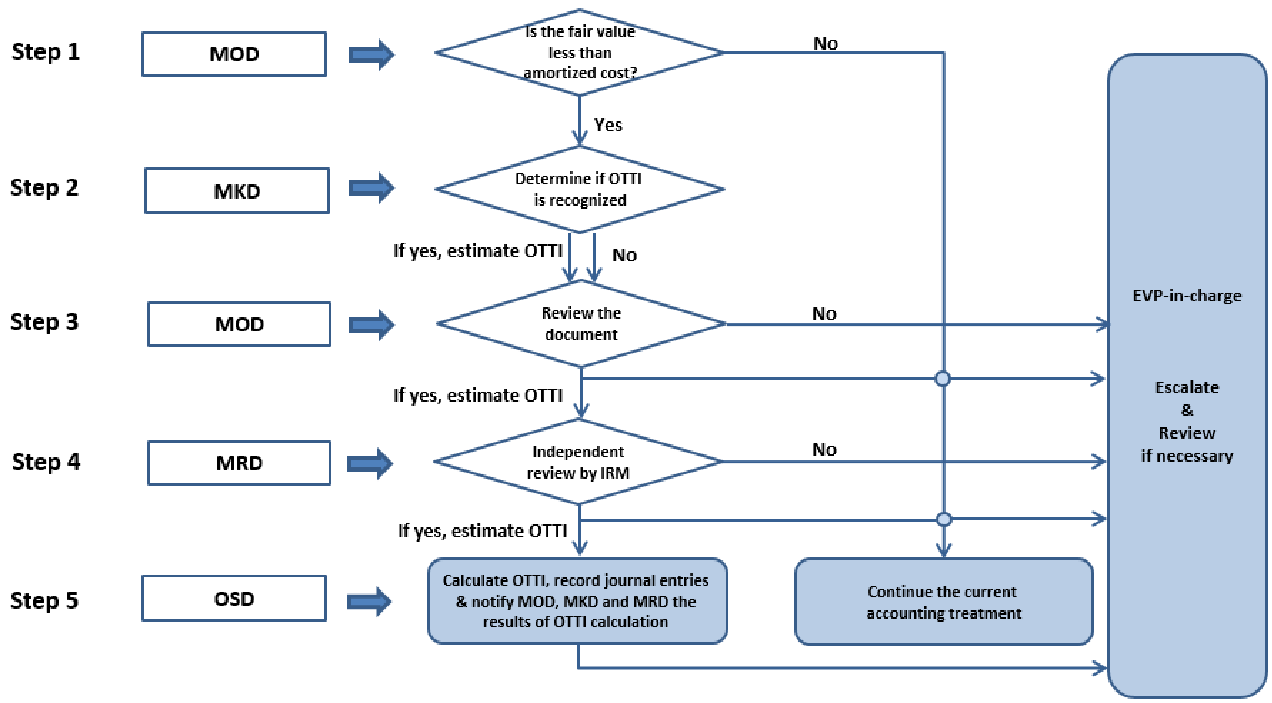
In situation 3 above, the Bank should consider the following information when developing the estimate of cash flows expected to be collected:

- The remaining payment terms of the security
- Prepayment speeds
- The financial condition of the issuer
- Expected defaults
- The value of any underlying collateral

The previous amortized cost basis less the other-than-temporary impairment recognized in earnings shall become the new amortized cost basis of the investment. That new amortized cost basis shall not be adjusted for subsequent recoveries in fair value.

The specific accounting treatments of the OTTI shall be based on the FMD's relevant policies.

4.3. Process and Decision Tree



- **Step 1: Impairment initiation**

  The initiation of impairment on a debt security should be conducted two business days (T-2) before each quarter end (T+0). MOD is an integral part of first line of defense and conducts debt security investments valuation on a daily basis. MOD should decide if the fair value of a debt security is lower than its amortized cost and if OTTI initiation is needed.

- **Step 2: OTTI determination**

  MKD is responsible for OTTI determination and preparing the documents that are required for verification of OTTI determination (including but not limited to introduction of the debt security and its issuer, the objective evidence and the results of impairment assessment, etc). The related documentation and OTTI estimation will be sent to MOD for first line review.

- **Step 3: First line review**

MOD reviews the document of OTTI proposal with OTTI estimation received from MKD and escalates to EVP-in-charge if necessary. After required documents are ready, MOD should deliver them to MRD, the second line of defense, for further independent review.

- **Step 4: Second line review**

  MRD evaluates related documents, eventually determine whether the debt security is impaired other than temporarily and escalates to EVP-in-charge if necessary. If MRD agrees the debt security is impaired other than temporarily, related documents including OTTI estimation should be passed over to the back office in OSD.

- **Step 5: Accounting subsequent to recognition of OTTI**

  The back office in OSD then calculates the OTTI depending on the situations described above and records accounting entries accordingly:

  ❖ In situation 1 or 2 above, the OTTI equals to the entire difference between the investment's amortized cost basis and its fair value at the balance sheet date.

  ❖ In situation 3 above, the amount representing the credit loss in OTTI is calculated based on the methodology developed by MRD.

  OSD will notify MKD, MOD& MRD the results of OTTI calculation and escalates to EVP-in-charge if necessary.

- **Step 6: Re-evaluation**

  Once each quarter end (T+0) data is available, all stakeholder will re-evaluate the OTTI within five business days by following above steps.

5. Procedure Assurance Methods

5.1. Awareness Methods

Individuals must be aware of the existence and the requirements of this procedure. Accepted awareness methods can include, but are not limited to, e-mail notifications, user attestations, or target awareness programs such as training, self-study, annual review, and etc. Awareness and training methods may be delivered together.

5.2. Training Methods

Individual is provided with training materials on the requirements and the scope of the procedure. The training includes new hires' training on the procedures, and also annual training program combined with review and update of the procedures.

5.3. Procedure Adherence Monitoring

MRD leverages primarily self-review and updates on an annual basis to monitor the procedure adherence. In addition, MRD will leverage IAD's audit review to evaluate the effectiveness of the procedures adherence and ongoing monitoring. MRD will take IAD's audit findings as an opportunity to enhance the procedures.

5.4. Update Requirements

This procedure should be reviewed periodically for potential updates or approvals at least every three years or more frequently if necessary.

5.5. Consequences of Violating the Procedure

The potential consequences of violating the procedure include oral warnings, performance rating downgrade, and warning of compensation impact based on HR related policy and guidelines.

5.6. Exceptions & Exemptions

Exceptions and exemptions to a procedure must be managed under the exception framework established in the associated policy.

6. Reference Information

6.1. External Regulations

6.2. Other Related Branch Policies, Procedures, and/or Guidance

Not applicable.

6.3. Glossary

The glossary lists the definitions and acronyms used in the policy.

Abbreviation	Name
ALCO	Asset Liability Management Committee
Board of Directors	Bank of China Limited Board of Directors
BOC	Bank of China Limited
BOCNY	Bank of China New York Branch or Bank of China U.S Branch
CRO	Chief Risk Officer
CUSO	Bank of China Limited's Combined U.S. Operations
EPS	Federal Reserve's Enhanced Prudential Standards Rule
FMD	BOCNY Financial Management Department
HO	Bank of China Limited Head Office
HS	Heightened Standard (Issued by Office of Comptroller of the Currency)
IAD	BOCNY Internal Audit Departments
LCD	BOCNY Legal and Compliance Department

MLRC	Market and Liquidity Risk Committee
MOD	Middle Office Department
MRD	Market Risk Management Department
OCC	Office of Comptroller of the Currency
ORD	BOCNY Operational Risk Department
RMD	BOCNY Risk Management Department
RMICC	Risk Management and Internal Control Committee
MKD	Global Market Department
USRMC	U.S. Risk Management Committee

7. Appendix

7.1. OTTI Methodology