CREDIT RISK MANAGEMENT (GCG III.27.c)

Credit risk arises from the failure of a counterparty to meet the terms of any contract with the Bank. Credit risk is not limited to the loan portfolio but is found in all the Bank's activities where success depends on counterparty, issuer, or borrower performance. It arises any time the Bank's funds are extended, committed, invested, or otherwise exposed through actual or implied contractual agreements, whether reflected on or off the balance sheet. The Bank considers its loan portfolio as the major source of credit risk. However, other sources of credit risk exist throughout the activities of the Bank, including the banking and trading books and On- and Off-Balance Sheet transactions.

Maximum Credit Risk Exposure (ARAC II.C.1.a and ARAC II.C.1.b)

The table below shows LANDBANK's maximum exposure to credit risk, before and after considering eligible collateral held or other credit enhancements.

On-Balance Sheet (BS) Items	2022 (In ₱ Millions)							
	CEA	0%	20%	50%	75%	100%	150%	CRWA
Cash on Hand	55,971	55,971	-	-	-	-	-	0
Checks & Other Cash Items (COCI)	33	-	33	-	-	-	-	7
Due from Bangko Sentral ng Pilipinas (BSP)	564,529	564,529	-	-	-	-	-	0
Due from Other Banks	17,995	-	1,525	16,449	-	21	-	8,550
Financial Assets Designated at FVTPL	1,109	-	-	-	-	1,109	-	1,109
Available-for-Sale (AFS) Financial Assets	426,629	348,619	3,940	70,931	-	3,139	-	39,392
Held-to-Maturity (HTM) Financial Assets	847,257	813,993	8,162	21,623	-	3,479	-	15,923
Loans & Receivables	1,002,524	-	6,142	101,243	-	857,937	37,202	965,591
1. Interbank Loans Receivables	49,487	-	5,746	8,928	-	34,658	155	40,504
2. Loans & Receivables - Others								
a. LGUs & Public Sector Entities	69,930	-	-	-	-	69,930	-	69,930
b. Government Corporation	2,022	-	-	-	-	2,022	-	2,022
c. Corporates	691,213	-	-	-	-	691,213	-	691,213
d. Microfinance/Small & Medium Enterprise	71,719	-	396	71,189	-		134	35,875
e. Loans to individuals	75,651	-	-	21,126	-	54,525	-	65,088
3. Defaulted Exposures	42,502	-	-	-	-	5,589	36,913	60,959
Other Loans and Receivables [1/]	29,200	26,547	-	2,653	-		-	1,326
Sales Contract Receivable (SCR)	1,831	-	-	-	-	913	918	2,290
Real & Other Properties Acquired (ROPA)	12,619	-	-	-	-		12,619	18,929
Total Exposures Excluding Other Assets	2,959,697	1,809,659	19,802	212,899	-	866,598	50,739	1,053,117
Add: Other Assets	42,989	270	-	-	-	42,719	-	42,719
Total On-BS RWA covered by CRM	-	-	-	-	-	-	-	1,079
Total On-BS Exposures	3,002,686	1,809,929	19,802	212,899	-	909,317	50,739	1,096,915

[1/] Arising from Repurchase Agreements, Certificates of Assignment/Participation with Recourse, and Securities Lending and Borrowing Transactions

Off-BS Items	2022 (In ₱ Millions)							
	CEA	0%	20%	50%	75%	100%	150%	CRWA
A. Direct credit substitutes	2,940	-	-	13	-	2,927	-	2,933
B. Transaction-related contingencies	77,206	-	-	-	-	77,206	-	77,206
C. Trade-related contingencies	4,171	-	-	2413	-	1,758	-	2,964
D. Other commitments	-	-	-	-	-	-	-	0
Total Off-BS Exposures	84,317	-	-	2426	-	81,891	-	83,103
Counterparty RWA In The Banking Book	**CEA**	**0%**	**20%**	**50%**	**75%**	**100%**	**150%**	**CRWA**
Available for Sale	**18,531**	-	**10,499**	**8,032**	-	-	-	**6,116**
TOTAL	**18,531**	-	**10,499**	**8,032**	-	-	-	**6,116**
Counterparty RWA In The Trading Book	**CEA**	**0%**	**20%**	**50%**	**75%**	**100%**	**150%**	**CRWA**
Exchange Rate Contracts	**4,570**	**3,229**	-	-	-	**1,341**	-	**1,341**
TOTAL	**4,570**	**3,229**	-	-	-	**1,341**	-	**1,341**
Less: General Loan Loss Provision (in excess of the amount permitted to be included in Tier 2)	-	-	-	-	-	-	-	-
TOTAL	**3,110,104**	**1,813,158**	**30,301**	**223,357**	**0**	**992,549**	**50,739**	**1,187,475**

CEA: **C**redit **E**quivalent **A**mount **CRM**: **C**redit **R**isk **M**itigant **RWA**: **R**isk **W**eighted Assets **CRWA**: Credit Risk Weighted Assets

Credit Exposures and Credit-Related Commitments (ARAC II.C.1.c)

As of December 31, 2022, LANDBANK's Gross Loans & Receivables (GLR) amounted to P1,002,524 million, net of credit risk mitigation which consists mainly of prime collaterals such as deposit holdout, government securities (GS) and sovereign guarantees. Net of Loans & Receivables, Corporates stood at P691,213 million (68.95%), followed by Loans to Individuals at P75,651 million (7.55%), Local Government Units (LGUs)/Public Sector Entities/Government Corporations at P71,952 million (7.18%) and Micro, Small & Medium Enterprises (MSMEs) at P71,719 million (7.15%). The Bank also holds substantial receivables arising from Repurchase Agreements, Certificates of Assignment/Participation with Recourse, and Securities Lending and Borrowing Transactions amounting to P29,200 million. The P83,103 million credit risk-weighted asset of net Off-balance Sheet exposures of P84,317 million is computed based on respective Credit Conversion Factors. These accounts are composed mainly of general guarantees of indebtedness (e.g., financial standby letters of credit - domestic and foreign), performance bonds and warranties related to particular transactions, and contingencies arising from the movement of goods and trust transactions. Outstanding derivative exposures are mainly over-the-counter foreign exchange option contracts.

The Bank's GLR has a corresponding Credit RWA of P965,591 million following the Standardized Approach. This represents 81.31% of the Total Credit RWA of P1,187,475 million. Further, total Credit RWA represents 88.58% of the Bank's Aggregate RWA of P1,340,572 million.

Management of Credit Risk

Credit RM aims to adequately manage the risk of financial loss arising from the failure of borrowers or counterparties to settle their obligations in accordance with the terms and conditions of the duly approved contractual agreement.

This involves the identification, measurement and monitoring of actual or potential losses and the implementation of appropriate measures, including the setting up of applicable limits to keep credit risk exposures within the Bank's risk appetite or the acceptable level of credit risk that it is willing to accept in pursuit of its lending plans and programs.

The Bank also manages the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions and the correlation of credit risk with other risks. The effective management of credit risk is a critical component of a comprehensive approach to RM and essential to the long-term success of the Bank.

The Bank manages credit risk through a structured framework duly approved by the LANDBANK Board that sets out policies and procedures covering the identification, measurement, control, and monitoring of credit risk. Accordingly, approval of credit application goes through prescribed loan approving levels which, depending on the transaction or amount of loan applied, could be elevated to the Credit Committee a Management-level Committee, the Investment & Loan Committee (ILC) and up to the LANDBANK Board, whenever applicable. The approval process also covers proposed remedial actions aimed at helping problem accounts regain normal operations. The Bank has put in place a comprehensive set of credit policies through the issuance of Credit Manuals, Credit Policy Issuances (CPIs) and Credit Bulletins (CBs). As the Bank's middle office for credit risk, the Credit Risk Management Department handles credit risk oversight, risk measurement and risk rating of borrowers.

To effectively monitor and maintain the quality of its loan portfolio, the Bank conducts annual qualitative and impairment reviews to assure proper loan classification and setting-up of valuation reserves. As of December 31, 2022, the Bank's net Non-Performing Loan (NPL) stood at P38,902.30 million or 3.32% of the total loan portfolio of P1,172,076.24 million.

Credit Risk Rating

LANDBANK's Credit Risk Engine System (CRES) serves as the main platform for the automated development of statistically-based credit rating models which will be used to conduct credit ratings of borrowers to help determine their creditworthiness. The Bank undertakes continuing development and implementation of the CRES scoring facility to provide support to its ongoing initiatives for the adoption of applicable banking regulations and global best practices and approaches in Credit Risk Management.

The Bank has developed and implemented the following statistical-based credit scoring models using CRES:

- Application Scoring Model for Individual Home Buyers
- Application Scoring Model for Salary Loan Availers
- Behavioral Scoring Model for LGUs
- Behavioral Scoring Model for MSMEs
- Behavioral Scoring Model for Large Enterprise
- Behavioral Scoring Model for Cooperatives
- Application Scoring Model for Credit Card
- Behavioral Scoring Model for Partner Financial Institutions (PFIs)

On the other hand, the Bank uses an internally developed expert-based credit rating system for Universal Banks, Commercial Banks, and Offshore Banks.

Credit Risk Monitoring

The Bank has continuously adopted a formal reporting system for the LANDBANK Board and Senior Management to be able to monitor the credit quality of individual and loan portfolios using asset quality indicators such as past-due ratio, NPL ratio, level of non-performing assets, coverage ratio, top 100 past due accounts, concentration risk. Clean large exposures, breaches in regulatory and internal limits, potential credit risk, restructured loans, government accounts, exposures to the real estate sector, adverse news, credit migration, large exposure/single borrowers limit, DOSRI Loans, Related Party Transactions, Expected Credit Loss (ECL) calculation, ROPA, PFIs, and compliance with Uniform Stress Testing and Real Estate Stress Test (REST) are intensively monitored by the Asset and Liability Committee (ALCO), ILC and the Risk Oversight Committee (RiskCom). The recovery of written-off accounts is also on the radar of the LANDBANK Board, RiskCom and Senior Management.

Collateral and Other Credit Enhancements (ARAC II.C.1.e)

The Bank adopts cash flow lending principles and collateral is not the primary factor in granting credit. The required amount and type of collateral and other credit enhancements to mitigate credit exposures depend primarily on the results of the holistic and prudent credit assessment. When needed, the Bank diligently evaluates the enforceability, realizable value, and marketability of offered collaterals. The Bank’s Credit Manual and CPIs provide guidelines on the acceptability of loan collateral and maximum valuation for each type of collateral.

The primary collaterals accepted are Holdout on Deposits, Government Securities, Real Estate Mortgage and Chattel Mortgage. The Bank also accepts government guarantees, cross suretyship from corporations and other eligible guarantees. In the case of agricultural and agriculture-related loans that are vulnerable to the effects of climate and weather disturbances, borrowers are encouraged to avail of crop insurance guarantees and other insurance mechanisms to shield them from these risks.

Credit Stress Test

LANDBANK regularly conducts stress testing of individual large exposure and its loan portfolio taking into account plausible risk events with a high probability of occurrence. Utilizing such scenarios with documented assumptions, tests are done to determine the magnitude of impact on the Bank's loan portfolio, on the Credit RWA, and finally on the Common Equity Tier 1 (CET1) Ratio. Stress testing also includes prescribed regulatory tests such as Uniform Stress Testing and REST. Likewise, various loan portfolio assessments and reviews are conducted to determine the impact of a certain event and government regulation on the Bank's loan portfolio, past due ratio and CET 1. Results of the stress testing, together with the action plans, are escalated to the ILC and RiskCom.

MARKET RISK MANAGEMENT (GCG III.27.c)

Market Risk Management Framework

LANDBANK is exposed to market risks in both its trading and non-trading banking activities. The Bank assumes market risk in market making and position taking in government securities and other debt instruments, equity, Foreign Exchange (FX) and other securities, as well as, in derivatives or financial instruments that derive their values from price, price fluctuations and price expectations of an underlying instrument (e.g., share, bond, FX or index). The Bank's exposure on derivatives is currently limited to currency swaps and currency forwards to manage FX exposure. The Bank is also exposed to derivatives that are embedded in some financial contracts, although, these are relatively insignificant in volume.

The Bank uses a combination of risk sensitivities, Value-at-Risk (VaR), stress testing, Common Equity Tier 1 (CET1) ratio and capital metrics to manage market risks and establish limits. The LANDBANK Board, RiskCom and the Asset and Liability Committee (ALCO), define and set the various market risk limits for each trading portfolio. The Treasury and Investment Banking Sector (TIBS), particularly the Financial Markets Group (FMG) which manages the Bank's trading units as well as the Asset and Liability Management Group (ALMG) which manages the liquidity and reserve positions, conducts risk-taking activities within limits and ensures that breaches are escalated to the Senior Management for appropriate action.

A management alert is activated whenever losses during a specified period equal or exceed specified management alert level. The Bank controls and minimizes the losses that may be incurred in daily trading activities through the VaR, Management Action Triggers (MATs) and Stop Loss. Positions are monitored on a daily basis to ensure that these are maintained within established position limits to control losses. Position limits are subordinated to MATs, VaR and Stop Loss limits. Macaulay and Modified Duration are used to identify the interest rate sensitivity of the Bond Portfolio of the Bank. In the same way, certain subsidiaries of the Bank independently quantify and manage their respective market risk exposures by maintaining their respective RM system and processes in place.

Market Risk Weighted Assets (ARAC II.C.2.a)

As of December 31, 2022, the LANDBANK's Total Market RWA stood at P16,502 million, broken down as follows:

In P million

PARTICULARS	AMOUNT
Interest Rate Exposure	1,886
Equity Exposure	0
FX Exposure	5,437
Options	9,179
Total Market RWA	16,502

The Total Market RWA represents 1.26% of the Bank's Aggregate RWA of P1,305,580 million.

Managing Market Risk Components

Market Risk is associated to earnings arising from changes in interest rate, FX rates, equity and in their implied volatilities. Market risk arises in trading as well as non-trading portfolios.

The Bank manages the following key market risk components using its internal risk mitigation techniques:

1. <u>Interest Rate Risk in the Trading Book</u>

   Interest Rate Risk represents exposures to instruments whose values vary with the level or volatility of interest rates as a result of market making and portfolio taking. LANDBANK continues to manage interest rate risk in trading activities through factor sensitivities and the use of VaR and stress testing. Government Securities (GS) and Foreign Securities (FS) are subject to daily mark-to-market and controlled through risk limits such as position, VaR, MATs and Stop Loss.

2. <u>Equity Price Risk Management</u>

   LANDBANK is exposed to equity price risk resulting from changes in the levels of volatility of equity prices, which in turn affect the value of equity securities and impacts on profit and loss of the Bank. Equities are subject to daily mark-to-market and controlled through risk limits such as position, VaR, MATs and Stop Loss.

3. FX Risk Management

   Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in FX rates. Using the Philippine peso as the functional currency, the Bank monitors daily the currency positions to ensure that these are within established limits.

Market Risk Measurement and Validation Tools **(ARAC II.C.2.b)**

1. Value-at-Risk (VaR) **(ARAC II.C.2.b.i)**

   VaR is a statistical approach for measuring the potential variability of trading revenue. It is used to measure market risk in the trading book under normal conditions, estimating the potential range of loss in the market value of the trading portfolio, over a one-day period, at 99.0% confidence level, assuming a static portfolio.

   The Bank uses the Historical Simulation Model in computing VaR of Equities, FS, GS and FX trading portfolios as well as FX Net Open Position which is acceptable to BSP. **(ARAC II.C.2.b.iv)** Moreover, the Bank continuously pursues initiatives to improve its processes.

   The VaR both at portfolio and across portfolio level are monitored. Daily VaR calculations are compared against VaR limits which is the monetary amount of risk deemed tolerable by Management. The Bank also determines Diversified VaR that takes into account the diversification effect in which all losses in all securities in a portfolio are imperfectly correlated.

2. Stress Test **(ARAC II.C.2.b.ii)**

   RM models have recently become the main focus of RM efforts in the banking industry where banking activities are exposed to changes in fair value of financial instruments. However, the Bank believes that the statistical models alone do not provide reliable method of monitoring and controlling risk because these models (while relatively sophisticated) have several known limitations, at the same time, do not incorporate the potential loss caused by very unusual market events. Thus, the VaR process is complemented by Stress Testing to measure this potential risk.

   Stress Test is a RM tool used to determine the impact on earnings and capital of market movements considered "extreme", i.e., beyond "normal" occurrence. The Bank utilizes Stress Tests to estimate possible losses which the VaR does not capture.

The Bank's Market Risk Stress Test analyzes the impact of major risks that emerge out of the different scenarios, considering adverse and probable risk events, on activities related to Treasury's trading and investment portfolios. This seeks to establish how far the Bank can absorb certain levels of stress, to explore the events that could cause a significant impact to the Bank and to assess its vulnerabilities and capability to deal with shocks such as price risk, interest rate risk, and FX risk.

Results are also simulated in the CET1 Ratio computation to be able to assess its impact said ratio set at 10.25% by BSP for LANDBANK as Domestic Systemically Important Banks (DSIB) for 2022.

3. Model Validation

Back-Test **(ARAC II.C.2.b.iii)**

LANDBANK adopts back-testing as the basic technique in verifying the quality of risk measures used by comparing actual trading results with model-generated risk measures.

Under the back-testing process, exception occurs if mark-to-market (MTM) and trading loss exceeds the result of the model-generated risk measure. The number of exceptions is noted and the model is classified into one of the three zones as follows: **(ARAC II.C.2.a)**

ZONE CLASSIFICATION	NUMBER OF EXCEPTIONS
safe/green zone	zero to four exceptions
non-conclusive/yellow zone	five to nine exceptions
problematic/red zone	10 or more exceptions

Back-testing results are presented to the ALCO and the RiskCom which examine the actual performance of portfolios against VaR measures to assess model accuracy and to enhance the risk estimation process in general.

Model Review

Risk models used in managing market risk are subjected to model review being done by Risk Modeling and Quantitative Analytics Unit (RMQAU) of MLRMD. On the other hand, Internal Audit Group (IAG) is tasked to do model audit of RM models.

LIQUIDITY RISK MANAGEMENT **(GCG III.27.c)**

Liquidity Risk Management Framework

The Bank's liquidity RM process is consistent with its general RM framework covering risk identification, measurement, monitoring and control. The policies and procedures that govern liquidity RM are reviewed and endorsed on a regular basis by ALCO and ROC for approval of the LANDBANK Board of Directors. The liquidity policy of the

Bank is to always maintain fund availability and hence, to be in a position to meet all of its obligations, in the normal course of business.

The Bank considers liquidity risk based on market and funding liquidity risk perspectives. Trading or market liquidity risk refers to the inability to unwind positions created from market, exchanges, and counterparties due to temporary or permanent factors. It is the risk that the Bank cannot easily offset or eliminate a position at the market price because of inadequate market depth or through market disruption.

Funding liquidity risk is the risk that the Bank will not be able to meet efficiently both expected and unexpected current and future cash flow and collateral needs without affecting either daily operations or the financial condition of the Bank. Funding liquidity risk is being monitored and controlled through the classification of maturities of assets and liabilities over time bands and across functional currencies as reflected in the Liquidity Gap Report (LGR).

The LANDBANK Board exercises oversight through ROC and has delegated the responsibility of managing the overall liquidity of the Bank to the ALCO. The ALCO and the Treasury Investment Banking Sector (TIBS) are responsible for the daily implementation and monitoring of relevant variables affecting the Bank's liquidity position. The ALCO review the assets and liabilities position on a regular basis and, in coordination with the TIBS, recommends measures to promote diversification of its liabilities according to source, instrument and currency to minimize liquidity risks resulting from concentration in funding sources.

The RMG, through the Market and Liquidity Risk Management Department (MLRMD) is responsible for the oversight monitoring of the Bank’s liquidity risk positions and ensures that reports on the Bank’s current risk are prepared and provided to ALCO and ROC in a timely manner.

The Bank performs a comprehensive liquidity risk measurement and control using the LGR, covering the bank-wide balance sheet, as a tool. Risk models used in liquidity RM are subjected to independent model validation as conducted by MLRMD - Risk Modeling & Quantitative Analytics Unit (RMQAU) and model audit by the IAG.

Liquidity Risk Measurement

The Bank manages the liquidity risk using the following tools:

1. Liquidity Gap Report (LGR)

   The Bank conducts liquidity gap analysis using the LGR. This risk measurement tool is used in identifying the current liquidity position and the Bank’s ability to meet future funding needs. It categorizes balance sheet items according to estimated maturities of assets and liabilities to determine any future mismatch such as long-term assets growing faster than long term liabilities.

   MLRMD reports RBU (Peso and FX Regular), FCDU, Solo (Parent) LGR on a weekly and monthly basis to ALCO and ROC, respectively. Parent and Subsidiary LGR is reported on a quarterly basis.

The following behavioral assumptions are used in measuring the Bank's liquidity gap:

- Non-Maturing Deposits: Using historical balances of NMD accounts, a behavioral analysis is conducted to determine the rate of deposit outflow per time bucket. The calculated deposit run-off rates are the basis for the withdrawal pattern or actual behavior of NMDs.
- Term Deposits (TDs): TDs were bucketed based on maturity with run-off assumption on the balance sheet. A behavioral analysis is conducted to approximate the early termination rate and the percentage of deposits that is likely to roll-over based on a historical deposit data. The early termination rate is used to estimate the amount of deposit that will be withdrawn before its maturity.
- Fixed Rate Loans: A behavioral analysis is conducted to estimate the percentage of loan balance that is likely to repay before the due date.
- Drawing Pattern of Credit Lines and Credit Cards: A behavioral model to capture and estimate the drawing pattern for credit cards and credit line products.

As of December 31, 2022, the Bank has in its possession a comfortable level of highly liquid assets to cover for liquidity risk that may arise in the earlier tenor buckets. Most assets (particularly loans and investments) have long term maturities. Net gap is positive in all buckets except in the 'more than 1 year to 5 years' bucket.

The Bank has established guidelines for liquidity risk limit setting to enable it to properly and prudently manage and control liquidity risk, consistent with the nature and complexity of its business activities, overall level of risk and its risk appetite.

The MCO limit set by the LANDBANK Board is one of the tools used to manage and control the liquidity risk in the Bank's gap report. MCO limits put a cap on the total amount of negative gaps in the '1 day to 1 year' time buckets.

2. Liquidity Stress Test

The Bank conducts regular stress testing and scenario analysis to further assess the Bank's vulnerability to liquidity risk. This activity supplements the risk models used by the Bank which simulates various probable to worst-case scenarios happening in the industry that would affect LBP. The following are the stress testing conducted by the Bank:

- Liquidity Stress Test/Scenario Analysis
- FX Regular Stress Test
- Foreign Currency Deposit Unit (FCDU) Stress Test

3. Liquidity Coverage Ratio (LCR)

   The LCR is reported monthly to BSP to ensure that the Bank maintains an adequate level of unencumbered High Quality Liquid Assets (HQLA) to meet liquidity needs for a 30 calendar-day liquidity stress scenario.

   The Bank computes the LCR using the BSP prescribed formula:

$$LCR = \frac{Stock\ of\ HQLA}{Total\ Net\ Cash\ Outflow\ over\ the\ next\ 30\ calendar\ days}$$

   Where:

   HQLA - Refer to assets that can be converted easily and immediately into cash at little or no loss of value in private markets to meet the Bank's liquidity needs during times of stress.

   Total Net Cash Outflows - Pertains to the sum of the stressed outflow amounts less the sum of the stressed inflow amounts, with the inflow amounts limited to seventy-five percent (75%) of outflow amounts.

PARTICULARS	31 December (In ₱ Million)	
	2022	2021
High Quality Liquid Assets	1,813,654	1,591,389
Total Net Cash Outflows	854,680	714,858
LCR	212.20%	222.62%

As of December 31, 2022, the Bank's LCR is higher than the 100% minimum requirement for the CY 2022.

INTEREST RATE RISK IN THE BANKING BOOK (GCG III.27.c)

Interest Rate Risk in the Banking Book Management Framework

Interest Rate Risk in the Banking Book (IRRBB) is the current and prospective risk to earnings and capital arising from adverse movements in interest rates that affect banking book positions. LANDBANK's IRRBB arises from the core banking activities. The main source of this type of IRRBB is gap risk which arises from timing differences in the maturity (for fixed rate) and re-pricing (for floating rate) of the Bank assets, liabilities and off-balance-sheet positions.

The Bank manages IRRBB based on approved policies and procedures. LANDBANK uses Re-pricing Gap/Earning-at-Risk (EaR) and Economic Value of Equity-at-Risk (EVEaR) to analyze the impact of changes in interest rates to both future earnings and net worth.

The Bank has established guidelines for IRRBB limit setting. To control re-pricing risk, a limit has been set on the EaR, putting a cap on the magnitude of re-pricing gap in the balance sheet. The EaR limit defines the maximum level of loss in net interest income (NII) due to changes in interest rates. Breaching this limit would require adjustments to be made in the balance sheet profile of the Bank. RMG-MLRMD recommends interest rate limits in coordination with Asset and Liability Management Group (ALMG) and is approved by the ALCO, ROC and the LANDBANK Board. On the economic value-based measure, the Bank compares the Equity level under various rate scenarios to the Equity at a base (or current) level to track change from base scenario.

The LANDBANK Board defines the Bank's risk appetite and approves business strategies relative to the management of IRRBB. It delegates to ALCO the establishment and management of the Bank's IRRBB position. The ALCO decides and allocates resources to manage IRRBB within the risk appetite set by the Bank. The TIBS ensures that ALCO's decisions pertaining to the management of structural IRRBB are implemented.

IAG is tasked to do model audit of RM models. The conduct involves the review and evaluation of the effectiveness of the system and, where necessary, ensures that appropriate revisions or enhancements to internal controls are made.

In addition, model validation is also being done by the Risk Modeling and Quantitative Analytics Unit (RMQAU) of MLRMD to check for any enhancements or calibrations needed to the models.

To date, the Bank does not engage in hedging transactions.

Interest Rate Risk in the Banking Book Measurement Models

The two complementary measures of the potential impact of IRRBB are as follows:

1. <u>Earnings-Based Measure</u>: The Bank uses the EaR to estimate changes in net interest income under a variety of interest rate scenarios over a 12-month horizon. As of December 31, 2022, the NII impact of change in interest rates amounted to P47,491.50million

2. <u>Economic Value-Based Measure</u>: The Bank uses the EVEaR to assess the impact of changes in interest rates over the remaining life of its assets, liabilities and off-balance sheet items. As of December 31, 2022, the EVEaR impact of change in interest rates amounted to P5,946.09million

Both measures are assessed to determine the full scope of the Bank's IRRBB exposure. Moreover, IRRBB is not managed in isolation. IRRBB measurement systems are integrated into the Bank's general risk measurement system and results from models are interpreted in coordination with other risks.

The interest rate risk exposures of the Bank are measured and reported to the ALCO and ROC on a weekly and monthly basis. Parent and Subsidiary EaR and EVEaR are prepared on a quarterly basis.

Key Behavioral and Modelling Assumptions

Behavioral assumptions enable the Bank to analyze how an instrument's actual maturity or re-pricing may vary from its contractual terms because of behavioral options. LANDBANK has established the following behavioral and modeling assumptions in the quantification of IRRBB:

1. Current Account and Savings Account (CASA) Repayment
   Behavioral assumptions for deposits that have no specific maturity/re-pricing date such as Non-Maturing Deposits (NMDs) can be a major determinant of IRRBB exposures under the economic value and earnings-based measures. To determine the actual behavior of NMDs, the Bank analyzed its deposits for the past ten (10) years to estimate the proportion of core (stable) and non-core (non-stable) deposits.
2. Term Deposits subject to Early Termination
   A behavioral analysis to estimate the amount of term deposits that will be withdrawn before its maturity.
3. Fixed Rate Loans subject to Prepayment
   A behavioral analysis to estimate the percentage of loan balances that is likely to repay before the due date.
4. Drawing Pattern of Credit Lines and Credit Cards
   Behavioral methodology to capture and estimates the drawing pattern for credit cards and credit line products.

Interest Rate Shocks and Stress Scenarios

The Bank has a wide range of static interest rate shocks consisting of parallel and non-parallel shifts in the yield curve including but not limited to the Market Outlook of the LBP Economist, interest rate volatility for the past 10 years and standardized rate shocks prescribed under Basel Committee on Banking Supervision (BCBS) framework on IRRBB.

The Bank conducts Interest Rate Stress Testing using EaR and EVEaR. Results of scenario analysis help the Bank focus on coming up with contingency measures to reduce impact of IRRBB.

OPERATIONAL RISK MANAGEMENT (GCG III.27.c)

The Operational Risk Management (ORM) system of the Bank underwent a thorough review and validation to ensure adherence with BSP MORB 146 (Circular 900) Operational Risk Management (ORM), BSP MORB 149 (Circular 951) Business Continuity Management (BCM), BSP MORB 148 (Circular 808) IT Risk Management, BSP MORB 153 (Circular 1085) Sustainable Finance Framework and other operational risk-related regulations.

The ORM frameworks aim to establish and implement risk management strategies and best practices to effectively address and manage operational risk that are embedded in the day-to-day operations of the Bank. These ORM frameworks were found to be substantially compliant to the minimum requirements of the BSP.

The risk management culture of the Bank is further reinforced with the conduct of risk awareness cascading and sharing sessions on Risk Governance Framework, ORM, BCM, IT and Information Security. Dissemination of operational risk management programs are clearly communicated through continued briefings and seminars using various channels and platforms available in the Bank. Intensive workshops and technical working group discussion reinforces the awareness and learning avenues conducted to all employees of the Bank and subsidiaries for them to effectively perform their duties in managing operational risks.

The ORM function is strengthened with the hiring, training, coaching, mentoring, movement, and promotion of ORM personnel. Major ORM programs for the year involved enhancement of ORM manuals, frameworks, policies, and tools.

The Bank has a BCM Program which is compliant with BSP MORB 149 and aligned with the ISO 22301:2012 (Business Continuity Management System). The BCM Framework emphasizes the Bank's BCM Governance and Process. BCM tools are continuously enhanced to conform to regulations and industry best practices.

As part of the Bank's BCM process, the Bank conducts annual Business Impact Analysis (BIA) and Business Continuity Risk Assessment (BCRA) to prioritize risks and implement corresponding controls and identify and prioritize the Bank's most critical functions and IT systems in case of disruptions. Also, Business Continuity Plan (BCP) components are being reviewed, updated and tested annually to ensure validity and effectiveness of the Plans.

Despite the threat of the COVID-19 pandemic, the Bank was able to continuously conduct business and provide services while ensuring the health and safety of personnel and clients. Various emergency preparedness and business continuity measures consistent with the Bank's BCP were implemented. The challenges encountered by business units nationwide and the lessons learned during the unprecedented pandemic were also considered in the review and enhancement of the Bank's BCP called Pandemic Response Plan.

The Bank ensure that business and risk management activities, including the operational risk management function, are carried out by adequate and qualified staff with the necessary experience, technical capabilities, and competence. The Bank supports the continuing education of officers and staff of Risk Management Group (RMG) through the certification programs where employees were licensed as Certified Risk Analysts (CRAs), Certified Risk Manager (CRM) and Bank Risk Management certification exams of Asian Institute of Chartered Banks (AICB).

Embedding of ORM across the institution is manifested with the BUs becoming aware of the specific operational risks they are confronted with. Taking a proactive stance in managing and escalating breaches as soon as they occur strengthens governance and enhances the oversight of these risks. BUs and Subsidiaries conduct risk self-assessment using various RM tools to quantify potential operational losses which serve as their dashboard in monitoring operational risk. RMG regularly monitors and escalates to Senior Management and RiskCom the results of ORM processes.

Operational Risk Exposure

LANDBANK currently uses the Basic Indicator Approach (BIA) for calculating the capital charge for operational risk under Pillar 1. The formula is based on the average Gross Revenues of the Bank for the last three years to calculate the Operational Risk Weighted Assets (ORWA). As of 31 December 2022, the Bank's Total ORWA using the Basic Indicator Approach was **P136.55 billion** or **10.19%** of the Bank's Aggregate Risk Weighted Assets (RWA) of **P1,340.57 billion**. With the sustained Gross Revenues of the Bank relative to its expanding business operations, ORWA is expected to increase annually.

LANDBANK is firm in its resolve to fortify its operational risk management system including the development of an internal economic capital measurement model to better capture the Bank's operational vulnerabilities and be able to provide a more reliable support for the overall strategic objectives of the Bank.

Based on an intensive self-assessment on the readiness of LANDBANK to adopt the Basel Committee on Banking Supervision (BCBS) d424 *Basel III: Finalizing Post-Crisis Reforms* for measuring operational risk capital charge under the Standardized Measurement Approach (SMA), the Bank put in place the enhanced operational risk framework, loss data gathering, models and processes including the adoption of the SMA for Pillar 1 capital charge and enhanced internal model for calculating operational risk weighted assets using the Advanced Measurement Approach (AMA)-based Internal Capital Assessment (ICA) for Pillar 2 capital assessment. The Bank has also engaged the services of a third-party professional consultant to validate these endeavors.

In addition, the simulation conducted by the Bank for 2022 using its historical loss data resulted in a lower operational capital charge by **P4.97 billion** and **P8.63 billion** using the SMA and AMA-based ICA, respectively, compared to the computed operational capital charge of **P13.65 billion** using the BIA.

Results of these capital exercises further ratify that the actual operational risk of the Bank is much lower than what it currently charges for its Pillar 1 capital as both models have consistently resulted in lower figures than the BIA. The lower capital charge will allow LANDBANK to lend more to its mandated sector especially small farmers and fishers, micro, small and medium enterprises, countryside financial institutions and local government units.

CONSUMER PROTECTION RISK MANAGEMENT SYSTEM (CPRMS)

In compliance with BSP Circular 1160 – "Regulations on Financial Consumer Protection (FCP) to Implement RA No. 11765, Otherwise Known as the "Financial Products and Services Consumer Protection Act (FCPA)", LANDBANK continues to update the Consumer Protection Risk Management System (CPRMS) as part of its enterprise-wide risk management system. It identifies, measures, monitors, and controls consumer protection risk inherent in the delivery of financial services to the general public. The Bank ensures to readily assist customers' needs and concerns across all channels and guarantee consumer protection practices, address and prevent or mitigate identified or associated risk of financial harm to the Bank and its clientele (depositors, borrowers, and other clients).

As part of oversight function on CPRMS, RMG ensures that board-approved CPRMS policies and procedures are in place, complaints management are strictly implemented, escalation of CPRMS-related issues is within the set timeline and training of Bank personnel are undertaken. Periodic reports are submitted to the Management Committee and the Risk Oversight Committee. RMG also conducts risk assessment of new, modified, or expanded products, programs, services, electronic banking channels, processes and other activities, including outsourcing from third party service providers to deliver quality service and protect LANKBANK's clients.

The CPRMS Oversight Framework is aligned with and adheres to the Financial Consumer Protection Standards of Conduct prescribed under BSP Circular 11765, to cover (1) Disclosure and Transparency; (2) Protection of Client Information; (3) Fair Treatment; (4) Effective Recourse; and (5) Protection of Consumer Assets against Fraud and Misuse. LANDBANK understands that financial literacy and inclusion begins with responsive and excellent customer service. The Bank is committed to protect our customers' rights as consumers of financial products and services. To protect clients' information, RMG implements a bank-wide risk management program to manage information security risk and data privacy. The CPRMS is also subject to audit and compliance testing.

Information Security and Technology Risk Management (GCG III.27.c)

Information is one of the important assets of the Bank, and preserving the confidentiality, integrity, and availability of information assets is one of the essential responsibilities of the Bank to uphold the trust of its clients and stakeholders.

The Bank employs a holistic approach to information security and technology risk management through implementation and continuous enhancement of organizational, technical, and physical controls aligned with strategic objectives, business processes, legal and regulatory requirements, global standards, and industry best practices.

To keep abreast with the evolving threat landscape and efforts towards digital transformation, the Bank continuously improves its security posture through the following:

- Adoption of global standards and industry best practices on information security and technology management
  - Swift Customer Security Controls Framework (CSCF)
  - Payment Card Industry Data Security Standards (PCI DSS)
  - International Organization for Standardization (ISO)
  - National Institute of Standards and Technology (NIST)
  - Control Objectives for Information and Related Technologies (COBIT)
- Formulation, development, review, updating, and issuance of documented policies and procedures to guide employees and other stakeholders on the Bank's security controls, practices, and measures, aligned with legal and regulatory requirements, covering various domains
  - Revised Information Security Program and Information Security Strategic Plan
  - Revised Cyber Resiliency Plan
  - Revised Guidelines on Vulnerability Management of the Bank's Information Technology Systems
  - Revised Guidelines on the Management of Information Assets
- Conduct of assessments and reviews by internal and external parties to measure the Bank's security posture
  - Internal Vulnerability Assessment
  - Enterprise Information Technology Security Risk Assessment
  - Information Security Program Review
- Facilitation of campaigns to promote risk management culture and intensify awareness on information security, IT security, cyber security, and data privacy for Bank employees, third-party service providers, clients, and the public through various activities, methodologies, and channels, including official social media accounts and conduct of simulation and testing exercises

- Subscription to threat intelligence feeds, monitoring services, and other reputable sources to keep abreast with the threat landscape, attack vectors, and trends on information security, IT security, and cybersecurity
- Employment of tools, devices, and solutions to identify, assess, measure, control, mitigate, monitor, and report risks associated with the use and management of information and technology resources
- Implementation of multi-layered network security systems, deployment of solutions and subscription to third-party services for a highly-redundant and secured IT infrastructure
- Continuous upgrading of IT infrastructure and electronic/digital banking channels