LANDBANK RISK MANAGEMENT PHILOSOPHY AND CULTURE (ARAC I.5.a)

Risk Management (RM) goes hand-in-hand on co-equal footing with LANDBANK's business strategy. It is an integrative component of good governance which the LANDBANK Board of Directors, Risk Oversight Committee (RISKCOM) and Senior Management oversee to ensure adequacy of framework, policies, internal controls, RM systems and procedures to manage risks. **(GCG III.27.d and GCG III.21)**

The Bank's core RM philosophy is to balance risk and reward by maximizing business opportunities, operating within the risk threshold and minimizing losses beyond its appetite. RM is also embedded in all the business processes of the Bank and it ascertains that risk-taking is commensurate with its risk appetite.

The Bank's RM completes the triumvirate of audit and compliance functions which focus on the risk controls of the Bank. Together with internal audit and compliance, the synergy of the three functions provides credence to the role of the Bank's corporate governance in implementing an effective RM framework.

LANDBANK's RM approach is governed by the Board-approved Enterprise RM (ERM) anchored on its mission, vision and strategic objectives. The LANDBANK's implementation of the ERM system with defined pro-active RM departs from silo approach. Thus, RM is implemented cross-functionally across the entire organization with active participation of the Board, Senior Management and all business units (BUs) of the Bank. ERM is implemented in three levels namely strategic, portfolio and transactional levels. **(ARAC I.5.b)**

At the Strategic Level, the LANDBANK Board through the RISKCOM and Senior Management, are actively involved in an enterprise-wide RM oversight which involves formulation and approval of RM framework, policies and strategies, internal controls, and RM system as well as the annual review thereof. **(ARAC II.B.1 & GCG III.27.a)** The LANDBANK Board and Senior Management are also involved in an organizational-wide risk monitoring which is used as basis for decision-making and review of LANDBANK's controls/mitigating measures (operational, financial and compliance control) and RM system. **(GCG III.27.b)**

At the Portfolio Level, the Groups and Departments oversee the implementation of policies and processes and monitor possible breaches. RM Group (RMG) recommends policies, processes and revisions based on risk reports submitted by the risk-taking BUs to address risk occurrences that cannot be solved at the level of the risk-taking BUs.

At the Transactional Level, the Authorized Risk Takers (ARTs) who act as the first line of defense are involved in the actual implementation of risk policies and procedures. The ARTs embrace the continuous management of risk events and immediately escalate policy breaches, procedural infractions and related risk occurrences that cannot be solved at their level to the Department or Group Heads.

Risk Governance Framework

RM involves the oversight function covering risk identification, assessment, measurement, control, monitoring and reporting of risks inherent in all activities of the Bank. The RMG, as an independent unit, performs the oversight function for all major risk areas (credit, market, operational, compliance, interest rate in the banking book, counterparty credit, liquidity, reputation, strategic, subsidiaries, trust operations, Information Technology [IT], related party transactions risk, among others) of the Bank. RMG reports functionally to the RISKCOM and administratively to the President and Chief Executive Officer (CEO) of LANDBANK. **(ARAC I.5.c)**

Subsidiaries Risk Management

Part of the Bank's Risk Governance Framework involves managing risks residing in LANDBANK Subsidiaries and Foundation.

The Bank provides RM oversight to LANDBANK Subsidiaries and Foundation (LSFs) acknowledging that their operations also bear impact on the Bank's financial statements. It monitors and reports risk exposures of the LANDBANK Subsidiaries and Foundation through the submission of consolidated financial reports.

RM oversight to the LSFs is also an essential component of corporate governance of LANDBANK, that ensures an integrated perspective of risk exposures, both at disaggregated and aggregated level. It is a means of improving the Bank's business and services on a group-wide activity that involves LANDBANK as Parent Bank and its five wholly-owned Subsidiaries and Foundation including newly acquired entities/institutions in the pursuit of its business goals and objectives:

1. Overseas Filipino Bank (OFB)
2. LBP Leasing and Finance Corporation (LLFC)
3. LBP Insurance Brokerage, Incorporated (LIBI)
4. LBP Resources and Development Corporation (LBRDC)
5. LBP Countryside Development Foundation, Incorporated (LCDFI)

RM Program for Subsidiaries (RMPS)

The RMPS includes relevant methodologies, processes and tools which guides the LSFs in implementing a robust RM on a group-wide basis. It embodies the respective RM Framework of the LANDBANK Subsidiaries and Foundation which covers the following:

1. RM Policy (Principles)
2. RM Oversight Structure, key roles and responsibilities
3. Levels of RM (Strategic, Portfolio and Transactional level)
4. Risk Identification and Measurement
5. Risk Monitoring and Reporting (ORM Tools, ROC Risk Reports including Pandemic Monitoring report)
6. RM Strategy Formulation
7. Programs to promote RM Awareness and culture in the Subsidiaries
8. RM Operations and Tools

RMPS implementation enables the LSFs to mirror the RM Framework and policies of LANDBANK as their Parent Bank, in compliance with the Bangko Sentral ng Pilipinas (BSP) Circular No. 971 dated Aug. 22 2017 "Guidelines on Risk Governance". The RMPS also takes into consideration the diversity of LANDBANK Subsidiaries and Foundation's mandate, nature of business operations, structure, risk appetite and other variables.

Pursuant to BSP Circular 900 s. 2016 or "Guidelines in Operational Risk Management" and as part of LBP's RM oversight to LSFs, the Bank maintains and regularly updates the Subsidiaries Risk Event Monitoring Loss Database which includes the data on operational risk events based on the Basel II Operational Risk Events categories as follows:

1. Internal Fraud
2. External Fraud
3. Employment Practices & Workplace Safety
4. Damage to Physical Assets
5. Business Disruption & Systems Failures
6. Execution, Delivery & Process Management

Said database includes relevant information on the risk events encountered by the LSFs and its relative amounts of actual losses, potential losses or near misses and mitigating measures.

The REM database is an input to the ORWA Optimization process which aims to explore available opportunities and develop capital measurement models that better capture the Bank's risk profile in the determination of estimated operational risk capital charge.

CREDIT RISK MANAGEMENT (GCG III.27.c)

Credit risk arises from the failure of 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	2020 (In ₱ Millions)							
	CEA	0%	20%	50%	75%	100%	150%	CRWA
Cash on Hand	**48,313**	**48,313**						
Checks & Other Cash Items (COCI)	**12**		**12**					**2**
Due from Bangko Sentral ng Pilipinas (BSP)	**446,741**	**446,741**						**-**
Due from Other Banks	**7,066**		**86**	**6,941**		**39**		**3,527**
Financial Assets Designated at FVTPL	**965**					**965**		**965**
Available-for-Sale (AFS) Financial Assets	**499,389**	**431,830**		**64,616**		**2,943**		**35,251**
Held-to-Maturity (HTM) Financial Assets	**459,159**	**434,759**	**2,633**	**12,666**		**9,101**		**15,961**
Loans & Receivables	**731,855**		**6,011**	**77,519**	**-**	**637,645**	**10,680**	**693,627**
1. Interbank Loans Receivables	28,974		5,667	4,898		18,388	21	22,002
2. Loans & Receivables – Others								-
a. LGUs & Public Sector Entities	40,897					40,897		40,897
b. Government Corporation	1,893					1,893		1,893
c. Corporates	538,669					538,669		538,669
d. Microfinance/Small & Medium Enterprise	67,898		344	67,554				33,846
e. Loans to individuals	42,536			5,067		37,469		40,003
3. Defaulted Exposures	10,988					329	10,659	16,318
Other Loans and Receivables 1/	**16,657**	**16,657**						**-**
Sales Contract Receivable (SCR)	**600**					**456**	**144**	**672**
Real & Other Properties Acquired (ROPA)	**6,903**						**6,903**	**10,355**
Total Exposures Excluding Other Assets	**2,217,660**	**1,378,300**	**8,742**	**161,742**	**-**	**651,149**	**17,727**	**760,359**
Add: Other Assets	**21,161**	**276**				**20,885**		**20,885**
Total On-BS RWA covered by CRM								**2,154**
Total On-BS Exposures	**2,238,821**	**1,378,576**	**8,742**	**161,742**	**-**	**672,034**	**17,727**	**783,398**

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

Off-BS Items	2020 (In ₱ Millions)							
	CEA	0%	20%	50%	75%	100%	150%	CRWA
A. Direct credit substitutes	**956**			**25**		**931**		**944**
B. Transaction-related contingencies	**42,190**					**42,190**		**42,190**

C. Trade-related contingencies	1,407			745		662		1,035
D. Other commitments								
Total Off-BS Exposures	**44,553**	**-**	**-**	**770**	**-**	**43,783**	**-**	**44,168**
Counterparty RWA In The Banking Book								
Derivative Exposures	1,162			1,162				581
Total Counterparty RWA In The Banking Book	**1,162**	**-**	**-**	**1,162**	**-**	**-**	**-**	**581**
Counterparty RWA In The Trading Book								
Derivative Exposures	347			43		304		326
Total Counterparty RWA In The Trading Book	**347**	**-**	**-**	**43**	**-**	**304**	**-**	**326**
Less: General Loan Loss Provision (GLLP) (excess in threshold limit of 1% of Gross CRWA)								2,190
TOTAL	**2,283,721**	**1,378,576**	**8,742**	**162,555**	**-**	**716,121**	**17,727**	**826,283**

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

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

As of Dec. 31, 2020, LANDBANK's Gross Loans & Receivables (GLR) amounted to ₱731,855 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 ₱538,669 million (73.60%), followed by Micro, Small & Medium Enterprises (MSMEs) at ₱67,898 million (9.28%), Local Government Units (LGUs)/Public Sector Entities/Government Corporations at ₱42,790 million (5.85%) and Loans to Individuals at ₱42,536 million (5.81%). The Bank also holds substantial receivables arising from Repurchase Agreements, Certificates of Assignment/Participation with Recourse, and Securities Lending and Borrowing Transactions amounting to ₱16,657 million. The ₱44,168 million credit risk weighted asset of net Off-balance Sheet exposures of ₱44,553 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 movement of goods and trust transactions. Outstanding derivative exposures are mainly over-the-counter foreign exchange option contracts.

The Bank's GLR have corresponding Credit RWA of ₱693,627 million following the Standardized Approach. This represents 83.95% of the Total Credit RWA of ₱826,283 million. Further, total Credit RWA represents 87.90% of the Bank's Aggregate RWA of ₱940,041 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 comprehensive set of credit policies through the issuance of Credit Manual, 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 review to assure proper loan classification and setting-up of valuation reserves. As of Dec. 31, 2020, the Bank's net Non-Performing Loan (NPL) stood at ₱11,048 million or 1.29% of the total loan portfolio of ₱858,243 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 credit worthiness. 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 uses the following internally developed statistically-based credit scoring models and their corresponding rating guidelines.

- 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 Corporates
- Behavioral Scoring Model for Cooperatives
- Application Scoring Model for Credit Card
- Behavioral Scoring Model for Partner Financial Institutions (PFIs)[1]

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

All credit rating models were subjected to independent model validation by the Bank's internal audit.

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 portfolio 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 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 ILC and the RiskCom. The recovery of written-off accounts is also within the radar of the LANDBANK Board, RiskCom and Senior Management.

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

The Bank adopts a 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 the 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 such 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

[1] *For implementation in 2021*

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 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. The stress testing also includes prescribed regulatory tests such as Uniform Stress Testing and REST. Likewise, various loan portfolio assessment and review are conducted to determine impact of a certain event and government regulation to 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, 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 Dec. 31, 2020, the LANDBANK's Total Market RWA stood at ₱15,381 million, broken down as follows:

In₱million

PARTICULARS	AMOUNT
Interest Rate Exposure	1,107
Equity Exposure	297
FX Exposure	2,027
Options	11,950
Total Market RWA	15,381

The Total Market RWA represents 1.64% of the Bank's Aggregate RWA of ₱940,041 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. Interest Rate Risk in the Trading Book

   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 an effective and independently validated VaR methodology 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.

PARTICULAR	DAILY LIMIT		MAT	STOP LOSS
	POSITION	VAR		
Government Securities	₱20,000.00 M	₱150.00 M	YTD Gain Erosion / Group Target	₱215.00 M
Foreign Securities	$20.00 M	$0.20 M		$0.64 M

YTD: Year-to-Date

The Foreign Exchange Risk in FS are accounted under Foreign Exchange Risk Management.

2. Equity Price Risk Management

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.

In ₱ million

PARTICULAR	DAILY LIMIT		MAT	STOP LOSS
	POSITION	VAR		
Equity	1,000.00	15.00	YTD Gain Erosion / Group Target	25.00

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.

The following limits are set for foreign-currency related transactions:

In $ million

PARTICULAR	DAILY LIMIT		MAT	STOP LOSS
	POSITION	VAR		
FX Trading	50.00	0.36	YTD Gain Erosion / Group Target	65.00
FS	20.00	0.20		0.64
Derivatives	30.00	0.226		200.00

LANDBANK had the following significant exposures denominated in foreign currencies as of Dec. 31, 2020:

In $ thousand

PARTICULAR	USD	JPY	EUR	AUD	Others	Total
ASSETS						
Fx Currency Notes & Coins on Hand (FCNCH)/ Cash and Other Cash Items (COCI)	28,700	782	446	107	870	30,905
Due from Banks	140,884	597	1,361	46	988	143,876
Held for Trading	11,370	0	0	0	0	11,370
Available for Sale Investment	1,624,909	0	1	0	38,447	1,663,357
Investments in Bonds and Other Debt Instruments (IBODI)	565,904	0	0	0	0	565,904
Interbank Loans Receivable	220,003	0	0	0	0	220,003
Loans & Receivables	532,099	33,999	0	0	0	566,098
Other Assets	26,466	621	1,022	0	791	28,900
Gross FX Assets	3,150,335	35,999	2,830	153	41,096	3,230,413
LIABILITIES						
Deposit Liabilities	2,338,473	448	19	0	0	2,338,940
Bills Payable	253,456	0	0	0	0	253,456
Other Liabilities	0	0	0	0	0	0
Gross FX Liabilities	120,482	253,383	30,324	0	790	404,979

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

1. VaR Analysis **(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 internally developed 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 disclosure is intended for external disclosure and for regulatory purposes.

   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 over-all VaR limit for the Treasury trading activities was set at ₱202 million throughout 2020. 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. <u>Stress Test</u> **(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 Portfolio Scenario Analysis (PSA) 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, FX risk and eventually, liquidity risk. Reverse Stress Tests are conducted to identify and simulate the events that can lead the Bank to a particular tail event.

   Results of the PSA are also simulated in the CET1 Ratio computation to be able to assess its impact said ratio set at 10.50% by BSP for LANDBANK as Domestic Systemically Important Banks (DSIB) for 2020.

3. <u>Back-Test</u> **(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.b.v)**

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.

4. Model Validation

   Risk models used in managing market risk are subjected to independent model validation. The Internal Audit Group (IAG) is tasked to do model validation of RM models. The Bank has also engaged the services of a third party to conduct an independent model validation.

INTEREST RATE RISK IN THE BANKING BOOK

Interest Rate Risk in the Banking Book Management Framework

Interest Rate Risk in the Banking Book (IRRBB) arises from the Bank's core banking activities. The main source of this type of IRRBB is gap risk, which reflects the fact that assets and liabilities have different maturities and are priced at different interest rates. Thus, it can be said that the primary form of IRRBB at LANDBANK 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.

Based on LANDBANK's Balance Sheet, the deposit accounts are the major sources of funding for loans and investments. Re-pricing mismatches of these accounts can expose the Bank's income and underlying economic value to unanticipated fluctuations as interest rates vary. Any mismatch would result to gaps that would mean additional interest cost or opportunity losses to the Bank due to interest rate changes.

The Bank manages IRRBB based on approved policies and guidelines, limit setting procedures and interest rate risk limits, application of interest rate risk measurement models and reporting standards such as Re-pricing Gap/Earning-at-Risk (EaR) and Economic Value of Equity-at-Risk (EVE) Report.

The Bank has established guidelines for interest rate limit setting to standardize the process framework. 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. Based on LANDBANK historical transactions and market data, RMG-TRMD recommends interest rate limits in coordination with Asset and Liability Management Group (ALMG) and is approved by the ALCO, RISKCOM 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 LANDBANK's risk appetite and approves the organizational and reporting structures for the management of IRRBB. It delegates to ALCO the management and optimization of the Bank's IRRBB position. The ALCO optimizes results within the risk appetite limit set by the Bank, takes decisions and allocates resources to manage IRRBB. The TIBS ensures that ALCO's decisions pertaining to the management of structural IRRBB are implemented.

IAG is tasked to do model validation of RM models. The validation 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. The Bank may also employ the services of external consultants to validate the Bank's various models.

In addition, model review is also being done by the Risk Modeling and Quantitative Analytics Unit (RMQAU) of TRMD to check for any enhancements or calibrations needed to the models. This is a regular internal control measure in preparation of external/independent validation/audit.

As of this moment, the Bank does not engage in hedging transactions.

Interest Rate Risk in the Banking Book Measurement Models

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

1. Earnings-Based Measure: The Bank uses the EaR Model to estimate changes in net interest income under a variety of rate scenarios over a 12-month horizon. EaR is a simulation method that analyzes the IRRBB in terms of earnings (accrual basis).

   The following table sets the Re-pricing Gap position of the Bank as of Dec. 31, 2020 and the increase/decline in earnings for upward and downward interest rate shocks in the banking book:

In ₱ million

PARTICULARS	0<=1D	1D<=1M	1<=3M	3<=6M	6<=9M	9M<=1Y
Financial Assets						
Liquid Assets	0	207,041	0	0	0	0
Total Investments	0	36,902	72,704	111,851	88,311	11,911
Total Loans	0	225,181	315,953	71,878	19,236	15,958
Other Assets	0	22	156	8	10	12
Total Financial Assets	0	469,146	388,812	183,738	107,558	27,881
Financial Liabilities						
Deposits	0	334,932	231,703	36,654	10,034	12,267
Bills Payable	0	1,144	2,250	12,644	429	171
Others	0	0	0	0	0	0

In ₱ million

PARTICULARS	0<=1D	1D<=1M	1<=3M	3<=6M	6<=9M	9M<=1Y
Total Financial Liabilities	0	336,076	233,952	49,299	10,463	12,438
Off-Balance Sheet Commitments	0	0	0	0	0	(1,708)
Total Off-Balance Sheet	0	0	0	0	0	(1,708)
Re-pricing Gap	0	133,070	154,860	134,439	97,095	13,734

Change in Interest Rates - in basis points (bps)

In ₱ million

	-300	-200	-100	-50	+50	+100	+200	+300
EaR	(11,362)	(7,575)	(3,787)	(1,894)	1,894	3,787	7,575	11,362

2. Economic Value-Based Measure: The Bank uses the EVE Model to assess the potential long-term effects of changes in interest rates over the remaining life of its holdings. This model also measures the change in the Bank's EVE for specified changes in interest rates.

   The table below shows the increase (decline) in economic value for upward and downward rate shocks using the EVE Model.

Change in Interest Rates - in bps

In ₱ million

Interest Rate Scenario	Basis	Interest Rate Scenario		EVE-at-Risk
		Peso	Dollar	
Parallel Shift - Up	BIS-IRRBB Calculation	+267	+200	21,705
	5-year Historical Data (Year-on-Year Change on Average Rates at 99% Level Confidence Level)	+179	+100	14,954
	5-year Historical Data (Year-on-Year Change on Average Rates at 95% Level Confidence Level)	+127	+100	9,433
Parallel Shift - Down	Market Sentiment	-75	-75	-4,851
	Market Sentiment	-200	-100	-15,996
	5-year Historical Data (Year-on-Year Change on Average Rates at 95% Level Confidence Level)	-127	-100	-8,964
	5-year Historical Data (Year-on-Year Change on Average Rates at 99% Level Confidence Level)	-179	-100	-13,439
	BIS-IRRBB Calculation	-267	-200	-10,563
Non-parallel Shift	Flattener			23,384
	Steepener			-17,067
	Short Rate Up			25,988
	Short Rate Down			1,353

Both viewpoints are assessed to determine the full scope of the Bank's IRRBB exposure (especially if the Bank has significant long-term or complex in IRRBB positions).

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 risk exposures.

The interest rate risk exposures of the Bank are measured and reported to the ALCO and RISKCOM on a weekly and monthly basis, respectively.

Key Behavioral and Modeling Assumptions

Behavioral analysis enables the Bank to analyze how an instrument's actual maturity or re-pricing behavior may vary from the instrument's 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 NMDs can be a major determinant of IRRBB exposures under the economic value and earnings-based measures. To determine the actual behavior of NMDs and capture the Bank's actual IRRBB exposure, the Bank analyzed its deposit base to estimate the proportion of core and non-core deposits. The volatile part is assumed to have a short maturity, while the stable part is assigned a longer maturity.

2. Term Deposit subject to Early Termination

   TD were bucketed based on maturity with run-off assumption on the balance sheet, such as existing banking book positions amortized and are not replaced by any new business. A behavioral analysis is conducted to approximate the early termination rate 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.

3. Fixed Rate Loans subject to Prepayment

   A behavioral analysis is conducted to estimate the percentage of loan balance that is likely to repay before the due date. The prepayment rate is computed using historical loan data. The computed monthly prepayment rate for loan product shall be considered in the computation of cash flows for fixed rate loans.

Stress Testing and Scenario Analysis

The Bank regularly undertakes static simulation. The cash flows arising solely from the Bank's current on- and off-balance sheet positions are assessed. For assessing the exposure of earnings, simulations estimating the cash flows and resulting earning streams over the one-year horizon are conducted based on one or more assumed interest rate scenarios.

The Bank also examines several possible situations, usually probable case and worst-case scenarios. The Bank does Interest Rate Stress Testing using EaR and EVE Models. Results of scenario analysis help the Bank focus on coming up with contingency measures to reduce impact of IRRBB.

LIQUIDITY RISK MANAGEMENT

Liquidity Risk Management Framework

The Parent's liquidity RM process is consistent with its general RM framework covering risk identification, measurement and analysis, monitoring and control. The policies and procedures that govern liquidity RM are reviewed and endorsed on a regular basis by ALCO and RISKCOM for approval of the Board of Directors. The basic liquidity policy of the Parent is to maintain fund availability at all times and hence, to be in a position to meet all of its obligations, in the normal course of business.

The Parent 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 Parent cannot easily offset or eliminate a position at the market price because of inadequate market depth or through market disruption.

Market liquidity risk is also associated with the probability that large transactions may have a significant effect on market prices in markets that lack sufficient depth. This liquidity risk perspective is captured through stress testing or scenario analysis.

Funding liquidity risk is the risk that the Parent 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 Parent. It occurs from the mismatch of asset, liability, exchange contract and contingent commitment maturities. 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 Parent Board exercises oversight through RISKCOM and has delegated the responsibility of managing the overall liquidity of the Parent to the ALCO. The ALCO and the Treasury Investment Banking Sector (TIBS) are responsible for the daily implementation and monitoring of relevant variables affecting Parent's liquidity position. The ALCO reviews 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 ALCO meets weekly or more frequently as required by prevailing situations. The RMG, through the Treasury Risk Management Department (TRMD) is responsible for the oversight monitoring of the Parent's liquidity risk positions and ensures that reports on the Parent's current risk are prepared and provided to ALCO and RISKCOM in a timely manner.

The Parent 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 the IAG and by a Third party.

Liquidity Risk Measurement Models

The Parent manages the liquidity risk using the following tools:

1. Liquidity Gap Report (LGR)

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

   With the implementation of the Asset-Liability and Risk Management System (ALRMS), TRMD prepares RBU (Peso and FX Regular), FCDU, Solo (Parent) LGR on a weekly and monthly basis to ALCO and RISKCOM, respectively. Parent and Subsidiary LGR is prepared in a quarterly basis. ALCO reviews the Bank's assets and liabilities position on a regular basis and recommends measures to promote diversification of its liabilities according to sources, instruments, and currencies to minimize liquidity risks resulting from concentration in funding sources.

   The table presents the assets and liabilities based on actual amortization schedule:

In P thousand

PARTICULARS	LANDBANK					
	2020[1/] (Unaudited)			2019 (Audited)		
	Due within 1 year	Due >1 year	Total	Due within 1 year	Due > 1 year	Total
ASSETS						
Cash & Other Cash Items	48,370,497	0	48,370,497	37,955,764	0	37,955,764
Due from BSP	272,358,986	184,769,152	457,128,138	380,699,212	0	380,699,212
Due from Other Banks	10,431,714	0	10,431,714	10,759,980	2,582,225	13,342,205
Interbank Loan Receivable	26,711,470	6,341,038	33,052,509	17,933,555	0	17,933,555
Security Purchased Under Agreement to Resell	15,823,492	0	15,823,492	38,107,761	0	38,107,761
Loans & Receivables	358,569,916	590,252,215	948,822,131	359,903,198	466,572,572	826,475,770
Investments	332,096,633	770,545,374	1,102,642,007	140,802,446	551,868,209	692,670,655
Other Assets	2,328,153	3,180,366	5,508,519	2,679,679	24,996,507	27,676,186
Total Assets	1,066,690,861	1,555,088,145	2,621,779,006	988,841,595	1,046,019,513	2,034,861,108
LIABILITIES						
Deposits						
Demand	105,998,621	963,824,952	1,069,823,573	884,597,245	0	884,597,245
Savings	419,615,249	526,699,786	946,315,036	813,555,891	0	813,555,891

In P thousand

PARTICULARS	LANDBANK					
	2020[1/] (Unaudited)			2019 (Audited)		
	Due within 1 year	Due >1 year	Total	Due within 1 year	Due > 1 year	Total
Time	93,863,995	151,734	94,015728	74,947,004	3,976,037	78,923,041
LTNCD	6,112,500	0	6,112,500		6,000,000	6,000,000
Bills Payable	3,667,287	24,909,623	28,576,910	2,242,579	25,295,928	27,538,507
Unsecure Subordinated Debt	0	0	0	0	0	0
Due to BTr, BSP, & MCs/PCIC	1,867,772	566,569	2,443,341	2,180,002	598,447	2,778,449
Due to Local Banks	0	0	0	0	0	0
Other Liabilities & Payable	50,094,199	18,682,928	68,777,127	658,003	71,892,813	72,550,816
Total Liabilities	681,228,623	1,534,835,592	2,216,064,215	1,778,180,724	107,763,225	1,885,943,949

1/ Using ALRMS computation

The Parent also prepares on a quarterly basis the Consolidated LGR (Parent and Subsidiaries). The following behavioral assumptions are used in measuring the Parent's liquidity gap:

- Non-Maturing Deposits: Regular savings (Total savings less High Yield Savings Accounts and Easy Savings Plus) and demand deposits are Non-Maturing Deposits (NMDs). A behavioral analysis is made to approximate the withdrawal pattern of NMDs. This is done by determining the rate of deposit outflow per time bucket using the historical end-of-day balances of NMD accounts. The deposit run-off rates are used as basis for slotting the NMD amount under the different tenors.

- Term Deposits: Term Deposit (TD) is a deposit product with a fixed contractual term. 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. The prepayment rate is computed using historical loan data.

The following table sets forth the asset-liability gap position over the detailed time period for the Bank as of 31 December 2020 based on actual amortization schedule which consider the effective maturities as indicated by the deposit retention history:

In P Million						
PARTICULARS	Due within 3 months	Due > 3 months to 6 months	Due > 6 months to 1 year	Due > 1 year to 5 years	Due > 5 years	Total
Financial Assets						
Cash & Due from Banks	326,800	2,128	2,233	184,769	0	515,930
Total Loans	215,062	104,002	82,041	395,008	201,585	997,698
Total Investments	119,822	105,847	106,428	486,394	284,152	1,102,643
Other Assets	158	9	2,161	2,921	259	5,508
Total Assets	661,842	211,986	192,863	1,069,092	485,996	2,621,779
Financial Liabilities						
Deposits	566,635	30,838	28,118	1,490,676	0	2,116,267
Borrowings	3,515	792	1,237	8,850	16,626	31,020

Other Liabilities & Unsecured Subordinated Debt	20,007	800	29,287	18,110	573	68,777
Total Liabilities	590,157	32,430	58,642	1,517,636	17,199	2,216,064
Gap Position	71,685	179,556	134,221	(448,544)	468,797	

As of 31 December 2020, the Parent 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. Maximum Cumulative Outflow (MCO) limit was not breached in the entire time bucket within the one-year horizon.

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

1. Financial Ratio Analysis

Financial Ratio Analysis is another liquidity risk measurement tool that calculates and compares liquidity and leverage ratios derived from information on the Parent's financial statements against set liquidity/leverage limits.

The following table sets out the Parent's liquidity ratios as of the dates indicated:

In million except when expressed in percentage

PARTICULARS	31 December			
	2020 (Audited)	2019 (Audited)	2018 (Restated)	2017 (Audited)
Liquid Assets	P 1,474,378 [1/]	P 1,105,321 [1/]	P 1,032,595 [2/]	P 972,283 [2/]
Financial Ratios:				
Liquid Assets to Total Assets	62.36%	54.32%	55.01%	59.88%
Liquid Assets to Total Deposits	70.39%	61.99%	62.35%	68.21%

1/Note: High Quality Liquid Assets (HQLA) from LBP Liquidity Coverage Ratio (LCR) Report

2/Note: Liquid Assets include the following:
1. Cash and other Cash Items
2. Interbank Loans
3. Government Securities
4. Tradable non-Government securities and commercial paper

2. Liquidity Stress Test

The Parent conducts regular stress testing and scenario analysis to further assess the Parent's vulnerability to liquidity risk. This activity supplements the risk models used by the Parent 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 Parent:

- Liquidity Stress Test/Scenario Analysis
- Fund Source Stress Test
- 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 P Million)	
	2020	2019
High Quality Liquid Assets	1,474,378	1,105,321
Total Net Cash Outflows	677,929	516,915
LCR	217.48%	213.83%

As of 31 December 2020, the Bank's LCR is higher than the 100% minimum requirement for the CY 2020.

INTEREST RATE RISK IN THE BANKING BOOK

Interest Rate Risk in the Banking Book Management Framework

Interest Rate Risk in the Banking Book (IRRBB) arises from the Bank's core banking activities. The main source of this type of IRRBB is gap risk, which reflects the fact that assets and liabilities have different maturities and are priced at different interest rates. Thus, it can be said that the primary form of IRRBB at LANDBANK 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.

Based on LANDBANK's Balance Sheet, the deposit accounts are the major sources of funding for loans and investments. Re-pricing mismatches of these accounts can expose the Bank's income and underlying economic value to unanticipated fluctuations as interest rates vary. Any mismatch would result to gaps that would mean additional interest cost or opportunity losses to the Bank due to interest rate changes.

The Bank manages IRRBB based on approved policies and guidelines, limit setting procedures and interest rate risk limits, application of interest rate risk measurement models and reporting standards such as Re-pricing Gap/Earning-at-Risk (EaR) and Economic Value of Equity-at-Risk (EVE) Report.

The Bank has established guidelines for interest rate limit setting to standardize the process framework. 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. Based on LANDBANK historical transactions and market data, RMG-TRMD recommends interest rate limits in coordination with Asset and Liability Management Group (ALMG) and is approved by the ALCO, RISKCOM and the LANDBANK Board of Directors. 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 of Directors defines LANDBANK's risk appetite and approves the organizational and reporting structures for the management of IRRBB. It delegates to ALCO the management and optimization of the Bank's IRRBB position. The ALCO optimizes results within the risk appetite limit set by the Bank, takes decisions and allocates resources to manage IRRBB. The TIBS ensures that ALCO's decisions pertaining to the management of structural IRRBB are implemented.

IAG is tasked to do model validation of RM models. The validation 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. The Bank may also employ the services of external consultants to validate the Bank's various models.

In addition, model review is also being done by the Risk Modeling and Quantitative Analytics Unit (RMQAU) of TRMD to check for any enhancements or calibrations needed to the models. This is a regular internal control measure in preparation of external/independent validation/audit.

As of this moment, the Bank does not engage in hedging transactions.

Interest Rate Risk in the Banking Book Measurement Models

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

3. Earnings-Based Measure: The Bank uses the EaR Model to estimate changes in net interest income under a variety of rate scenarios over a 12-month horizon. EaR is a simulation method that analyzes the IRRBB in terms of earnings (accrual basis).

   The following table sets the Re-pricing Gap position of the Bank as of Dec. 31, 2020 and the increase/decline in earnings for upward and downward interest rate shocks in the banking book:

In ₱ million

PARTICULARS	0<=1D	1D<=1M	1<=3M	3<=6M	6<=9M	9M<=1Y
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Liquid Assets	0	207,041	0	0	0	0
Total Investments	0	36,902	72,704	111,851	88,311	11,911
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Commitments	0	0	0	0	0	(1,708)
Total Off-Balance Sheet	0	0	0	0	0	(1,708)
Re-pricing Gap	0	133,070	154,860	134,439	97,095	13,734

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In ₱ million

	-300	-200	-100	-50	+50	+100	+200	+300
EaR	(11,362)	(7,575)	(3,787)	(1,894)	1,894	3,787	7,575	11,362

4. Economic Value-Based Measure: The Bank uses the EVE Model to assess the potential long-term effects of changes in interest rates over the remaining life of its holdings. This model also measures the change in the Bank's EVE for specified changes in interest rates.

   The table below shows the increase (decline) in economic value for upward and downward rate shocks using the EVE Model.

Change in Interest Rates - in bps
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		Peso	Dollar	
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Both viewpoints are assessed to determine the full scope of the Bank's IRRBB exposure (especially if the Bank has significant long-term or complex in IRRBB positions).

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 risk exposures.

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The Bank also examines several possible situations, usually probable case and worst-case scenarios. The Bank does Interest Rate Stress Testing using EaR and EVE Models. Results of scenario analysis help the Bank focus on coming up with contingency measures to reduce impact of IRRBB.

OPERATIONAL RISK MANAGEMENT (2019 AR page 124)

The Operational Risk Management (ORM) system of the Bank underwent a thorough review and validation to ensure adherence with BSP Circular 900 (Guidelines on Operational Risk Management), BSP Circular 951 (Guidelines on Business Continuity Management (BCM), BSP Circular 808 (IT Risk Management), BSP Circular 982 (Information Security Risk Management) 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 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 Circular 951 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 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. Lessons learned and best practices implemented during the onslaught of Typhoons Rolly and Ulysses were considered in the review and updating of the Business Continuity Plans.

Despite the threat of the COVID-19 pandemic, the Bank was able to continuously provide its services while ensuring the health and safety of its 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.

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 conduct 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 (2019 AR page 126)

LANDBANK uses the Basic Indicator Approach in calculating the capital charge for operational risk under Pillar 1. The average Gross Revenue of the Bank for the last three years is used to calculate the Operational RWA. Thus, with the Gross Revenue of the Bank consistently increase with business expansion, the Operational RWA has also been increasing annually. As of 31 December 2020, the Bank's Total Operational RWA using the Basic Indicator Approach was **₱98,377 Million** or **10.5%** of the Bank's Aggregate RWA of **₱940,041 Million**.

Cognizant that Gross Revenues (BSP proxy data) are but a shadow indicator of operational risks in the Basic Indicator Approach, LANDBANK conducts a simulation of the computation of the estimated losses using the Bank's actual historical losses and estimated probability of occurrence to determine the variance from the Basic Indicator Approach model. Self-risk assessment of the five sub-risks of operational risk (people, process, IT systems/Info Sec, event and legal risks) shows that the total estimated loss is way below the Total Operational RWA under the Basic Indicator Approach.

LANDBANK is firm in its resolve to fortify 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.

The 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.

Information Security and Technology Risk Management

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.

Major accomplishments and improvements include:

- Adoption and approval of the new Information Security Policy Framework (ISPF) with the revised Information Security Risk Management (ISRM) and Information Technology Risk Management (ITRM) frameworks, aligned with regulatory requirements and global standards

- Formulation, development, review, updating, and issuance of documented procedures to guide employees on the Bank's security controls, practices, and measures

- Conduct of internal and external security reviews such as vulnerability assessment and penetration testing, Payment Card Industry Data Security Standards assessment to measure the Bank's security posture and ensure that noted vulnerabilities are addressed

- Conduct 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

- Use 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 banking channels

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

LANDBANK as one of the major players in the banking industry annually conducts a thorough and comprehensive Internal Capital Adequacy Assessment Process (ICAAP) to determine the quality and adequacy of its capital, given the existing risk exposures as well as future risks arising from growth, new markets and expansion of the product portfolio.

To align with the local and global best practices, the LANDBANK Board and Senior Management performed collaborative governance and provided directions to enhance the ICAAP development and RM processes, and to strengthen the capital position of the Bank with the following enhancements:

- Enhanced and articulated the Risk Appetite Statement (RAS) and Materiality Threshold for Pillar 2 risks and Early Warning Indicators/alerts required by the Bangko Sentral ng Pilipinas (BSP)
- Updated the qualitative and quantitative Bank-wide stress testing of Pillar 1 and Pillar 2 Risks
- Enhanced the articulation of bases of assumptions for the quantification of Pillar 1 and Pillar 2 risks

Internal Capital Adequacy Assessment Process Culture

The ICAAP is embedded in the Bank's operating philosophy and has been cascaded down to the BU level, forming an integral part of the Bank's RM process. This process enables the LANDBANK Board and Senior Management to assess all the risks that are inherent in the daily activities of the BUs on a continuing basis.

All BUs of the Bank are aware of the corresponding capital charge for the losses that could arise from any transaction or business they undertake. In monitoring the efficient performance of the BUs across the organization in the area of RM and capital utilization, the Bank adopts a rigorous escalation and thorough monitoring process via regular reports on actual losses versus estimated losses for each risk category established in the ICAAP.

Strengthening Capital Planning

For 2019 LANDBANK's capital was strong and sufficient to deliver its mandated services and to cover the risks inherent in its operations. Under the most probable scenario, the Bank estimated the 2019 year-end Common Equity Tier CET 1 ratio at **11.40%** versus the 11.00% minimum regulatory requirement for CET 1 ratio.

The actual CET 1 ratio recorded as of 31 December 2019 was **12.88%** implying an objective risk assessment and capital planning for the year. The CET 1 ratio of 12.88% of the Bank was above the BSP minimum requirements of **11.00%** CET 1 ratio and was compliant with Basel III requirements.

LANDBANK maintains a strong capital base at all times to boost customer confidence, enhance competitiveness, ensure stability, and sustain long-term growth and viability. As such, the Bank continues to adhere with BSP's policies, rules and more specifically, comply with regulatory requirements on capital structure and capital adequacy. The Bank vigorously continues to preserve its capital to sustain developmental pursuit and service its mandated clients while maintaining acceptable Return on Equity (ROE) of at least equal to the average ROE of the commercial banking industry.

LANDBANK's General Policy on Capital Planning was enhanced to establish capital levels that will adequately support the Bank's Vision and its strategic plans and ensure continued compliance with the evolving capital and capital ratio requirements of the BSP. Given that internal capital generation through earnings remains as the principal source of the Bank's capital accumulation, the primary thrust of LANDBANK's capital planning activities is to maximize its profitability and consequently, attain higher retained earnings.

The Bank strictly manages its income-generating assets by managing the Risk Weighted Assets (RWA) via diversification of loan portfolio, review of loans/ provision of reserves in a timely manner, compliance with regulatory ratios, internal limits and risk appetite, strict monitoring of clean large exposures and Directors, Officers, Stockholders and Their Related Interest (DOSRI) loans and timely calibration of credit and market risk measurement tools.

CONSUMER PROTECTION RISK MANAGEMENT SYSTEM (CPRMS) (2019 AR page 126)

In compliance with BSP Circular 1048 "BSP Regulation on Financial Consumer Protection; Guidelines and Procedures Governing the Consumer Assistance and Management System of BSP-Supervised Financial Institutions; and Amendments to the Manual of Regulations for Banks and Non-Bank Financial Institutions", LANDBANK continuous to update the Customer Protection Risk Management System (CPRMS) as part of the Bank's enterprise-wide risk management system. It identifies, measures, monitors, and controls consumer protection risks 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 are 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 1048, to cover (1) Disclosure and Transparency; (2) Protection of Client Information; (3) Fair Treatment; (4) Effective Recourse; and (5) Financial Education and Awareness. 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.

Board-Level Committee including Membership and Functions

As of 31 December 2020

Committee: Risk Oversight Committee (RISKCOM)

Duties and Functions:

1. The Board-level Risk Oversight Committee (RISKCOM) is primarily responsible for the LANDBANK's Risk Management (RM) framework, policies and guidelines and ensures the alignment of RM objectives with the Bank's overall business strategies and performance goals.
2. The RISKCOM oversees the RM program of the Bank ensuring that RM systems are in place, limits and tolerances are observed, system of limits remain effective and immediate corrective actions are taken whenever there are breaches.

The RISKCOM is composed of the following:

RISKCOM Chairperson	Director Jaime L. Miralles
RISKCOM Vice-Chairperson	Deputy Treasurer Erwin D. Sta. Ana (Representative of Treasurer Rosalia V. de Leon Alternate of DOF Secretary Carlos P. Dominguez)
Member/Independent Director	Director Nancy D. Irlanda
Member/Independent Director	Director Jesus V. Hinlo Jr.
Member/Ex-Officio Director	Secretary William D. Dar Department of Agriculture

The RISKCOM meets at least **once a month** and held a total of **13** meetings in 2020 including **one** Joint Management Committee (MANCOM) and RISKCOM meeting for the approval of 2020 LANDBANK ICAAP Document and Recovery Plan.

The Committee approved, noted or confirmed 310 regular risk reports and 27 special reports comprising of frameworks, plans, programs, policies and procedures and 28 ad hoc reports were deliberated to assess and mitigate various risk such as credit risk, treasury risk, (e.g., market, interest rate and liquidity), operational risk, legal risk, people risk, information security and technology risk, etc.

Major LANDBANK initiatives and new/enhanced guidelines approved by the RISKCOM are as follows:

Credit RM
1. Calibrated CRES Cooperative Scoring Facility - 2019 Commitment to Governance Commission for GOCCs 2. Proposed Enhancement in the Credit Risk Engine System (CRES) Scoring Facilities Guidelines 3. Proposed Enhancement of Business Rules in the Credit Risk Engine System (CRES) Scoring Facilities 4. Proposed Enhancement on Credit Rating System for Universal, Commercial, Offshore and Foreign Banks 5. Proposed Amendment to Business Rules in Credit Rating System (CRS)
Treasury-related (Market, Liquidity, IRRBB, Counterparty Credit) **RM**
1. Review of the Bank's Trading Limits 2. Asset & Liability Risk Management System (ALRMS) – IT System Prioritization Level 3. Valuation Model per Investment in Non-Marketable Equity Securities (INMES) Account 4. 2020 Asset-Liability Management Strategies 5. Updating of Pre-Settlement Risk (PSR) Weights 6. Guidelines for the Preparation of Liquidity Gap Report (Version 8) 7. Guidelines for the Preparation of the Repricing Gap/Earnings-at-Risk (Version 7) 8. Guidelines on Back-testing of Results of Model-Generated Risk Measures (Version 3) 9. Guidelines for the Preparation of the Economic Value of Equity-at-Risk
Operational RM
1. Revised Consumer Protection Risk Management System 2. Proposed Guidelines in Operational Risk Capital Charge Calculation Using Standardized Measurement Approach (SMA) and Advanced Measurement Approach (AMA)-based Internal Capital Assessment (ICA) 3. Revised IT Systems Prioritization List 4. Operational Risk Threshold for Business Units 5. Revised Consumer Protection Risk Management System (CPRMS)
Information Security & Technology RM
1. Information Security Awareness

2. ISRM and ITRM Framework 3. Guidelines on Vulnerability Management of the Bank's Information Technology (IT) Systems 4. Proposed Revisions to Guidelines on Monitoring and Reporting of Activity Logs of Information Technology (IT) Administrators 5. Information Security Policy Set
Enterprise RM
1. Updated RISKCOM Charter 2. Amended RISKCOM Charter 3. Guidelines on the Conduct of Stress Testing Exercises for LANDBANK
Other Items approved by RISKCOM
1. Updated Risk Dictionary 2. Update on BSP Presentation on LBP's ORWA Initiative 3. Result of Asset & Liability Committee Liquidity Contingency Plan Call Tree Testing 4. 2019 Information Security Program Review

The overall 2020 performance rating of the RISKCOM is 97.50% or Superior based on the parameters: Function and Responsibilities, Structure, Process and Performance.