



PUBLIC DISCLOSURE ON CAPITAL ADEQUACY RATIO

(IN ACCORDANCE WITH THE CIRCULAR 41/2016/TT-NHNN)



As of 31st December 2022

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I. INTRODUCTION

The objectives of Public Disclosure in accordance with Circular 41 are providing the transparency information on status of equity, value of risk weighted and risk management framework of Wooribank Vietnam (“the Bank”) to related parties (depositors, government agencies, etc), based on the information the Bank can evaluate the capital adequacy ratio.

According to Public Disclosure of Circular 41, the Bank implements the qualitative and quantitative information on the capital adequacy ratio.

II. SCOPE OF CAPITAL ADEQUACY RATIO CALCULATION

1. Qualitative Content

According to regulations on financial reporting for credit institutions and foreign bank branches, the following entities are subject to consolidation and non-consolidation of the Bank:

- Subsidiaries: not any;
- Affiliated companies: not any;
- Exempt companies (insurance companies): not any;

The Bank, consisting of no subsidiaries or affiliated companies, shall only be subject to the minimum capital adequacy ratio based on its Financial Statements.

2. Quantitative Content

Amount of investment in a subsidiary which is an insurance business enterprise: not incurred.

III. CAPITAL STRUCTURE

1. Qualitative content

The capital of the Bank as of 31st December 2022 does not include stocks and no debt-equity instruments. The Bank’s own capital consists mainly of contributed capital from Wooribank Korea (“Mother bank”) and retained earnings from initial investment in Vietnam until now.

2. Quantitative content

Table 1. The Capital of the Bank

Unit: Million VND

Items	Amount (31/12/2022)
Tier 1 Capital	10,123,551
Tier 2 Capital	15,291
Own capital	10,138,842

IV. CAPITAL ADEQUACY RATIO

1. Qualitative Content

a. Process of calculation and management of Capital Adequacy Ratio (“CAR”)

Step 1: Collecting data
- Collect data
- Cleansing input data
Step 2: Calculating and monitoring CAR
- Calculate CAR through the automatic CAR calculating tool
- Test the accuracy of the calculating tool, ensure the exact CAR result
- Division independently check
Step 3: Approving and disclosing
- Management level approve the CAR result
- Report to SBV, disclose the information

b. Capital planning to secure capital adequacy ratio

The Bank establishes the targeted capital adequacy ratio for the period of the next 3-5 years and at least annually conducts the periodical judgement in order to adjust on time when there are changes in the business environment, law to meet the target of risk management. On the basis of established targeted capital adequacy ratio, the Bank establishes the suitable capital plan and business plan.

2. Quantitative Content

Table 2. Capital Adequacy Ratio & Risk Weighted Assets

Unit: Million VND

Criteria	Amount (31/12/2022)
Capital adequacy ratio (%)	22.45%
Tier 1 capital adequacy ratio (%)	22.42%
Own capital	10,138,842
Total risk-weighted asset	45,163,361
Credit risk weight asset	40,957,820
Counterparty credit risk-weighted asset	499,291
Regulatory capital for operational risk	282,494
Regulatory capital for market risk	14,006

V. CREDIT RISK

Credit risk is one of the Bank's material risks, accounting for the highest proportion of the Bank's total regulatory capital. To manage and minimize credit risk, the Bank has focused on completing the credit risk management framework, upgrading information and technology systems, and implementing a series of initiatives to strengthen credit risk management system.

“**Credit risk**” is the risk that customers do not perform or are unable to partially/fully perform the loan repayment obligations under contracts/agreements with the Bank, excluding the cases exposed to counterparty credit risk. In which, customers (including credit institutions, foreign bank branches) have relations with the Bank in receiving credit (including receiving credits through trust), receiving deposits, and corporate bond issuance.

“**Counterparty credit risk**” is the risk that the counterparty does not perform or is unable to partially/fully perform its payment obligations before or in the due date of its proprietary, repo, and reverse repo transactions; trading of derivative products for hedging risks, FX trading, financial asset trading to serve the customers and counterparties’ demand. In which, counterparty (including credit institutions, foreign bank branches) have transactions with the Bank including proprietary transactions, repo

transaction and reverse repo transaction; trading of derivative products to prevent risk; FX trading, financial asset trading to serve the customers and counterparties' demand.

1. Qualitative Content

a. Credit risk management policy

The Bank has issued Credit Risk Management Policy to specify the issues needed for an accurate assessment of the Bank's credit risk. Accordingly, the Bank ensures that credit extension is in compliance with the laws and internal regulations of the Bank, maintains checking and supervising credit before, during and after extension; maintains independence and objectivity in risk assessment within the protection tiers at the same time.

➤ Credit risk management principles

Credit risk is managed based on the following principles:

- Balance between risk and return, if there is discrepancy between risk and return opportunity, risk management must be prioritized.
- For all credit risk transactions, credit risk must be assessed and prioritized for management, and
- Credit portfolio must be diversified and not concentrated on assets or specific asset class

➤ Credit risk management strategy

The Bank's target bad debt ratio and bad credit grant ratio are in line with credit risk appetite.

➤ Credit risk management apparatus

- Credit risk limit must be determined according to the following criteria: Credit risk limit proposed by Risk Management Division, submitted to the Risk Council for review to submit to General Director for promulgation or amendment.
- Risk Management Division periodically monitors the performance of the limits and in case limits are likely to exceed, Risk Management Division shall coordinate with relevant units to have suitable solution and submit to competent authorities.
- The Bank has decentralized credit approval authority based on: credit size, customer credit rating and type of collateral. Woori Vietnam grants approval authority to 4

levels: consulting with the Mother Bank, credit Committee, credit officer Committee and Branch /transaction Office.

➤ **Evaluation, monitoring and control of credit risk**

Regarding the measurement (methods and models of credit risk measurement) of credit risk:

The Bank use the Expected Loss measuring model to measure the credit risk. The model was set up in accordance with international practices, supported by Woori Bank (Korea). Herein, the risk level is classified according to the business type (according to credit rating and business) and retail credit (individual credit scoring model).

The Bank uses a credit rating model to conduct customer reviews. For corporate customers, the Bank has operated a model of customer credit ratings under Basel III standards with support from the parent Bank. Accordingly, indicators of credit risk such as PD (Probability at Default), EAD (Exposure at Default), LGD (Loss Given at Default) are calculated for each loan. For individual customers, the Bank has developed and operated a credit rating model based on customer information, credit status, and customer usage information.

b. List of independent credit rating agencies

The Bank utilizes the credit rating scales of the following three independent credit rating agencies: Standard and Poor's (S&P), Moody's Investor Service (Moody's) and Fitch Rating.

c. Credit risk mitigation

Credit risk mitigation was carried out by the following methods:

- Collateral: valuable documents, savings card issued by credit institutions, foreign bank branches;
- Third party guarantee.



2. Quantitative Content

a. Risk weighted assets according to the credit rating scale

Table 3. Credit Risk Weighted Assets

Unit: Million VND

Classification of claims	Rating SBV	Risk weight	Value of asset with risk (31/12/2022)
Claims on foreign financial institutions (including foreign credit institutions) and foreign branch banks in Vietnam	From AAA to AA-	20%	4,463,718
	From A+ to BBB-	50%	1,915,513
	From BB+ to BB-	40%	41,910
	B+ to B-	50%	255
	A+ to BBB-	50%	436,399
	BB+ to BB-	80%	2,153,241
	Under B- or not rated	150%	11,584
TOTAL			9,022,620

b. Risk weighted assets by credit risk and counterparty risk

Table 4. Credit Risk Weighted Assets (By Different parties' risk factor)

Unit: Million VND

Items	Amount (31/12/2022)
Credit risk weighted assets	40,957,820
Financial Institution Receivable	9,022,620
Enterprises Receivable	24,666,296
Real Estate Receivable	161,863
Housing Receivable	1,670,934
Retail Receivable	3,503,509
Bad Debt Receivable	160,081
Other Assets	1,772,517

Table 5. Counterparty Credit Risk Weighted Assets

Unit: Million VND

Items	Amount (31/12/2022)
Counterparty credit risk weighted assets	499,291
Derivative product transactions aimed at hedging risks	282,400
Foreign exchange or financial asset trading transactions aimed at serving the demands of customers	216,891

c. Risk weighted assets by sector

Sector-based risk-weighted assets:

Table 6. Credit Risk Weighted Assets (By Industry)

Unit: Million VND

No.	Items	Amount (31/12/2022)
1	Agriculture, forestry and fisheries	378,879
2	Manufacturing and processing industry	13,424,409
3	Producing and distributing electricity, gas, water, etc.	1,988,871
4	Water supply, waste management and treatment	19,851
5	Construction	1,909,145
6	Wholesale, retail, repair cars and motorcycles	845,864
7	Transportation and warehouse	1,125,303
8	Accommodation and food services	7,290
9	Information and communication	13,773
10	Financial, banking, and insurance operations	10,921,531
11	Real estate	1,116,011
12	Professional activities, science and technology	12,710
13	Administrative activities and supporting services	40,061
14	Education and training	1,142,308
15	Health and social assistance activities	913,965
16	Other services	140,683
17	Individual	5,184,649
18	Non Classification (Other Assets)	1,772,517
	TOTAL	40,957,820

d. Credit risk mitigation

Risk weighted assets (including on-balance and off-balance sheet) are mitigated the credit risk under the risk mitigation methods prescribed in Article 11 of Circular 41:

Table 7. Credit Risk Weighted Assets (Before and After Credit Risk Mitigations)

Unit: Million VND (31/12/2022)

Total credit risk weighted assets (Before CRM)	CRM* measures		Total credit risk weighted assets (After CRM)
	Security Asset	Guarantee	
41,189,430	569	231,041	40,957,820

* CRM: Credit risk mitigation

VI. OPERATIONAL RISK

Operational risk refers to the risk arising due to inadequate or failed internal processes, people, system errors, failures, or external events that causes financial losses or non-financial negative impacts on the Bank. Operational risk shall include legal risks; exclude reputational risk and strategic risk.

Wooribank has synchronously implemented operational risk management throughout the system and has brought important values in minimizing the frequency and the impact of operational risk on finance, reputation, and legal obligations of the Bank.

1. Qualitative Content

a. Operational risk management policy

The Bank has issued “*Operational Risk Management Policy*” in order to unify the principles, create a seamless framework for managing operational risk, fully meet the international standards and best practices, as well as the State Bank's internal control system requirements and legal regulations.

➤ **Principles of Operational risk management**

All products, business activities, business processes, and information technology systems of the Bank must be identified with operational risk; from there, there are solutions to monitor, control, and create tools and methods to measure operational risk.

All operational risk must be managed by risk limits within the risk appetite of the Bank. The culture of operational risk management should be established in the whole banking system to prevent risks incidents.

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The operational risk management organization structure operates following 3-lines of defense principle, ensuring that the operational risk are managed according to clear authority and responsibility; are assessed independently and objectively; are reported fully and accurately to the Members' Council, Risk Management Committee, General Director, Risk Council and Divisions/Departments/Branches of the Bank.

Manage objectively all the operational risk that may arise during the business activities.
Comply with the State Bank's regulations on operational risk management.

➤ **Framework of Operational risk management**

The framework of operational risk management at the Bank prescribes the overall components, including: (i) operational risk governance and organization - the principle, the strategy, objectives and limits of operational risk; (ii) operational risk management documentation; (iii) operational risk management culture and awareness; (iv) procedures for identifying, evaluating, measuring, controlling and reporting operational risk; (v) operational risk management in new products/systems/markets, outsourcing and technology application; and (vi) operational risk management system.

➤ **Content of Operational risk management Policy**

The operational risk management policy at the Bank specifies the following contents:

- Strategy for operational risk management;
- Limits on operational risk, including financial loss limit (sorted by 7 operational risk events and 6 business groups according to Circular 13/2018 /TT-NHNN) and non-financial loss limit (including reputation, service errors, labor and arising legal obligations);
- Organizational model of operational risk management: the structure of 3-lines of defense, roles and responsibilities of risk management of the Risk Management Division, the managers of the Divisions, the staffs in charge of managing operational risk and the role of each division/department at the Bank;
- The operational risk management process: identifying, measuring, and evaluating operational risk by applying the operational risk management tools;
- Managing operational risk for new products, new markets, outsourcing activities, and managing operational risks in technology application;
- Handling of operational risk, including methods: Avoidance of risk, reduction of risk, acceptance of risk or transfer of risk;

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- Reporting and managing operational risk data.

b. Business continuity plan

The Bank establishes and periodically runs and revises (if any) the Business continuity plan in accordance with the operational risk management strategy. The Business continuity plan has to meet at least the following requirements:

- There are available plan, method, and resource to maintain the ability of business continuity, to mitigate the damage in the scenario of interruption/stop events in business;
- The established plan is consistent with the qualifications, scale of the Bank;
- There are backup systems for human resources, information technology system and database;
- Be able to restore disrupted business activities back to the normal state within the requested time limit;
- Be reviewed and tested annually in order to determine the effectiveness of the plan to sustain operations and make adjustments if necessary.

2. Quantitative Content

Regulatory capital for operational risk according to Circular 41/2016/TT-NHNN is calculated according to the Basic Indicator method.

Business index (BI) includes 3 components taken from the Bank's income statement, including: IC (absolute value of interest Incomes and similar incomes minus Interest Expenses and other similar accounts), SC (Total value of service Incomes, service Expenses, other operating Incomes, other operating Expenses), FC (Sum of absolute value Net gain / loss from foreign exchange trading, trading securities, and investment securities).

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The business index and the components of the business index, the regulatory capital for operational risk are shown in the table below:

Table 8. Regulatory Capital for Operational Risk

Unit: Million VND (31/12/2022)

Period (the latest 12 quarters at time calculated Regulatory capital for operational risk)	IC	SC	FC	BI (=IC+SC+FC)
The latest 4 quarters (BI ₁)	1,877,914	302,679	400,339	2,580,932
The next 4 quarters (BI ₂)	1,127,591	240,099	261,340	1,629,030
The first 4 quarters (BI ₃)	967,791	310,691	161,441	1,439,923
Regulatory capital for operational risk $\{(BI_1 + BI_2 + BI_3)/3 \times 15\%\}$				282,494

VII. MARKET RISK

1. Qualitative Content

a. Market risk management policy

The Market Risk Management Policy in the Bank is in line with the Bank's objectives, business strategy, risk appetite and State Bank regulations, where by:

- Organizational model of market risk management is implemented according to the model of three independent tiers of protection: The first tier of protection has the function of identifying, controlling and minimizing risks; The second tier of protection has the function of establishing risk management policies, internal regulations on risk management, risk measurement and monitoring; The third tier of protection has an internal audit function performed by the Internal Audit Department.
- Regulations on classification of trading books and banking books follows the principle: Items in trading books are only allowed to be reclassified and converted to banking books when they no longer meet the criteria for recording in the trading books; banking book entries are not allowed to be reclassified and converted to

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trading book; transferring status from the trading book to banking books of items must be approved.

- The Bank conducts identifying, measuring, monitoring, mitigating, tracking and reporting the Market risk.
- Principle of setting market risk limit: The limit of market risk will be proposed by the Risk Management Division in cooperation with other related units, submitted to the Risk Council for review and approved by the General Director. The market risk limit is reviewed and re-evaluated at least annually or when there is a major change affecting the market risk exposure of the Bank.

b. The bank's proprietary trading strategy

As of 31st December 2022, the Bank has no strategy of proprietary trading and transaction of proprietary trading. All foreign exchange transactions and derivatives transactions are aimed at meeting the liquidity, serving the demands of customers, partners and the purpose of corresponding to these ones.

c. Portfolio of trading books

The Bank's trading book consists of following:

- Foreign exchange transactions: to facilitate the demand of customers and counterparties, together with their corresponding back to back transactions.
- Derivatives transactions: to facilitate the demand of customers and counterparties, together with their corresponding back to back transactions.

2. Quantitative Content

Table 9. Regulatory Capital for Market Risk

Unit: Million VND (31/12/2022)

Type of market risk	Regulatory capital for market risk	Market risk weighted assets
Interest rate risk	14,006	175,070
Total	14,006	175,070

As of 31st December 2022, capital for market risk of the Bank only combines of the interest rate risk.



The Bank's total net foreign exchange position per its own capital as of 31st December 2022 is **-0.32%**, which is less than 2%. Therefore, the Bank's regulatory capital for foreign exchange risk as of 31st December 2022 is zero.

Regulatory capital for the stock price risk, regulatory capital for the product price and regulatory capital for option trading as of 31st December 2022 is zero for the reason that those activities are not in the portfolio of the Bank.

We hereby confirm that the information provided herein is accurate and take all legal responsibilities regard to contents of the public disclosure.

Hanoi, 31st March 2023

Wooribank Vietnam Limited



Lee Jong In

General Director