



# CAPITAL ADEQUACY RATIO DISCLOSURE

30 June 2024

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## 1. Scope of CAR calculation

At 30/06/2024, the Bank has three (03) subsidiaries as follows:

- Techcom Securities Joint Stock Company (main business: securities investment)
- Techcombank AMC (main business: debt and asset management)
- Techcom Capital Joint Stock Company (main business: fund management)
- When calculating the consolidated CAR as at 30/06/2024, the Bank uses the data in its consolidated financial statement (the Bank and its three subsidiaries as mentioned above).

At the time of this report, the Bank does not have a subsidiary in the insurance business (not included in the consolidated CAR calculation).

## 2. Owner's equity structure:

Techcombank's owner's equity includes:

### Main components of tier-1 capital:

- Charter capital (contributed capital)
- Reserves for increasing charter capital
- Reserves for professional development
- Financial reserves
- Retained earnings
- Share premium

### Main components of tier-2 capital:

- 80% general provision in accordance with SBV's regulations on the classification of assets, provision level, risk provisioning method and use of provisions by credit institutions and branches of foreign banks.
- Minorities interests
- Deduction from Tier-2 capital: Purchase or invest in secondary debt issued by another credit institution or foreign bank branch that fully meets the conditions to be included in the Tier 2 capital of that credit institution or foreign bank branch (not including secondary debt received as collateral, discount, rediscount of customers).

### Additional deductions:

- Capital contribution, share purchase in enterprises operating in the fields of insurance, securities, remittance, foreign exchange business, gold, factoring, credit card issuance, consumer credit, services Payment intermediaries, credit information.

**Table 1 – Capital**

Unit: billion VND

| Item                   | 30/06/2024 |              | 31/12/2023 |              |
|------------------------|------------|--------------|------------|--------------|
|                        | Single     | Consolidated | Single     | Consolidated |
| Tier 1 capital         | 124,140    | 136,614      | 117,456    | 129,743      |
| Tier 2 capital         | 2,216      | 3,598        | 2,556      | 3,874        |
| Deduction from capital | 11,295     | -            | 11,294     | -            |
| Capital                | 115,061    | 140,212      | 108,717    | 133,617      |

### 3. Capital Adequacy Ratio:

#### 3.1 CAR calculation process

Techcombank has developed an automated program for CAR calculation on a monthly basis. In addition, Techcombank has issued a Regulation on CAR management and a CAR calculation Process in compliance with Circular 41/2016/TT-NHNN, which provides for detailed responsibilities and mandates of stakeholders in the inputting of data, calculation, review and reporting on CAR, Techcombank also regulated Risk appetite and early warning thresholds in CAR management.

#### 3.2 Capital planning

Techcombank conducts an internal capital adequacy assessment process (ICAAP) and develops capital plan to ensure sufficient capital to support its normal business activities under BAU conditions and in the event of adverse situation. Techcombank also manages the capital adequacy ratio to ensure compliance with SBV's regulatory requirements while maintaining competitive advantage in its business operations.

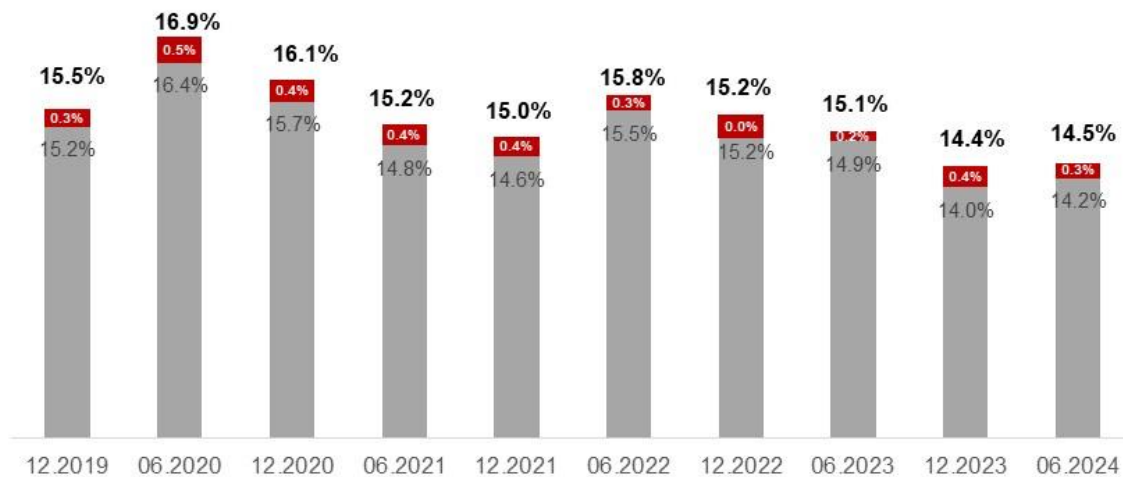
#### 3.3 CAR, risk-weighted assets, capital requirement by types of risk

**Table 2 – CAR, risk-weighted assets, required capital by types of risk (\*)**

Unit: billion VND, %

| Item   | 30/06/2024 |              | 31/12/2023 |              |
|--|------------|--------------|------------|--------------|
|  | Single     | Consolidated | Single     | Consolidated |
| A Credit risk weighted assets                              | 790,094    | 847,984      | 770,140    | 818,783      |
| B Counterparty credit risk weighted assets                 | 8,296      | 8,294        | 6,040      | 6,033        |
| C Capital requirement for Operational risk                 | 7,388      | 8,050        | 6,758      | 7,393        |
| D Capital requirement for Market risk                      | 675        | 675          | 1,119      | 1,119        |
| E Total risk-weighted assets = (A) + (B) + [(C)+(D)] *12.5 | 899,174    | 965,340      | 874,642    | 931,219      |
| <b>Capital ratios</b>                                      |            |              |            |              |
| F Tier-1 capital ratio                                     | 13.81      | 14.15        | 13.43      | 13.93        |
| G CAR  | 12.80      | 14.52        | 12.43      | 14.35        |

(\*) format presented per SBV requirement in Circular 41/2016/TT-NHNN (appendix 5).

Capital Adequacy Ratio<sup>1</sup> (CAR)

<sup>1</sup> Consolidated level

<sup>2</sup> The CAR/CAR Tier 1 in the bar chart are rounded to 1 decimal place for presentation purpose

Since the official application of Circular 41/2016/TT-NHNN (Basel II) in July 2019, Techcombank's capital adequacy ratio has been consistently among the highest in the industry and is significantly above the 8% regulatory requirement.

## 4. Credit risk:

### 4.1 Credit risk management policy

#### 4.1.1 Credit risk management strategy:

Pursuant to regulations and guidances of Laws and State Bank of Vietnam, especially Circular No.13/2018/TT-NHNN and Circular No.40/2018/TT-NHNN that amends and supplements some contents of Circular No.13, Techcombank has developed, improved and implemented a comprehensive risk management framework, with credit risk being one of the material risks that the Bank focuses on. Based on the bank-wide Risk Management Policy, regulations on credit risk management (including credit counterparty risk) have been established, ensuring that credit risk is identified, assessed, measured, monitored and controlled effectively, enabling Techcombank to achieve its plans and objectives while complying with regulatory requirements.

Credit risk management at Techcombank is performed based on the orientation of principles: Oversight and supervision of the BOD and CEO; Comprehensive credit risk management; All credit activities are conducted within the scope of internal document system on Credit Risk Management Regulation, Credit Orientation and Credit Granting Process for each customer segment; Develop, improve systems to measure and control credit risk; Develop credit risk management strategy in compliance with regulations of Laws and SBV; Control conflicts of interests in credit granting activities.

Related to Techcombank's credit risk management structure, credit risk management policy stipulates three main components: (i) The BOD is the highest-level authority in credit risk management, through the advisory and consulting role of the Board Risk Committee (BRC) and supervision on the basis of Risk Appetite; (ii) Risk management tools and methods, including organizational structure – to ensure effective deployment of risk management activities (such as Executive Risk Committee, Credit Committees and levels of credit approvers, other committees having the function of credit risk management and making decisions on credit risk management, Risk Management Division) and other tools and methods; (iii) Risk Management Culture emphasizes that all employees have the rights and responsibilities in risk management.

In addition, credit risk management policy also specifies details of the credit risk process, from risk identification, measurement, acceptance, debt classification, risk provisioning and mitigation, to risk monitoring and controlling, which helps to lay out the direction and guidance in credit risk management across the Bank, ensuring close alignment with Techcombank's process on credit granting and debt management. The Bank is especially keen on developing and improving techniques and methods to measure and quantify risks as well as credit risk stress testing to ensure compliance with not only SBV's regulatory requirements but also to be on par with international best practices and standards such as IFRS, Basel II, Basel III, ... All of these contents have been documented in Techcombank's regulation on credit risk management and other implementation documents.

The Regulation on Credit risk management at Techcombank also establishes requirements on controls of limits and prudential ratios in bank's credit activities, ensuring the compliance with the Law on Credit Institutions and with Circular specifies prudential ratios and limits in the operations of banks and branches of foreign banks and amendments and supplements.

#### **4.1.2 Internal credit rating system:**

The internal rating system consists of financial and non-financial indicators used to measure the risk and the customer's ability not to repay debt as agreement based on qualitative and quantitative assessments. From that, the rating results will be used to support the making-decision process for credit granting, pricing, analyzing for ratings movement and reduction of credit quality.

Techcombank has issued the Regulation on Model Risk Management, Regulation on Model Governance Standards in order to set out principles, requirements and standards on model risk management, model life cycle management; including the internal credit rating model. These regulations are developed on the basis of complying with the regulations of the State Bank, following international standards and practices, and improving the risk management capacity of Techcombank in the trend of digitization and automation.

The rating process is developed to ensure the compliance with regulations on the credit risk measurement models governance stipulated at the Regulation on Credit risk management, Regulation on Model Risk Management establishing the implementation orders and procedures as well as responsibilities of relevant units in customer credit rating at Techcombank. In which, Business Units are mainly responsible for collecting customer information and inputting data into the system, ensuring the accuracy and authenticity of customer information, Risk Management Division is responsible for assessing customer information and proof documents, approving ratings/ requesting re-ratings/ adjusting customer ratings according to the regulated authority.

Information of Techcombank's internal credit rating system is always available and can be provided upon request by internal audit, external audit and other regulatory agencies for independent audit/inspection purposes.

#### **4.1.3 Measuring, monitoring and controlling credit risks**

Techcombank measures credit risk through risk measurements/models such as Credit rating/Probability of Default (PD), Loss Given Default (LGD), Exposure at Default (EAD), Expected Loss (EL) and Expected Credit Loss (ECL). These models are built, developed and validated according to the Regulation on Model Risk Management, at the same time, following international standards including IFRS, Basel II, Basel III.

Regarding debt classification and credit risk provisioning, Techcombank has automatic debt classification on Globus T24 software and uses the debt classification results as basis for credit risk provisioning, which fully meets the related requirements of the SBV.

#### 4.1.4 **Credit risk policy and process**

The Bank has built a system of documents and processes throughout the customer's journey, from identifying, proposing to grant credit, appraising, approving credit and debt management until customer's debt settlement at Techcombank. From the high-level documents issued by the Board of Directors, CEO and Divisions have issued subordinate documents to concretize and guide in more details on the roles and responsibilities of individuals, divisions and units involved in credit risk controlling. Specifically:

BOD's regulation:

- Regulation on credit risk management, Regulation on credit operations under the Board of Directors: Set out principles on credit risk management, credit operations in accordance with the provisions of the law and the State Bank, and provide high level orientation and oversight of Techcombank's Board of Directors. On the basis of the principles approved by the Board of Directors, the competent authorities at Techcombank authorized by the Board of Directors will organize detailed implementation according to the layers of documents below and the actual business / operation of Techcombank.
- Along with the issuance of regulation on credit operations which controls of the credit granting process, loan use and repayment process, the Board of Directors also issued Regulation on management, handling and recovery of problem loans that sets out the principles, the management structure system, workout plans, debt collection operations for problem loans (including delinquent and current loans that have warning signs).
- Document on collateral management: the principles of Techcombank's collateral management are designed according to the collateral journey corresponding to the credit journey of customers at Techcombank.

Implementation documents by Chief Executive Officer/Head of Divisions:

- Regulation on standards for credit activities: Set out the minimum principles and requirements that need to be ensured when designing, issuing, and implementing detailed contents of credit activities at Techcombank. The regulation is the basis for issuing credit granting processes and developing credit solutions/products for customers.
- Credit granting process for each customer segment: procedures for granting credit to customers, including detailed guidance on how to analyze, assess and appraise credit risk of customers.
- Post-disbursement control process/Problem loan management process for each customer segment: procedures, contents, principles, and responsibilities of units in monitoring and controlling each credit facility after they are disbursed. These processes specify the frequency of credit risk controlling, minimum frequency of on-site examinations on the customers to collect information for effective risk control. Through post-disbursement checks and controls, Techcombank can quickly identify and detect warning signals of deteriorating credit quality that may negatively affect customer's ability to perform its credit obligations to Techcombank, then implement timely solutions to mitigate credit risks for the Bank.
- Collateral valuation process: in addition to the guidance on collateral valuation, the documents also specify when to conduct periodic collateral re-valuation to ensure that the collateral value is not falling compared to the original valuation and necessary measures to be taken of the collateral falls in value.

#### **4.1.5 Credit appraisal:**

Credit risk management regulations have stipulated high-level requirements and principles for credit granting appraisal in compliance with provisions of the Laws and of SBV, especially the following minimum contents:

- Identify the related person of customers, customers' total exposure, customers, and his/her related person;
- Based on the customer's credit rating (if any), also including credit ratings from other credit institutions and foreign banks' branches;
- Assess the completeness of documents, legal status, and recoverability of collateral in case of secured credit granting;
- Appraise the ability to fulfill obligations and commitments of the guarantor in the case of credit extension with guarantee from a third party.

More detailed standards, requirements and guidelines for credit appraisal are also issued by Techcombank to ensure the effective operations of the above contents and requirements.

After the appraisal process, Techcombank proposes suitable credit granting to customers based on their financial capacity, business plans, investment projects and capital usage to submit to the competent authorities for approval according to regulations.

#### **4.1.6 Collateral management**

Techcombank has developed system of documents on collateral management which clearly separates the role of governance and execution in Techcombank to ensure strict compliance with regulatory and SBV's requirements, while mitigating potential risks that may adversely impact the Bank's interest:

- The BOD promulgated the Regulation on collateral management at Techcombank to establish long-term development orientation for collateral management, which clearly and fully states the framework of collateral management, governance principles and collateral management tools to ensure compliance with law, governance orientation and international standards.
- The CEO promulgated Regulation on the receipt and management of collateral to execute the requirements from BOD to establish the orientation for implementing specific processes, instructions, and detailed documents for receiving, managing, and valuating collateral, clarify the role and responsibilities of related parties. This regulation is the basis for related units to deploy and/or use to develop specific solutions on receiving, managing and valuating different types of collateral suitable for the type of customer/type of industry/economic sector. In addition, it is the basis for operating units to develop and deploy processes /guidelines on receipt and management for each type of asset (real estate, inventory, debt collection rights, etc.); process/guideline on changing collateral information, borrowing and releasing according to the needs of customers and the requirements of other related parties.

In addition with completing the collateral policy framework, in 2023, Techcombank has issued a collateral data management framework, standardized and cleaned data, and continued to build, improve and upgrade systems and tools so that collateral taking fully meet managerial requirements and be updated promptly.

#### **4.2 List of independent credit rating agencies to be used when calculating CAR**

In the CAR calculation, Techcombank is using the credit rating provided by the following agencies: Moody's, Standard & Poor and Fitch Rating. These are credit rating agencies accepted by the SBV in accordance with Circular 41/2016/TT-NHNN.

**4.3 List of collateral, third-party guarantee, netting on-balance sheet balance and credit derivative products eligible for mitigating credit risk**

Currently, the Bank has not applied the following credit risk mitigation techniques: on-balance sheet balance netting, third-party guarantee and credit derivatives.

Where collateral is used as a means of mitigating credit risk, the collateral must belong to the following list:

- Cash, valuable papers, passbook issued by credit institutions or branches of foreign banks;
- Gold (standard gold, physical gold, jewelry gold convertible to 99.99 gold);
- Valuable papers issued by or guaranteed by Vietnamese Government or the SBV;
- Debt securities issued by foreign governments, public entities of foreign governments that are rated BB- or above by independent credit rating agencies;
- Debt securities issued by corporations rated BBB- or above by independent credit rating agencies;
- Shares listed on Ho Chi Minh or Hanoi Stock Exchange;

The mitigation of credit risk by using collateral is conducted in accordance with Techcombank's Regulation on CAR and Process for CAR calculation from time to time.

**4.4 Claims, risk weights corresponding to credit ratings and total risk-weighted assets by each selected credit rating agency**
**Table 3 – Claims, risk weights corresponding to credit ratings and risk-weighted assets by selected credit rating agency**

Unit: billion VND

| Credit rating (S&P's, Fitch)   | Credit rating (Moody's)   | RW   | Single        |               | Consolidated  |               |
|--|---------------------------|------|---------------|---------------|---------------|---------------|
|  |                           |      | 30/06/2024    | 31/12/2023    | 30/06/2024    | 31/12/2023    |
| <b>Claims from governments and central banks, PSEs, municipal governments</b>        |                           |      |               |               |               |               |
| AAA, AA+, AA, AA-  | Aaa, Aa1, Aa2, Aa3        | 0%   | -             | -             | -             | -             |
| A+, A, A-  | A1, A2, A3                | 20%  | -             | -             | -             | -             |
| BBB+, BBB, BBB-  | Baa1, Baa2, Baa3          | 50%  | -             | -             | -             | -             |
| BB+, BB, BB-, B+, B, B-  | Ba1, Ba2, Ba3, B1, B2, B3 | 100% | -             | -             | -             | -             |
| Under B- or un-rated   | Under B3 or un-rated      | 150% | -             | -             | -             | -             |
| <b>Claims from foreign finance institutions or Vietnam branches of foreign banks</b> |                           |      |               |               |               |               |
| AAA, AA+, AA, AA-  | Aaa, Aa1, Aa2, Aa3        | 20%  | 570           | 222           | 570           | 242           |
| A+, A, A-  | A1, A2, A3                | 50%  | 13,965        | 8,841         | 14,095        | 9,526         |
| BBB+, BBB, BBB-  | Baa1, Baa2, Baa3          | 50%  | 618           | 1,362         | 618           | 1,362         |
| BB+, BB, BB-, B+, B, B-  | Ba1, Ba2, Ba3, B1, B2, B3 | 100% | -             | -             | -             | -             |
| Under B- or un-rated   | Under B3 or un-rated      | 150% | -             | -             | -             | -             |
| <b>Claims from local credit institutions (original tenor of 3 months or more)</b>    |                           |      |               |               |               |               |
| AAA, AA+, AA, AA-  | Aaa, Aa1, Aa2, Aa3        | 20%  | -             | -             | -             | -             |
| A+, A, A-  | A1, A2, A3                | 50%  | -             | -             | -             | -             |
| BBB+, BBB, BBB-  | Baa1, Baa2, Baa3          | 50%  | -             | -             | -             | -             |
| BB+, BB, BB-   | Ba1, Ba2, Ba3             | 80%  | 12,700        | 17,441        | 14,215        | 18,362        |
| B+, B, B-  | B1, B2, B3                | 100% | 9,723         | 15,102        | 9,829         | 15,313        |
| Under B- or un-rated   | Under B3 or un-rated      | 150% | 5,241         | 2,837         | 5,241         | 3,213         |
| <b>Claims from local credit institutions (original tenor of less than 3 months)</b>  |                           |      |               |               |               |               |
| AAA, AA+, AA, AA-  | Aaa, Aa1, Aa2, Aa3        | 10%  | -             | -             | -             | -             |
| A+, A, A-  | A1, A2, A3                | 20%  | -             | -             | -             | -             |
| BBB+, BBB, BBB-  | Baa1, Baa2, Baa3          | 20%  | -             | -             | -             | -             |
| BB+, BB, BB-   | Ba1, Ba2, Ba3             | 40%  | 7,885         | 14,398        | 7,954         | 14,504        |
| B+, B, B-  | B1, B2, B3                | 50%  | 3,518         | 3,936         | 3,709         | 4,191         |
| Under B- or un-rated   | Under B3 or un-rated      | 70%  | 9,215         | 8,731         | 9,438         | 8,790         |
| <b>Total</b>   |                           |      | <b>63,435</b> | <b>72,871</b> | <b>65,670</b> | <b>75,503</b> |

## 4.5 Credit risk-weighted assets

| <b>Table 4 – Credit risk-weighted assets</b> |  |                |                |                |                |
|--|--|----------------|----------------|----------------|----------------|
| <i>Unit: billion VND</i>                     |  |                |                |                |                |
|  | Risk-weighted assets   | Single         |                | Consolidated   |                |
|  |  | 30/06/2024     | 31/12/2023     | 30/06/2024     | 31/12/2023     |
| I  | Cash, gold, equivalents  | -              | -              | -              | -              |
| II   | Claims on VN government, SBV, State Treasury, Central Cities' People's Committees, Bank of Social Policy | -              | -              | -              | -              |
| III  | Claims on DATC and VAMC  | 603            | 603            | 603            | 603            |
| IV   | Claims on international financial institutions   | -              | -              | -              | -              |
| V  | Claims on foreign governments and central banks  | -              | -              | -              | -              |
| VI   | Claims on foreign PSEs, local governments  | -              | -              | -              | -              |
| VII  | Claims on financial institutions   | 63,435         | 72,871         | 65,670         | 75,503         |
| 1  | Foreign financial institutions and Vietnam branches of foreign banks                                     | 15,153         | 10,425         | 15,283         | 11,130         |
| 2  | Local credit institutions  | 48,283         | 62,446         | 50,386         | 64,373         |
| VIII   | Financial lease  | -              | -              | -              | -              |
| IX   | Non-performing loans   | 5,091          | 4,416          | 5,091          | 4,416          |
| X  | Loans for securities trading   | 6,986          | 6,754          | 44,453         | 32,037         |
| XI   | Loans secured by real estate   | 245,845        | 193,962        | 246,377        | 193,987        |
| 1  | Loans secured by commercial real estate  | 199,892        | 151,653        | 200,424        | 151,678        |
| 2  | Loans secured by non-commercial real estate  | 45,954         | 42,309         | 45,954         | 42,309         |
| 3  | Loans secured by mixed real estate   | -              | -              | -              | -              |
| XII  | Claims on SMEs   | 80,616         | 80,400         | 87,239         | 86,974         |
| XIII   | Specialized lending  | 53,637         | 101,392        | 53,637         | 101,427        |
| XIV  | Claims on corporates   | 231,448        | 205,305        | 237,552        | 210,161        |
| 1  | Corporates with financial statements   | 214,303        | 197,595        | 220,406        | 202,451        |
| 2  | Corporates without financial statements  | 13,866         | 7,117          | 13,866         | 7,117          |
| 3  | Corporates of less than 1 year old   | 3,280          | 593            | 3,280          | 593            |
| XV   | Mortgage loans   | 18,623         | 21,662         | 18,623         | 21,662         |
| XVI  | Retail credit portfolio  | 31,377         | 30,547         | 31,377         | 30,547         |
| XVII   | Receivables from sale of non-performing loans  | -              | -              | -              | -              |
| XVIII  | Equity instruments, share purchased from enterprises   | 616            | 616            | 6,202          | 6,202          |
| XIX  | Purchases of accounts receivable of finance companies and financial leasing companies                    | -              | -              | -              | -              |
| XX   | Other assets   | 51,816         | 51,611         | 51,160         | 55,263         |
|  | <b>Total</b>   | <b>790,094</b> | <b>770,140</b> | <b>847,984</b> | <b>818,783</b> |

**4.6 Risk-weighted assets for counterparty credit risk**
**Table 5 – Risk-weighted assets for counterparty credit risk**

Unit: billion VND

| Risk-weighted assets  | Single       |              | Consolidated |              |
|---|--------------|--------------|--------------|--------------|
|   | 30/06/2024   | 31/12/2023   | 30/06/2024   | 31/12/2023   |
| I Cash, gold, equivalents   | -            | -            | -            | -            |
| II Claims on VN government, SBV, State Treasury, Central Cities' People's Committees, Bank of Social Policy | -            | -            | -            | -            |
| III Claims on DATC and VAMC   | -            | -            | -            | -            |
| IV Claims on international financial institutions   | -            | -            | -            | -            |
| V Claims on foreign governments and central banks   | -            | -            | -            | -            |
| VI Claims on foreign PSEs, local governments  | -            | -            | -            | -            |
| VII Claims on financial institutions  | 6,539        | 4,190        | 6,539        | 4,190        |
| 1 Foreign financial institutions and Vietnam branches of foreign banks                                      | 334          | 1,066        | 334          | 1,066        |
| 2 Local credit institutions   | 6,205        | 3,124        | 6,205        | 3,124        |
| VIII Financial lease  | -            | -            | -            | -            |
| IX Non-performing loans   | -            | -            | -            | -            |
| X Loans for securities trading  | -            | -            | -            | -            |
| XI Loans secured by real estate   | -            | -            | -            | -            |
| 1 Loans secured by commercial real estate   | -            | -            | -            | -            |
| 2 Loans secured by non-commercial real estate   | -            | -            | -            | -            |
| 3 Loans secured by mixed real estate  | -            | -            | -            | -            |
| XII Claims on SMEs  | 5            | 19           | 5            | 12           |
| XIII Specialized lending  | -            | -            | -            | -            |
| XIV Claims on corporates  | 1,752        | 1,831        | 1,749        | 1,831        |
| 1 Corporates with financial statements  | 1,411        | 1,790        | 1,408        | 1,790        |
| 2 Corporates without financial statements   | 341          | 40           | 341          | 40           |
| 3 Corporates of less than 1 year old  | 0            | 1            | 0            | 1            |
| XV Mortgage loans   | -            | -            | -            | -            |
| XVI Retail credit portfolio   | -            | -            | -            | -            |
| XVII Receivable from sale of non-performing loans   | -            | -            | -            | -            |
| XVIII Equity instruments, share purchased from enterprises  | -            | -            | -            | -            |
| XIX Purchases of accounts receivable of finance companies and financial leasing companies                   | -            | -            | -            | -            |
| XX Other assets   | -            | -            | -            | -            |
| <b>Total</b>  | <b>8,296</b> | <b>6,040</b> | <b>8,294</b> | <b>6,033</b> |

## 4.7 Credit risk-weighted assets by industry

Table 6 – Credit risk-weighted assets by industry

Unit: billion VND

| Industry   | Single         |                | Consolidated   |                |
|--|----------------|----------------|----------------|----------------|
|  | 30/06/2024     | 31/12/2023     | 30/06/2024     | 31/12/2023     |
| I Individuals and household businesses   | 149,186        | 152,273        | 186,652        | 177,556        |
| II Economic entities   | 606,843        | 589,028        | 622,336        | 603,149        |
| 1 Agriculture, forestry and fishery  | 5,028          | 5,267          | 5,160          | 5,843          |
| 2 Mining   | 1,941          | 1,961          | 2,025          | 2,330          |
| 3 Manufacturing and processing   | 67,463         | 62,922         | 68,735         | 63,484         |
| 4 Production and distribution of electricity, gas, hot water, steam and air conditioners   | 3,903          | 4,596          | 3,910          | 4,597          |
| 5 Water supply; management and treatment of waste water and solid waste  | 77             | 58             | 77             | 58             |
| 6 Construction   | 25,570         | 22,137         | 25,570         | 22,368         |
| 7 Wholesale and retail; repairing automobiles, motorbikes and other powered vehicles   | 94,186         | 94,035         | 94,199         | 94,705         |
| 8 Logistics (transportation and warehousing)   | 16,607         | 16,700         | 16,803         | 16,804         |
| 9 Accommodation and restaurants  | 2,177          | 1,694          | 2,500          | 1,875          |
| 10 Information and communication   | 883            | 718            | 883            | 718            |
| 11 Finance, business and insurance   | 60,120         | 63,718         | 62,355         | 66,350         |
| 12 Real estate   | 293,249        | 298,730        | 304,480        | 307,527        |
| 13 Professional activities, science and technology   | 16,856         | 939            | 16,856         | 939            |
| 14 Financial services and support services   | 816            | 714            | 816            | 714            |
| 15 Activities of the Communist Party, civil society, regulators, public security and national defense, compulsory social assurance | 644            | 667            | 644            | 667            |
| 16 Education and training  | 300            | 231            | 300            | 231            |
| 17 Healthcare and social safety net  | 497            | 9              | 497            | 9              |
| 18 Art and entertainment   | 4,109          | 1,245          | 4,109          | 1,245          |
| 19 Other services  | 12,419         | 12,685         | 12,419         | 12,685         |
| 20 Informal domestic workers in households activities  | 0              | 0              | 0              | 0              |
| 21 Activities of international organizations   | -              | -              | -              | -              |
| III Other assets   | 34,064         | 28,839         | 38,995         | 38,078         |
| <b>Total</b>   | <b>790,094</b> | <b>770,140</b> | <b>847,984</b> | <b>818,783</b> |

**Table 7 – Counterparty credit risk-weighted assets by industry***Unit: billion VND*

| Industry   | Single       |              | Consolidated |              |
|--|--------------|--------------|--------------|--------------|
|  | 30/06/2024   | 31/12/2023   | 30/06/2024   | 31/12/2023   |
| I Individuals and household businesses   | -            | -            | -            | -            |
| II Economic entities   | 8,296        | 6,040        | 8,294        | 6,033        |
| 1 Agriculture, forestry and fishery  | 2            | 0            | 2            | 0            |
| 2 Mining   | -            | -            | -            | -            |
| 3 Manufacturing and processing   | 196          | 236          | 196          | 236          |
| 4 Production and distribution of electricity, gas, hot water, steam and air conditioners   | 4            | -            | 4            | -            |
| 5 Water supply; management and treatment of waste water and solid waste  | -            | -            | -            | -            |
| 6 Construction   | 8            | 1            | 8            | 1            |
| 7 Wholesale and retail; repairing automobiles, motorbikes and other powered vehicles   | 1,484        | 1,442        | 1,484        | 1,442        |
| 8 Logistics (transportation and warehousing)   | 1            | 8            | 1            | 8            |
| 9 Accommodation and restaurants  | -            | -            | -            | -            |
| 10 Information and communication   | 0            | 2            | 0            | 2            |
| 11 Finance, business and insurance   | 6,041        | 3,183        | 6,038        | 3,176        |
| 12 Real estate   | 26           | 93           | 26           | 93           |
| 13 Professional activities, science and technology   | -            | -            | -            | -            |
| 14 Financial services and support services   | 1            | 0            | 1            | 0            |
| 15 Activities of the Communist Party, civil society, regulators, public security and national defense, compulsory social assurance | -            | -            | -            | -            |
| 16 Education and training  | -            | -            | -            | -            |
| 17 Healthcare and social safety net  | -            | -            | -            | -            |
| 18 Art and entertainment   | 0            | -            | 0            | -            |
| 19 Other services  | 533          | 1,074        | 533          | 1,074        |
| 20 Informal domestic workers in households activities  | -            | -            | -            | -            |
| 21 Activities of international organizations   | -            | -            | -            | -            |
| III Other assets   | -            | -            | -            | -            |
| <b>Total</b>   | <b>8,296</b> | <b>6,040</b> | <b>8,294</b> | <b>6,033</b> |

## 4.8 Credit risk mitigation

**Table 8 – Risk-weighted assets (on-balance sheet and off-balance sheet) eligible for credit risk mitigation (single)**

Unit: billion VND

|                |                                  | 30/06/2024     |                                 |                                  | 31/12/2023     |                                 |                |
|----------------|----------------------------------|----------------|---------------------------------|----------------------------------|----------------|---------------------------------|----------------|
| Classification | Total RWA before risk mitigation | Collateral     | Total RWA after risk mitigation | Total RWA before risk mitigation | Collateral     | Total RWA after risk mitigation |                |
| 1              | Claims on government             | 603            | 1                               | 603                              | 603            | 1                               | 603            |
| 2              | Claims on financial institutions | 65,180         | 3,512                           | 63,435                           | 72,951         | 100                             | 72,871         |
| 3              | Claims on Corporates             | 387,107        | 16,585                          | 372,640                          | 407,107        | 14,350                          | 393,806        |
| 4              | Loans secured by real estate     | 246,042        | 345                             | 245,845                          | 194,294        | 442                             | 193,962        |
| 5              | Mortgage loans                   | 18,629         | 13                              | 18,623                           | 21,764         | 70                              | 21,662         |
| 6              | Individuals                      | 50,851         | 917                             | 49,792                           | 55,416         | 1,418                           | 53,980         |
| 7              | NPL                              | 5,103          | 8                               | 5,091                            | 4,438          | 15                              | 4,416          |
| 8              | Other assets                     | 34,064         | -                               | 34,064                           | 28,839         | -                               | 28,839         |
|                | <b>Total</b>                     | <b>807,579</b> | <b>21,382</b>                   | <b>790,094</b>                   | <b>785,413</b> | <b>16,395</b>                   | <b>770,140</b> |

**Table 9 – Risk-weighted assets (on-balance sheet and off-balance sheet) eligible for credit risk mitigation (consolidated)**

Unit: billion VND

|                |                                  | 30/06/2024     |                                 |                                  | 31/12/2023     |                                 |                |
|----------------|----------------------------------|----------------|---------------------------------|----------------------------------|----------------|---------------------------------|----------------|
| Classification | Total RWA before risk mitigation | Collateral     | Total RWA after risk mitigation | Total RWA before risk mitigation | Collateral     | Total RWA after risk mitigation |                |
| 1              | Claims on government             | 603            | 1                               | 603                              | 603            | 1                               | 603            |
| 2              | Claims on financial institutions | 67,415         | 3,512                           | 65,670                           | 75,583         | 100                             | 75,503         |
| 3              | Claims on Corporates             | 399,833        | 16,585                          | 385,366                          | 418,571        | 14,350                          | 405,270        |
| 4              | Loans secured by real estate     | 246,574        | 345                             | 246,377                          | 194,319        | 442                             | 193,987        |
| 5              | Mortgage loans                   | 18,629         | 13                              | 18,623                           | 21,764         | 70                              | 21,662         |
| 6              | Individuals                      | 88,317         | 917                             | 87,258                           | 80,699         | 1,418                           | 79,263         |
| 7              | NPL                              | 5,103          | 8                               | 5,091                            | 4,438          | 15                              | 4,416          |
| 8              | Other assets                     | 38,995         | -                               | 38,995                           | 38,078         | -                               | 38,078         |
|                | <b>Total</b>                     | <b>865,469</b> | <b>21,382</b>                   | <b>847,984</b>                   | <b>834,056</b> | <b>16,395</b>                   | <b>818,783</b> |

## 5. Operational risk:

### 5.1 Operational risk management policy

In accordance with the Risk Management Policy of Techcombank, operational risk is classified as one of the material risks. In addition to reputational and strategic risks, the Bank is managing 10 sub-types of operational risks, including:

- External rules & regulations risk: Potential loss due to non-compliance with statutory requirements and regulations, or due to policy and legal changes or to the interpretation and/or application of laws and regulations.
- Liability risk: Potential loss because of reasonable and legitimate request for compensation/penalty imposed to any Unit or individual of the Bank.
- Legal enforcement risk: Potential loss due to failure to protect the Bank's legitimate interests, or difficulties in enforcing the Bank's rights.
- Damage to physical assets: Potential loss or damage to physical assets and property caused or business interruption by natural disasters and other incidents.
- Safety and security: Potential loss or damage to the health and safety of employees or clients or third parties resulting from internal failure or external incidents or events.
- Internal fraud: Potential loss caused by employees' actions of misappropriation of assets or violation of the laws or Bank's regulations and policies.
- External fraud: Potential loss caused by external actions such as fraud and forgery, theft and bribery, hacking, and other actions of similar nature.
- Information security & technology risk: Potential loss caused by unauthorized access, use, disclosure, manipulation, and disruption.
- Execution, delivery, and process management: Potential loss resulting from failure in implementing an established process or weaknesses in process design.
- Model & data risk: Potential loss resulting from significant difference between the outcomes of risk measurement models and empirical evidence.

Fundamental risk management strategy and principles of Techcombank

- The Board of Directors plays the most significant role in developing the "top-down message" to promote bank-wide risk management culture.
- The BOD and CEO and Head of Divisions build solid corporate culture based on consistent and strong risk management culture, ensuring that operational risk management culture is embraced and maintained across all activities of the Bank.
- All units and individuals across the Bank have risk management rights and obligations, and therefore, are responsible for the accountability, reporting and control of risks arising in their operations.
- The Bank develops, adopts, and maintains a consistent operational risk management structure which is fully translated into risk management processes.
- The Bank manages its operational risks in line with operational risk appetite indicators and limits approved by the BOD. Such indicators and limits are in alignment with the Bank's risk appetite and are subject to annual review. The BOD approves and reviews operational risk appetite indicators and limits in line with the Bank's operational risk nature and risk tolerance.

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The execution of operational risk management policy is translated to the governance, structure, and implementation of operational risk management:

- Establish and operate Executive Risk Committee, which provides advice to the CEO on the governance and execution of all matters related to operational risk, reputational risk, and strategic risk across Techcombank within the approved risk management framework and risk appetite.
- Articulating and completing the 03-line-of-defense model against operational risk:
  - + **First line of defense:** All employees of Techcombank are responsible for identifying, evaluating, mitigating, managing, handling, and reporting risks in their operations. The Head of Unit is the first person who is fully liable to operational risk control at the unit, following the approved operational risk limit;
  - + **Second line of defense:** Operational Risk Management – Risk Management Division and other units independently managing and supervising operational risk management shall develop and monitor the implementation of Regulation of Operational Risk Management, the tools and systems to measure operational risks, collaborate with the first line of defense in the detection, control and mitigation of operational risks and ensure compliance with the law and regulatory requirements.
  - + **Third line of defense:** Internal Audit shall review, evaluate independently and objectively the completeness, alignment, effectiveness of internal control system of the bank as per regulations on the operations of audit and risk management.

## 5.2 Business Continuity Plan

Annually, the Bank conducts BCP drills including fire – rescue drills based on various scenarios.

This plan consists of business continuity plan, post-disaster recovery plan, data recovery plan and fire prevention plan...

A high-level Business Continuity Management Policy is applicable to all units and individuals across the bank. Business continuity testing and management is conducted periodically, and Business Continuity Management is responsible for test result analysis and reporting to the Board of Management.

The Business Impact Analysis is conducted annually. Based on such findings, identify critical units/operations, and map out an appropriate contingency plan.

All departments at Head Office and branches have their contact tree established in the business continuity plan and each employee is informed of the people they need to contact.

The Bank developed its crisis management plan, describing severe crisis incidents which may have impacts on operations of Techcombank, in which, threats to safety of employees, assets and business continuity, customer's faith and reputation of the Bank must all be controlled effectively.

Crisis Management Plan (CMP) is composed of the following documents:

- Business Continuity Plan in response to the following incidents:
  - + Environment risks: natural disasters (flood/ earthquake/ storm/epidemic, etc.) and severe disruption to infrastructures (electricity/ telecommunication, etc.)
  - + Socio-economic disturbances: war/ terrorism/ riot, etc.
  - + Crimes: extortion/ blackmailing/ murder/ explosion or fire

- Liquidity contingency plan developed and assessed in response to business incidents: strike/ liquidity issues/ reputation damage/loss of important documents/data/information
- IT disaster recovery plan and information security response plan developed and assessed to tackle the following IT incidents: loss of transmission line/critical system failure, cyber-attack.

**5.3 Operational risk capital requirement**

**Table 10 - Business indicators and components of business indicators**

(Unit: billion VND)

| Items on Income Statement   | Item      | Single                  |                         |                         | Consolidated            |                         |                         |
|---|-----------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|   |           | 01/07/2023 - 30/06/2024 | 01/07/2022 - 30/06/2023 | 01/07/2021 - 30/06/2022 | 01/07/2023 - 30/06/2024 | 01/07/2022 - 30/06/2023 | 01/07/2021 - 30/06/2022 |
| <b>  Interest and similar income – Interest and similar expenses  </b>  | <b>IC</b> | <b>30,989</b>           | <b>25,451</b>           | <b>28,496</b>           | <b>32,847</b>           | <b>27,207</b>           | <b>29,892</b>           |
| Interest and similar income   | IC1       | 55,856                  | 48,818                  | 37,870                  | 58,834                  | 51,231                  | 39,882                  |
| Interest and similar expenses   | IC2       | 24,866                  | 23,367                  | 9,373                   | 25,987                  | 24,025                  | 9,990                   |
| <b>Fees and commission income + Fees and commission expenses + Income from other activities + Expense of other activities</b>                   | <b>SC</b> | <b>23,846</b>           | <b>21,020</b>           | <b>14,497</b>           | <b>25,167</b>           | <b>21,870</b>           | <b>17,895</b>           |
| Fees and commission income  | SC1       | 10,277                  | 9,708                   | 6,148                   | 12,237                  | 11,222                  | 9,401                   |
| Fees and commission expenses  | SC2       | 2,574                   | 2,833                   | 1,727                   | 2,853                   | 2,976                   | 1,931                   |
| Income from other activities  | SC3       | 5,703                   | 5,247                   | 4,231                   | 5,385                   | 4,931                   | 4,240                   |
| Expense of other activities   | SC4       | 5,293                   | 3,232                   | 2,391                   | 4,693                   | 2,740                   | 2,323                   |
| <b>  Net gain/loss from forex trading   +   Net gain/loss from securities held-for-trading   +   Net gain/loss from investment securities  </b> | <b>FC</b> | <b>2,044</b>            | <b>805</b>              | <b>612</b>              | <b>4,101</b>            | <b>655</b>              | <b>1,373</b>            |
| Net gain/loss from forex trading  | FC1       | 1,379                   | 512                     | 64                      | 1,392                   | 517                     | 67                      |
| Net gain/loss from securities held-for-trading  | FC2       | 106                     | 44                      | 293                     | 106                     | 44                      | 293                     |
| Net gain/loss from investment securities  | FC3       | 558                     | 248                     | 255                     | 2,602                   | 94                      | 1,013                   |
| <b>Business Indicator</b>   | <b>BI</b> | <b>56,879</b>           | <b>47,275</b>           | <b>43,605</b>           | <b>62,114</b>           | <b>49,731</b>           | <b>49,160</b>           |

**Table 11 - Operational risk capital requirement**

|   |                   | 30/06/2024    |                | 31/12/2023    |               |
|---|-------------------|---------------|----------------|---------------|---------------|
|   |                   | Single        | Consolidated   | Single        | Consolidated  |
| <b>Operational risk capital requirement</b> | <b>Kor</b>        | <b>7,388</b>  | <b>8,050</b>   | <b>6,758</b>  | <b>7,393</b>  |
| <b>Operational risk weighted asset</b>      | <b>12.5 * Kor</b> | <b>92,350</b> | <b>100,629</b> | <b>84,476</b> | <b>92,416</b> |

## 6. Market risk

### 6.1 Market risk management policy

#### *Principles of risk management*

- Supervision by the Board of Directors and the Chief Executive Officer
  - + BOD approves and periodically reviews Risk Appetite and the Bank's Regulation on management of market risk
  - + CEO is responsible for implementing and maintaining consistently the Regulation on management of market risk, processes and systems for management of market risk, and ensuring they are in line with the Risk Appetite and the Regulation on management of market risk
- Comprehensive risk management
  - + Techcombank controls market risk via its policies, regulations, processes, systems, internal control and appropriate measures to reduce risks.
  - + Techcombank identifies and manages market risk in all trading activities and products. Positions generating market risks are held and managed centrally at the Financial Markets Unit - GTS Division and are managed in terms of concentration risk for counterparties, products and currencies.
  - + Products and services must be approved by authorities.
- Separation of functions related to risk management

Techcombank manages market risk based on the principle of separating the risk assessment and control function and the income generation functions.

  - + The Risk Management Division takes the main responsibility of managing of market risk
  - + Business units conduct trading functions and must ensure that positions of market risk, are within limits

#### *The structure of Market Risk Management*

- Board of Directors/ Board Risk Committee:
  - + The Board of Directors is the highest authority managing Market Risk of the system.
  - + Board Risk Committee: advises the Board of Directors on the management of market risk and makes approval of risk acceptance decisions before proposing to the BOD for approval and issuance.
- Chief Executive Officer (CEO)/ Risk Committee:
  - + CEO: is responsible for organizing and monitoring the implementation of the regulation of market risk management, approving the risk limits and is responsible to the Board of Directors/ Board Risk Committee for the approval of the limits, issuing standards for building and validating models for measurement of market risk, organizing the implementation of the direction of the Board of Directors in handling and remediating the shortcomings and limitations in risk management at the request and recommendations of the State Bank, independent auditing organizations and other authorities. The CEO inspects and evaluates risk management and proposes remedial measures to the Board of Directors.
  - + Executive Risk Committee: advises CEO on management of market risk and endorses risk limit decisions before proposing to the CEO for approval and issuance.
- Risk Management Division:

- + The Chief Risk Officer: is responsible for supervising market risk management activities and performing the functions and duties specified in the Risk Management Policy of Techcombank.
- + Market and Liquidity Risk Management unit: is independent from business units to exercise its duties and obligations including identifying, measuring, controlling, analyzing, forecasting and reporting on market risk, developing the regulations and proposing on market risk management tools.
- Business units: perform daily business operations and ensure such activities comply with strategies on risk management, risk appetite, policy and limits on risk management approved by competent authority.
- Internal Audit: is responsible for controlling, reviewing, conducting independent and objective review of the compliance with strategy, policy, regulation, process on risk management and limits for market risk; proposing remedial solutions, measures and monitoring the implementation of recommendations by units in the post audit period.

## 6.2 Market risk management strategy

### 6.2.1 Market risk prevention for the market risk exposure of the Trading book

- Regarding the Trading book, business units shall only conduct transactions under the trading book and maintain market risk exposure within the approved market risk limit.
- The market risk limits are developed in compliance with the Bank's material market risk limit. The control of limit compliance must be carried out independently by the Market and Liquidity Risk Management Unit - Risk Management Division or another independent unit which is not under Global Transaction Banking Services Division.

Techcombank has developed limits as follows:

- i. Interest rate limit for transaction product, trader, Stoploss, Stopgain, total interest rate risk exposure on the trading book, concentration.
- ii. Forex risk limits include total foreign currency long and short positions, gold position, limit on each type of currency, trader limit, stop loss limit, stopgain limit.
- iii. Equity trading risk limit (not incurring).
- iv. Commodity risk limit (not incurring).

### 6.2.2 Principles of market risk management

- i. In normal market conditions:
  - The review of annual limits is conducted at least once a year or at any time during the year where necessary. In the event of changing limits, the new limits shall be adopted upon approval and informed by the Market and Liquidity Risk Management unit.
  - Traders shall conduct transactions within the approved market risk limits.
- ii. In markets with high volatility in securities, commodities prices, gold, exchange rates and interest rates: GTS Division and Risk Division shall collaborate in reviewing market risk positions and agree on what needs to be done to mitigate risks for the portfolio. When necessary, the Risk Division shall conduct a stress test based on a combination of two approaches: (i) sensitivity analysis and (ii) scenario analysis.

### 6.2.3 Principles in market risk prevention

- The unit holding market risk position need to proactively hedge against market risk by identifying and taking measures to warn about market risk due to changes in macro indexes, laws & regulations and and financial markets.
- Regarding prevention of market risk on the same financial instrument, Financial Markets under GTS Division shall proactively take necessary measures within the approved market risk limit.
- In case, the market risk hedging instrument for the portfolio is a different financial instrument, Financial Markets under GTS Division can only implement the hedging after having written agreement with Market and Liquidity Risk Management unit and Treasury Finance Center unit on the measurement method and monitoring mechanism for the risk.  
Measures of the hedging market risk can only be adopted upon approval of the Head of Financial Markets unit, Head of Market and Liquidity Risk Management unit and Head of Treasury Finance Center unit.

### 6.2.4 Market Risk Limit

**Techcombank has developed market risk limits as follows:**

- Techcombank's limit is classified according to 2 criteria: validity period and measurement nature
  - + For validity period: Market risk limits include three types of limits: annual limit, temporary limit and one-off limit.
  - + For measurement nature: Limits include two types: quantitative limits: VaR, PV01, NOP, Stoploss ... and qualitative limits: limits for products, currency, or holding duration...
- Techcombank needs to ensure that the limits are complied with at the end of day. For market risk limits, limit monitoring must be performed on a daily basis.

The Bank has established a system for managing market risk limits at the portfolio level. The Bank has established a VaR limit for the government bond portfolio, foreign exchange and gold portfolio; threshold for warning VaR status of the portfolio of interest rate derivatives and corporate bonds. Market risk limits at portfolio level include: VaR, PV01, Stoploss, Stopgain, NOP, book size, and trader's limit. Specifically:

- i. Interest rate risk limit includes interest rate risk limit for each product portfolio and total interest risk exposure on the trading book, Stoploss, Stopgain, trader's limit.
- ii. Foreign exchange risk limit includes total foreign currency long and short positions for the foreign currency trading portfolio, long and short positions for each currency, gold position; stop loss and stopgain, and Trader's limit.
- iii. Equity trading risk limit for securities firm being the Bank's subsidiary: no limit applied since no trading.
- iv. Commodity risk limit: no limit applied since no trading.
- v. Concentration risk includes limit of the total portfolio of government bond, corporate bond and investment limit for one issuer of corporate bonds. In addition, the Unit has also developed concentration risk on the trading book for transaction counterparties, transaction products and currency types via the development and measuring concentration risk by (i) counterparty: Expected loss of the portfolio / Total owner's equity, EL of each customer / EL of total portfolio; (ii) transaction products: VaR or biggest loss (VaR equivalent) of the product portfolio / Total owner's equity; (iii) currency types: foreign currency net position / Owner's equity.

#### Limit compliance

- The Heads of Business Divisions are responsible for maintaining the discipline of traders in complying with the limits
- The traders are responsible for compliance with the limit.
- The Risk Management Division is responsible for independent control of limit compliance.

**Market risk limit excess**

- Regulation of market risk management also classifies types of possible limit excess cases including limit excess due to: (i) arising transactions; (ii) operational error; and (iii) market volatility, which is beyond the Bank's control, (iv) due to the impact of changing the methodology for measuring risk position, changing/updating setting in information technology system used for risk position measurement.
- When the limit excess occurs, the trading unit that uses the limit and the Risk Management Division must identify root causes and take remedial measures. In case signs of intentional limit excess are found, trading officer and related people may be subject to disciplinary measures.

**Method of development and approval of market risk limits**

- The method of developing market risk limits must comply with material risk limits and regulatory requirements (if any). Limits must be set for each fundamental risk indicators and can be calculated by the system or alternative tools.
- Limit approval:
  - + Approval principles: (I) CEO approves limits. In case where limits are adjusted to a less restrictive level, CEO shall report these limits to the Board of Directors after the adjustment, (ii) Executive risk committee approves the limit before submitting it to the CEO for approval.
  - + The limit approval process includes three steps:
    - i. Limit proposal: drafted by the Trading unit.
    - ii. Independent consideration of the proposed limit and request for approval of the limit: Risk Division shall review the proposal independently and give inputs (in favor or against the proposal) and submit it to Risk Committee.
    - iii. Limit approval: Based on the proposal of the trading unit and the recommendation of the Risk Management Division, the limit approval authority level makes a decision to approve or disapprove of limit proposal. In case the limit is not approved, depending on the reason, the trading unit and the Risk Management Division consider restarting the limit proposal process accordingly. After the limit being approved, related units shall be notified, and the Risk Management Division shall update the limit on the Bank's system for control purpose (if any).

**6.2.5 Measuring, monitoring and controlling market risk**

- Techcombank adopts a segregated system of market risk management, where the Market and Liquidity Risk Management unit is independent from business function. It is responsible for identifying, measuring, monitoring, controlling and reporting on market risk and developing market risk management models.
- Market risk factors affecting the value of a financial portfolio need to be fully identified and quantified based on available market and price indicators. Assumptions and measurements need to be documented by the Market and Liquidity Risk management unit and fully understood by the related units.
- Techcombank regulates and adopts a reputable system of market risk measurement tools in the financial industry, suitable for the markets and in line with the measurement system of

international standards such as IFRS (International Financial Reporting Standards), Basel Capital Accord... such as VaR, NOP, Stoploss, trading limits, PV01, Duration and stress tests.

- The selection of method and tools for market risk measurement should be based on the complexity of the products as well as Techcombank's information technology system, database and infrastructure used for such measuring and monitoring.
- The measurement system for market risk must ensure that:
  - + Key risk factors related to liabilities, assets, off-balance sheet undertakings are fully assessed.
  - + Risk measurement methods and models must be periodically checked and evaluated in terms of accuracy and appropriateness, assumptions and parameters need to be adjusted according to internal regulations.
  - + Risk measurement must be carried out in a timely and accurate manner for effective risk monitoring and control.
- To ensure the soundness of our market risk measurements, Techcombank has applied aggregated VaR calculated based on 1-day return to measure and control material risk limit from the beginning of 2023. In order to gradually improve measurement quality and align with quantitative worldwide standards, Techcombank has also developed VaR and Stressed VaR models using internal model approach of Basel guidelines to apply to internal measurement and monitoring in 2024.

The bank has conducted model reviews and identified model risk in the model development process, and taken actions to mitigate those risks along with a plan to overcome the limitations/weakness of the model. Documentation of model validation standards is also gradually developed and standardized.

Market risk models and pricing models are assessed periodically at least once a year. The assessment includes reliability of market data, model accuracy, appropriateness of parameters and assumptions, the completeness of model documentation and on-going monitoring activities.

- Techcombank's regulations on market risk monitoring and control:

Limit control and warning of limit excess:

- + The control of market risk limits is independently implemented on a daily basis by Market and Liquidity Risk Management. New limits or updated limits must be controlled from the effective date.
- + Limit control reports must be sent to the Head of Business Division, Head of Business Unit, CRO and Head of Market and Liquidity Risk Management Unit - Risk Management Division.
- + Risk reports are archived for periodic reviews and assessment.
- + In order to support the management of risk limits, Market and Liquidity Risk Management Unit - Risk Management Division gives warnings to the Business Division when market risk position is equal or greater than 80% of the approved limit.

Limit report and limit excess report.

- + Positions and limits are reported daily as part of the market risk report. Realized profit (loss) and expected mark-to-market profit & loss of trading book is reported by Finance Division
- + The daily report must highlight the limit excess (if any).

- + In order to avoid a limit excess, the limit report should provide warnings when the risk position approaches the limit.
- + Limit excess due to non-compliance with TCB's regulations shall not be allowed under any circumstances. When reporting limit excess, the Market and Liquidity Risk Management Unit must notify the Head of Business Divisions and Head of Business unit to develop a plan to bring the exceeded positions within the limits.
- + When there is limit excess, Business Divisions and Risk Division report to authorities as per regulations.

### **6.2.6 Internal reporting on market risks**

Techcombank has strict requirements on internal market risk reporting on:

- Accuracy
- Adequacy
- Clarity and usefulness
- Frequency
- Distribution of units and individuals receiving reports

Techcombank has clear regulations on internal reporting on market risks with different frequencies: daily, monthly, quarterly, semiannual and ad-hoc upon specific request. Specifically:

- Daily risk report includes information on market risk position, limit utilization, early warnings and breaches of limits (if any), realized profit and loss and mark-to-market profit and loss reports.
- Monthly portfolio report includes comprehensive information on compliance with market risk positions, market risk exposure of different portfolio in the month and on the report date, movements of risk exposures, changes in market conditions, observations and findings on portfolios in the month, limit excess, recommendations on risk management and results of implementing recommendations from internal audit and regulatory agencies (if any).
- Quarterly and semi-annual reports might include, in addition to the above contents, a stress test, realized profit/loss and Marked-to-market profit/loss of the trading book, results of reviewing, evaluating methods/model for measuring and monitoring market risk position as per regulations from time to time.

## **6.3 Trading strategy**

Techcombank's trading strategy for financial product with potential market risk is based on conservative view. The bank assesses its products in terms of potential market risk and imposes market risk limits before any actual roll-out.

### **6.3.1 FX and gold trading**

- FX and gold trade is based on the bid-ask spread of permitted currency pairs and trading of SJC gold plates on the interbank market in order to optimize profit for Techcombank within the approved limits in line with the Bank's risk appetite from time to time.
- Products: USD, VND, convertible currencies, standard SJC gold plates.
- Types of transaction: spot, forward, swap.
- Transaction channel: direct trading on electronic system, chat room on Eikon Messenger (Reuters), recorded telephone messages and other form of electronic transactions.

### 6.3.2 *Trading of government bonds*

- Trading of bonds and futures contracts of government bonds is based on the bid-ask spread of bonds of different maturities in order to optimize profit for Techcombank within the approved limits. In the event of a stressful market situation, business units need to review the business strategy and risk profile, assess market movements as well as take risk management measures.
- Perform the roles of market maker by listing two-way prices for the bonds in the Techcombank's portfolio and listing purchase price for bonds not in Techcombank's portfolio.
- Bond maturity: as per bond maturities currently circulating in the market and within the market risk limit from time to time.
- Types of bonds: government bonds, government-guaranteed bonds, municipal bonds.
- Transaction channel: order matching on the government bond trading system of the Hanoi Stock Exchange, trading via Eikon Messenger (Reuters), Skype, other forms of electronic transactions or other official transaction channels.

### 6.3.3 *Short term interest rates trading*

- Short-term interest rate trading includes professional business related to short-term interest rate risks in the interbank money market such as interbank deposits/loans, short-term currency swap, investments of certificates of deposit/short-term valuable papers and other monetary products as prescribed by the Regulatory from time to time in order to maximize accumulated revenue for Techcombank within the approved limit. In the event of a stressful market situation, business units need to review the business strategy and risk profile, assess market movement as well as take risk management measures.
- Rates trading is the unit representing the Bank to provide quotations on the interbank market and provide information on the interbank money market to other units across the Bank.
- Maturity: less than a year.
- Currencies: VND, USD and some other foreign currencies as permitted by the SBV.
- Transaction channels: existing electronic channels (Reuters Dealing, Reuters Messenger...), telephone, other form of electronic transactions or any other official transaction channels.

### 6.3.4 *Derivatives trading*

- Trading in interest rate and exchange rate derivative products, including one-currency currency swaps, two-currency interest rate swaps, accrued interest rate swaps, etc. within the granted limit in order to seek opportunities to increase profits for Techcombank. In the event of a stressful market situation, business units need to review the business strategy and risk profile, assess market movement as well as take risk management measures.
- Trading maturity: in accordance with regulations on market risk limits from time to time and relevant laws
- Transaction currencies: VND, USD and some other currencies permitted by the SBV.
- Transaction channel: existing electronic transaction channels (Reuters Dealing, Reuters Messenger...), telephone, other form of electronic transactions or other official channels as regulated by Techcombank from time to time.

**6.3.5 Trading of corporate bonds and other valuable papers issued by credit institutions trading**

- Trading of bonds and other types of valuable papers issued by credit institutions with the aim of seeking opportunities to increase profits for Techcombank within the the approved limit and the provisions of the underlying law.
- Maturity of bonds/valuable papers: as per the maturity of bonds/valuable papers currently circulating in the market in and within the market risk limits from time to time.
- Types of bonds/valuable papers: listed or unlisted bonds, CDs, bills and notes .
- Transaction channels: existing transaction channels, market chat rooms, skype, Reuters and other form of electronic transactions.

**6.4 Trading and banking book portfolio classification****Table 12 – Trading & banking book portfolio classification**

|    | <b>Transaction/instrument</b>      | <b>Purpose/instrument</b>   | <b>Type of book</b> |
|----|------------------------------------|---|---------------------|
| 1. | Money market transaction           | Repo, reverse repo  | Banking Book        |
|    |                                    | Other transactions  | Banking Book        |
| 2. | Debt securities – Government bonds | Trading purpose with holding duration of less than a year   | Trading Book        |
|    |                                    | Other transactions  | Banking Book        |
| 3. | Debt securities – Corporate bonds  | Trading purpose with holding duration of less than a year   | Trading Book        |
|    |                                    | Other transactions  | Banking Book        |
| 4. | Equity securities                  | Trading purpose with holding duration of less than a year   | Trading Book        |
|    |                                    | Other transactions  | Banking Book        |
| 5. | Other valuable papers              | Trading purpose with holding duration of less than a year   | Trading Book        |
|    |                                    | Other transactions  | Banking Book        |
| 6. | FX Transactions                    | Trading purpose with holding duration of less than a year   | Trading Book        |
|    |                                    | To meet customers' and counterparties' needs and counter transactions of the above  | Trading Book        |
|    |                                    | Other transactions  | Banking Book        |
| 7. | Gold                               | Trading purpose with holding duration of less than a year   | Trading Book        |
|    |                                    | Other transactions  | Banking Book        |
| 8. | Commodities derivatives            | To meet customers' and counterparties' needs and counter transactions of the above  | Trading Book        |
|    |                                    | Trading purpose with holding duration of less than a year   | Trading Book        |
| 9. | Other derivatives transactions     | To meet customers' and counterparties' needs and counter transactions of the above  | Trading Book        |
|    |                                    | To hedge transactions on the Banking Book   | Trading Book        |
|    |                                    | To hedge balance sheet items (including off-balance sheet items) of the Banking Book, except transactions to hedge the self-trading | Banking Book        |

**Table 12 – Trading & banking book portfolio classification**

| Transaction/instrument | Purpose/instrument                                    | Type of book |
|------------------------|---|--------------|
|                        | transactions mentioned above                          |              |
|                        | Other transactions                                    | Banking Book |
| 10. Other transactions | Other transactions on market 1 (deposits and lending) | Banking Book |

**6.5 Capital requirement for market risk****Table 13 - Capital requirement for market risk***Unit: billion VND*

| Type of market risk | 30/06/2024          |              | 31/12/2023          |               |
|---------------------|---------------------|--------------|---------------------|---------------|
|                     | Capital requirement | RWA          | Capital requirement | RWA           |
| Interest rate risk  | 675                 | 8,434        | 1,119               | 13,986        |
| Equity risk         | -                   | -            | -                   | -             |
| FX risk*            | -                   | -            | -                   | -             |
| Commodities risk    | -                   | -            | -                   | -             |
| Option risk         | -                   | -            | -                   | -             |
| <b>Total</b>        | <b>675</b>          | <b>8,434</b> | <b>1,119</b>        | <b>13,986</b> |

\* Regulatory capital for foreign exchange risk (KFXR) shall apply in the event that total value of net foreign exchange exposure (including gold) of banks and/or foreign bank branches is greater than 2% of the owners' equity thereof.

**Abbreviations**

|           |   |
|-----------|---|
| BOD       | Board of Directors                              |
| BOM       | Board of Management                             |
| CAR       | Capital Adequacy Ratio                          |
| CCF       | Credit Conversion Ratio                         |
| CMP       | Crisis Management Plan                          |
| DATC      | Vietnam Debt and Asset Trading Corporation      |
| EAD       | Exposure at Default                             |
| EL        | Expected Loss                                   |
| FIRB      | Foundation Internal Rating-Based approach       |
| FX        | Foreign exchange                                |
| LGD       | Loss given Default                              |
| NOP       | Net Open Position                               |
| NPL       | Non performing loan                             |
| PD        | Probability of Default                          |
| PSEs      | Non – central government Public Sector Entities |
| RW        | Risk weight                                     |
| RWA       | Risk-weighted Assets                            |
| SBV       | State Bank of Vietnam                           |
| Stop loss | Stop loss threshold                             |
| VAMC      | Vietnam Asset Management Company                |
| VaR       | Value at Risk                                   |
| VBMA      | Vietnam Bond Market Association                 |
| VPN       | Virtual Private Network                         |