

Unofficial Translation

With collaboration between the Bank of Thailand and the Association of International Banks

This translation is for convenience of those unfamiliar with Thai language.

Please refer to the Thai text for the official version.

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**Bank of Thailand Notification**

**No. FPG. 11/2562**

**Re: Regulations on Capital Supervision for Financial Business Groups**

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**1. Rationale**

The Bank of Thailand is aware of the increased operations of financial institutions in form of financial business groups, but if this practice is not properly supervised, it may lead to the increased risk exposures and the stability issues of the financial institutions. Therefore, in 2006, the Bank of Thailand issued the policy for consolidated supervision, which is not legally enforceable, for preliminary implementation. Later, when there is the amendment to the Financial Institution Business Act B.E. 2551 (2008) by incorporating provisions on consolidated supervision, the Bank of Thailand thereby issued the Bank of Thailand Notification No. FPG. 66/2551 Re: Regulations on Consolidated Supervision dated 3 August 2008 in order to legally enforce the regulations, but in the early stage, only qualitative requirement have been applied. Then, the Bank of Thailand issued the Bank of Thailand Notification No. FPG. 6/2553 Re: Regulations on Consolidated Supervision dated 18 June 2010 in order to fully implement the regulations starting from 30 June 2010.

The Bank of Thailand has applied principles from the Basel capital framework to capital requirements for financial business groups (Consolidated basis), both at the Solo Consolidation level and Full Consolidation level, in conjunction with financial institutions' capital maintenance (Solo basis). Previously, regulations have been progressively amended, including an amendment wherein a financial business group is required to maintain capital in accordance with Basel III requirements, that was enforced on commercial banks' financial business groups as from 1 January 2014. Amendments were also made to capital requirement regulations for finance companies' financial business groups and credit foncier companies' financial business groups, to comply with, and make reference to, regulations at the Solo basis level in 2017. In 2018, amendments were made on capital deduction items for a financial business group, in cases where a life insurance company in a financial business group holds or invests in securities that are

counted as capital of other financial institutions or other financial business groups, in order to reduce investment restrictions imposed on life insurance companies.

On this, subsidiaries within financial business groups that are under the supervision of specific supervisory agencies, such as the Securities and Exchange Commission and the Office of Insurance Commission, are, still, required to comply with the regulations as specified by those supervisory agencies.

**For this Notification amendment, the Bank of Thailand continues to uphold the original principles for capital components in accordance with Basel III. In essence, this amendment is to ensure compliance with the new Thai Financial Reporting Standard No. 9: Financial Instruments: TFRS 9, which comes into force from the accounting period starting on or after 1 January 2020, as well as to ensure compliance with, and reference to, the relevant Solo basis regulations.**

## **2. Statutory Power**

By virtue of Section 4, Section 31, Section 57 and Section 71 of the Financial Institution Business Act B.E. 2551 (2008), the Bank of Thailand hereby issues regulations on capital supervision for financial business groups, which shall be applied by financial institutions, parent companies, subsidiaries, and affiliated companies of financial institutions within financial business groups to comply with.

## **3. Repealed Notification**

**Bank of Thailand Notification No. FPG 9/2561 Re: Regulations on Capital Supervision for Financial Business Groups dated 11 April 2018**

## **4. Scope of Application**

This Notification shall apply to all financial institutions, parent companies, subsidiaries, and affiliated companies of financial institutions within financial business groups according to the law on financial institution business, except foreign commercial bank's branch.

## **5. Contents**

### **5.1 Definitions**

“Consolidated supervision” means the supervision of a financial business group of a financial institution for both qualitative and quantitative aspects, by taking into consideration risks that may arise from business operations of the financial business group that may affect companies and financial institution within the group, irrespective of whether

those risks have been represented on financial statements of the financial institutions or companies within the financial business group or not. This is to ensure that the financial business group will appropriately and prudently operate its business.

“Financial institution” means:

- A. A locally registered commercial bank, which may also be a retail bank and foreign commercial bank’s subsidiary, excluding foreign commercial bank’s branch
- B. A finance company
- C. A credit foncier company

“Financial business” shall refer to that as specified in the Bank of Thailand Notification Re: Regulations on Structure and Scope of Business of Financial Business Groups.

“Supporting business” shall refer to that as specified in the Bank of Thailand Notification Re: Regulations on Structure and Scope of Business of Financial Business Groups.

“Total capital of financial institution” shall refer to that as specified in the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks, or the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies, or the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies, as the case may be.

“Credit risk” means the risk that a company within a financial business group may incur losses as its borrower or counterparty fails to fulfill the obligations on borrowing, investment and contingent liability, such as the borrower fails to make principal or interest payments according to an agreement with the company within the financial business group so that such company, as a lender, incurs losses from that default on payment.

“Market risk” means the risk that a company within a financial business group may incur losses due to any changes in the value of exposures, both on-balance and off-balance sheet exposures, from the movement of interest rate, equity security price, exchange rate and commodity price, where the movement of interest rate and equity security price may be caused by general market factors (general market risk) and/or specific factors of the issuer of that equity security (specific risk).

“Operational risk” means risk of loss resulting from inadequacy or failure of internal control, people and systems of a company within a financial business group, or from external events, including legal risk (such as prosecutorial or litigation risk, which is the risk that a legal action will be taken, or authority-imposed fines as well as risk of loss

from out-of-court settlement agreements). However, this type of risk does not include strategic risk and reputational risk.

“Trading book” means positions in financial instruments and commodities held either with trading intent or in order to hedge other positions of the trading book, including all types of derivatives that have not been used to hedge positions in the banking book. Financial instruments in the trading book must be free of any restrictive covenants on their tradability or able to be hedged completely. In addition, the positions must be frequently and accurately valued, and the portfolio should be actively managed.

“Banking book” means positions in financial instruments or any other transactions held with non-trading intent or financial instruments with the initial intention of holding them in the long term or until maturity.

## **5.2 Supervision of capital adequacy of a financial business group**

5.2.1 A financial business group must hold capital for its financial business group according to the ratios as specified by the Bank of Thailand for both consolidation levels, which are capital for the solo consolidation and capital for the full consolidation, in addition to capital requirement for a financial institution on a solo basis.

5.2.2 Companies within a financial business group that are under supervision of other specific supervisory agencies, such as the Securities and Exchange Commission or the Office of Insurance Commission, must, still, comply with regulations as specified by those supervisory agencies.

## **5.3 Preparation of consolidated financial statements according to regulations on consolidated supervision**

As capital requirement for a financial business group must be calculated from consolidated financial statements, therefore, a financial business group, irrespective of whether the parent company is a financial institution or other juristic person, must prepare consolidated financial statements according to accounting standards and financial reporting standards as specified for both consolidation levels, namely:

5.3.1 Financial statements of Solo consolidation means financial statements preparation of the financial institution and all subsidiaries within the solo consolidation.

5.3.2 Financial statements of Full consolidation means financial statements preparation of the parent company and subsidiaries within the financial business group, only those that the parent company directly and/or indirectly hold shares, including those of related parties, of at least 50% of total paid-up shares of those companies, except subsidiaries that operate non-life-insurance or life insurance business, which shall be excluded from consolidated

financial statements in all cases (even though the parent company holds shares in those companies of 50% or more).

#### **5.4 Capital requirement for a financial business group**

Total capital for a financial business group is a capital that a particular financial business group must hold to absorb risks from its business operations for both consolidation levels, namely capital requirement for the solo consolidation and capital requirement for the full consolidation. A financial business group must hold capital for both consolidation levels no less than the levels as specified by the Bank of Thailand.

For the solo consolidation that has only a financial institution within the group, it shall use financial statements of the financial institution (solo basis) to calculate capital requirement for the solo consolidation. If the financial institution has investments in subsidiaries outside its solo consolidation, investments in affiliated companies<sup>1</sup> or investments in joint ventures, it shall prepare consolidated financial statements using the equity method<sup>2</sup> in order to calculate capital requirement for the solo consolidation.

##### **5.4.1 Capital requirement for a financial business group of commercial bank**

A financial business group of commercial bank, both solo consolidation and full consolidation, must hold capital in proportion to total risk-weighted assets of the financial business group to absorb credit risk, market risk and operational risk. A financial business group must comply with additional regulations as specified in this Notification and follow notifications for a financial institution on a solo basis shall also apply:

A. The Bank of Thailand Notification Re: Regulations on Capital Supervision for Commercial Banks

B. The Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks

C. The Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA)

D. The Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB)

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<sup>1</sup> According to the definition as specified in financial accounting and financial reporting standards

<sup>2</sup> According to the format of Solo consolidation's financial statements

E. The Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets of Counterparties for Derivatives

F. The Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Unsettled Transactions and Non-Delivery versus Payment (Non-DvP) Transactions for Commercial Banks

G. The Bank of Thailand Notification Re: Permission for Financial Institutions to Conduct in Securitisation Business

H. The Bank of Thailand Notification Re: Regulations on Supervision of Market Risk and Capital Requirement for Market Risk of Financial Institutions

I. The Bank of Thailand Notification Re: Regulations on Minimum Capital Requirement for Operational Risk

J. Other regulations on capital requirement that may be additionally specified by the Bank of Thailand later on

#### **5.4.1.1 Capital to risk-weighted assets ratio**

(1) Minimum capital requirement: A financial business group of commercial bank shall hold capital, at the end of the day, in proportion to total risk-weighted assets of the group, which are credit risk-weighted assets, market risk-weighted assets, and value equivalent to operational risk-weighted assets, in the same manner as a commercial bank on a solo basis, as follows:

A. Common equity tier 1 ratio (CET1 ratio) – no less than 4.5%

B. Tier 1 capital ratio (T1 ratio) – no less than 6%

C. Total capital ratio (TC ratio) – no less than 8.5%

#### (2) Capital buffer

(2.1) Conservation buffer: A financial business group of commercial bank shall hold common equity tier 1 ratio in addition to minimum capital requirement for no less than 2.5% of total risk-weighted assets of the financial business group.

On this, if the financial business group cannot hold capital buffer according to the specified ratio, the commercial bank or parent company (as the case may be) must retain part or all of its net profit, by limiting the apportionment of net profit according to the regulations as specified in the Bank of Thailand Notification Re: Regulations on Capital Supervision for Commercial Banks. This will not be considered that the financial business group fails to hold capital according to regulatory capital ratios

according to Section 57 of the Financial Institution Business Act B.E. 2551 (2008), in case where the commercial bank or parent company (as the case may be) have retained net profit according to the regulations, however, the financial business group cannot hold capital according to the regulatory capital ratio. In such as, the parent company shall consult with the Bank of Thailand on its capital maintenance plan, and, the financial business group shall accordingly comply with the plan as proposed.

(2.2) Countercyclical buffer: The Bank of Thailand may require a financial business group to hold common equity tier 1 in addition to conservation buffer for 0 – 2.5% of total risk-weighted assets of the financial business group, in the same manner as a commercial bank on a solo basis, in order to absorb systemic risk that may arise during an economic downturn, when there is a sign of an upturn in the economy and that this measure is necessary to be implemented.

#### **5.4.1.2 Calculation of capital requirement for a financial business group**

A financial business group of commercial bank must calculate capital for both consolidation levels, which are capital for the solo consolidation and capital for the full consolidation. Data from consolidated financial statements prepared in accordance with regulations on consolidated supervision shall be used to calculate capital requirements, based on capital components of the financial business group of commercial bank according to Attachment 1.

#### **5.4.1.3 Calculation of risk-weighted assets or value equivalent to risk-weighted assets**

(1) Regulations on the calculation of credit risk-weighted assets

(1.1) Credit risk-weighted assets of a financial business group can be calculated using the two following approaches:

A. The Standardised Approach (SA) – as specified in Attachment 2

B. The Internal Ratings-Based Approach (IRB) – as specified in Attachment 3

(1.2) A financial business group shall calculate credit risk-weighted assets of its solo consolidation and full consolidation using the same approach as the commercial bank on a solo basis in accordance with regulations on the calculation of credit risk-weighted assets as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised

Approach (SA) or Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB), as the case may be.

On this, in using the same approach for calculating credit risk-weighted assets as the commercial bank on a solo basis, a financial business group shall comply with regulations on submission of an application as specified in Attachment 2 or Attachment 3, as the case may be.

(1.3) In case where a commercial bank on a solo basis has been approved to use the IRB for calculating credit risk-weighted assets, its financial business group must manage to use the IRB within 3 years from the day that commercial bank receives approval to use the IRB from the Bank of Thailand, unless the Bank of Thailand specifies otherwise.

On this, in managing to use the IRB, a financial business group shall comply with regulations on submission of an application as specified in Attachment 3.

(1.4) For the using or changing the list of External credit assessment institutions (ECAIs), the methodology for calculating risk weights of corporate claims, or the methodology for recognition of financial collateral for credit risk mitigation, a financial business group shall:

A. In case where a financial business group uses the SA for calculating credit risk-weighted assets, which is the same approach as used by the commercial bank on a solo basis, the financial business group shall use the same list of ECAI, or the methodology for calculating risk weights of corporate claims, or the methodology for recognition of financial collateral for credit risk mitigation according to the approval that the commercial bank on a solo basis received from the Bank of Thailand.

On this, the parent company shall notify the adoption of the list of ECAIs or the methodology for calculating risk weights of corporate claims, or notify as well as submit the Self-Assessment Form in case of changing the methodology for recognition of financial collateral for credit risk mitigation to the Bank of Thailand.

B. In case where a financial business group uses the SA for calculating credit risk-weighted assets, but the commercial bank on a solo basis uses the IRB, the parent company shall apply regulations on the calculation of credit risk-weighted assets according to the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA).

(2) Regulations on the calculation of market risk-weighted assets

(2.1) Market risk-weighted assets of a financial business group can be calculated using the three following approaches:

- A. The Standardised Approach
- B. The Internal Model Approach
- C. The Mixed Approach (The combination of the Standardised Approach and the Internal Model Approach)

(2.2) A financial business group shall calculate market risk-weighted assets of its solo consolidation and full consolidation using the same approach as the commercial bank on a solo basis in accordance with the Bank of Thailand Notification Re: Regulations on Supervision of Market Risk and Capital Requirement for Market Risk of Financial Institutions. The parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook.

In case where a financial business group cannot manage to use the same approach as the commercial bank on a solo basis, the parent company shall submit an approval letter to the Bank of Thailand according to the relevant Public Handbook, by specifying causes and explanations why the financial business group cannot manage to use the same approach as the commercial bank on a solo basis. In such as, the Bank of Thailand will give approval on a case-by-case basis.

On this, the Bank of Thailand will finish the consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

(2.3) For a financial business group that the commercial bank on a solo basis has positions in the trading book at the materiality threshold level as specified in the Bank of Thailand Notification Re: Regulations on Supervision of Market Risk and Capital Requirements for Market Risks of Financial Institutions, the financial business group shall calculate capital requirement for all components of market risk, namely interest rate risk, equity security price risk, exchange rate risk and commodity price risk.

(2.4) For a financial business group that the commercial bank on a solo basis has positions in the trading book less than the materiality threshold level as specified in Clause (2.3), the financial business group shall calculate capital requirement only for commodity price risk (if any).

Except the Bank of Thailand requires any other arrangements for the capital requirements of financial business group for market risk.

(2.5) In case where a financial business group holds securities included in capital of other financial institutions or other financial business groups or enters into financial transactions linked to securities included in capital of other financial institutions or other financial business groups which those securities are classified into the trading book and have already been deducted from capital, the investments in those securities or notional amounts of those transactions for portion that has already been deducted from the capital can be excluded from the calculation of market risk-weighted assets.

(2.6) Capital calculated from the total transactions as specified above shall be used to calculate market risk-weighted assets by multiplying by 12.5. The calculated market risk-weighted assets will be used as a base for calculating minimum capital requirements for market risk.

(2.7) If any financial business group intends to calculate market risk capital for each individual company, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will give approval only if there is necessity, and will finish the consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

(3) Regulations on the calculation of value equivalent to operational risk-weighted assets

(3.1) Value equivalent to operational risk-weighted assets can be calculated using the two following approaches:

- A. The Basic Indicator Approach (BIA)
- B. The Standardised Approach (SA-OR), including the Alternative Standardised Approach (ASA)

(3.2) A financial business group shall calculate value equivalent to operational risk-weighted assets of its solo consolidation and full consolidation using the same approach as the commercial bank on a solo basis in accordance with the Bank of Thailand Notification Re: Regulations on Minimum Capital Requirement for Operational Risk.

On this, if a commercial bank on a solo basis has been approved to use the SA-OR or the ASA to calculate value equivalent to operational risk-weighted assets, the parent company shall submit an approval request for using the same approach for calculating value equivalent to operational risk-weighted assets as the commercial bank. The approval request, which is as specified in Attachment 4, together with the Self-Assessment Form shall be submitted to the Bank of Thailand according to the

relevant Public Handbook. The Bank of Thailand will finish the consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

(3.3) A financial business group that is eligible to use the SA-OR or the ASA to calculate value equivalent to operational risk-weighted assets must meet the minimum requirements as specified in the Bank of Thailand Notification Re: Regulations on Minimum Capital Requirement for Operational Risk.

(3.4) A financial business group shall use financial data from consolidated financial statements prepared in accordance with regulations on consolidated supervision to calculate value equivalent to operational risk-weighted assets for its solo consolidation and full consolidation. Income of a financial business group that will be used to calculate value equivalent to operational risk-weighted assets shall be the income less direct expenses from all core businesses of each individual company, for example, income derived from foreclosed property for sale<sup>3</sup> of an asset management company (deducted by direct expenses, such as specific business tax and other types of tax related to the sale of foreclosed property for sale), commission income of a securities company and asset management company (deducted by direct expenses, such as commission expense), income of a leasing business (deducted by direct expenses, such as interest expense, commission expense), even though those direct income and expenses have not been used to calculate value equivalent to operational risk-weighted assets of a commercial bank on a solo basis.

#### **5.4.2 Capital requirement for a financial business group of finance company**

A financial business group of finance company, both solo consolidation and full consolidation, must hold capital in proportion to total risk-weighted assets of the financial business group to absorb credit risk, market risk, and operational risk in the same manner as a finance company on a solo basis. A financial business group of finance company must comply with additional regulations as specified in this Notification, and also comply with the regulations as specified in the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies.

##### **5.4.2.1 Capital to risk-weighted assets ratio**

(1) Minimum capital requirement: A financial business group of finance company shall hold capital, at the end of the day, in proportion to total risk-weighted assets of the group, which are credit risk-weighted assets, market risk-

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<sup>3</sup> This income shall be allocated to the “Asset Management” business line.

weighted assets, and value equivalent to operational risk-weighted assets, in the same manner as a finance company on a solo basis, as follows:

A. Common equity tier 1 (CET1 ratio) – no less than 4.5%

B. Tier 1 capital ratio (T1 ratio) – no less than 6%

C. Total capital ratio (TC ratio) – no less than 8.5%

(2) Capital buffer

(2.1) Conservation buffer: A financial business group of finance company shall hold common equity tier 1 ratio in addition to minimum capital requirement for no less than 2.5% of total risk-weighted assets of the financial business group. The capital buffer shall be phased in in equal increments of 0.625% each year, from 1 January 2018 until its final level of no less than 2.5% on 1 January 2021, in the same manner as a finance company on a solo basis, as follows:

(Unit: percent)

Capital adequacy ratio	1 Jan 2018	1 Jan 2019	1 Jan 2020	1 Jan 2021
CET1 ratio	5.125	5.75	6.375	7
Tier 1 ratio	6.625	7.25	7.875	8.5
Total capital ratio	9.125	9.75	10.375	11

On this, if the financial business group cannot hold capital buffer according to the specified ratio, the finance company or parent company (as the case may be) must retain part or all of its net profit, by limiting the apportionment of net profit according to the regulations as specified in the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies. This will not be considered that the financial business group fails to hold capital according to regulatory capital ratios according to Section 57 of the Financial Institution Business Act B.E. 2551 (2008), in case where the finance company or parent company (as the case may be) have retained net profit according to the regulations, however, the financial business group cannot hold capital according to the regulatory capital ratio. In such as, the parent company shall consult with the Bank of Thailand on its capital maintenance plan, and, the financial business group shall accordingly comply with the plan as proposed.

(2.2) Countercyclical buffer: The Bank of Thailand may require a financial business group to hold common equity tier 1 in addition to conservation buffer for 0 – 2.5% of total risk-weighted assets of the financial business group, in the same manner as a finance company on a solo basis, in order to absorb

systemic risk that may arise during an economic downturn, when there is a sign of an upturn in the economy and that this measure is necessary to be implemented.

#### **5.4.2.2 Calculation of capital requirement for a financial business group**

A financial business group of finance company must calculate capital for both consolidation levels, which are capital for the solo consolidation and capital for the full consolidation. Data from consolidated financial statements prepared in accordance with regulations on consolidated supervision shall be used to calculate capital requirement, based on capital components of a financial business group of finance company according to the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies. In addition, the financial business group shall also comply with additional regulations as specified in Attachment 1 in the same manner as a financial business group of commercial bank.

#### **5.4.2.3 Calculation of risk-weighted assets or value equivalent to risk-weighted assets**

For the regulations on calculation of credit risk-weighted assets, market risk-weighted assets and value equivalent to operational risk-weighted assets, a financial business group of finance company shall apply the regulations as specified in the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies. In addition, the financial business group shall also comply with additional regulations for a financial business group as specified in Clause 5.4.1.3 in the same manner as a financial business group of commercial bank.

#### **5.4.3 Capital requirement for a financial business group of credit foncier company**

A financial business group of credit foncier company, both solo consolidation and full consolidation, must hold capital in proportion to total risk-weighted assets of the financial business group to absorb asset risk and operational risk in the same manner as a credit foncier company on a solo basis. A financial business group of credit foncier company must comply with additional regulations as specified in this Notification, and also comply with the regulations as specified in the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies.

### 5.4.3.1 Capital to risk-weighted assets ratio

(1) Minimum capital requirements: A financial business group of credit foncier company shall hold capital, at the end of the day, in proportion to total risk-weighted assets of the group, which are assets subject to capital requirements and value equivalent to operational risk-weighted assets, in the same manner as a credit foncier company on a solo basis, for total capital ratio is no less than 8.5%.

#### (2) Capital buffer

(2.1) Conservation buffer: A financial business group of credit foncier company shall hold capital in addition to minimum capital requirement for no less than 2.5% of total risk-weighted assets of the financial business group. The capital buffer shall be phased in in equal increments of 0.625% each year, from 1 January 2018 until its final level of no less than 2.5% on 1 January 2021, in the same manner as a credit foncier company on a solo basis, as follows:

(Unit: percent)

Capital adequacy ratio	1 Jan 2018	1 Jan 2019	1 Jan 2020	1 Jan 2021
Total capital ratio	9.125	9.75	10.375	11

On this, if the financial business group cannot hold capital buffer according to the specified ratio, the credit foncier company or parent company (as the case may be) must retain part or all of its net profit, by limiting the apportionment of net profit according to the regulations as specified in the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies. This will not be considered that the financial business group fails to hold capital according to regulatory capital ratio according to Section 57 of the Financial Business Act B.E. 2551 (2008), in case where the credit foncier company or parent company (as the case may be) have retained net profit according to the regulations, however, the financial business group cannot hold capital according to the regulatory capital ratio. In such as, the parent company shall consult with the Bank of Thailand on its capital maintenance plan, and, the financial business group shall accordingly comply with the plan as proposed.

(2.2) Countercyclical buffer: The Bank of Thailand may require a financial business group to hold total capital in addition to conservation buffer for 0 – 2.5% of total risk-weighted assets of the financial business group, in the same manner as a credit foncier company on a solo basis, in order to absorb systemic risk that may arise during an economic downturn, when there is a sign of an upturn in the economy and that this measure is necessary to be implemented.

#### **5.4.3.2 Calculation of capital requirement for a financial business group**

A financial business group of credit foncier company must calculate capital for both consolidation levels, which are capital for the solo consolidation and capital for the full consolidation. Data from consolidated financial statements prepared in accordance with regulations on consolidated supervision shall be used to calculate capital requirements, based on capital components of a financial business group of credit foncier company according to the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies. In addition, the financial business group shall also comply with additional regulations for a financial business group as specified in Attachment 1, only for relevant parts.

#### **5.4.3.3 Calculation of the assets subject to capital requirements, or calculation of value equivalent to operational risk-weighted assets**

(1) Regulations on calculation of the assets subject to capital requirements

A financial business group of credit foncier company shall use the assets from consolidated financial statements prepared in accordance with regulations on consolidated supervision to calculate the value of assets for which the solo consolidation and full consolidation must maintain capital requirements, by applying the regulations as specified in the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies.

(2) Regulations on calculation of value equivalent to operational risk-weighted assets

A financial business group of credit foncier company shall use data from consolidated financial statements prepared in accordance with regulations on consolidated supervision to calculate value equivalent to operational risk-weighted assets for its solo consolidation and full consolidation, by applying the regulations as specified in the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies.

#### **5.5 Submission of an approval request for the calculation of risk-weighted assets or value equivalent to risk-weighted assets for capital requirement of a financial business group**

In case of setting up a financial business group, the parent company shall submit an approval request for capital requirements for a financial business group

together with a request for setting up a financial business group. The following documents shall be submitted to the Bank of Thailand according to the relevant Public Handbook.

5.5.1 In case where a financial business group uses the SA for calculating credit risk-weighted assets:

(1) An approval request for capital requirements for a financial business group, as specified in Attachment 4

(2) The self-assessment of compliance with minimum requirements for the recognition of credit risk mitigation in the calculation of capital requirements (SAC-CRM), where the regulations as specified in the Bank of Thailand Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA) or Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies, shall be applied.

5.5.2 In case where a financial business group uses the IRB for calculating credit risk-weighted assets:

(1) All documents as specified in Clause 5.5.1

(2) The results of self-assessment of compliance with minimum requirements for the adoption of the IRB for calculating credit risk-weighted assets, where the regulations as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB) or Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies, shall be applied.

5.5.3 In case where a financial business group uses the SA-OR or ASA for calculating value equivalent to operational risk-weighted assets:

(1) A plan that outlines the preparations for the adoption of SA-OR or ASA for calculating value equivalent to operational risk-weighted assets according to Attachment 4

(2) The self-assessment of compliance with minimum requirements for the adoption of the SA-OR or ASA for calculating value equivalent to operational risk-weighted assets (SAC-OR) according to the Bank of Thailand Notification Re: Regulations on Minimum Capital Requirement for Operational Risk or Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies, shall be applied.

(3) Documents that outline the allocation of operating income of financial business group according to business lines (only income of companies included in consolidated financial statements)

5.5.4 In case where a financial business group uses the approach for calculating market risk-weighted assets that requires prior approval from the Bank of Thailand, the parent company shall submit an approval request together with supporting documents to the Bank of Thailand according to the relevant Public Handbook, by applying the regulations on supervision of market risk and capital requirement for market risk for a financial institution.

The Bank of Thailand will finish the consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

## **5.6 Capital disclosure requirement for a financial business group**

The parent company shall disclose information about capital requirement of financial business group in accordance with the regulations as specified in the Bank of Thailand Notification Re: Disclosure of Capital Requirements for Financial Business Groups.

## **6. Transitional provision**

6.1 In case where a financial business group of commercial bank has eligible financial instruments under Basel II issued before 1 January 2013 and where those instruments do not have features as specified in **Attachment 4** and **Attachment 5** of the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks, the financial business group shall exclude or phase out those instruments from its capital as from 1 January 2013 onwards, according to the regulations as specified in **Attachment 7** of the Bank of Thailand Notification Re: Capital Components for Locally Registered Commercial Banks and the amendments thereof.

**6.2 Regarding the impact on capital from increased provisioning for assets and liabilities due to the first-time implementation of TFRS 9,**

**6.2.1** The financial business group of impacted commercial banks and finance companies that choose to recognize the said impact, in whole, in their retained earnings may add back the impact, in whole, to their common equity tier 1 (CET1) capital. The regulations stipulated in the BOT Notification Re: Components of Capital for Domestically Registered Commercial Banks shall be applied, *mutatis mutandis*.

**6.2.2** The financial business group of impacted credit foncier companies that choose to recognize the said impact, in whole, in their retained earnings may add back the impact, in whole, to their capital. The regulations stipulated in the BOT Notification Re: Regulations on Capital and Maintenance of Liquid Assets for Credit Foncier Companies shall be applied, *mutatis mutandis*.

## 7. Effective Date

This Notification shall come into effect for accounting periods beginning on and from 1 January 2020.

Announced on 7<sup>th</sup> May 2019

(Mr. Veerathai Santiprabhob)  
Governor  
Bank of Thailand

Regulatory Policy Department  
Tel. 0 2283 6938

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## Capital Components for a Financial Business Group

### 1. Capital components for a financial business group of commercial bank

Capital components for a financial business group can be classified as those of the solo consolidation and those of the full consolidation, which, for both consolidation levels, consist of tier 1 capital and tier 2 capital. The regulations as specified in the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks shall be applied, and the financial business group shall also comply with the following regulations: (Examples for the preparation of consolidated financial statements and calculation of capital requirements under Basel III for a financial business group of commercial bank are in Attachment 1.1)

#### 1.1 Tier 1 capital (T1)

1.1.1 Common equity tier 1 (CET1), namely items that can be included in CET1 after deductions and adjustments, as follows:

##### (1) Items that can be included in CET1

Non-controlling interest (NCI) less the amount of capital that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders (Surplus CET1), where the minimum capital requirement and conservation buffer are equal to 7% of risk-weighted assets.

NCI that can be included in CET1 according to the first paragraph must have all of the following features:

A. NCI is existed from the preparation of consolidated financial statements of the parent company and a subsidiary that operates commercial bank business.

B. NCI meets all requirements for items that can be included in CET1 of a commercial bank on a solo basis.

C. NCI does not relate neither to the commercial bank nor the parent company<sup>1</sup>.

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<sup>1</sup> Including the case where a company within the financial business group gives financial support, either directly or indirectly, to those minority shareholders

Surplus CET1 can be calculated by the following formula:

<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">Surplus CET1</div> <div style="margin-right: 10px;">=</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">NCI Proportion</div> <div style="margin-right: 10px;">X</div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 5px;">CET1</div> <div style="margin-right: 5px;">-</div> <div style="border: 1px solid black; padding: 5px;">Subsidiary CET1 Capital</div> </div> </div>
<p><u>Where:</u>      NCI Proportion      =      <math>\frac{\text{CET1 attributable to non-controlling shareholders}}{\text{Total CET1 of Subsidiary}}</math></p> <p>                  CET1                      =      Qualifying CET1 according to the second paragraph</p> <p>                  Subsidiary CET1 Capital      =      The lesser of:</p> <p style="margin-left: 40px;">- 7% of risk-weighted assets of Subsidiary from separate financial statements; or</p> <p style="margin-left: 40px;">- 7% of risk-weighted assets of Subsidiary from consolidated financial statements</p>

On this, for NCI according to accounting standards and financial reporting standards under the joint control with the parent company, such as there is an agreement of joint control or business strategies are jointly developed, the commercial bank or parent company may include that NCI in its capital in full, if approval is granted by the Bank of Thailand. In such case, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

## (2) Deductions from CET1

Items as specified in (2.1) – (2.2) below shall be deducted from CET1; gross of investments in equity securities of a company operating financial and supporting business<sup>2</sup> according to the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks, where the total amount of investments shall be compared with 10% of net CET1 and only the amount that exceeds 10% of net CET1 shall be deducted from capital:

(2.1) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial

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<sup>2</sup> The ratio of shares and total amount of direct and indirect investments shall be calculated in accordance with the Bank of Thailand Notification Re: Regulations on Risk Supervision of Financial Business Groups, even though the indirect investments are not indicated on consolidated financial statements.

business group<sup>3</sup>, holds equity securities included in CET1 of other financial institutions or its own financial business group or other financial business groups, the investments in those equity securities will be deducted from CET1 of financial business group with book value in accordance with accounting standards and financial reporting standards. This is except the case where the holding of those equity securities is ordinary business of the company, as approved by its specific supervisory agency, for hedging purposes or for short-term trading of equity securities in a high liquid market, or to gain returns for repayment to the policy holders as specified in the life insurance policies. On this, the holding of those equity securities must not be with the intention to avoid double gearing regulations, and, currently, the Bank of Thailand allows only the following cases.

(2.1.1) Securities companies and asset management companies to hold those securities for hedging purposes or those classified into the trading book.

(2.1.2) Life insurance companies holding those securities to gain returns for repayment to the policy holders as specified in the life insurance policies, only for the portion invested in instruments counted as CET1 of other financial institutions or other financial business groups, proportionate to the liabilities items from the insurance policies and liabilities of the investment contracts<sup>4</sup> to the aggregated liabilities and equity of the owner obtained from the life insurance company's financial statements. In this regard, if the parent company wishes to use another method other than the one stipulated by the Bank of Thailand, it shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

The Bank of Thailand reserves rights to give an order on a case-by-case basis, if later found that securities companies, asset management companies or life insurance companies hold significant amount of those equity securities or do not comply with the above guidelines.

In other cases, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on

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<sup>3</sup> including companies within the financial business group that must be included in consolidated financial statements and companies within financial business group that the investments in those companies are not deducted from capital of the financial business group, such as non-life insurance company, life-insurance company

<sup>4</sup> For example, liabilities arisen from Unit Linked policies, etc.

a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

(2.2) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, enters into equity derivatives linked to equity securities included in CET1 of other financial institutions or its own financial business group or other financial business groups, the notional amount of those derivatives shall be deducted from CET1 of the financial business group from the first day those derivatives are entered into according to the Bank of Thailand Notification Re: Regulations on Permission for Commercial Banks to Engage in Market Derivatives.

**1.1.2 Additional tier 1 capital (AT1)**, which are financial instruments, namely items that can be included in AT1 after deductions and adjustments as follows:

**(1) Items that can be included in AT1**

Items that can be included in AT1; which is T1 (NCI and AT1) less (i) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties<sup>5</sup> (Surplus T1); and (ii) the amount of NCI that has been included in CET1 according to 1.1.1 (1). The minimum capital requirement and conservation buffer are equal to 8.5% of risk-weighted assets.

NCI and AT1 that can be included in T1 according to the first paragraph must have all of the following features:

A. NCI is existed from the preparation of consolidated financial statements according to regulations on consolidated supervision or AT1 of subsidiaries<sup>6</sup> which included in consolidated financial statements according to regulations on consolidated supervision

B. NCI and AT1 meets all requirements for items that can be included in CET1 or AT1 of a commercial bank on a solo basis.

C. NCI or AT1 does not relate neither to the commercial bank nor the parent company<sup>1</sup>.

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<sup>5</sup> external parties of the financial business groups that are not related parties of the parent company

<sup>6</sup> Including the commercial bank, if it is one of the subsidiaries of the financial business group

Surplus T1 can be calculated by the following formula:

Surplus T1	=	T1 Proportion	X	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 5px; text-align: center;">CET1 + AT1</td> <td style="padding: 0 10px;">-</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">Subsidiary T1 Capital</td> </tr> </table>	CET1 + AT1	-	Subsidiary T1 Capital
CET1 + AT1	-	Subsidiary T1 Capital					

Where: T1 Proportion =  $\frac{\text{T1 attributable to non-controlling shareholders and external parties}}{\text{Total T1 of Subsidiary}}$

CET1 + AT1 = CET1 and AT1 that can be included in T1 according to the second paragraph

Subsidiary T1 Capital = The lesser of:

- 8.5% of risk-weighted assets of Subsidiary from separate financial statements; or
- 8.5% of risk-weighted assets of Subsidiary from consolidated financial statements

On this, for NCI according to accounting standards and financial reporting standards under the joint control with the parent company, such as there is an agreement of joint control or business strategies are jointly developed, the commercial bank or parent company may include that NCI in its capital in full, if approval is granted by the Bank of Thailand. In such case, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

## (2) Deductions from AT1

Items as specified in (2.1) – (2.3) below shall be deducted from AT1; gross of investments in financial instruments included in tier 1 capital of a company operating financial and supporting business<sup>2</sup> only in case of holding shares of no more than 10% of total paid-up shares of that company according to the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks, where the total amount of investments shall be compared with 10% of net CET1 and only the amount that exceeds 10% of net CET1 shall be deducted from capital:

(2.1) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, holds financial instruments included in AT1 of other financial institutions or its own financial business group or other financial business groups, the investments in those securities will be deducted from AT1 of financial business group with book value in accordance with accounting standards and financial reporting standards. This is except the

case where the holding of those securities are ordinary business of the company, as approved by its specific supervisory agency, for hedging purposes or for short-term trading of securities in a high liquid market, or to gain returns for repayment to the policy holders as specified in the life insurance policies. On this, it must not be with the intention to avoid double gearing regulations, and, currently, the Bank of Thailand allows only the following cases.

(2.1.1) Securities companies and asset management companies to hold those securities for hedging purposes or those classified into the trading book.

(2.1.2) Life insurance companies holding those securities to gain returns for repayment to the policy holders as specified in the life insurance policies, only for the portion invested in instruments counted as AT1 of other financial institutions or other financial business groups, proportionate to the liabilities items from the insurance policies and liabilities of the investment contracts<sup>4</sup> to the aggregated liabilities and equity of the owner obtained from the life insurance company's financial statements. In this regard, if the parent company wishes to use another method other than the one stipulated by the Bank of Thailand, it shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

The Bank of Thailand reserves rights to give an order on a case-by-case basis, if later found that securities companies, asset management companies or life insurance companies hold the significant amount of those securities or do not comply with the above guidelines.

In other cases, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

(2.2) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, is a seller of credit derivatives, such as issuing credit linked notes or being a seller of credit default swaps linked to securities included in AT1 of other financial institutions or its own financial business group or other financial business groups, the notional amount of those derivatives shall be deducted from AT1 of the financial business group from the first day those derivatives are entered into.

(2.3) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, is a buyer of bond or equity derivatives linked to instruments included in AT1 of other financial institutions or its own financial business group or other financial business groups, the notional amount of those derivatives shall be deducted from AT1 of the financial business group from the first day those derivatives are entered into according to the Bank of Thailand Notification Re: Regulations on Permission for Commercial Banks to Engage in Market Derivatives.

**1.2 Tier 2 capital (T2)**, namely financial instruments that can be included in tier 2 capital, **general provisions**<sup>7</sup> and surplus of provisions after deductions and adjustments as follows:

### 1.2.1 Items that can be included in T2

Items that can be included in T2; which is total capital (TC – which consists of NCI, AT1 and T2) less (i) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties<sup>5</sup> (Surplus TC); and (ii) the amount of NCI and AT1 that have been included in CET1 according to 1.1.1 (1) and AT1 according to 1.1.2 (1). The minimum capital requirement and conservation buffer are equal to 11% of risk-weighted assets.

NCI, AT1 and T2 that can be included in TC according to the first paragraph must have all of the following features:

A. NCI is existed from the preparation of consolidated financial statements according to regulations on consolidated supervision or AT1 of subsidiaries<sup>6</sup> which included in consolidated financial statements according to regulations on consolidated supervision or T2 of subsidiaries<sup>6</sup> which included in consolidated financial statements according to regulations on consolidated supervision.

B. NCI, AT1 and T2 meets all requirements for items that can be included in CET1, AT1 or T2 of a commercial bank on a solo basis.

C. NCI, AT1 or T2 does not relate neither to the commercial bank nor the parent company<sup>1</sup>.

Surplus TC can be calculated by the following formula:

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<sup>7</sup> Please refer to the definition of “general provisions” as specified in the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks

$$\text{Surplus TC} = \text{TC Proportion} \times \left\{ \text{CET1 + AT1 + T2} - \text{Subsidiary TC Capital} \right\}$$

Where: TC Proportion =  $\frac{\text{TC attributable to non-controlling shareholders and external parties}}{\text{Total TC of Subsidiary}}$

CET1 + AT1 + T2 = CET1, AT1 and T2 that can be included in TC according to the second paragraph

Subsidiary TC Capital = The lesser of:

- 11% of risk-weighted assets of Subsidiary from separate financial statements; or
- 11% of risk-weighted assets of Subsidiary from consolidated financial statements

On this, for NCI according to accounting standards and financial reporting standards under the joint control with the parent company, such as there is an agreement of joint control or business strategies are jointly developed, the commercial bank or parent company may include that NCI in its capital in full, if approval is granted by the Bank of Thailand. In such case, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

### 1.2.2 General provision

General provision that a company within and outside the solo consolidation have set aside according to the Bank of Thailand Notification Re: Guidelines on Asset Classification and Provisioning of Financial Institutions, or according to regulations as specified by specific supervisory agency of that company, or accounting standards and financial reporting standards, can be included in tier 2 capital. On this, each company outside the solo consolidation must receive an approval to apply guidelines on asset classification and provisioning from the Bank of Thailand. In requesting the approval, the parent company shall submit an approval request together with details of the approach that each company outside the solo consolidation will use for asset classification and provisioning to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

### 1.2.3 Deductions from tier 2 capital

Items as specified in (1) – (3) below shall be deducted from tier 2 capital; gross of investments in financial instruments included in tier 2 capital of a

company operating financial and supporting business<sup>2</sup> only in case of holding shares of no more than 10% of total paid-up shares of that company according to the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks, where the total amount of investments shall be compared with 10% of net CET1 and only the amount that exceeds 10% of net CET 1 shall be deducted from capital:

(1) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, holds financial instruments included in T2 of other financial institutions or its own financial business group or other financial business groups, the investments in those securities will be deducted from T2 of financial business group with book value in accordance with accounting standards and financial reporting standards. This is except the case where the holding of those securities is ordinary business of the company, as approved by its specific supervisory agency, for hedging purposes or for short-term trading of securities in a high liquid market, or to gain returns for repayment to the policy holders as specified in the life insurance policies. On this, it must not be with the intention to avoid double gearing regulations, and, currently, the Bank of Thailand allows only the following cases.

(1.1) Securities companies and asset management companies to hold those securities for hedging purposes or those classified into the trading book.

(1.2) Life insurance companies holding those instruments to gain returns for repayment to the policy holders as specified in the life insurance policies, only for the portion invested in instruments counted as T2 of other financial institutions or other financial business groups, proportionate to the liabilities items from the insurance policies and liabilities of the investment contracts<sup>4</sup> to the aggregated liabilities and equity of the owner obtained from the life insurance company's financial statements. In this regard, if the parent company wishes to use another method other than the one stipulated by the Bank of Thailand, it shall submit an approval request for an approval to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

The Bank of Thailand reserves rights to give an order on a case-by-case basis, if later found that securities companies, asset management companies or life insurance companies hold the significant amount of those securities or do not comply with the above guidelines.

In other cases, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case

basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

(2) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, is a seller of credit derivatives, such as issuing credit linked notes or being a seller of credit default swaps linked to securities included in T2 of other financial institutions or its own financial business group or other financial business groups, the notional amount of those derivatives shall be deducted from T2 of the financial business group from the first day those derivatives are entered into.

(3) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, is a buyer of bond or equity derivatives linked to securities included in T2 of other financial institutions or its own financial business group or other financial business groups, the notional amount of those derivatives shall be deducted from T2 of the financial business group from the first day those derivatives are entered into according to the Bank of Thailand Notification Re: Regulations on Permission for Commercial Banks to Engage into Market Derivatives.

For items that a commercial bank on a solo basis must receive an approval from the Bank of Thailand before including them in its capital, the financial business group must also receive an approval for those items as well.

For items to be included in CET1, T1, T2 or deducted from capital, they shall be included or deducted according to the timeframes as specified in the Bank of Thailand Notification Re: Regulations on Components of Capital for Locally Incorporated Banks or other related Bank of Thailand Notifications, except the following items.

1. For items according to 1.1.1 (1), 1.1.2 (1) and 1.2.1, surplus CET1, surplus T1 and surplus TC shall be phased out over a 5-year period starting from 1 January 2014 by the ratio of 20%, 40%, 60%, 80% and 100% each year respectively.

2. The following items shall be included in or deducted from capital within the specified timeframes as follows:

Item	Immediately	Quarterly
<b>1. Tier 1 capital</b>		
<b>1.1 Common equity tier 1 (CET1)</b>		
Items of a subsidiary that operates commercial bank business – only non-controlling interests that can be included in CET1 of the financial business group (Clause 1.1.1 (1))		/

Item	Immediately	Quarterly
<b>CET1 adjustments and deductions</b>		
(1) Gains (losses) from changes in fair values of derivatives for cash flow hedges (Cash flow hedge reserve)		
(1.1) Those of the commercial bank or parent company		/
(1.2) Those of non-controlling shareholders		/
(2) Investments in equity securities and warrants for equity shares included in CET1 of other financial institutions or other financial business groups, other than cross-holding of shares between the commercial bank and companies operating financial business or supporting business, as well as investments in warrants for equity shares of those companies, and investments in equity securities, including investments in warrants for equity shares of finance companies and credit foncier companies (Clause 1.1.1 (2))	/	
(3) Values of underlying equity securities included in CET1 of other financial institutions or other financial business groups in case of buying equity derivatives (Clause 1.1.1 (2))	/	
<b>1.2 Additional tier 1 capital (AT1)</b>		
Items of subsidiaries only those attributable to non-controlling shareholders and external parties that can be included in AT1 of the financial business group (Clause 1.1.2 (1))		/
<b>AT1 deductions, which are financial instruments</b>		
(1) Investments in financial instruments included in AT1 , which are financial instruments, of other financial institutions or other financial business groups, other than cross-holding of AT1 between the commercial bank and companies operating financial business or supporting business, and investments included in tier 1 capital of commercial bank or other finance companies (Clause 1.1.2 (2))	/	
(2) Values of underlying financial instruments included in AT1, which are financial instruments, of other financial institutions or other financial business groups in case of buying bond or equity derivatives; and being a seller of credit derivatives (Clause 1.1.2 (2))	/	
<b>2. Tier 2 capital (T2)</b>		
(1) Items of subsidiaries only those attributable to non-controlling shareholders and external parties that can be included in T2 of the financial business group (Clause 1.2.1)		/
<b>T2 deductions</b>		

Item	Immediately	Quarterly
(1) Investments in financial instruments included in T2 of other financial institutions or other financial business groups, other than cross-holding of T2 between the commercial bank and companies operating financial business and supporting business, and investments in financial instruments included in T2 of commercial bank or other finance companies (Clause 1.2.3)	/	
(2) Values of underlying financial instruments included in T2 of other financial institutions or other financial business groups in case of buying bond or equity derivatives and being a seller of credit derivatives (Clause 1.2.3)	/	

On this, if a financial business group intends to use the same timeframes for inclusion or deduction of Item 1.1 (1.1) and (1.2) in/from capital above as those specified in the regulations on a solo basis, for net profits after being apportioned according to the resolution of the shareholders' meeting or company's rules, it is allowed to do so, such as including or deducting the item in/from capital on a half-yearly basis, however, those timeframes must be consistently applied.

The Bank of Thailand may impose any other conditions on the calculation of capital requirement of a financial business group afterwards, which may be general conditions and specific conditions for a particular case.

## 2. Capital components for a financial business group of credit foncier company

Capital components for a financial business group of credit foncier company can be classified as those of the solo consolidation and those of the full consolidation, which, for both consolidation levels, consist of capital and deductions from capital as specified in the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies. And, the financial business group shall also comply with additional regulations as specified by the Bank of Thailand as follows:

**2.1 Deductions from capital;** the following items shall be deducted from capital of the financial business group in full:

(1) If a company within the financial business group, where the investment in that company has not been deducted from capital of the financial business group<sup>3</sup>, holds equity or debt securities included in capital of other financial institutions, or own or other financial business groups, the investments in those securities will be deducted from capital of the financial business group with book value in accordance with accounting standards and financial reporting standards. This is except the case

where the holding of those securities is ordinary business of the company, as approved by its specific supervisory agency, for hedging purposes or for short-term trading of securities in a high liquid market, or to gain returns for repayment to the policy holders as specified in the life insurance policies. On this, it must not be with the intention to avoid double gearing regulations, and, currently, the Bank of Thailand allows only the following cases.

(1.1) Securities companies and asset management companies to hold those securities for hedging purposes or those classified into the trading book.

(1.2) Life insurance companies holding those securities to gain returns for repayment to the policy holders as specified in the life insurance policies, only for the portion invested in equity instruments or debt instruments counted as capital of other financial institutions or other financial business groups, proportionate to the liabilities items from the insurance policies and liabilities of the investment contracts<sup>4</sup> to the aggregated liabilities and equity of the owner obtained from the life insurance company's financial statements. In this regard, if the parent company wishes to use another method other than the one stipulated by the Bank of Thailand, it shall submit an approval request for an approval to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

The Bank of Thailand reserves rights to give an order on a case-by-case basis, if later found that securities companies, asset management companies or life insurance companies hold the significant amount of those securities or do not comply with the above guidelines.

In other cases, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly been received.

(2) If a company within the financial business group that is included in the consolidated financial statements is a seller of credit derivatives, such as issuing credit linked notes or being a seller of credit default swaps linked to debt securities included in capital of other financial institutions or other financial business groups, the notional amount of those derivatives shall be deducted from capital of the financial business group from the first day those derivatives are entered into.

(3) If a company within the financial business group that is included in the consolidated financial statements is a buyer of bond or equity derivatives linked to

bond or equity securities included in capital of other financial institutions or other financial business groups, the notional amount of those derivatives shall be deducted from capital of the financial business group from the first day those derivatives are entered into.

(4) Investments in subsidiaries within the financial business group that directly or indirectly operate non-life insurance and life insurance business

(5) Investments in subsidiaries within the financial business group, apart from those as specified in (4), that the parent company holds shares, both directly and indirectly, of less than 50% of total paid-up shares of those companies

(6) Investments in companies outside the financial business group that the parent company holds shares, both directly and indirectly, of more than 10% of total paid-up shares of those companies, except investments in the following companies:

(6.1) A company that operates supporting business that facilitates the operations of a financial institution and the overall financial institution system, such as National Credit Bureau Co., Ltd., National ITMX Co., Ltd., SWIFT Company, and Thai Rating and Information Services Co., Ltd.

(6.2) A company acquired from debt restructuring, debt payment, debt settlement or credit guarantee as approved by the Bank of Thailand

(6.3) A liquidated company

The investments according to clause (4) – (6) shall be deducted from capital of the financial business group with value in accordance with accounting standards and financial reporting standards on the preparation of consolidated financial statements, in proportion to shares directly and indirectly held by the financial institution or the parent company. On this, if the investment in a particular company has already been deducted from the capital, the investments of that company in other companies may not be further deducted from the capital.

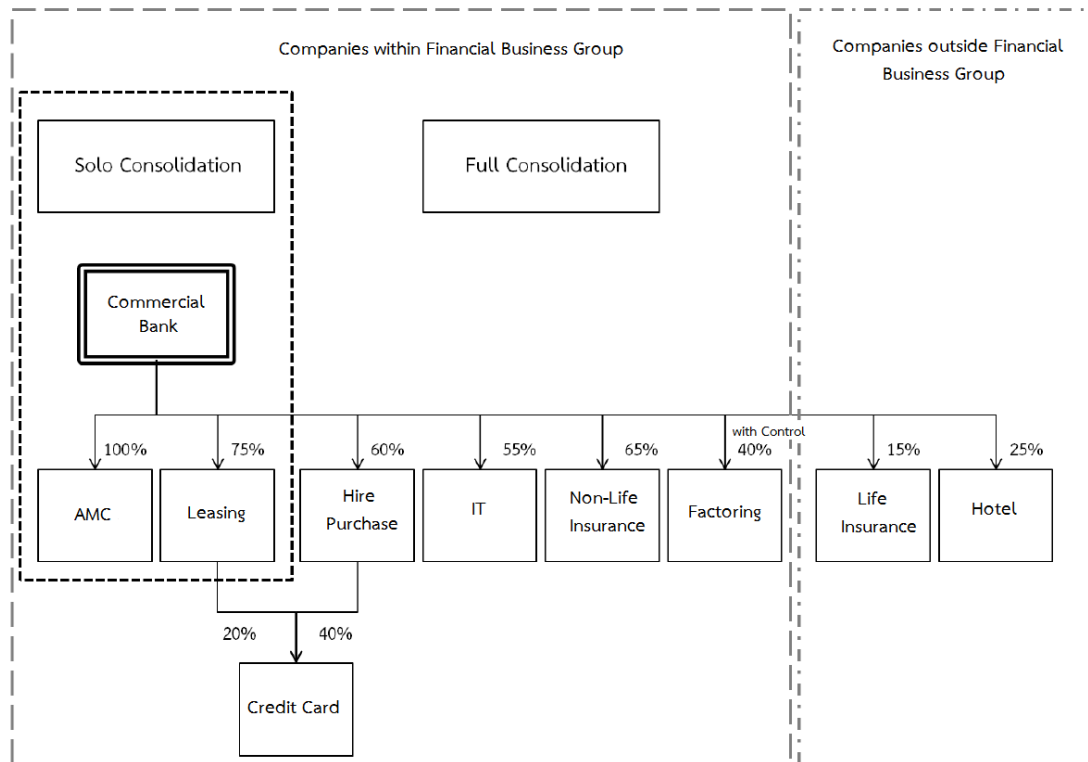
**2.2 Non-controlling interest (NCI)**, which is existed from preparation of consolidated financial statements according to regulations on consolidated supervision, shall be included in capital, only for NCI that does not relate to the financial institution or parent company. For inclusion of NCI and deduction of items in/from capital, the same regulations as specified for the credit foncier company or the parent company of financial business group shall be applied.

Timeframes for inclusion or deduction of any items in/from capital shall be in accordance with the Bank of Thailand Notification Re: Regulations on Supervision of Capital and Liquid Coverage Ratio (LCR) for Credit Foncier Companies. However, items according to clause (1) – (6) shall be immediately deducted from capital.

The Bank of Thailand may impose any other conditions on the calculation of capital requirement of a financial business group afterwards, which may be general conditions and specific conditions for a particular case.

## Examples for the Preparation of Consolidated Financial Statements and the Calculation of Capital for a Financial Business Group of Commercial Bank

### 1. The parent company is a commercial bank



According to the above example, only companies within the financial business group that operate financial business or supporting business over which the commercial bank has control will be included in consolidated financial statements.

- Companies within the financial business group are Asset Management Company (AMC), Leasing Company, Hire Purchase Company, IT Company, Non-Life Insurance Company, Factoring Company (the commercial bank holds shares of only 40% but having control over it), and Credit Card Company (the commercial bank holds shares indirectly through Leasing Company and Hire Purchase Company for a total of 60%)

- Companies outside the financial business group are Life Insurance Company and Hotel Company – even though Life Insurance Company operates financial business but the commercial bank does not have control over it, while Hotel Company, which is considered other business, the commercial bank must reduce its shares to be no more than 10%.

Examples of financial data of companies within the financial business group to be included in the preparation of consolidated financial statements and the calculation of eligible capital for the financial business group

Separate financial statements of companies within the financial business group

(unit: million Baht)

Commercial Bank			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in <sup>1</sup> AMC	1,000	Liabilities	40,000
Leasing company	750	Shareholders' equity	10,000
Hire purchase company	180		
IT company	110		
Non-life insurance company	1,040		
Life insurance company	300		
Factoring company	160		
Hotel company	75		
Other assets	46,385		
	<b>50,000</b>		<b>50,000</b>

Asset Management Company (AMC)			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Deferred tax assets	10	Liabilities	9,000
Other assets	9,990	Shareholders' equity	1,000
	<b>10,000</b>		<b>10,000</b>

Leasing Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in Credit Card Company	140	Liabilities	1,500
Deferred tax assets	10	Shareholders' equity	1,000
Other assets	2,350		
	<b>2,500</b>		<b>2,500</b>

Hire Purchase Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in Credit Card Company	280	Liabilities	700
Deferred tax assets	20	Shareholders' equity	300
Other assets	700		
	<b>1,000</b>		<b>1,000</b>

IT Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Intangible assets	50	Liabilities	300
Other assets	450	Shareholders' equity	200
	<b>500</b>		<b>500</b>

Credit Card Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	1,500	Liabilities	800
		Shareholders' equity	700
	<b>1,500</b>		<b>1,500</b>

Factoring Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	700	Liabilities	300
		Shareholders' equity	400
	<b>700</b>		<b>700</b>

Non-Life Insurance Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	5,000	Liabilities	3,400
		Shareholders' equity	1,600
	<b>5,000</b>		<b>5,000</b>

Life Insurance Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	15,000	Liabilities	13,000
		Shareholders' equity	2,000
	<b>15,000</b>		<b>15,000</b>

Hotel Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	800	Liabilities	500
		Shareholders' equity	300
	<b>800</b>		<b>800</b>

<sup>1</sup> Investments of Commercial Bank are recognized by the equity methods except investments in Life Insurance Company, which are recognized by relevant accounting standards and financial reporting standards

## Intra-group lending, investment and contingent liabilities

(unit: million Baht)

Company that gives a loan/ investment/ contingent liabilities	Company that receives a loan/ investment/ contingent liabilities		Investment		Lending	contingent liabilities	Total
	Company	Shareholders' equity	%	Amount			
Commercial Bank	AMC	1,000	10 0	1,000			1,000
Commercial Bank	Leasing	1,000	75	750			750
Commercial Bank	Hire Purchase	300	60	180	500	20	700
Commercial Bank	IT	200	55	110			110
Leasing	Credit Card	700	20	140	50		190
Hire Purchase	Credit Card	700	40	280			280
Commercial Bank	Non-Life Insurance	1,600	65	1,040			1,040
Commercial Bank	Factoring	400	40	160			160
Commercial Bank	Life Insurance	2,000	15	300			300
Commercial Bank	Hotel	300	25	75			75

**Provided that:**

- Other assets of the commercial bank, assets and other assets of subsidiaries receive a risk weight of 100%
- Intra-group transactions consist only of investments and loans
- Shareholders' equity consists only of share capital and retained earnings which are included in CET1
- Life Insurance Company is not listed on the Stock Exchange of Thailand

**1.1 Solo consolidation**

The commercial bank must prepare consolidated financial statements that include subsidiaries which operate granting of credits or comparable business that the commercial bank directly holds shares of 75% or more and must calculate eligible capital as follows:

Company	The preparation of financial statements and calculation of eligible capital
AMC / Leasing	To be included in consolidated financial statements for the calculation of solo consolidation capital requirements

Company	The preparation of financial statements and calculation of eligible capital
Hire Purchase / IT / Credit Card	To be excluded from consolidated financial statements at the solo consolidation basis as they are in the full consolidation, but the investments in each particular company shall be used for the calculation of risk-weighted assets
Non-Life Insurance / Life Insurance / Factoring	<p>To be excluded from consolidated financial statements as:</p> <ul style="list-style-type: none"> <li>- Non-life and life insurance companies are exempted from the preparation of consolidated financial statements according to regulations on the calculation of capital requirements for financial business group</li> <li>- The commercial bank holds shares in Factoring Company of less than 50% of total paid-up shares</li> </ul> <p>The investments in the all above companies shall be used for the calculation of threshold deduction – where the total investments in those companies will be compared with 10% of net CET1 of the solo consolidation, and, the portion that exceeds 10% of net CET1 will be deducted from CET1 of the solo consolidation, while the portion that does not exceed 10% of net CET1 will be used for the calculation of risk-weighted assets by assigning a risk weight of 250% as they are the investments in companies that operate financial business that the commercial bank holds shares of more than 10% of total paid-up shares</p>
Hotel	To be excluded from consolidated financial statements as they are the investments in equity securities of a company that does not operate financial business or supporting business that the commercial bank holds shares of more than 10% of total paid-up shares; however, the investments in such company will be used for the calculation of risk-weighted assets by assigning a risk-weight of 1250%

### 1.1.1 Preparation of consolidated financial statements for the solo consolidation

According to the structure of the financial business group and financial data of companies within the financial business group, consolidated financial statements are as follows:

(unit: Million Baht)

	Commercial Bank	AMC	Leasing	Total	Intra-group transactions		Consolidated financial statements
Assets	50,000	10,000	2,500	62,500		1,750 <sup>(1)</sup>	60,750
Liabilities	40,000	9,000	1,500	50,500	-	-	50,500
Shareholders' equity*	10,000	1,000	1,000	12,000	2,000 <sup>(2)</sup>		10,000
Non-controlling interests						250 <sup>(3)</sup>	250
<b>Total liabilities and shareholders' equity</b>							<b>60,750</b>

\* excluding non-controlling interests

#### Calculation of intra-group transactions

(1) Eliminate intra-group investments (assets), by the equity method, in AMC and Leasing Company

= investments in AMC + investments in Leasing Company

= 1,000 + 750 = 1,750

(2) Eliminate intra-group shareholding

= shareholders' equity of AMC + shareholders' equity of Leasing

Company

= 1,000 + 1,000 = 2,000

(3) Account for non-controlling interests existed from the preparation of consolidated financial statements

= ratio of NCI x shareholders' equity of Leasing Company

= 25% x 1,000 = 250

#### Recording for intra-group transactions for the preparation of consolidated financial statements

Dr. Shareholders' equity	2,000
Cr. Investments	1,750
Non-controlling interests	250

### 1.1.2 Calculation of eligible capital for the solo consolidation

According to the above consolidated financial statements, eligible capital can be calculated as follows:

#### (1) CET1

##### A. CET1 before adjustments and deductions

$$= 10,000 + \text{NCI that can be included in CET1}$$

$$= 10,000 + 0 = 10,000 \text{ million Baht}$$

NCI that can be included in CET1 is equal to 0 as NCI that can be included in CET1 must be NCI of subsidiaries within the solo consolidation that operate only commercial bank business. Therefore, in case where the parent company is a commercial bank, there is no NCI that can be included in CET1. However, a commercial bank may include NCI of subsidiaries within the solo consolidation in AT1 if they have the features as specified.

##### B. Adjustments and deductions

(i) Deferred tax assets of AMC and Leasing Company

$$= 10 + 10 = 20 \text{ million Baht}$$

(ii) Investments in equity securities that the commercial bank holds shares of more than 10% of total paid-up shares of the companies that operate financial business and supporting business which are not included in consolidated financial statements<sup>2</sup>:

= the amount of those investments that exceeds 10% of net CET1

= (investments in Non-Life Insurance Company + investments in Life Insurance Company + investments in Factoring Company) – 10% x (CET1 according to A. – deductions from CET1, which are deferred tax assets of AMC and Leasing Company according to B.(i))

$$= (1,040 + 300 + 160) - [10\% \times (10,000 - 20)]$$

$$= 1,500 - 998 = 502 \text{ million Baht}$$

##### C. CET1 of the solo consolidated group

= CET1 before adjustments and deductions (A.) – adjustments and deductions (B.)

$$= 10,000 - 20 - 502 = 9,478 \text{ million Baht}$$

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<sup>2</sup> is part of the calculation of threshold deduction which refers to details of the calculation of threshold deduction as specified in the Bank of Thailand Notification Re: Capital Components of Locally Registered Commercial Banks

**(2) T1 of the solo consolidation**

T1 of the solo consolidation consists of CET1 and AT1 of companies within the solo consolidation. In this example, CET1 and AT1 of the subsidiaries included in consolidated financial statements that can be included in T1 of the solo consolidation are those of Leasing Company since it is a subsidiary that the commercial bank holds shares of less than 100% (75%).

**A. CET1 of the solo consolidation**

= CET1 of the solo consolidation according to 1.1.2 (1) C.

= 9,478 million Baht

**B. AT1 of the solo consolidation**

AT1 of the solo consolidation is T1 deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1); and (2) NCI that has already been included in CET1 of the solo consolidation. The calculation of AT1 of the subsidiary is as follows:

(i) Minimum capital requirement and conservation buffer

(Subsidiary T1 capital)

= The lesser of 8.5% of risk-weighted assets of subsidiary from separate financial statements or 8.5% of risk-weighted assets of subsidiary from consolidated financial statements (in this case, 8.5% of risk-weighted assets of subsidiary from separate financial statements is used)

= 8.5% x risk-weighted assets of Leasing Company<sup>3</sup>

= 8.5% x [(2,490 x 100%) + (10 x 0%)] = 211.65 million Baht

(ii) The amount that exceeds minimum capital requirement

and conservation buffer attributable to non-controlling shareholders and external parties

(Surplus T1)

$$\text{Surplus T1} = \text{T1 Proportion} \times \left\{ \text{CET1+AT1} - \text{Subsidiary T1 Capital} \right\}$$

= 25% x (1,000 – 211.65) = 197.09 million Baht

<sup>3</sup> In this example, a risk weight of 100% is assigned.

Therefore, NCI and AT1 of the subsidiary included in consolidated financial statements that can be included in AT1 of the solo consolidation:

$$= T1 - \text{Surplus } T1 - \text{NCI that has already been included in CET1}$$

$$= (25\% \times 1,000) - 197.09 - 0 = 52.91 \text{ million Baht}$$

### C. T1 of the solo consolidation

= CET1 of the solo consolidation according to 1.1.2 (2) A. +  
AT1 of the solo consolidation according to 1.1.2 (2) B.

$$= 9,478 + 52.91 = 9,530.91 \text{ million Baht}$$

### (3) TC of the solo consolidation

TC of solo consolidation consists of T1 and T2 of companies within the solo consolidation. In this example, T1 and T2 of the subsidiaries included in consolidated financial statements that can be included in TC of the solo consolidation are those of Leasing Company since it is a subsidiary that the commercial bank holds shares of less than 100% (75%).

#### A. T1 of the solo consolidation

$$= T1 \text{ of the solo consolidation according to 1.1.2 (2) C.}$$

$$= 9,530.91 \text{ million Baht}$$

#### B. T2 of the solo consolidation

T2 of the solo consolidation is TC deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC); and (2) NCI and AT1 that have already been included in CET1 and AT1 of the solo consolidation. The calculation of T2 of the subsidiary is as follows:

(i) Minimum capital requirement and conservation buffer  
(Subsidiary TC capital)

= The lesser of 11% of risk-weighted assets of the subsidiary from separate financial statements or 11% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 11% of risk-weighted assets of the subsidiary from separate financial statements is used)

$$= 11\% \times \text{risk-weighted assets of Leasing Company}^3$$

$$= 11\% \times [(2,490 \times 100\%) + (10 \times 0\%)] = 273.90 \text{ million Baht}$$

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC)

$$\boxed{\text{Surplus TC}} = \boxed{\text{TC Proportion}} \times \left\{ \boxed{\text{CET1+AT1 +T2}} - \boxed{\text{Subsidiary TC Capital}} \right\}$$

$$= 25\% \times (1,000 - 273.90) = 181.53 \text{ million Baht}$$

Therefore, NCI, AT1 and T2 of the subsidiary included in consolidated financial statements that can be included in T2 of the solo consolidation:

= TC – Surplus TC – NCI and AT1 that have already been included in CET1 and AT1

$$= (25\% \times 1,000) - 181.53 - 52.91 = 15.56 \text{ million Baht}$$

### C. TC of the solo consolidation

= T1 of the solo consolidation according to 1.1.2 (3) A. + T2 of the solo consolidation according to 1.1.2 (3) B.

$$= 9,530.91 + 15.56 = 9,546.47 \text{ million Baht}$$

### 1.1.3 Calculation of risk-weighted assets

(1) The total amount of investments in equity securities which commercial bank holds shares of more than 10% of total paid-up shares of the companies that operate financial business and supporting business that not included in consolidated financial statements, for portion that does not exceed 10% of net CET1, shall be used for the calculation of risk-weighted assets by assigning a risk-weight of 250%<sup>4</sup> (data from 1.1.2 (1) B. (ii))

$$= [10\% \times (10,000 - 20)] \times 250\%$$

$$= 998 \times 250\% = 2,495 \text{ million Baht}$$

(2) Investments in Hotel Company, which is the investment in equity security of company that does not operate financial business or supporting business that the commercial bank holds shares of more than 10% of paid-up shares shall be used for the calculation of risk-weighted assets by assigning a risk-weight of 1250%<sup>2</sup>

$$= 75 \times 1,250\% = 937.50 \text{ million Baht}$$

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<sup>4</sup> According to the regulations as specified in the Bank of Thailand Notification Re: Guidelines on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardized Approach (SA)

(3) The remaining amount of assets from consolidated financial statements of the solo consolidation, apart from (1) and (2), shall be assigned relevant risk weights – in this example, a risk weight of 100% shall be assigned to other assets

$$= [(60,750 - 1,040 - 300 - 160 - 75 - 20) \times 100\%] + (20 \times 0\%)$$

$$= 59,155 \text{ million Baht}$$

(4) Contingent liabilities of 20 million Baht shall be multiplied by credit conversion factor (CCF) and relevant risk weight – in this example, CCF of contingent liabilities equal to 100% and risk weight of counterparty equal to 100%

$$= 20 \times 100\% \times 100\% = 20 \text{ million Baht}$$

Therefore, risk-weighted assets of the solo consolidation

$$= 2,495 + 937.50 + 59,155 + 20 = 62,607.50 \text{ million Baht}$$

#### 1.1.4 Calculation of BIS ratio

The ratio of total capital of the solo consolidation to total risk-weighted assets of the solo consolidation =  $(9,546.47 / 62,607.50) \times 100 = 15.25\%$

## 1.2 Full consolidated group

The commercial bank must prepare consolidated financial statements that include subsidiaries that the commercial bank holds shares of at least 50% of total paid-up shares except Non-Life Insurance Company (In this example, Life Insurance Company is not a company within the financial business group) and must calculate eligible capital as follows:

Company	The calculation of eligible capital
AMC / Leasing / Hire Purchase / IT / Credit Card	To be included in consolidated financial statements for the calculation of full consolidation capital requirements
Non-life Insurance / Life Insurance / Factoring	To be excluded from consolidated financial statements as: <ul style="list-style-type: none"> <li>- Non-life and life insurance companies are exempted from the preparation of consolidated financial statements according to regulations on the calculation of capital requirements for financial business group</li> <li>- The commercial bank holds shares in Factoring Company of less than 50% of total paid-up shares</li> </ul> <p>The investments in the all above companies shall be used for the calculation of threshold deduction – where the total investments in those companies will be compared with 10% of net CET1 of the full</p>

Company	The calculation of eligible capital
	consolidation, and, the portion that exceeds 10% of net CET1 will be deducted from CET1 of the full consolidation, while the portion that does not exceed 10% of net CET1 will be used for the calculation of risk-weighted assets by assigning a risk weight of 250% as they are the investments in companies that operate financial business that the commercial bank holds shares of more than 10% of total paid-up shares
Hotel	To be excluded from consolidated financial statements as they are the investments in equity securities of a company that does not operate financial business or supporting business that the commercial bank holds shares of more than 10% of total paid-up shares; however, the investments in such company will be used for the calculation of risk-weighted assets by assigning a risk-weight of 1250%

### 1.2.1 Preparation of consolidated financial statements for the full consolidation

According to the structure of the financial business group and financial data of companies within the financial business group, consolidated financial statements are as follows:

(unit: Million Baht)

	Commercial Bank	AMC	Leasing	Hire Purchase	IT	Credit Card	Total	Intra-group transactions		Consolidated financial statements
Assets	50,000	10,000	2,500	1,000	500	1,500	65,500		3,010 <sup>(1)</sup>	62,490
Liabilities	40,000	9,000	1,500	700	300	800	52,300	550 <sup>(2)</sup>	-	51,750
Shareholders' equity*	10,000	1,000	1,000	300	200	700	13,200	3,200 <sup>(3)</sup>		10,000
Non-controlling interests									740 <sup>(4)</sup>	740
<b>Total liabilities and shareholders' equity</b>										<b>62,490</b>

\* excluding non-controlling interests

Calculation of intra-group transactions

(1) Eliminate intra-group investments and lending (assets), by the equity method, in AMC, Leasing Company, Hire Purchase Company, IT Company and Credit Card Company

$$= (\text{investments in AMC} + \text{investments in Leasing Company} + \text{investments in Hire Purchase Company} + \text{investments in IT Company} + \text{investments in Credit Card Company}) + (\text{lending of Commercial Bank} + \text{lending of Leasing Company})$$

$$= [1,000 + 750 + 180 + 110 + (140 + 280)] + (500 + 50) = 3,010$$

(2) Eliminate intra-group borrowing

$$= \text{loans of Hire Purchase Company} + \text{loans of Credit Card Company}$$

$$= 500 + 50 = 550$$

(3) Eliminate intra-group shareholding

$$= \text{shareholders' equity of the subsidiaries} = 1,000 + 1,000 + 300 + 200 + 700$$

$$= 3,200$$

(4) Account for non-controlling interests existed from the preparation of consolidated financial statements

$$= (\text{ratio of NCI} \times \text{shareholders' equity of Leasing Company}) + (\text{ratio of NCI} \times \text{shareholders' equity of Hire Purchase Company}) + (\text{ratio of NCI} \times \text{shareholders' equity of IT Company}) + (\text{ratio of NCI} \times \text{shareholders' equity of Credit Card Company})$$

$$= (25\% \times 1,000) + (40\% \times 300) + (45\% \times 200) + (40\% \times 700) = 740$$

Recording for intra-group transactions for the preparation of consolidated financial statements

Dr. Borrowing	550
Cr. Lending	550
Dr. Shareholders' equity	3,200
Cr. Investments	2,460
Non-controlling interests	740

**1.2.2 Calculation of eligible capital for the full consolidation**

According to the above consolidated financial statements, eligible capital can be calculated as follows:

**(1) CET1****A. CET1 before adjustments and deductions**

= 10,000 + NCI that can be included in CET1

= 10,000 + 0 = 10,000 million Baht

NCI that can be included in CET1 is equal to 0 as NCI that can be included in CET1 must be NCI of subsidiaries within the full consolidation that operate only commercial bank business. Therefore, in case where the parent company is a commercial bank, there is no NCI that can be included in CET1. However, a commercial bank may include NCI of subsidiaries within the full consolidation in AT1 if they have the features as specified.

**B. Adjustments and deductions**

(i) Deferred tax assets of AMC, Leasing Company and Hire Purchase Company = 10 + 10 + 20 = 40 million Baht

(ii) Intangible assets of IT Company = 50 million Baht

(iii) Investments in equity securities that the commercial bank holds shares of more than 10% of total paid-up shares of the companies that operate financial business and supporting business which are not included in consolidated financial statements<sup>2</sup>:

= the amount of those investments that exceeds 10% of net CET1

= (investments in Non-Life Insurance Company + investments in Life Insurance Company + investments in Factoring Company) – 10% x (CET1 according to A. – deductions from CET1, which are deferred tax assets of AMC, Leasing Company and Hire Purchase Company, and intangible assets of IT Company according to B. (i) and (ii))

= (1,040 + 300 + 160) – [10% x (10,000 – 40 – 50)]

= 1,500 – 991 = 509 million Baht

**C. CET1 of the full consolidation**

= CET1 before adjustments and deductions (A.) – adjustments and deductions (B.)

= 10,000 – 40 – 50 – 509 = 9,401 million Baht

**(2) T1 of the full consolidation**

T1 of the full consolidation consists of CET1 and AT1 of companies within the full consolidation. In this example, CET1 and AT1 of the subsidiaries included in consolidated financial statements that can be included in T1 of the full consolidation are those of Leasing Company, Hire Purchase Company, IT Company and Credit Card Company since they are subsidiaries that the commercial bank holds shares of less than 100%.

**A. CET1 of the full consolidated group**

- = CET1 of the full consolidation according to 1.2.2 (1) C.
- = 9,401 million Baht

**B. AT1 of the full consolidation**

AT1 of the full consolidation is T1 deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1); and (2) NCI that has already been included in CET1 of the full consolidation. The calculation of AT1 of the subsidiaries is as follows:

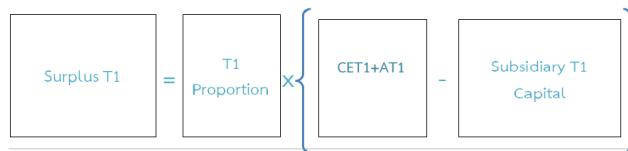
(i) Minimum capital requirement and conservation buffer (Subsidiary T1 capital)

= The lesser of 8.5% of risk-weighted assets of the subsidiary from separate financial statements or 8.5% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 8.5% of risk-weighted assets of the subsidiary from separate financial statements is used).

	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Subsidiary T1 capital	= 8.5% x [(2,490 x 100%) + (10 x 0%)] <sup>3</sup> = 211.65	= 8.5% x [(980 x 100%) + (20 x 0%)] <sup>3</sup> = 83.30	= 8.5% x [(450 x 100%) + (50 x 0%)] <sup>3</sup> = 38.25	= 8.5% x (1,500 x 100%) <sup>3</sup> = 127.50

= 211.65 + 83.30 + 38.25 + 127.50 = 460.70 million Baht

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1)



	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Surplus T1	= 25% x (1,000 – 211.65) = 197.09	= 40% x (300 – 83.30) = 86.68	= 45% x (200 – 38.25) = 72.79	= 40% x (700 – 127.50) = 229.00

= 197.09 + 86.68 + 72.79 + 229 = 585.56 million Baht

Therefore, NCI and AT1 of the subsidiaries included in consolidated financial statements that can be included in AT1 of the full consolidation:

$$\begin{aligned}
 &= \text{T1} - \text{Surplus T1} - \text{NCI that has already been included in CET1} \\
 &= [(25\% \times 1,000) + (40\% \times 300) + (45\% \times 200) + (40\% \times 700)] - \\
 &585.56 - 0 \\
 &= 740 - 585.56 \qquad \qquad \qquad = 154.44 \text{ million Baht}
 \end{aligned}$$

### C. T1 of the full consolidation

= CET1 of the full consolidation according to 1.2.2 (2) A. + AT1 of the full consolidation according to 1.2.2 (2) B.

$$= 9,401 + 154.44 \qquad \qquad \qquad = 9,555.44 \text{ million Baht}$$

### (3) TC of the full consolidation

TC of the full consolidation consists of T1 and T2 of companies within the full consolidation. In this example, T1 and T2 of the subsidiaries included in consolidated financial statements that can be included in TC of the full consolidation are those of Leasing Company, Hire Purchase Company, IT Company and Credit Company since they are subsidiaries within the full consolidated group that the commercial bank holds shares of less than 100%.

#### A. T1 of the full consolidation

= T1 of the full consolidation according to 1.2.2 (2) C.

$$= 9,555.44 \text{ million Baht}$$

#### B. T2 of the full consolidation

T2 of the full consolidation is TC deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC); and (2) NCI and AT1 that have already been included in CET1 and AT1 of the full consolidation. The calculation of T2 of the subsidiaries is as follows:

(i) Minimum capital requirement and conservation buffer  
(Subsidiary TC capital)

= The lesser of 11% of risk-weighted assets of the subsidiary from separate financial statements or 11% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 11% of risk-weighted assets of the subsidiary from separate financial statements is used)

	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Subsidiary TC capital	$= 11\% \times [(2,490 \times 100\%) + (10 \times 0\%)]^3$ $= 273.90$	$= 11\% \times [(980 \times 100\%) + (20 \times 0\%)]^3$ $= 107.80$	$= 11\% \times [(450 \times 100\%) + (50 \times 0\%)]^3$ $= 49.50$	$= 11\% \times (1,500 \times 100\%)^3$ $= 165.00$

$$= 273.90 + 107.80 + 49.50 + 165.00 = 596.20 \text{ million Baht}$$

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC)

$$\text{Surplus TC} = \text{TC Proportion} \times \left\{ \text{CET1+AT1 +T2} - \text{Subsidiary TC Capital} \right\}$$

	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Surplus TC	$= 25\% \times (1,000 - 273.90)$ $= 181.53$	$= 40\% \times (300 - 107.80)$ $= 76.88$	$= 45\% \times (200 - 49.50)$ $= 67.73$	$= 40\% \times (700 - 165)$ $= 214.00$

$$= 181.53 + 76.88 + 67.73 + 214.00 = 540.14 \text{ million Baht}$$

Therefore, NCI, AT1 and T2 of the subsidiaries included in consolidated financial statements that can be included in T2 of the full consolidation:

= TC – Surplus TC – NCI and AT1 that have already been included in CET1 and AT1

$$= [(25\% \times 1,000) + (40\% \times 300) + (45\% \times 200) + (40\% \times 700)] - 540.14 - 154.44$$

$$= 740 - 540.14 - 154.44 = 45.42 \text{ million Baht}$$

### C. TC of the full consolidation

= T1 of the full consolidation according to 1.2.2 (3) A. + T2 of the full consolidation according to 1.2.2 (3) B.

$$= 9,555.44 + 45.42 = 9,600.86 \text{ million Baht}$$

### 1.2.3 Calculation of risk-weighted assets

(1) The total amount of investments in equity securities which commercial bank holds shares of more than 10% of total paid-up shares of the companies that operate financial business and supporting business that not included in consolidated financial statements, for portion that does not exceed 10% of net CET1, shall be used for the calculation of risk-weighted assets by assigning a risk-weight of 250% (data from 1.2.2 (1) B. (iii))

$$= [10\% \times (10,000 - 40 - 50)] \times 250\%$$

$$= 991 \times 250\% \qquad \qquad \qquad = 2,477.50 \text{ million Baht}$$

(2) Investments in Hotel Company, which is the investment in equity security of company that does not operate financial business or supporting business that the commercial bank holds shares of more than 10% of total paid-up shares shall be used for the calculation of risk-weighted assets by assigning a risk-weight of 1250%

$$= 75 \times 1,250\% \qquad \qquad \qquad = 937.50 \text{ million Baht}$$

(3) The remaining amount of assets from consolidated financial statements of the full consolidation, apart from (1) and (2), shall be assigned relevant risk weights – in this example, a risk weight of 100% shall be assigned to other assets

$$= [(62,490 - 1,040 - 300 - 160 - 75 - 90) \times 100\%] + (90 \times 0\%)$$

$$= 60,825 \text{ million Baht}$$

(4) Contingent liabilities of 20 million Baht shall be multiplied by credit conversion factor (CCF) and relevant risk weight – in this example, CCF of contingent liabilities equal to 100% and risk weight of counterparty equal to 100%

$$= 20 \times 100\% \times 100\% \qquad \qquad \qquad = 20 \text{ million Baht}$$

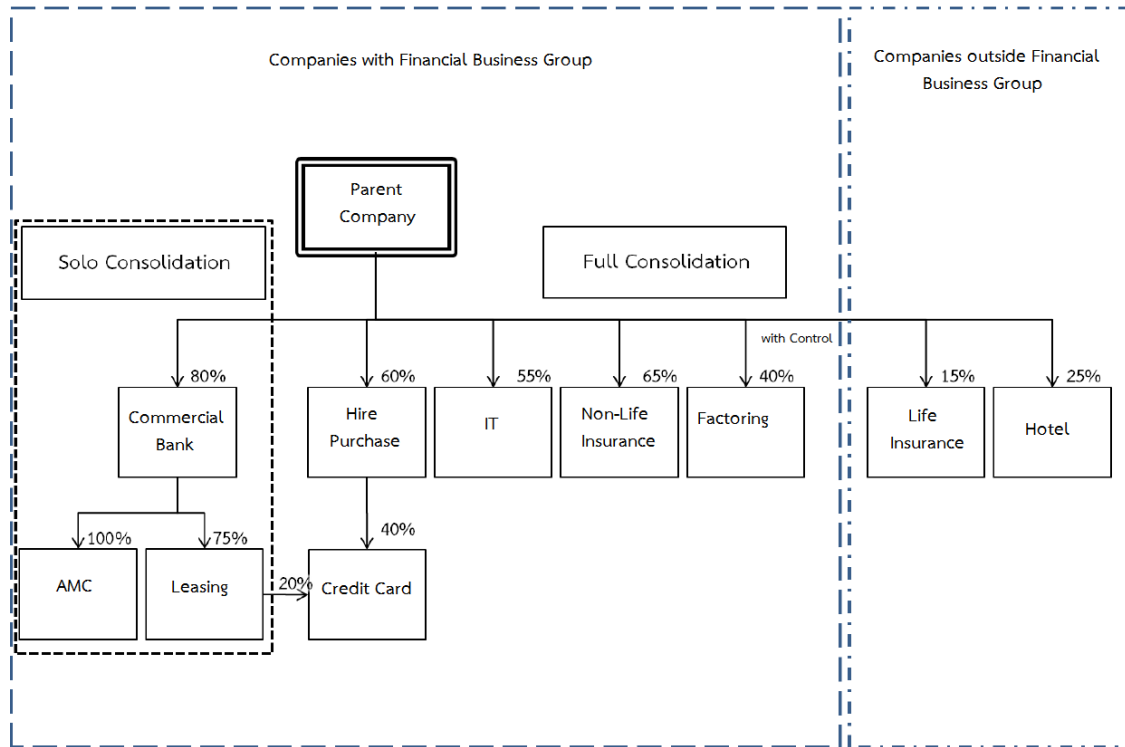
Therefore, risk-weighted assets of the full consolidation

$$= 2,477.50 + 937.50 + 60,825 + 20 \qquad = 64,260 \text{ million Baht}$$

### 1.2.4 Calculation of BIS ratio

The ratio of total capital of the full consolidation to total risk-weighted assets of the full consolidation =  $(9,600.86 / 64,260) \times 100 = 14.94\%$

## 2. The parent company is not a commercial bank (other juristic person)



According to the above example, only companies within the financial business group that operate financial business or supporting business over which the parent company has control will be included in consolidated financial statements.

- Companies within the financial business group are Commercial bank, Asset Management Company (AMC), Leasing Company, Hire Purchase Company, IT Company, Non-Life Insurance Company, Factoring Company (the parent company holds shares of only 40% but having control over it), and Credit Card Company (the parent company holds shares indirectly through Leasing Company and Hire Purchase Company for a total of 60%)

- Companies outside the financial business group are Life Insurance Company and Hotel Company – even though Life Insurance Company operates financial business but the parent company does not have control over it, while Hotel Company, which is considered other business, the parent company must reduce its shares to be no more than 10%.

Examples of financial data of companies within the financial business group to be included in the preparation of consolidated financial statements and the calculation of eligible capital for the financial business group

Separate financial statements of companies within the financial business group

Juristic Person			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in <sup>5</sup>		Liabilities	3,200
Commercial bank	8,000	Shareholders' equity	8,000
Hire purchase company	180		
IT company	110		
Non-life insurance company	1,040		
Life insurance company	300		
Factoring company	160		
Hotel company	75		
Other assets	1,335		
	<b>11,200</b>		<b>11,200</b>

Commercial Bank			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in		Liabilities	40,000
Asset management company	1,000	Shareholders' equity	10,000
Leasing company	750		
Other assets	48,250		
	<b>50,000</b>		<b>50,000</b>

Asset Management Company (AMC)			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Deferred tax assets	10	Liabilities	9,000
Other assets	9,990	Shareholders' equity	1,000
	<b>10,000</b>		<b>10,000</b>

Leasing Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in Credit Card Company	140	Liabilities	1,500
Deferred tax assets	10	Shareholders' equity	1,000
Other assets	2,350		
	<b>2,500</b>		<b>2,500</b>

Hire Purchase Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Investments in Credit Card Company	280	Liabilities	700
Deferred tax assets	20	Shareholders' equity	300
Other assets	700		
	<b>1,000</b>		<b>1,000</b>

IT Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Intangible assets	50	Liabilities	300
Other assets	450	Shareholders' equity	200
	<b>500</b>		<b>500</b>

Credit Card Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	1,500	Liabilities	800
		Shareholders' equity	700
	<b>1,500</b>		<b>1,500</b>

Factoring Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	700	Liabilities	300
		Shareholders' equity	400
	<b>700</b>		<b>700</b>

Non-Life Insurance Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	5,000	Liabilities	3,400
		Shareholders' equity	1,600
	<b>5,000</b>		<b>5,000</b>

Life Insurance Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	15,000	Liabilities	13,000
		Shareholders' equity	2,000
	<b>15,000</b>		<b>15,000</b>

Hotel Company			
<u>Assets</u>		<u>Liabilities and shareholders' equity</u>	
Assets	800	Liabilities	500
		Shareholders' equity	300
	<b>800</b>		<b>800</b>

<sup>5</sup> Investments of Juristic Person (parent company) are recognized by the equity methods except investments in Life Insurance Company, which are recognized by relevant accounting standards and financial reporting standards

## Intra-group lending, investment and contingent liabilities

(unit: million Baht)

Company that gives a loan/ investment/ contingent liabilities	Company that receives loan/investment/contingent liabilities		Investment		Lending	Contingent liabilities	Total
	Company	Shareholders' equity	%	Amount			
Juristic Person	Commercial Bank	10,000	80	8,000			8,000
Commercial Bank	AMC	1,000	100	1,000			1,000
Commercial Bank	Leasing	1,000	75	750			750
Commercial Bank	Hire Purchase				500	20	700
Juristic Person	Hire Purchase	300	60	180			180
Juristic Person	IT	200	55	110			110
Leasing	Credit Card	700	20	140	50		190
Hire Purchase	Credit Card	700	40	280			280
Juristic Person	Non-Life Insurance	1,600	65	1,040			1,040
Juristic Person	Factoring	400	40	160			160
Juristic Person	Life Insurance	2,000	15	300			300
Juristic Person	Hotel	300	25	75			75

**Provided that:**

- Other assets of the juristic person, assets and other assets of commercial bank and those of subsidiaries receive a risk weight of 100%
- Intra-group transactions consist only of investments and loans
- Shareholders' equity consists only of share capital and retained earnings which are included in CET1
- Life Insurance Company is not listed on the Stock Exchange of Thailand

**2.1 Solo consolidation**

The parent company, which is a juristic person, must prepare consolidated financial statements that include Commercial Bank and subsidiaries which operate granting credits or comparable business that Commercial Bank directly holds shares of 75% or more and must calculate eligible capital as follows:

Company	The preparation of financial statements and calculation of eligible capital
AMC / Leasing	To be included in consolidated financial statements for the calculation of solo consolidation capital requirements
Credit Card	To be excluded from consolidated financial statements at the solo

	consolidation basis as it is a company within the full consolidation, but the investments in this company shall be used for the calculation of risk-weighted assets
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### 2.1.1 Preparation of consolidated financial statements for the solo consolidation

According to the structure of the financial business group and financial data of companies within the financial business group, consolidated financial statements are as follows:

(unit: Million Baht)

	Commercial Bank	AMC	Leasing	Total	Intra-group transactions		Consolidated financial statements
Assets	50,000	10,000	2,500	62,500		1,750 <sup>(1)</sup>	60,750
Liabilities	40,000	9,000	1,500	50,500	-	-	50,500
Shareholders' equity*	10,000	1,000	1,000	12,000	2,000 <sup>(2)</sup>		10,000
Non-controlling interests						250 <sup>(3)</sup>	250
<b>Total liabilities and shareholders' equity</b>							<b>60,750</b>

\* excluding non-controlling interests

#### Calculation of intra-group transactions

(1) Eliminate intra-group investments (assets), by the equity method, in AMC and Leasing Company

$$\begin{aligned}
 &= \text{investments in AMC} + \text{investments in Leasing Company} \\
 &= 1,000 + 750 \qquad \qquad \qquad = 1,750
 \end{aligned}$$

(2) Eliminate intra-group shareholding

= shareholders' equity of AMC + shareholders' equity of Leasing Company

$$= 1,000 + 1,000 \qquad \qquad \qquad = 2,000$$

(3) Account for non-controlling interests existed from the preparation of consolidated financial statements

= ratio of NCI x shareholders' equity of Leasing Company

= 25% x 1,000 = 250

Recording for intra-group transactions for the preparation of consolidated financial statements

Dr. Shareholders' equity	2,000
Cr. Investments	1,750
Non-controlling interests	250

### 2.1.2 Calculation of eligible capital for the solo consolidation

According to the above consolidated financial statements, eligible capital can be calculated as follows:

#### (1) CET1

##### A. CET1 before adjustments and deductions

= 10,000 + NCI that can be included in CET1

= 10,000 + 0 = 10,000 million Baht

NCI that can be included in CET1 is equal to 0 as NCI that can be included in CET1 must be NCI of subsidiaries within the solo consolidation that operate only commercial bank business. Therefore, in case the subsidiary within the solo consolidation does not operate commercial bank business, NCI is therefore equal to 0. However, the commercial bank may include NCI of subsidiaries within the solo consolidation in AT1 if they have the features as specified.

**B. Adjustments and deductions:** Deferred tax assets of AMC and Leasing Company = 10 + 10 = 20 million Baht

##### C. CET1 of the solo consolidation

= CET1 before adjustments and deductions (A.) – adjustments and deductions (B.)

= 10,000 – 20 = 9,980 million Baht

#### (2) T1 of the solo consolidation

T1 of the solo consolidation consists of CET1 and AT1 of companies within the solo consolidation. In this example, CET1 and AT1 of the subsidiaries included in consolidated financial statements that can be included in T1 of the solo consolidation are those of Leasing Company since it is a subsidiary that the commercial bank holds shares of less than 100% (75%).

**A. CET1 of the solo consolidation**

= CET1 of the solo consolidation according to 2.1.2 (1) C.

= 9,980 million Baht

**B. AT1 of the solo consolidation**

AT1 of the solo consolidation is T1 deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1); and (2) NCI that has already been included in CET1 of the solo consolidation. The calculation of AT1 of the subsidiary is as follows:

(i) Minimum capital requirement and conservation buffer (Subsidiary T1 capital)

= The lesser of 8.5% of risk-weighted assets of the subsidiary from separate financial statements or 8.5% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 8.5% of risk-weighted assets of the subsidiary from separate financial statements is used)

= 8.5% x risk-weighted assets of Leasing Company

= 8.5% x [(2,490 x 100%) + (10 x 0%)] = 211.65 million Baht

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1)

$$\boxed{\text{Surplus T1}} = \boxed{\text{T1 Proportion}} \times \left\{ \boxed{\text{CET1+AT1}} - \boxed{\text{Subsidiary T1 Capital}} \right\}$$

= 25% x (1,000 – 211.65) = 197.09 million Baht

Therefore, NCI and AT1 of the subsidiary included in consolidated financial statements that can be included in AT1 of the solo consolidation:

= T1 – Surplus T1 – NCI that has already been included in CET1

= (25% x 1,000) – 197.09 – 0 = 52.91 million Baht

**C. T1 of the solo consolidation**

= CET1 of the solo consolidation according to 2.1.2 (2) A. +  
AT1 of the solo consolidation according to 2.1.2 (2) B.

$$= 9,980 + 52.91 = 10,032.91 \text{ million Baht}$$

**(3) TC of the solo consolidation**

TC of the solo consolidation consists of T1 and T2 of companies within the solo consolidation. In this example, T1 and T2 of the subsidiaries included in consolidated financial statements that can be included in TC of the solo consolidation are those of Leasing Company since it is a subsidiary that the commercial bank holds shares of less than 100% (75%).

**A. T1 of the solo consolidation**

= T1 of the solo consolidation according to 2.1.2 (2) C.

$$= 10,032.91 \text{ million Baht}$$

**B. T2 of the solo consolidation**

T2 of the solo consolidation is TC deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC); and (2) NCI and AT1 that have already been included in CET1 and AT1 of the solo consolidation. The calculation of T2 of the subsidiary is as follows:

(i) Minimum capital requirement and conservation buffer  
(Subsidiary TC capital)

= The lesser of 11% of risk-weighted assets of the subsidiary from separate financial statements or 11% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 11% of risk-weighted assets of the subsidiary from separate financial statements is used)

$$= 11\% \times \text{risk-weighted assets of Leasing Company}$$

$$= 11\% \times [(2,490 \times 100\%) + (10 \times 0\%)] = 273.90 \text{ million Baht}$$

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties  
(Surplus TC)

$$\boxed{\text{Surplus TC}} = \boxed{\text{TC Proportion}} \times \left\{ \boxed{\text{CET1+AT1 +T2}} - \boxed{\text{Subsidiary TC Capital}} \right\}$$

$$= 25\% \times (1,000 - 273.90) = 181.53 \text{ million Baht}$$

Therefore, NCI, AT1 and T2 of the subsidiary included in consolidated financial statements that can be included in T2 of the solo consolidation:

= TC – Surplus TC – NCI and AT1 that have already been included in CET1 and AT1

$$= (25\% \times 1,000) - 181.53 - 52.91 = 15.56 \text{ million Baht}$$

### C. TC of the solo consolidation

= T1 of the solo consolidation according to 2.1.2 (3) A. + T2 of the solo consolidation according to 2.1.2 (3) B.

$$= 10,032.91 + 15.56 = 10,048.47 \text{ million Baht}$$

### 2.1.3 Calculation of risk-weighted assets

(1) Assets from consolidated financial statements of the solo consolidation shall be assigned relevant risk weights - in this example, a risk weight of 100% shall be assigned to other assets

$$= [(60,750 - 20) \times 100\%] + (20 \times 0\%) = 60,730 \text{ million Baht}$$

(2) Contingent liabilities of 20 million Baht shall be multiplied by credit conversion factor (CCF) and relevant risk weight – in this example, CCF of contingent liabilities equal to 100% and risk weight of counterparty equal to 100%

$$= 20 \times 100\% \times 100\% = 20 \text{ million Baht}$$

Therefore, risk-weighted assets of the solo consolidation

$$= 60,730 + 20 = 60,750 \text{ million Baht}$$

### 2.1.4 Calculation of BIS ratio

The ratio of total capital of the solo consolidation to total risk-weighted assets of the solo consolidation =  $(10,048.47 / 60,750) \times 100 = 16.54\%$

## 2.2 Full consolidation

The parent company, which is a juristic person, must prepare consolidated financial statements that include subsidiaries that the parent company directly holds shares of at least 50% of total paid-up shares except Non-Life Insurance Company (In this example,

Life Insurance Company is not a company within the financial business group) and must calculate eligible capital as follows:

Company	The preparation of financial statements and calculation of eligible capital
Commercial Bank / AMC / Leasing / Hire Purchase / IT / Credit Card	To be included in consolidated financial statements of the parent company for the calculation of capital of the full consolidation
Non-life Insurance / Life Insurance / Factoring	<p>To be excluded from consolidated financial statements as:</p> <ul style="list-style-type: none"> <li>- Non-life and life insurance companies are exempted from the preparation of consolidated financial statements according to regulations on the calculation of capital requirements for financial business group</li> <li>- The parent company holds shares in Factoring Company of less than 50% of total paid-up shares</li> </ul> <p>The investments in the all above companies shall be used for the calculation of threshold deduction – where the total investments in those companies will be compared with 10% of net CET1 of the full consolidation, and, the portion that exceeds 10% of net CET1 will be deducted from CET1 of the full consolidated group, while the portion that does not exceed 10% of net CET1 will be used for the calculation of risk-weighted assets by assigning a risk weight of 250% as they are the investments in companies that operate financial business that the parent company holds shares of more than 10% of total paid-up shares</p>
Hotel	To be excluded from consolidated financial statements as they are the investments in equity securities of a company that does not operate financial business or supporting business that the parent company holds shares of more than 10% of total paid-up shares; however, the investments in such company will be used for the calculation of risk-weighted assets by assigning a risk-weight of 1250%

### 2.2.1 Preparation of consolidated financial statements for the full consolidation

According to the structure of the financial business group and financial data of companies within the financial business group, consolidated financial statements are as follows:

(unit: Million Baht)

	Juristic person	Commercial Bank	AMC	Leasing	Hire Purchase	IT	Credit Card	Total	Intra-group transactions		Consolidated financial statements
<b>Assets</b>	11,200	50,000	10,000	2,500	1,000	500	1,500	76,700		11,010 <sup>(1)</sup>	<b>65,690</b>
Liabilities	3,200	40,000	9,000	1,500	700	300	800	55,500	550 <sup>(2)</sup>	-	54,950
Shareholders' equity*	8,000	10,000	1,000	1,000	300	200	700	21,200	13,200 <sup>(3)</sup>		8,000
Non-controlling interests										2,740 <sup>(4)</sup>	2,740
<b>Total liabilities and shareholders' equity</b>											<b>65,690</b>

\* excluding non-controlling interests

Calculation of intra-group transactions

(1) Eliminate intra-group investments and lending (assets), by the equity method, in Commercial Bank, AMC, Leasing Company, Hire Purchase Company, IT Company and Credit Card Company

= (investments in Commercial Bank + investments in AMC + investments in Leasing Company + investments in Hire Purchase Company + investments in IT Company + investments in Credit Card Company) + (Lending of Commercial Bank + Lending of Leasing Company)

$$= [8,000 + 1,000 + 750 + 180 + 110 + (140 + 280)] + (500 + 50)$$

$$= 11,010$$

(2) Eliminate intra-group borrowing

= loans of Hire Purchase Company + loans of Credit Card Company

$$= 500 + 50 = 550$$

(3) Eliminate intra-group shareholding

= the sum of shareholders' equity of the subsidiaries

$$= 10,000 + 1,000 + 1,000 + 300 + 200 + 700$$

$$= 13,200$$

(4) Account for non-controlling interests existed from the preparation of consolidated financial statements

= (ratio of NCI x shareholders' equity of Commercial Bank) + (ratio of NCI x shareholders' equity of Leasing Company) + (ratio of NCI x shareholders' equity of Hire Purchase Company) + (ratio of NCI x shareholders' equity of IT Company) + (ratio of NCI x shareholders' equity of Credit Card Company)

$$= (20\% \times 10,000) + (25\% \times 1,000) + (40\% \times 300) + (45\% \times 200) + (40\% \times 700)$$

$$= 2,740$$

Recording for intra-group transactions for the preparation of consolidated financial statements

Dr. Borrowing	550
Cr. Lending	550
Dr. Shareholders' equity	13,200
Cr. Investments	10,460
Non-controlling interests	2,740

## 2.2.2 Calculation of eligible capital for the full consolidation

According to the above consolidated financial statements, eligible capital can be calculated as follows:

### (1) CET1

#### A. CET1 before adjustments and deductions

$$= 8,000 + \text{NCI that can be included in CET1}$$

$$= 8,000 + 700 = 8,700 \text{ million Baht}$$

Calculation of NCI that can be included in CET1:

#### (1.1) Minimum capital requirement and conservation buffer

(Subsidiary CET1 capital)

= The lesser of 7% of risk-weighted assets of the subsidiary from separate financial statements or 7% of risk-weighted assets of the subsidiary from

consolidated financial statements (in this case, 7% of risk-weighted assets of the subsidiary from separate financial statements is used)

$$= 7\% \times 50,000 = 3,500 \text{ million Baht}$$

(1.2) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders (Surplus CET1)

$$\text{Surplus CET1} = \text{NCI Proportion} \times \left\{ \text{CET1} - \text{Subsidiary CET1 Capital} \right\}$$

$$= 20\% \times (10,000 - 3,500) = 1,300 \text{ million Baht}$$

(1.3) NCI of the subsidiary that operates commercial bank business that can be included in CET1

$$= \text{CET1} - \text{Surplus CET1}$$

$$= (20\% \times 10,000) - 1,300 = 700 \text{ million Baht}$$

## B. Adjustments and deductions

(i) Deferred tax assets of AMC, Leasing Company and Hire Purchase Company = 10 + 10 + 20 = 40 million Baht

(ii) Intangible assets of IT Company = 50 million Baht

(iii) Investments in equity securities that the parent company holds shares of more than 10% of total paid-up shares of the companies that operate financial business and supporting business which are not included in consolidated financial statements<sup>2</sup>:

= the amount of those investments that exceeds 10% of net CET1

= (investments in Non-Life Insurance Company + investments in Life Insurance Company + investments in Factoring Company) – 10% x (CET1 according to A. – deductions from CET1, which are deferred tax assets of AMC, Leasing Company and Hire Purchase Company, and intangible assets of IT Company)

$$= (1,040 + 300 + 160) - [10\% \times (8,700 - 40 - 50)]$$

$$= 1,500 - 861 = 639 \text{ million Baht}$$

## C. CET1 of the full consolidation

= CET1 before adjustments and deductions (A.) – adjustments and deductions (B.)

$$= 8,700 - 40 - 50 - 639 = 7,971 \text{ million Baht}$$

## (2) T1 of the full consolidation

T1 of the full consolidation consists of CET1 and AT1 of companies within the full consolidation. In this example, CET1 and AT1 of the subsidiaries included in consolidated financial statements that can be included in T1 of the full consolidation are those of Commercial Bank, Leasing Company, Hire Purchase Company, IT Company and Credit Card Company since they are subsidiaries that the parent company holds shares of less than 100%.

### A. CET1 of the full consolidated group

= CET1 of the full consolidation according to 2.2.2 (1) C.

$$= 7,971 \text{ million Baht}$$

### B. AT1 of the full consolidation

AT1 of the full consolidation is T1 deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1); and (2) NCI that has already been included in CET1 of the full consolidation. The calculation of AT1 of the subsidiaries is as follows:

(i) Minimum capital requirement and conservation buffer (Subsidiary T1 capital)

= The lesser of 8.5% of risk-weighted assets of the subsidiary from separate financial statements or 8.5% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 8.5% of risk-weighted assets of the subsidiary from separate financial statements is used)

	Commercial Bank	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Subsidiary T1 capital	= 8.5% x (50,000 x 100%) = 4,250.00	= 8.5% x [(2,490 x 100%) + (10 x 0%)] = 211.65	= 8.5% x [(980 x 100%) + (20 x 0%)] = 83.30	= 8.5% x [(450 x 100%) + (50 x 0%)] = 38.25	= 8.5% x (1,500 x 100%) = 127.50

$$= 4,250.00 + 211.65 + 83.30 + 38.25 + 127.50$$

$$= 4,710.70 \text{ million Baht}$$

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus T1)

$$\text{Surplus T1} = \text{T1 Proportion} \times \left\{ \text{CET1+AT1} - \text{Subsidiary T1 Capital} \right\}$$

	Commercial Bank	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Surplus T1	= 20% x (10,000 - 4,250) = 1,150.00	= 25% x (1,000 - 211.65) = 197.09	= 40% x (300 - 83.30) = 86.68	= 45% x (200 - 38.25) = 72.79	= 40% x (700 - 127.50) = 229.00

$$= 1,150.00 + 197.09 + 86.68 + 72.79 + 229.00$$

$$= 1,735.56 \text{ million Baht}$$

Therefore, NCI and AT1 of the subsidiaries included in consolidated financial statements that can be included in AT1 of the full consolidation:

$$= \text{T1} - \text{Surplus T1} - \text{NCI that has already been included in CET1}$$

$$= [(20\% \times 10,000) + (25\% \times 1,000) + (40\% \times 300) + (45\% \times 200) + (40\% \times 700)] - 1,735.56 - 700$$

$$= 2,740 - 1,735.56 - 700 = 304.44 \text{ million Baht}$$

### C. T1 of the full consolidation

= CET1 of the full consolidation according to 2.2.2 (2) A. + AT1 of the full consolidation according to 2.2.2 (2) B.

$$= 7,971 + 304.44 = 8,275.44 \text{ million Baht}$$

### (3) TC of the full consolidation

TC of the full consolidation consists of T1 and T2 of companies within the full consolidation. In this example, T1 and T2 of the subsidiaries included in consolidation financial statements that can be included in TC of the full consolidation are those of Commercial Bank, Leasing Company, Hire Purchase Company, IT Company and Credit Company since they are subsidiaries within the full consolidation that the parent company holds shares of less than 100%.

#### A. T1 of the full consolidation

= T1 of the full consolidation according to 2.2.2 (2) C.

= 8,275.44 million Baht

## B. T2 of the full consolidation

T2 of the full consolidation is TC deducted by (1) the amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC); and (2) NCI and AT1 that have already been included in CET1 and AT1 of the full consolidation. The calculation of T2 of the subsidiaries is as follows:

(i) Minimum capital requirements and conservation buffer (Subsidiary TC capital)

= The lesser of 11% of risk-weighted assets of the subsidiary from separate financial statements or 11% of risk-weighted assets of the subsidiary from consolidated financial statements (in this case, 11% of risk-weighted assets of the subsidiary from separate financial statements is used)

	Commercial Bank	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Subsidiary TC capital	= 11% x 50,000 = 5,500.00	= 11% x [(2,490 x 100%) + (10 x 0%)] = 273.90	= 11% x [(980 x 100%) + (20 x 0%)] = 107.80	= 11% x [(450 x 100%) + (50 x 0%)] = 49.50	= 11% x (1,500 x 100%) = 165.00

= 5,500.00 + 273.90 + 107.80 + 49.50 + 165.00

= 6,096.20 million Baht

(ii) The amount that exceeds minimum capital requirement and conservation buffer attributable to non-controlling shareholders and external parties (Surplus TC)

$$\text{Surplus TC} = \text{TC Proportion} \times \left\{ \text{CET1+AT1 +T2} - \text{Subsidiary TC Capital} \right\}$$

	Commercial Bank	Leasing Company	Hire Purchase Company	IT Company	Credit Card Company
Surplus TC	= 20% x (10,000 – 5,500) = 900.00	= 25% x (1,000 – 273.90) = 181.53	= 40% x (300 – 107.80) = 76.88	= 45% x (200 – 49.50) = 67.73	= 40% x (700 – 165) = 214.00

$$= 900.00 + 181.53 + 76.88 + 67.73 + 214.00$$

$$= 1,440.14 \text{ million Baht}$$

Therefore, NCI, AT1 and T2 of the subsidiaries included in consolidated financial statements that can be included in T2 of the full consolidation:

= TC – Surplus TC – NCI and AT1 that have already been included in CET1 and AT1

$$= [(20\% \times 10,000) + (25\% \times 1,000) + (40\% \times 300) + (45\% \times 200) + (40\% \times 700)] - 1,440.14 - (700 + 304.44)$$

$$= 2,740 - 1,440.14 - 1,004.44 = 295.42 \text{ million Baht}$$

### C. TC of the full consolidation

= T1 of the full consolidation according to 2.2.2 (3) A. + T2 of the full consolidation according to 2.2.2 (3) B.

$$= 8,275.44 + 295.42 = 8,570.86 \text{ million Baht}$$

### 2.2.3 Calculation of risk-weighted assets

(1) The total amount of investments in equity securities which the parent company holds shares of more than 10% of total paid-up shares of the companies that operate financial business and supporting business that not included in consolidated financial statements, for portion that does not exceed 10% of net CET1, shall be used for the calculation of risk-weighted assets by assigning a risk-weight of 250% (data from 2.2.2 (1) B. (iii))

$$= [10\% \times (8,700 - 40 - 50)] \times 250\%$$

$$= 861 \times 250\% = 2,152.50 \text{ million Baht}$$

(2) Investments in Hotel Company, which is the investment in equity security of company that does not operate financial business or supporting business that the parent company holds shares of more than 10% of total paid-up shares shall be used for the calculation of risk-weighted assets by assigning a risk-weight of 1250%

$$= 75 \times 1,250\% = 937.50 \text{ million Baht}$$

(3) The remaining amount of assets from consolidated financial statements of the full consolidation, apart from (1) and (2), shall be assigned relevant risk weights – in this example, a risk weight of 100% shall be assigned to other assets

$$= [(65,690 - 1,040 - 160 - 300 - 75 - 90) \times 100\%] + (90 \times 0\%)$$

$$= 64,025 \text{ million Baht}$$

(4) Contingent liabilities of 20 million Baht shall be multiplied by credit conversion factor (CCF) and relevant risk weight – in this example, CCF of contingent liabilities equal to 100% and risk weight of counterparty equal to 100%

$$= 20 \times 100\% \times 100\% = 20 \text{ million Baht}$$

Therefore, risk-weighted assets of the full consolidation

$$= 2,152.50 + 937.50 + 64,025 + 20 = 67,135 \text{ million Baht}$$

#### 2.2.4 Calculation of BIS ratio

The ratio of total capital of the full consolidation to total risk-weighted assets of the full consolidation =  $(8,570.86 / 67,135) \times 100 = 12.77\%$

## **Regulations on the Calculation of Credit Risk-Weighted Assets for Financial Business Groups under the Standardised Approach (SA)**

### **1. Definitions**

The definitions as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA) shall be applied.

### **2. Principle**

The Standardised Approach (SA) is an approach for calculating credit risk-weighted assets by referring to ratings of claims from the external credit assessment institutions. While, the risk weights will be assigned based on the type and quality of each individual asset and off-balance sheet item of a financial business group. The calculation under the SA is less complicated than the Internal Ratings-Based Approach (IRB). A financial business group shall refer to the regulations as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA), except for any specific regulations as specified in this Notification.

### **3. Regulations on the Calculation of Credit Risk-Weighted Assets under the SA**

A financial business group shall calculate credit risk-weighted assets of its solo consolidation and full consolidation by applying the regulations as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA), and the financial business group shall also comply with the following regulations:

#### **3.1 The calculation of credit risk-weighted assets under the SA**

A financial business group shall use assets and off-balance sheet items from consolidated financial statements, prepared according to regulations on consolidated supervision, to calculate the net amount of assets. The net amount of assets shall be multiplied by risk weights, as specified in the Bank of Thailand Re: Regulations on the Calculation of Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA), to obtain credit risk-weighted assets.

#### **3.2 Assignment of risk weights to assets and off-balance sheet items**

##### **3.2.1 General regulations**

A financial business group shall classify assets and off-balance sheet items, as clause 3.1, according to their type and credit quality, then, assign them risk weights in accordance with the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA).

### **3.2.2 Provisions**

Specific provisions for assets and off-balance sheet items that a company outside the solo consolidation has set aside, in accordance with the Bank of Thailand Notification Re: Guidelines on Asset Classification and Provisioning of Financial Institutions or the regulations as specified by its supervisory agency or accounting standards and financial reporting standards, shall be deducted from assets and off-balance sheet items or credit equivalent amount before multiplying the net amount by risk weights as specified by the Bank of Thailand. The ratio of provisions that have been set aside shall be compared with the ratio as specified by the Bank of Thailand in order to use the lower risk weights according to the regulations as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA).

### **3.2.3 Corporates claims**

(1) For a financial business group that the commercial bank on a solo basis uses the SA, it must calculate risk-weighted of claims on corporates by using the same approach as the commercial bank on a solo basis

(2) For a financial business group that the commercial bank on a solo basis uses the IRB, it shall calculate risk-weighted of claims on corporates by using risk weights according to the ratings that a particular claim on corporate receives from external credit assessment institutions (ECAIs) or by using a risk weight of 100% for all claims on corporates

### **3.2.4 Retail claims**

In determining if any particular retail claim meets the Granularity criterion and requirements on Low value of individual exposure in order to assign a risk weight of 75% to that claim, a financial business group must consider total credit lines and contingent liabilities entered into with that particular retail borrower including its related parties. A financial business group shall apply the guidelines as specified in the Bank of Thailand Circular No. ThorPorTor. ForNorSor. (21) Wor.1413/2551 dated 3 August 2008 Re: Clarification regarding the Verification of Nominees under the Law Governing Financial Institution Business and the amendments thereof, as well as guidelines on determination of related party transactions as specified in the Bank of Thailand Notification Re: Supervisory Guidelines on Large Exposure (Single Lending Limit).

### 3.2.5 Securities-related claims

(1) For securities-related claims from lending for the purchase of securities by placing those securities as collateral (margin loans or credit balance loans), the following risk weights shall be assigned starting from the trade date:

(1.1) Retail claims – assign a risk weight of 100%, where the amount of the claims may not be combined with those according to Clause 3.2.4

(1.2) Other claims (non-retail claims), such as claims on corporates, claims on financial institutions – assign risk weights based on the type of claims as specified in the Bank of Thailand Notification

(2) For securities-related claims from using cash to purchase those securities – assign a risk weight of 0% starting from the trade date to the settlement date; if the borrower fails to make the settlement on that specified date – assign a risk weight as specified in (1) starting from the settlement date

### 3.2.6 Non-performing assets

For non-performing assets transferred from the commercial banks, which is a parent company, to an asset management company, those assets shall be classified and the provisions shall be set aside based on the default period counted continuously from the default period during which they have not yet been transferred from the commercial banks.

## 3.3 Use of credit ratings from external credit assessment institutions (ECAIs)

### 3.3.1 For a financial business group that the commercial bank on a solo basis uses the SA

The financial business group shall use ratings that each type of claims receives from the same ECAIs as used by the commercial bank on a solo basis.

### 3.3.2 For a financial business group that the commercial bank on a solo basis uses the IRB

The parent company shall notify a list of ECAIs that will be used for each type of claims of its financial business group, by referring to the list of ECAIs as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA). Those details shall be notified in an application for the calculation of capital requirements for a financial business group as specified in Attachment 4, and the application shall be submitted to the Bank of Thailand according to the relevant Public Handbook, according to Clause 5.4.1.3 (1.4) (B) of this Notification.

### 3.4 Credit risk mitigation (CRM)

A financial business group may adjust its credit risk exposures downward by using financial collateral, on-balance sheet netting, and guarantees and credit derivatives, by applying the regulations as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA) and the following regulations:

#### 3.4.1 Financial collateral

##### (1) Credit risk mitigation by using financial collateral

A financial business group shall apply the same approach for the recognition of financial collateral as the commercial bank on a solo basis.

In case where a financial business group uses its own estimates for haircuts under the Comprehensive Approach, it must receive an approval from the Bank of Thailand and must comply with the minimum requirements as specified by the Bank of Thailand.

##### (2) Eligible financial collateral

Financial collateral that a financial business group can use for credit risk mitigation in the calculation of credit risk-weighted assets must have features as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA). Equity securities that can be used for credit risk mitigation must be those issued by companies outside the financial business group and must not have a positive correlation with the respective claims.

If approved to use equity securities issued by a company within the financial business group as financial collateral for transactions of its ordinary business, within the scope as specified by the specific supervisory agency and under the explicit risk management processes, and if those equity securities will not be afterwards transferred to be of its own, those securities may be used for credit risk mitigation. Currently, the Bank of Thailand gives an approval only for the case of margin loans, where a securities company lends for the purchase of securities. In other cases, approval on a case-by-case basis is required, where the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 45 days from the day the request and supporting documents have been completely and correctly received.

##### (3) Credit risk mitigation under the Comprehensive Approach

For repo-style transactions or OTC derivatives under master netting agreements, each company within the financial business group may netting the effect of those agreements on a counterparty-by-counterparty basis. However, those agreements must meet all conditions as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA). The recognition of those netting agreements between different companies, within a particular financial business group, with the same counterparty is allowed, but this must be specified in the agreements that are legally enforceable.

(4) Intra-group recognition of financial collateral

Remaining portion of financial collateral for a particular claim of a particular company within the financial business group cannot be used with that claim of other company within the financial business group, unless this condition is specified in the master netting agreement that is legally enforceable.

### **3.4.2 On-balance sheet netting**

A financial business group may perform on-balance sheet netting between assets and liabilities of a particular counterparty in order to reduce its credit risk exposures. However, the netting must meet the minimum requirements as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA). On this, a financial business group cannot offset the outstanding balance of assets of a particular company within its group against the outstanding balance of liabilities of other company within the group for the same counterparty, unless it is allowed by related laws.

### **3.4.3 Guarantee and credit derivatives**

(1) A financial business group cannot use guarantee and credit derivatives for credit risk mitigation, if the guarantor and protection seller is a company within its financial business group, or if the protection seller is a parent company, subsidiary or affiliated company of the borrower.

(2) Remaining portion of a guarantee for a particular claim of a particular company within the financial business group cannot be used with that claim of other company within the same financial business group, unless this condition is specified in the legally enforceable agreement.

## **4. Submission of an application for the calculation of credit risk-weighted assets under the SA**

The parent company of a financial business group that intends to use the SA for calculating credit risk-weighted assets shall submit the following documents:

4.1 An application for the calculation of capital requirements for a financial business group, using the Form as specified in Attachment 4

4.2 Self-assessment of compliance with minimum requirements on the recognition of credit risk mitigation in the calculation of capital requirements (SAC-CRM)

The regulations as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA) shall be applied.

The parent company shall submit an application for the calculation of credit risk-weighted assets for its financial business group under the SA to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

## Regulations on the Calculation of Credit Risk-Weighted Assets for Financial Business Groups under the Internal Ratings-Based Approach (IRB)

### 1. Definitions

The definitions as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB) shall be applied.

### 2. Principle

The IRB is an approach for calculating credit risk-weighted assets that is rather complicated but is more risk sensitive than the Standardised Approach (SA). Under the IRB, a financial business group can use its internal model to estimate losses from credit risk, as follows:

(1) Unexpected loss (UL), which is part of losses that should be covered by capital. Minimum capital requirements that a financial business group must hold to cover UL will be calculated from credit risk-weighted assets according to the regulations as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB).

(2) Expected loss (EL), which is part of losses that should be covered by provisions. A financial business group must calculate EL in accordance with this Notification and compare it with total eligible provisions, and, if there is any difference, the financial business group must comply with the regulations as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB).

The risk estimates under the IRB can be calculated by various approaches, however, the generally used approach for the calculation of credit risk-weighted assets under the IRB is the PD/LGD Approach (risk weight function), which consists of 4 risk components, namely Probability of default (PD), Loss given default (LGD), Exposure at default (EAD) and Effective maturity (M). A financial business group may choose to use the PD/LGD Approach in the 2 following alternatives:

(1) Foundation Internal Ratings-Based Approach (FIRB), which is an approach that a financial business group estimates its own PD, while other risk components are as specified by the Bank of Thailand.

(2) Advanced Internal Ratings-Based Approach (AIRB), which is an approach that a financial business group estimates all 4 risk components.

A financial business group can use the IRB for calculating credit risk-weighted assets only when it has fully complied with the minimum requirements as specified by the Bank of Thailand. Regulations as specified the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB) shall be applied, except for any specific guidelines as specified in this Notification.

### **3. Regulation on the calculation of credit risk-weighted assets under IRB**

A financial business group that uses the IRB for calculating credit risk-weighted assets of its solo consolidation and full consolidation shall apply the regulations as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB) and shall also comply with the following regulations:

#### **3.1 Asset class**

A financial business group shall comply with regulations on asset classes as well as refer to the definition of each asset class under the IRB, namely sovereign claims, bank claims, corporate claims, retail claims, equity exposures, purchased receivables and other assets, according to the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB).

If any claims/asset of a financial business group cannot be classified into any of the first 6 asset classes, as specified above, they shall be classified into the other assets class (Asset Class-7).

#### **3.2 The calculation of credit risk-weighted assets under the IRB**

A financial business group shall calculate credit risk-weighted assets for the 5 following categories of assets as well as counterparty credit risk-weighted assets for derivatives and unsettled transactions by applying the regulations as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB), except for the following specific regulations as specified in this notification shall apply:

##### **3.2.1 Category 1: Sovereign claims, bank claims and corporate claims**

(1) In estimating PD of claims of a financial business group, there must be only one PD for each borrower (or guarantor), except there is the recognition of credit guarantees, or credit derivatives, or there is a currency mismatch in credit lines, or approval

is granted by the Bank of Thailand on a case-by-case basis. In requesting the approval, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

In addition, if a particular corporate borrower fails to make repayments to any company within the financial business group, it will be considered that such borrower fails to make repayments for all existing loans, including undrawn credit lines, even though the loans or undrawn credit lines having with other companies within the financial business group are still not in default.

(2) In estimating LGD with the recognition of financial collateral for credit risk mitigation<sup>1</sup> for a financial business group that uses the AIRB (hereinafter referred to as an “AIRB financial business group”), equity securities that can be used as financial collateral for credit risk mitigation must be issued by a company outside the financial business group and must not have a positive correlation with the respective claims.

If approved to use equity securities issued by a company within the financial business group as financial collateral for transactions of its ordinary business, within the scope as specified by the specific supervisory agency and under the explicit risk management processes, and if those equity securities will not be afterwards transferred to be of its own, those securities may be used for credit risk mitigation. Currently, the Bank of Thailand gives approval only for the case of margin loans, where a securities company lends for the purchase of securities. In other cases, approval on a case-by-case basis is required, where the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

Remaining portion of financial collateral for a particular claim of a particular company within the financial business group cannot be used with the same claim of other company within the financial business group, unless this condition is specified in the legally enforceable agreement.

(3) In estimating LGD with the recognition of credit guarantees and credit derivatives<sup>2</sup> for an AIRB financial business group, the financial business group

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<sup>1</sup> A financial business group shall apply this practice in estimating LGD with the recognition of financial collateral for credit risk mitigation for all types of assets

<sup>2</sup> A financial business group shall apply this practice in estimating LGD with the recognition of credit guarantees and credit derivatives for credit risk mitigation for all types of assets

cannot use guarantees and credit derivatives for credit risk mitigation, if the guarantor or protection seller<sup>3</sup> is a company within its financial business group, or if the protection seller is a parent company, subsidiary or affiliated company of the borrower.

Remaining portion of credit guarantees for a particular claim of a particular company within the financial business group cannot be used with the same claim of other company within the financial business group, unless this condition is specified in the legally enforceable agreement.

(4) In estimating LGD with the recognition of the effects of master netting agreements<sup>4</sup> for repo-style transactions or OTC derivatives for an AIRB financial business group, each company within the financial business group can recognize the netting effects for each type of transactions with its counterparties, if this is specified in the master netting agreements that are legally enforceable.

To recognize netting effects across different companies within the financial business group for a particular counterparty, it must be specified in the master netting agreements that are legally enforceable.

(5) In estimating EAD with the recognition of on-balance sheet netting, a financial business group cannot offset the outstanding balance of on-balance sheet assets of a particular company against the outstanding balance of on-balance sheet liabilities of other company within the financial business group for the transactions with the same counterparty, unless this is allowed by related laws.

### **3.2.2 Category 2: Retail claims**

(1) To determine retail claims, a financial business group shall consider the nature of the management of claims portfolios of each company within the financial business group and the features of the loans. That is, if any company within the financial business group does not manage its loans on a portfolioed basis, those claims cannot be classified as retail claims.

(2) For the calculation of a volatility of loss rate of revolving retail claims for each portfolio, a financial business group must use data that can reflect the characteristics of borrowers within the portfolios to which the same internal rating system is applied in order to ensure that the volatility of loss rate reflects risk exposures of

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<sup>3</sup> As specified in the Bank of Thailand Notification Re: Regulations on Permission for Commercial Banks to Engage in Credit Derivatives

<sup>4</sup> A financial business group shall apply this practice in estimating LGD with the recognition of the effects of master netting agreements for credit risk mitigation for all types of assets

revolving retail loans (of the entire group) to which the same internal rating system is applied.

### 3.2.3 Category 3: Equity exposures

(1) For investments in securities included in capital of other financial institutions or other financial business groups that must be deducted from capital of the financial business group – assign a risk weight of 0%

(2) For investments in companies only for portion that must be deducted from capital of the financial business group – assign a risk weight of 0%

(3) For the estimation of EAD for equity derivatives, a financial business group may recognize the effects of the netting across different positions of the same equity securities. However, those derivatives must be offsetting position entered into for hedging purposes and are of the same company. And, the netting must be specified in the legally enforceable agreement.

(4) For early adoption of the IRB, a financial business group is allowed to use the SA for equity exposures in accordance with conditions, requirements and relaxation timeframes as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB).

### 3.2.4 Category 4: Purchased receivables

If purchased receivables are allocated to several companies within the financial business group, the financial business group shall estimate EL of dilution risk that can appropriately reflect risk exposures of each portfolio of claims.

## 4. Regulations for expected losses and total eligible provisions

In comparing total EL for credit risk-weighted assets under the IRB with total eligible provisions<sup>5</sup>, if the amount of eligible provisions is greater than EL (surplus of provisions), a financial business group may include that surplus of provisions in its tier 2 capital according to the regulations as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-

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<sup>5</sup> Eligible provisions of a particular financial business group consist of

- (1) Provisions that companies within the financial business group have set aside, according to the regulations as specified by the Bank of Thailand, for all exposures to which the IRB is applied for the calculation of credit risk-weighted assets (eligible provisions of the commercial bank and subsidiaries within the solo consolidation) and
- (2) Provisions that companies within the financial business group have set aside, according to the regulations as specified by their specific supervisory agencies or accounting standards and financial reporting standards, for all asset to which the IRB is applied for the calculation of credit risk-weighted assets (eligible provisions of companies outside the solo consolidation that do not apply the regulations as specified by the Bank of Thailand for the commercial bank and companies within the solo consolidation)

Based Approach (IRB). If any company outside the solo consolidation intends to include eligible provisions that have been set aside in accordance with the Bank of Thailand Notification Re: Guidelines on Asset Classification and Provisioning, or regulations as specified by its specific supervisory agency, or accounting standards and financial reporting standards, in its tier 2 capital, the parent company shall submit an approval request, by specifying asset classification methods and provisioning methods that have been used by that company, which intend to include in tier 2 capital, to the Bank of Thailand according to the relevant Public Handbook, on a case-by-case basis. The Bank of Thailand will finish its consideration of the request within 60 days from the day the request and supporting documents have been completely and correctly received.

## **5. Minimum requirements for the IRB**

A financial business group must comply with the minimum requirements for the IRB according to the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB), except the following – the regulations as specified in this Notification shall apply:

### **5.1 The design and development of internal rating system**

(1) A financial business group may use various internal rating systems for estimating risk components of each portfolio of claims as a particular system may appropriately reflect specific risks of each portfolio.

(2) Companies within the financial business group may use different internal systems for the same type of portfolio of claims, if the internal system used by each company can appropriately reflect specific risks of those portfolios. However, for category 1: sovereign claims, bank claims and corporate claims, only one internal rating system must be used for the entire group, except there is the recognition of guarantees or credit derivatives or there is a currency mismatch on credit lines, or as approved by the Bank of Thailand on a case-by-case basis. In requesting the approval, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

(3) All internal rating systems used by companies within the financial business group must meet the minimum requirements as specified by the Bank of Thailand<sup>6</sup>.

(4) A financial business group must specify the definition of each rating as well as set out clear processes and criteria for assigning a rating grade to each claim, which will be applied throughout the financial business group, so that the estimation of risks and PD of each rating grade of each company within the group are appropriately carried out and reflect the similarity of risk exposures.

## **5.2 Internal risk rating system operations**

(1) The assignment and review of internal ratings of a financial business group must be carried out or approved by a unit that is independent from approval of loans. Companies within a financial business group may appoint a particular unit to be responsible for those arrangements. However, for loan approval function, all companies that engage in loan transactions must have a unit responsible for that function.

(2) A financial business group must gather data concerning key characteristics of its claims, transactions or credit lines so that it can disclose information of its internal rating systems according to the Bank of Thailand Notification Re: Disclosure Requirement on Capital Adequacy for a Financial Business Groups.

## **5.3 Corporate governance and oversight**

(1) The board of directors or delegated committee of each company within a financial business group must be responsible for approving processes and methods for the assignment of ratings as well as methodologies for the estimation of risk components according to policy frameworks or principles as specified by the parent company. Alternatively, a financial business group may appoint the board of directors or delegated committee of the parent company to be responsible for those arrangements. In addition, a financial business group must prepare a report on its internal ratings, which must be part of a report that the financial business group presents to the board of directors of the parent company or delegated committee and senior management of the parent company.

(2) Companies within a financial business group must have a unit responsible for approval of loans, a unit responsible for credit risk control, and a unit responsible for development or assignment of internal ratings, where those companies may appoint a particular unit or all units to be jointly responsible for those arrangements. However, for

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<sup>6</sup> If the same internal rating system is used for the entire financial business group, it must justify that such internal rating system can appropriately reflect the nature and risks of loans or credit lines of its entire group.

loan approval function, all companies that engage in loan transactions must have a unit responsible for that function.

(3) Companies within a financial business group must have an independent unit responsible for the review of internal rating systems, design and development of internal rating systems, application of internal rating systems, operations of credit risk control unit, and credit approval processes of credit approval unit, where those companies may appoint a particular unit or all units to be jointly responsible for those arrangements.

#### **5.4 Use of internal ratings**

Companies within a financial business group must use internal rating systems and calculated risk components in their loan approval process, risk management and capital allocation, while good governance practices must be incorporated into their risk management. However, the extent to which those internal rating systems and risk components are used may depend on the specific business of each company.

#### **5.5 Risk quantification**

(1) Data used for estimating risk components of a financial business group must be historical data collected over a sufficiently long period and is evidently reliable. In addition, the number of sample borrowers, loan approval standards or other characteristics of the data used for estimating risk components must be similar or comparable to actual borrowers or loan approval standards of financial business group in order to ensure that they can represent and reflect risks of each portfolio of exposures<sup>7</sup>.

(2) Companies within a financial business group must refer to the definition of default as specified in the Bank of Thailand Notification Re: Regulations on the Calculation Credit Risk-Weighted Assets for Commercial Banks under the Internal Ratings-Based Approach (IRB). Default data according to that definition shall be collected and used to estimate risk components of the financial business group. If a financial business group uses default data from external sources, it must demonstrate to the Bank of Thailand that the data has been adjusted to be consistent with the definition as specified in the Bank of Thailand Notification Re: Regulations on the Calculation Credit Risk-Weighted Assets for Commercial Banks under the Internal Ratings-Based Approach (IRB) and that it can represent default behaviors of the borrowers of the financial business group.

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<sup>7</sup> Data for estimating risk components of a particular financial business group should consist of data of the parent company, subsidiaries and affiliated companies within the group, in case where the same internal model and internal rating system is applied for the entire group

(3) A financial business group must specify the maximum amount of overdrafts that it will approve for borrowers, as this data will be used for calculating default rates.

(4) Companies within a financial business group must refer to the definition of losses as specified in the Bank of Thailand Notification Re: Regulations on the Calculation Credit Risk-Weighted Assets for Commercial Banks under the Internal Ratings-Based Approach (IRB). In calculating economic losses, a financial business group must calculate the present value of expected future cash inflows given an appropriate rate of return, by incorporating related direct and indirect costs.

(5) A financial business group must have effective policy and process for monitoring the single-obligor concentration both within and across purchased receivables portfolios of the financial business group.

#### **5.6 Validation of internal estimates**

A financial business group must validate the accuracy and consistency of its internal rating systems, assignment of ratings process, and the estimation of all risk components, where companies with the financial business group may appoint a particular unit of or all units to be jointly responsible for those arrangements

#### **5.7 Minimum requirements for the use of LGD and EAD as specified by the Bank of Thailand**

(1) A financial business group that uses the FIRB may use commercial real estate (CRE) and residential real estate (RRE) as collateral if it meets the requirements as specified in the Policy Statement of the Bank of Thailand Re: Valuation of Collateral and Immovable Properties for Sale Obtained from Debt Repayment, Loan Guarantees or Purchased at an Auction of Financial Institutions.

(2) In case where a financial business group accepts receivables (borrowers) of its borrowers as collateral, it must take into consideration possible risks in the event that its borrowers of financial business group fails to make the payments and, accordingly, it must require the receivables of its borrowers to make those payments, which may make the amount of exposures to those borrowers exceed the single lending limit, the specified limit on the transactions with related parties of the solo consolidation, or the limit on intra-group transactions, as the case may be.

#### **5.8 Requirements for recognition of leasing**

A financial business group as the lessor must have in place a sound risk management according to the Bank of Thailand Notification Re: Permission for Commercial Banks to Conduct Hire Purchase and Leasing Businesses.

### 5.9 The calculation of risk-weighted assets for equity instruments

(1) A financial business group must have in place a clear policy on classification of equity instruments of companies within the group according to related Bank of Thailand Notifications, such as the Bank of Notification Re: Regulations on Supervision of Market Risk and Capital Requirement for Market Risk of Financial Institutions, Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Internal Ratings-Based Approach (IRB), and Regulations on Interest Rate Risk for Banking Book of the Financial Institutions (positions in the trading book or positions in the banking book), and must also set out internal guidelines on risk management for positions in the banking book according to the guidelines as specified by the Bank of Thailand.

(2) A financial business must choose the method for calculating capital requirements for equity instruments that is appropriate to risk characteristics and complexity of those instruments of financial business group<sup>8</sup>.

(3) A financial business group must have in place a system for validating the consistency of models and the development of models, while the models and model development processes must be regularly reviewed. Companies within the financial business group may appoint a particular unit of or all units to be jointly responsible for those arrangements.

### 5.10 Disclosure requirements

A financial business group shall comply with the regulations as specified in the Bank of Thailand Notification Re: Disclosure Requirement on Capital Adequacy for Financial Business Groups.

## 6. Submission of an application and scope for the adoption of the IRB

A financial business group may choose any approach for calculating credit risk-weighted assets that is appropriate to the complexity of its risk management system as well as adoption readiness. A financial business group that is eligible to use the IRB for calculating credit risk-weighted assets must meet the minimum requirements as specified by the Bank of Thailand and must receive an approval from the Bank of Thailand.

A financial business group shall refer to regulations on the submission of an application and scope for the adoption of the IRB as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial

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<sup>8</sup> If a financial business group uses the internal model method, that internal model must be integrated into the entire risk management process and risk management for equity exposures in the banking book of financial business group

Banks under Internal Ratings-Based Approach (IRB), except the following – the regulations as specified in this Notification shall apply:

### **6.1 Submission of an application for the adoption of the IRB**

The parent company that intends to use the IRB for calculating risk-weighted assets shall submit an application, as specified in Attachment 4, together with supporting documents, as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB), to the Bank of Thailand according to the relevant Public Handbook, no less than 6 months before the parallel calculation.

On this, the Bank of Thailand will finish its consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

### **6.2 Use of the IRB with significant asset classes**

A financial business group that uses the IRB for calculating credit risk-weighted assets may use the SA for certain portfolios of assets or sub-asset classes of retail claims, or those of certain insignificant businesses of the financial business group<sup>9</sup>, or certain types of transactions with special characteristics to which the IRB cannot be applied. However, the sum of credit risk-weighted assets calculated by the IRB must not less than 85% of the total risk-weighted assets of the financial business group (IRB coverage ratio) (in calculating the coverage ratio, risk-weighted assets for equity instruments shall not be included).

### **6.3 Phased rollout of the IRB approach**

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<sup>9</sup> Examples of the IRB adoption of a financial business group:

- (1) Use the IRB with a particular type of exposures of the commercial bank and of other companies within the financial business group, and use the SA with other insignificant exposures of the commercial bank and of other companies within the financial business group – for example, use the IRB with retail exposures of both the commercial bank and other companies within the financial business group
- (2) Use the IRB with significant exposures of the commercial bank and use the SA with insignificant exposures of the commercial bank and all exposures of other companies within the financial business group. On this, the same approach must be used with the same type of exposures of the commercial bank and other companies within the financial business group, unless approval is granted by the Bank of Thailand on a case-by-case basis. In requesting the approval, the parent company shall submit an approval request to the Bank of Thailand according to the relevant Public Handbook. The Bank of Thailand will finish its consideration of the request within 90 days from the day the request and supporting documents have been completely and correctly received.

The Bank of Thailand allows a financial business group that starts to use the IRB within December 2014 to gradually use the IRB, as the IRB coverage ratio must not be less than 60% of total credit risk-weighted assets of the financial business group, according to readiness of each financial business group, over a 3-year period from the day it starts to use the IRB. On this, a financial business group shall start using the IRB with large-sized assets or business units and those with high risk exposures in the first year of the phased rollout period, and, at the end of the third year, the coverage ratio must not be less than 85% of total risk-weighted assets of the financial business group<sup>10</sup>.

#### **6.4 Parallel calculation**

As a financial business group will have time to prepare for the adoption of the IRB, while the Bank of Thailand can ensure that the financial business group can use the IRB as requested, the financial business group is subject to the parallel calculation requirement, where it must calculate capital requirements under the IRB in parallel with the current approach for at least 1 year in case of the FIRB and for at least 2 years in case of the AIRB. However, as deemed appropriate, the Bank of Thailand may reduce the timeframe parallel calculation.

On this, if the Bank of Thailand considers that any financial business group is not ready to use the IRB for calculating risk-weighted assets, it may extend the parallel calculation timeframe for that financial business group.

#### **6.5 Capital floor**

A financial business group must hold capital of no less than the level as specified in the Bank of Thailand Notification Re: Regulation on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under Internal Ratings-Based Approach (IRB), unless the Bank of Thailand specifies otherwise.

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<sup>10</sup> A financial business group must hold capital during the phased rollout of the IRB as follows:

- (1) If a financial business groups use the IRB covering less than 60% of total risk-weighted assets of the financial business group, it is not allowed to adopt a phased rollout of the IRB, and, therefore, it must hold capital proportionate to credit risk-weighted assets calculated under the SA.
- (2) If a financial business groups use the IRB covering at least 60% of total risk-weighted assets of the financial business group, it must hold capital proportionate to credit risk-weighted assets calculated under the IRB and the SA.

An Application for the Calculation of Capital Requirements for a Financial Business Group

Name of the parent company of the financial business group .....

Name of the Managing Director of the parent company ..... (signed) .....

Name and position of a person responsible for completing this application that can be contacted by the Bank of Thailand .....Tel. ....

**Section 1: A financial business group that uses the SA for calculating credit risk-weighted assets shall provide the following information:**

A plan that outlines the preparations for the adoption of the SA and credit risk mitigation for the calculation of capital requirements of the financial business group (including database system, budget allocation, details of responsible staff members - namely, their names and positions, or working groups that have been set up, relevant documents and frequency of progress reporting to senior managements of the parent company), as well as existing problems or obstacles (if any)

**Section 2: A financial business group that uses the SA for calculating credit risk-weighted assets but the financial institution on a solo basis uses the IRB shall provide the following information:**

1. Reasons that the financial business group cannot use the IRB in the same way as the financial institution on a solo basis:

.....  
.....

2. A timeframe that the financial business group will manage to use the IRB

.....

3. For claims on corporates, the financial business group will:

- Assign risk weights based on their ratings from ECAs
- Assign a risk weight of 100% to all claims

4. Specify the number and outstanding balance of claims according to consolidated financial statements of the full consolidation that receive ratings from the external credit assessment institutions (ECAs) at the end of the latest reporting period, classified by type of claims:

Type of claims*	Number of claims that receive ratings from the ECAs	Outstanding balance of claims that receive ratings from the ECAs (million Baht)	Ratio of the number of claims that receive ratings from the ECAs to the total number of claims (%)	Ratio of the outstanding balance of claims that receive ratings from the ECAs to the total outstanding balance of claims (%)
1. Claims on sovereigns (1) Claims on sovereigns and central banks (2) Claims on non-central government public sector entities, government organizations and state enterprises classified as claims on sovereigns				
2. Claims on multinational development banks that do not receive a 0% risk weight				
3. Claims on financial institutions (1) Claims on financial institutions and securities (2) Claims on non-central government public sector entities, government organizations and state enterprises classified as claims on financial institutions				
4. Claims on corporates				

\* Please refer to the definition of each type of claims as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA) or the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies

5. The financial business group shall provide a list of the ECAs that it will use their ratings for assigning risk weights to each type of claims as follows:

(1) Claims on sovereigns and financial institutions  
.....

(2) Claims on multinational development banks that do not receive a 0% risk weight  
.....

(3) Claims on corporates (if not assigning a 100% risk weight to all claims on corporates)  
.....

In addition, the financial business group shall provide the outstanding balance at the end of reporting period, according to consolidated financial statements of the full consolidation, of claims that receive risk weights from the ECAs, classified by type of claims:

Type of claims*	Outstanding balance of claims that receive ratings from the ECAs as approved by BOT (million Baht)					Other*	Total
	S&P	Moody's	Fitch	Fitch (Thailand)	TRIS		
1. Claims on sovereigns (1) Claims on sovereigns and central banks (2) Claims on non-central government public sector entities, government organizations and state enterprises classified as claims on sovereigns							

2. Claims on multinational development banks that do not receive a 0% risk weight							
3. Claims on financial institutions (1) Claims on financial institutions and securities (2) Claims on non-central government public sector entities, government organizations and state enterprises classified as claims on financial institutions							
4. Claims on corporates							

\* The outstanding balance of claims that do not receive ratings from the ECAs as approved by BOT

6. The methodology that the financial business group will use for calculating haircuts under the comprehensive approach (if applicable):

- Standard supervisory haircuts
- Own estimates for haircuts
  - By internal estimates of market price volatility and foreign exchange volatility
  - By value-at-risk models

**Section 3: A financial business group that uses the IRB for calculating credit risk-weighted assets shall provide the following information:**

1. A (phased rollout) plan for the adoption of the IRB, by specifying timeframes (month/year) and the approach under the IRB (FIRB or AIRB) that the financial business group intends to use for each type of exposures, as well as types and proportions of insignificant exposures to which the SA will be applied – provide details in the attached Table “IRB Adoption

Plan”; Financial Business Group shall also provide the explicit strategic plan, namely its target type of loans, such as corporate loans or retail loans

2. Details of sub-systems of the internal ratings system that the financial business group will apply to each type of exposures, such as corporate claims or retail claims; the “sub-system” means the system that is customized according to the type, business operations or customers – provide details in the attached Table “IRB Adoption Plan”; if there are additional supporting documents, they may be submitted as an attachment to the application

3. An expected time period that the financial business group will be fully prepared for the pre-approval of internal systems by the Bank of Thailand – provide details in the attached Table “IRB Adoption Plan”

4. A plan that outlines the preparations for the adoption of the IRB according to the (phased rollout) plan for the adoption of the IRB according to 1. (namely, database system, budget allocation, details of responsible staff members - namely, their names and positions, or working groups that have been set up, relevant documents and frequency of progress reporting to senior managements of the parent company) as well as existing problems or obstacles (if any)

5. Specify the methodology that the financial business group will apply to each type of sub-classes of special lending, and provide further details in the attached Table “IRB Adoption Plan”:

- Supervisory slotting criteria
- Corporate risk weight function

6. Specify an approach that the financial business group will apply to each type of equity exposures, as well as specify reasons for applying that method in the attached Table “IRB Adoption Plan”:

- Market based approach
- Simple risk weight method
- Internal model method
- PD/LGD approach

7. For a financial business group that the parent company is an overseas financial institution, it shall provide details of credit policy, credit approval process, credit review and monitoring for each type of exposures in the attached Table “IRB Adoption Plan”, and specify if the internal system is developed by the overseas financial institution or internally developed.

8. Specify the coverage ratios over the 3-year period of the phased rollout of the IRB (if applicable):

Type of exposures*	1 <sup>st</sup> year of phased rollout: ..... (year)		2 <sup>nd</sup> year of phased rollout: ..... (year)		3 <sup>rd</sup> year of phased rollout: ..... (year)		4 <sup>th</sup> year of phased rollout: ..... (year)	
	Approach	% of total RWAs	Approach	% of total RWAs	Approach	% of total RWAs	Approach	% of total RWAs
1. Sovereign claims								
2. Financial institution exposures								
3. Corporate claims								
4. Retail claims								
5. Equity exposures								
Total exposures under the SA								
Total exposures under the IRB								
	Total	100%		100%		100%		100%

\* Please refer to the definition of each type of exposures as specified in the Bank of Thailand Notification Re: Regulations on the Calculation of Risk-Weighted Assets for Commercial Banks under the Internal Ratings-Based Approach (IRB) or the Bank of Thailand Notification Re: Regulations on Capital Requirement and Maintenance of Liquid Assets for Finance Companies

**Section 4: A financial business group that uses the SA-OR or ASA for calculating value equivalent to operational risk-weighted assets shall provide the following information:**

A plan that outlines the preparations for the adoption of SA-OR or ASA for calculating value equivalent to operational risk-weighted assets (namely, database system, budget allocation, details of responsible staff members - namely, their names and positions, or working groups that have been set up, relevant documents and frequency of progress reporting to senior managements of the parent company) as well as existing problems or obstacles (if any).

Attached Table

## IRB Adoption Plan

Name of the financial business group .....

Type of exposures	Specify the approach to be applied (FIRB or AIRB or SA) and the date of adoption	Amount of exposures according to financial statements of the full consolidation at the end of the latest reporting period		Amount of risk-weighted assets of the full consolidation at the end of the latest reporting period under the current approach (Current Accord)		Internal rating system		Time period that the BOT can conduct the pre-approval examination of the internal rating system
		Amount (million Baht)	% of total exposures (assets) of the full consolidation	Amount (million Baht)	% of total exposures (assets) of the full consolidation	Name of the system	(1) developed by the parent company; or (2) internally developed*	
1. Sovereign claims								
1.1 Sovereigns and central banks								
1.2 Non-central government public sector entities, government organizations and oversea state enterprises classified as sovereign claims								

Type of exposures	Specify the approach to be applied (FIRB or AIRB or SA) and the date of adoption	Amount of exposures according to financial statements of the full consolidation at the end of the latest reporting period		Amount of risk-weighted assets of the full consolidation at the end of the latest reporting period under the current approach (Current Accord)		Internal rating system		Time period that the BOT can conduct the pre-approval examination of the internal rating system
		Amount (million Baht)	% of total exposures (assets) of the full consolidation	Amount (million Baht)	% of total exposures (assets) of the full consolidation	Name of the system	(1) developed by the parent company; or (2) internally developed*	
1.3 BIS, IMF, ECB and EC								
1.4 Multinational development banks								
2. Financial institution exposures								
2.1 Commercial banks, finance companies and credit foncier companies								
2.2 Securities companies								
2.3 Non-central government public sector entities, government organizations and state enterprises								

Type of exposures	Specify the approach to be applied (FIRB or AIRB or SA) and the date of adoption	Amount of exposures according to financial statements of the full consolidation at the end of the latest reporting period		Amount of risk-weighted assets of the full consolidation at the end of the latest reporting period under the current approach (Current Accord)		Internal rating system		Time period that the BOT can conduct the pre-approval examination of the internal rating system
		Amount (million Baht)	% of total exposures (assets) of the full consolidation	Amount (million Baht)	% of total exposures (assets) of the full consolidation	Name of the system	(1) developed by the parent company; or (2) internally developed*	
classified as financial institution exposures								
3. Corporate claims								
3.1 Corporates								
3.2 Corporates with total sales of the entire group of less than 1,000 million Baht								
3.3 Specialized lending								
3.3.1 Supervisory slotting criteria								
- Project finance								
- High-volatility								

Type of exposures	Specify the approach to be applied (FIRB or AIRB or SA) and the date of adoption	Amount of exposures according to financial statements of the full consolidation at the end of the latest reporting period		Amount of risk-weighted assets of the full consolidation at the end of the latest reporting period under the current approach (Current Accord)		Internal rating system		Time period that the BOT can conduct the pre-approval examination of the internal rating system
		Amount (million Baht)	% of total exposures (assets) of the full consolidation	Amount (million Baht)	% of total exposures (assets) of the full consolidation	Name of the system	(1) developed by the parent company; or (2) internally developed*	
commercial real estate								
- Commodities finance								
- Income-producing real estate								
3.3.2 Corporate risk weight function								
- Project finance								
- High-volatility commercial real estate								
- Commodities								

Type of exposures	Specify the approach to be applied (FIRB or AIRB or SA) and the date of adoption	Amount of exposures according to financial statements of the full consolidation at the end of the latest reporting period		Amount of risk-weighted assets of the full consolidation at the end of the latest reporting period under the current approach (Current Accord)		Internal rating system		Time period that the BOT can conduct the pre-approval examination of the internal rating system
		Amount (million Baht)	% of total exposures (assets) of the full consolidation	Amount (million Baht)	% of total exposures (assets) of the full consolidation	Name of the system	(1) developed by the parent company; or (2) internally developed*	
finance								
- Income-producing real estate								
3.4 Purchased receivables								
4. Retail claims								
4.1 Residential mortgage exposures								
4.2 Qualifying revolving retail claims								
4.3 Other retail claims								
4.4 Purchased receivables								
5. Equity Exposures								
5.1 Market-based approach								

Type of exposures	Specify the approach to be applied (FIRB or AIRB or SA) and the date of adoption	Amount of exposures according to financial statements of the full consolidation at the end of the latest reporting period		Amount of risk-weighted assets of the full consolidation at the end of the latest reporting period under the current approach (Current Accord)		Internal rating system		Time period that the BOT can conduct the pre-approval examination of the internal rating system
		Amount (million Baht)	% of total exposures (assets) of the full consolidation	Amount (million Baht)	% of total exposures (assets) of the full consolidation	Name of the system	(1) developed by the parent company; or (2) internally developed*	
5.1.1 Simple risk weight method								
5.1.2 Internal models method								
5.2 PD/LGD approach								
<b>Total</b>								

\* to be specified by a financial business group that the parent company is an overseas financial institution