Bangkok Bank

# Bangkok Bank Public Company Limited

## Basel III - Pillar 3 Disclosures

## As at December 31, 2014

Bangkok Bank

## Contents

Bangkok Bank

## Index of Tables

## Introduction

Bangkok Bank ("the Bank") recognizes that effective risk management and good corporate governance are essential to the stability and sustainable credibility of the Bank and its subsidiaries in the Group ("the Group"). The Bank therefore places great emphasis on continually improving risk management processes and on having a sufficient level of capital to support business operations, at both the Bank level and the Group level.

The use of market discipline is deemed to be an important driver in the enhancement of the risk management system. Therefore disclosures of information regarding capital, risk exposures, risk assessment processes, and capital adequacy are provided at both the Bank level (Solo Basis) and the Group level (Full Consolidation Basis) in accordance with the disclosure requirements of the Bank of Thailand ("BOT").

The complete disclosure report of information regarding capital management in accordance with Basel III - Pillar 3 is provided, of which the quantitative information regarding capital structure, capital adequacy, and market risk assessment is disclosed semi-annually. As for the disclosure of qualitative information, it is updated annually or when there is a material change in the risk management policy. Disclosures will be made for information that the Bank considers to be of material nature. The Pillar 3 disclosure reports will be made available on the Bank's website under the section "About Bangkok Bank/ Investor Relations" within four months after the end of relevant period.

## Scope of Application

The disclosure report covers information at both the Bank level (Solo Basis) and the Group level (Full Consolidation Basis). There are 9 companies in the Group consisting of;

- Bangkok Bank Public Company Limited engaged in commercial banking (as the parent company)
- Bangkok Bank Berhad engaged in commercial banking
- Bangkok Bank (China) Company Limited engaged in commercial banking
- BBL Asset Management Company Limited engaged in fund management
- Bangkok Capital Asset Management Company Limited engaged in fund management
- Bualuang Securities Public Company Limited engaged in securities business
- Sinsuptawee Asset Management Company Limited engaged in asset management
- BBL Nominees (Tempatan) Sdn. Bhd engaged in supporting business
- BBL (Cayman) Limited engaged in finance business

The scope of consolidation for accounting and regulatory purposes has no difference (See Table 6).

# 1. Capital Structure and Capital Adequacy

## 1.1 Capital Structure

The Bank's capital structure according to the regulations on capital requirements under the principles of BOT's Basel III, is revised into Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital.

- Common Equity Tier 1 capital comprises
  - 1) Paid-up share capital
  - 2) Premium (discount) on common share
  - 3) Legal reserves
  - 4) Reserves appropriated from net profit
  - 5) Retained earnings after appropriations
  - 6) Non-controlling interest classified as Common Equity Tier 1
  - 7) Other reserves
  - 8) Deductions such as intangible assets
- Additional Tier 1 capital consists of non-controlling interest classified as Tier 1 Capital.
- Tier 2 capital consists of
  - 1) Long-term subordinated debt instrument subordinated to depositors and general creditors
  - 2) General provisions for normal assets not exceeding 1.25 percent of credit risk assets
  - 3) Non-controlling interest classified as Tier 2

In adopting Basel III, BOT relaxes for new other comprehensive income items recognized as capital by allowing to phase in the addition into or deduction from the capital at 20 percent p.a. starting from 2014 to 2018. As for subordinated debt instruments classified as Tier 2 of which the criteria do not meet qualifications under Basel III regarding capability for loss absorbency of the Bank at the point of non-viability i.e. no conversion feature to common shares or written off upon the authority's decision to make financial support to the Bank, BOT requires phasing out capital at 10 percent p.a. starting from 2013 to 2022.

**Table 1: Capital Structure**

Unit : Million Baht

| Capital | The Group | | The Bank | |
|---|---|---|---|---|
| | **31 December 2014** | **30 June 2014** | **31 December 2014** | **30 June 2014** |
| Common Equity Tier 1 Capital | **303,683** | 292,775 | **297,006** | 287,012 |
| Tier 1 Capital | **303,810** | 292,891 | **297,006** | 287,012 |
| Total Capital | **350,097** | 339,204 | **342,423** | 332,566 |

## 1.2 Capital Adequacy

The objective of the Bank's and the Group's capital management policy is to maintain an adequate level of capital to support growth strategies within an acceptable risk framework, as well as to meet regulatory requirements and market expectations.

In compliance with the BOT's supervisory review process guidelines, the Bank's capital management process assesses the overall risk and capital adequacy under the Internal Capital Adequacy Assessment Process (ICAAP). The process covers assessments of all substantial risks to the Bank's operations under projected normal and stressed scenarios, so that the Bank can effectively manage its risks while ascertaining and ensuring that it has a sound capital base in line with its risk profile. Therefore, the Bank will expand the capital management process to the Group.

The Standardized Approach (SA) is used to measure credit risk, market risk, and operational risk for computing regulatory capital requirements under BOT's Basel III at both the Bank level and the Group level.

Under the principles of Basel III, the BOT requires that commercial banks registered in Thailand and their groups must maintain three minimum capital adequacy ratios: a Common Equity Tier 1 capital adequacy ratio of no less than 4.50 percent, a Tier 1 capital adequacy ratio of no less than 6.00 percent, and a total capital adequacy ratio of no less than 8.50 percent. However, the aforementioned minimum ratio does not include the Capital Conservation Buffer which BOT sets out to phasing in additional capital ratio of more than 0.625 percent p.a. beginning 2016 until completion of the increment to more than 2.50 percent in 2019. In year 2019, their Common Equity Tier I ratio originally from 4.50% to more than 7.00%, Tier I ratio originally from 6.00% to more than 8.50% and total capital ratio originally from 8.50% to more than 11.00% of the total risk-weighted assets.

Moreover, BOT may require banks to maintain additional capital for Countercyclical Buffer at maximum 2.50 percent. As at December 31, 2014, the Bank and the Group has adequate capital for such buffers.

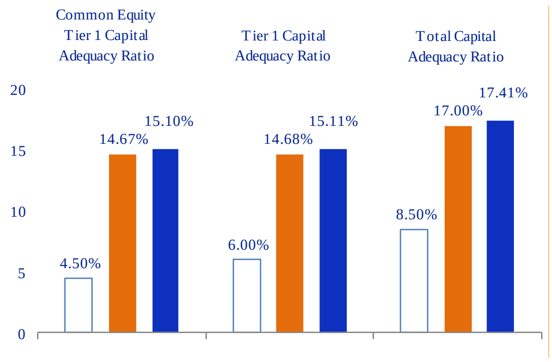
**Table 2: Capital Adequacy**

| Capital | The Group | | The Bank | |
|---|---|---|---|---|
| | **31 December 2014** | **30 June 2014** | **31 December 2014** | **30 June 2014** |
| Common Equity Tier 1 Capital | **15.10%** | 14.67% | **15.24%** | 14.82% |
| Tier 1 Capital | **15.11%** | 14.68% | **15.24%** | 14.82% |
| Total Capital | **17.41%** | 17.00% | **17.56%** | 17.18% |

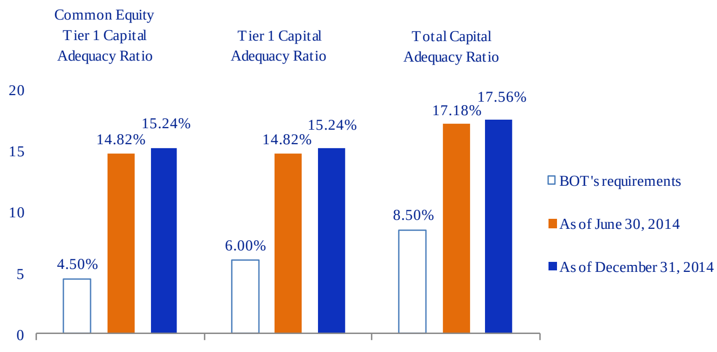
Bangkok Bank

## Capital Adequacy Ratio

### Group Level (Full Consolidation Basis)




### Bank Level (Solo Basis)



### Table 3: Component of Capital

Unit : Million Baht

| Component of Capital | The Group | | The Bank | |
|---|---|---|---|---|
| | 31 December 2014 | 30 June 2014 | 31 December 2014 | 30 June 2014 |
| **Tier 1 Capital** | **303,810** | **292,891** | **297,006** | **287,012** |
| Common Equity Tier 1 Capital | **303,683** | **292,775** | **297,006** | **287,012** |
| Paid-up share capital | 19,088 | 19,088 | 19,088 | 19,088 |
| Premiums on share capital | 56,346 | 56,346 | 56,346 | 56,346 |
| Legal reserves | 19,000 | 18,500 | 19,000 | 18,500 |
| Reserves appropriated from net profit | 81,500 | 76,500 | 81,500 | 76,500 |
| Net profit after appropriations | 86,200 | 77,075 | 79,619 | 71,445 |
| [1]Other comprehensive income* | 41,689 | 45,406 | 41,581 | 45,260 |
| [2]Deductions from Common Equity Tier 1 Capital* | (140) | (140) | (128) | (127) |
| Additional Tier 1 Capital | **127** | **116** | **-** | **-** |
| [3]Non-controlling interest* | 127 | 116 | - | - |
| **Tier 2 Capital** | **46,287** | **46,313** | **45,417** | **45,554** |
| [5]Subordinated debenture* | 23,628 | 23,628 | 23,628 | 23,628 |
| General provision | 22,658 | 22,684 | 21,789 | 21,926 |
| [4]Non-controlling interest* | 1 | 1 | - | - |
| **Total Capital** | **350,097** | **339,204** | **342,423** | **332,566** |

***Component of capital subject to phasing in (out)**

Unit : Million Baht

| As at December 31, 2014 | The Group | | The Bank | |
|---|---|---|---|---|
| | Classified As Capital | Outstanding Balance for Phasing In (Out) | Classified As Capital | Outstanding Balance for Phasing In (Out) |
| **Phasing in (out) at 20 percent p.a. beginning 2014 - 2018** | | | | |
| [1]Other comprehensive income | 41,689 | 914 | 41,581 | 501 |
| [2]Deductions from Common Equity Tier 1 Capital | (140) | (558) | (128) | (514) |
| [3]Non-controlling interest | 127 | (101) | - | - |
| [4]Non-controlling interest | 1 | 5 | - | - |
| **Phasing in (out) at 10 percent p.a. beginning 2013 - 2022** | | | | |
| [5]Subordinated debenture | 23,628 | (23,628) | 23,628 | (23,628) |

Bangkok Bank

***Component of capital subject to phasing in (out)**

Unit : Million Baht

| As at June 30, 2014 | The Group | | The Bank | |
|---|---|---|---|---|
| | Classified As Capital | Outstanding Balance for Phasing In (Out) | Classified As Capital | Outstanding Balance for Phasing In (Out) |
| **Phasing in (out) at 20 percent p.a. beginning 2014 - 2018** | | | | |
| [1]Other comprehensive income | 45,406 | 1,197 | 45,260 | 658 |
| [2]Deductions from Common Equity Tier 1 Capital | (140) | (560) | (127) | (509) |
| [3]Non-controlling interest | 116 | 94 | - | - |
| [4]Non-controlling interest | 1 | 5 | - | - |
| **Phasing in (out) at 10 percent p.a. beginning 2013 - 2022** | | | | |
| [5]Subordinated debenture | 23,628 | (23,628) | 23,628 | (23,628) |

**Bangkok Bank**

### Table 4: Minimum Capital Requirements for Each Type of Risks

Unit : Million Baht

| Type of Risks | The Group | | The Bank | |
|---|---|---|---|---|
| | 31 December 2014 | 30 June 2014 | 31 December 2014 | 30 June 2014 |
| **Minimum capital requirements for credit risk** | **154,996** | **154,256** | **150,735** | **150,105** |
| Performing | 153,329 | 152,983 | 149,098 | 148,866 |
| - Sovereigns and central banks, Multilateral development banks (MDBs[1]), and Provincial organizations/ Government entities/ State enterprises (PSEs[2]) which have the same risk weight as Sovereigns | 1,187 | 820 | 1,187 | 820 |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | 7,086 | 6,152 | 6,337 | 5,685 |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | 113,188 | 114,841 | 107,908 | 109,532 |
| - Retail | 13,493 | 12,873 | 13,339 | 12,775 |
| - Residential mortgage loans | 6,254 | 5,892 | 6,252 | 5,890 |
| - Other assets | 12,121 | 12,405 | 14,075 | 14,164 |
| Non-Performing | 1,667 | 1,273 | 1,637 | 1,239 |
| **Minimum capital requirements for market risk** | **2,636** | **2,327** | **2,623** | **2,304** |
| - Interest Rate Risk | 2,016 | 1,730 | 2,003 | 1,679 |
| - Equity Price Risk | 137 | 144 | - | - |
| - Foreign Exchange Risk | 483 | 453 | 620 | 625 |
| - Commodity Price Risk | - | - | - | - |
| **Minimum capital requirements for operational risk** | **13,282** | **13,030** | **12,346** | **12,179** |
| **Total minimum capital requirements** | **170,914** | **169,613** | **165,704** | **164,588** |

Remark

[1] Multilateral Development Banks

[2] Non-central Government Public Sector Entities

Bangkok Bank

### Table 5: Main Features of Regulatory Capital Instruments

| | Ordinary share | Subordinated debt 1 | Subordinated debt 2 |
|---|---|---|---|
| Issuer | Bangkok Bank Public Company Limited | Bangkok Bank Public Company Limited Hong Kong Branch | Bangkok Bank Public Company Limited |
| ISIN Code | TH0001010006 | USY0606WBQ25 (Reg S)<br>US059895AH54 (144A) | TH0001032C09 |
| **Regulatory treatment** | | | |
| Instrument type | Common Equity Tier 1 | Tier 2 capital | Tier 2 capital |
| Qualified Basel III | Qualified | Non-qualified | Non-qualified |
| Non-qualified Basel III features | N/A | No loss absorption features | No loss absorption features |
| Phased-out or full-amount | Full-amount | Phased-out at 10% p.a. | Phased-out at 10% p.a. |
| Eligible at solo/group level | Group & solo | Group & solo | Group & solo |
| Amount recognized in regulatory capital (Net of phasing out) (Unit: THB Million) | 19,088 | 7,628 | 16,000 |
| Par value | 10 Baht | 1,000 U.S. Dollar | 1,000 Baht |
| Accounting classification | Shareholder's equity | Amortized-cost debt | Amortized-cost debt |
| Original date of issuance | Multiple | January 28, 1999 | December 7, 2012 |
| Perpetual or dated | Perpetual | Dated | Dated |
| Original maturity date | No maturity | March 15, 2029 | December 7, 2022 |
| Issuer's authority to call subject to prior supervisory approval | No | No | No |
| Optional call date, contingent call date and redemption amount | N/A | The Bank has the option to redeem the subordinated notes if there are changes in or amendments to the tax laws or regulations of Thailand and/or Hong Kong resulted that the Bank has additional amount to pay in respect to the withholding tax. The redemption amount of the notes shall be equal to total outstanding principal plus accrued interest. | December 7, 2017 / Full redemption amount |
| Subsequent call dates, if applicable | N/A | Any date after original date of issuance | At any coupon payment dates after 5 years from original date of issuance |

## Table 5: Main Features of Regulatory Capital Instruments (Continued)

| | Ordinary share | Subordinated debt 1 | Subordinated debt 2 |
|---|---|---|---|
| **Coupons / dividends** | | | |
| Fixed or floating dividend/coupon | Discretionary dividend amount | Fixed rate | Fixed rate |
| Coupon rate and any related index | Distributable profit that has been declared as dividend | 9.025 % p.a. | 4.375 % p.a. |
| Existence of a dividend stopper | No | No | No |
| Fully discretionary, partially discretionary or mandatory | Fully discretionary | Mandatory by BOT | Mandatory by BOT |
| Existence of step up or other incentive to redeem | No | No | No |
| Non-cumulative or cumulative | Non-cumulative | Non-cumulative | Non-cumulative |
| Convertible or non-convertible | Non-convertible | Non-convertible | Non-convertible |
| Write-down feature | No | No | No |
| Position in subordination hierarchy in liquidation | The ordinary shareholders shall of the return of capital in a winding-up at the last position. | The subordinated noteholders shall of the return of capital in a winding-up after preferred shareholders, depositors and general creditors. | The subordinated noteholders shall of the return of capital in a winding-up after preferred shareholders, depositors and general creditors. |

## Table 6: Reconciliation of Regulatory Capital and Financial Statement under Consolidated Supervision

**The Group capital** — Unit : Million Baht

| Item | 31 December 2014 Amount | 30 June 2014 Amount | References based on balance sheet under the consolidated supervision |
|---|---|---|---|
| **Tier 1 capital** | | | |
| **Common Equity Tier 1 Capital** | | | |
| Paid-up common shares after deducting treasury shares | 19,088 | 19,088 | A |
| Premiums on share capital | 56,346 | 56,346 | B |
| Legal reserves | 19,000 | 18,500 | C |
| Reserves appropriated from net profit | 81,500 | 76,500 | D |
| Net profit after appropriation | 86,200 | 77,075 | E |
| Other comprehensive income | | | |
| Revaluation surplus on land building and condominium appraisal | 14,089 | 14,539 | F |
| Revaluation surplus (deficit) of available for sale equity and debt securities | 28,100 | 31,240 | G |
| Foreign currency translation differences | (500) | (373) | H |
| Other owner changes items | - | - | |
| **Total CET1 capital before regulatory adjustments and deduction** | **303,823** | **292,915** | |
| Regulatory adjustments on CET1 | - | - | |
| Regulatory deduction on CET1 | | | |
| Intangible assets (Software computer license) | (140) | (140) | I |
| **Total regulatory deduction on CET1** | **(140)** | **(140)** | |
| **Total CET1** | **303,683** | **292,775** | |
| **Additional Tier 1 capital** | | | |
| Non-controlling interest | 127 | 116 | J |
| **Total Tier 1 capital** | **303,810** | **292,891** | |
| **Tier 2 capital** | | | |
| Proceeds from issuing subordinated debt securities | 23,628 | 23,628 | K |
| General provision | 22,658 | 22,684 | L |
| Non-controlling interest | 1 | 1 | M |
| **Total Tier 2 capital** | **46,287** | **46,313** | |
| **Total regulatory capital** | **350,097** | **339,204** | |

Bangkok Bank

## Table 6: Reconciliation of Regulatory Capital and Financial Statement under Consolidated Supervision (Continued)

**Balance sheet under the consolidated supervision** [1]

Unit : Million Baht

| Items | 31 December 2014 | 30 June 2014 | References for the Group capital items |
|---|---|---|---|
| | Amount | Amount | |
| **Assets** | | | |
| Cash | 59,899 | 43,204 | |
| Interbank and money market items, net | 532,205 | 362,763 | |
| Claim on securities | 65 | 41 | |
| Derivative assets | 15,941 | 12,439 | |
| Investments, net | 382,054 | 395,499 | |
| Investments in subsidiaries and associates, net | 1,156 | 985 | |
| Loans to customers and accrued interest receivables, net | | | |
| Loans to customers | 1,782,849 | 1,765,224 | |
| Accrued interest receivables | 4,233 | 3,451 | |
| **Total Loans to customers and accrued interest receivables** | **1,787,082** | **1,768,675** | |
| Less Deferred revenue | (616) | (703) | |
| Less Allowance for doubtful accounts | (89,411) | (94,338) | |
| Qualified as capital | (22,658) | (22,684) | L |
| Less Revaluation allowance for debt restructuring | (2,514) | (2,869) | |
| **Total Loans to customers and accrued interest receivables, net** | **1,694,541** | **1,670,765** | |
| Customers' liabilities under acceptances | 1,852 | 1,748 | |
| Properties for sale, net | 16,516 | 17,860 | |
| Premises and equipment, net | 31,455 | 31,993 | |
| Other Intangible assets, net | 698 | 700 | |
| Deduction from capital | (140) | (140) | I |
| Deferred tax assets | 2,132 | 2,042 | |
| Other assets, net | 21,376 | 18,098 | |
| **Total assets** | 2,759,890 | 2,558,137 | |
| **Liabilities** | | | |
| Deposits | 2,058,779 | 1,903,432 | |
| Interbank and money market items, net | 140,048 | 117,463 | |
| Liabilities payable on demand | 9,136 | 8,789 | |
| Liabilities to deliver securities | 152 | 159 | |
| Derivative liabilities | 17,852 | 11,035 | |
| Debt issued and borrowings | 140,845 | 138,823 | |
| Debt instruments that are qualified as capital | 23,628 | 23,628 | K |
| Bank's liabilities under acceptances | 1,852 | 1,748 | |
| Provisions | 9,241 | 8,432 | |
| Deferred tax liabilities | 4,169 | 4,773 | |
| Other liabilities | 54,173 | 50,248 | |
| **Total liabilities** | 2,436,247 | 2,244,902 | |

Bangkok Bank

## Table 6: Reconciliation of Regulatory Capital and Financial Statement under Consolidated Supervision (Continued)

**Balance sheet under the consolidated supervision**[1]

Unit : Million Baht

| Items | 31 December 2014 Amount | 30 June 2014 Amount | References for the Group capital items |
|---|---|---|---|
| **Owner' Equity** | | | |
| Share capital | | | |
| Authorized share capital | | | |
| Preferred shares | 17 | 17 | |
| Common shares | 39,983 | 39,983 | |
| Issued and paid-up share capital | | | |
| Common shares | 19,088 | 19,088 | A |
| Premium on share capital | | | |
| Premium on common shares | 56,346 | 56,346 | B |
| Other comprehensive income | 43,137 | 47,144 | |
| Qualified as capital | 41,689 | 45,406 | F, G, H |
| Retained earnings | | | |
| Appropriated | | | |
| Legal reserve | 19,000 | 18,500 | C |
| Others | 81,500 | 76,500 | D |
| Unappropriated | 104,420 | 95,517 | |
| Qualified as capital | 86,200 | 77,075 | E |
| รวม Total shareholders' equity | 323,491 | 313,095 | |
| Non-controlling interest | 152 | 140 | |
| Qualified as Tier 1 capital | 127 | 116 | J |
| Qualified as Tier 2 capital | 1 | 1 | M |
| **Total owner's equity** | 323,643 | 313,235 | |
| **Total liabilities and owner's equity** | 2,759,890 | 2,558,137 | |

**Remark**

[1] The scope of consolidation for accounting and regulatory purposes has no difference.

## 2. Information Related to the Risks

The effective risk management is fundamental to good banking practice of the Bank and the Group. Accordingly, the Bank has established guidelines for managing risk in each area of the business of the Bank and the Group to ensure that they have effective risk management mechanisms in place. Over the past few years, the Bank has continuously analyzed major risk factors which could affect the financial operations of the Bank and the Group and, where necessary, adjusted their organizational structure and risk management processes. This is to ensure that their risk management systems are effective and in line with international standards and are in accordance with the BOT guidelines.

The Risk Management Committee, the Board of Executive Directors and the senior management all play significant roles in prescribing and reviewing the sufficiency of the risk management policy and system. They also define the risk management strategy, and monitor and control the risk of the Bank and the Group to be at an appropriate level, in compliance with the risk management policy approved by the Board of Directors.

The risk management process of the Bank and the subsidiaries in the Group comprises the identification of significant risks which may potentially impact business operations, the assessment of each type of risk, the monitoring and control of risks to an appropriate level, and the reporting of the status for each type of risk to relevant parties so as to enable them to manage and/or handle the risks in a timely manner.

The key principle of risk management is based on each business unit being responsible for continuously managing its relevant risk exposures and ensuring each risk stays within the approved limits and in compliance with the overall risk management policy approved by the Board of Directors, while the Risk Management Division is responsible for monitoring and controlling the overall risks on a regular basis. The Risk Management Division and all risk-generating units are audited by the Audit and Control Division to assess the effectiveness, adequacy and appropriateness of the internal control systems.

The approach used by the Bank and the subsidiaries in the Group for the management of credit risk, market risk and operational risk are as follows:

### 2.1 Credit Risk

Credit Risk is the risk that arises from the inability of borrowers or counterparties to perform their obligations under contractual agreements in relation to lending, investment and other contractual activities, for example the borrowers' failure to repay principal and/or interest as agreed in the contract.

#### 2.1.1 Credit Risk Management

The Bank has established credit underwriting processes which include the formulation of the credit policy, credit risk ratings for customers, and the establishment of different levels of delegation of authority for credit approval, depending upon the type of business and/or the size of the credit line. In considering, the approval of loans in general, the Bank considers the purpose of the loan and assesses the repayment ability of the applicant, taking into account the applicant's operating cash flows, business feasibility, the capability of management, and collateral coverage. The Bank performs credit reviews which include reviewing credit risk rating on a regular basis. In order to effectively monitor and manage its credit risks, the Bank has, therefore, set up the following divisions.

- Risk Management Division is responsible for analyzing and reporting to management on the status of risks in various areas of the Bank, as well as proposing recommendations for the review of the overall risks policy of the Bank in anticipation of, and in compliance with, new rules, regulations and international standards. The division is also responsible for monitoring the management of each type of risk to comply with the Bank's risk management policy.

- Credit Management Division is responsible for managing risks related to credit extension by supervising and monitoring credit extensions in accordance with the Bank's credit policies. The Credit Management Division comprises the Credit Policy unit, the Credit Acceptance unit, the Portfolio Management unit, the Risk Asset Review unit, the Special Asset Management unit, the Loan Recovery and Legal unit, and the Bank Property unit. The functions of each unit are summarized below
  - Credit Policy unit oversees the credit policy framework and coordinates the improvement and adjustment of the credit policy. It is also responsible for disseminating the credit policy, credit standards and credit processes; for monitoring and overseeing exceptional cases which are inconsistent with the credit policy; and for gathering various inputs which may be used for improving the credit policy.
  - Credit Acceptance oversees the quality of credit extensions to ensure they are in line with the credit policy and credit underwriting standards, reviews the appropriateness of loan structures as well as the results of customers' credit risk ratings, promotes the development of a good credit culture, and maintains a systematic and reliable credit extension process.
  - Portfolio Management unit is responsible for analyzing and making recommendations for adjustments to the portfolio structure, recommending the appropriate portfolio composition and the provision of reserves for loan losses at the portfolio level, developing and overseeing credit risk management tools and methodologies, constructing credit databases, and overseeing related management standards.
  - Risk Asset Review unit is charged with reviewing credit quality and credit management processes, assessing the adequacy of loan loss reserves, and evaluating compliance with credit policy, regulations and credit underwriting standards.
  - Special Asset Management unit is responsible for managing non-performing loans, and for determining and executing strategies for the resolution and restructuring of troubled loans.
  - Loan Recovery and Legal unit is responsible for taking legal actions, negotiating loan settlements, and seizing collateral for sale by public auction.
  - Bank Property unit is responsible for managing and selling foreclosed assets obtained from loan recovery processes and from legal actions.

For the credit process, credit applications are first considered by the business units and then submitted to the Credit Acceptance unit. The unit conducts additional analysis to help mitigate credit risk by ensuring that the proposals comply with the Bank's credit policies in areas such as credit underwriting standards, credit risk rating, and collateral appraisal. In handling non-performing loans, there is a specific unit to manage and resolve such loans. The Bank also has an independent unit to review credit quality and credit management processes; assess the adequacy of loan loss reserves for non-performing loans; evaluate the effectiveness in complying with credit policy, regulations and credit underwriting standards; and assess the appropriateness of portfolio composition, the adequacy of capital and the effectiveness of stress testing as specified by the Bank and the BOT. All the above units report to the senior management, the Board of Executive Directors and the Risk Management Committee on a regular basis.

The Bank has established different measures to control credit risk. For example, the Bank has instituted limits on the amount of total credit extended, contingent liabilities, and investment in a group of borrowers, an industry and a country. All of this will limit the loss of capital due to an economic downturn. Moreover, the Bank monitors and reports on these aspects to the senior management, the Board of Executive Directors and the Risk Management Committee to ensure that there will be adequate capital to safeguard the continuity of business operations in difficult times.

For the subsidiaries in the Group, credit risk management processes similar to that of the Bank have been established, but the organizational structure of the units that are responsible for the supervision and management of credit risk may vary according to the structure of each company.

**2.1.2 Classification and Impairment of Assets**

The Bank and each subsidiary in the Group follow the guidelines of the BOT and/or the relevant local regulators regarding the classification of assets and relevant provisions. Assets are classified as normal, special mention, substandard, doubtful, doubtful of loss and loss by taking into consideration the length of time in default of payment whether of principal or interest, and also qualitative measures.

Under the Standardized Approach (SA) for measuring capital adequacy, the Bank and the subsidiaries in the Group's provisions are differentiated into Specific Provision and General Provision as follows:

- Specific Provisions include provisions that have been set aside for non-performing loans based on the difference between the book value of such loans and the present value of estimated future cash flows to be received, either from the debtors or from disposal of collateral; and provisions that have been set aside for performing loans in accordance with the minimum guidelines specified by the BOT and/or the relevant regulators. For loans with similar credit risk characteristics, the Collective Approach may be adopted using historical loss information and current observable data to determine the provisioning level. Furthermore, specific provisions include provisions for any off-balance sheet items where a loss may be realized upon settlement of obligations on behalf of such debtors; provisions for other on-balance sheet assets where objective evidence of impairment exists and the impairment loss can be estimated; and unrealized loss on revaluation of securities categorized as trading and available-for-sale. Specific provisions do not include provisions for assets classified as normal which have already been included in Tier 2 capital.
- General Provisions include provisions that have been set aside in excess of the minimum regulatory requirements for potential loss due to changes in economic and legal environment and other factors as outlined above which are not earmarked specifically for any particular debtor; and provisions that have been set aside for assets classified as normal that are included in Tier 2 capital.

Bangkok Bank

The following tables present the quantitative information related to credit risk at the Bank and the Group level as at December 31, 2014 and 2013.

**Table 7: Significant on-statement of financial position assets and off-statement of financial position items before credit risk mitigation classified by remaining maturity**

Unit: Million Baht

| | The Group | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | | | | |
| Remaining maturity | On-statement of financial position assets | | | | | Off-statement of financial position items before multiplying by credit conversion factors | | | |
| | Net loans and accrued interest receivables* | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
| Up to 1 year | 1,030,177 | 145,921 | 205,959 | 6,137 | 1,388,194 | 41,221 | 807,315 | 22,919 | 871,455 |
| Over 1 year | 1,013,505 | 152,243 | 208 | 9,804 | 1,175,760 | 5,422 | 503,249 | 57,336 | 566,007 |
| **Total** | **2,043,682** | **298,164** | **206,167** | **15,941** | **2,563,954** | **46,643** | **1,310,564** | **80,255** | **1,437,462** |

* Including interbank and money market items but excluding general provisions

Unit: Million Baht

| | The Group | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 31 December 2013 | | | | | | | | |
| Remaining maturity | On-statement of financial position assets | | | | | Off-statement of financial position items before multiplying by credit conversion factors | | | |
| | Net loans and accrued interest receivables* | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
| Up to 1 year | 1,005,196 | 61,570 | 155,211 | 9,235 | 1,231,212 | 48,374 | 756,585 | 10,320 | 815,279 |
| Over 1 year | 934,051 | 242,111 | - | 4,535 | 1,180,697 | 6,380 | 272,353 | 83,429 | 362,162 |
| **Total** | **1,939,247** | **303,681** | **155,211** | **13,770** | **2,411,909** | **54,754** | **1,028,938** | **93,749** | **1,177,441** |

* Including interbank and money market items but excluding general provisions

Unit: Million Baht

| Remaining maturity | The Bank – 31 December 2014 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | On-statement of financial position assets | | | | | Off-statement of financial position items before multiplying by credit conversion factors | | | |
| | Net loans and accrued interest receivables* | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
| Up to 1 year | 984,912 | 136,665 | 149,440 | 5,866 | 1,276,883 | 39,620 | 797,397 | 26,216 | 863,233 |
| Over 1 year | 1,000,074 | 146,681 | 208 | 9,804 | 1,156,767 | 2,845 | 503,249 | 57,335 | 563,429 |
| **Total** | **1,984,986** | **283,346** | **149,648** | **15,670** | **2,433,650** | **42,465** | **1,300,646** | **83,551** | **1,426,662** |

* Including interbank and money market items but excluding general provisions

Unit: Million Baht

| Remaining maturity | The Bank – 31 December 2013 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | On-statement of financial position assets | | | | | Off-statement of financial position items before multiplying by credit conversion factors | | | |
| | Net loans and accrued interest receivables* | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
| Up to 1 year | 965,836 | 54,853 | 109,150 | 9,138 | 1,138,977 | 44,475 | 744,354 | 13,601 | 802,430 |
| Over 1 year | 922,941 | 235,850 | - | 4,535 | 1,163,326 | 5,370 | 272,353 | 83,429 | 361,152 |
| **Total** | **1,888,777** | **290,703** | **109,150** | **13,673** | **2,302,303** | **49,845** | **1,016,707** | **97,030** | **1,163,582** |

* Including interbank and money market items but excluding general provisions

## Table 8: Significant on-statement of financial position assets and off-statement of financial position items before credit risk mitigation classified by customer's country of residence

Unit: Million Baht

| Customer's country of residence [1] | The Group 31 December 2014 On-statement of financial position assets: Net loans and accrued interest receivables[2] | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Off-statement of financial position items before multiplying by credit conversion factors: Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
|---|---|---|---|---|---|---|---|---|---|
| Thailand | 1,704,506 | 265,561 | 23,277 | 11,686 | 2,005,030 | 29,527 | 1,066,499 | 62,750 | 1,158,776 |
| Asia | 307,367 | 25,873 | 147,939 | 2,778 | 483,957 | 16,892 | 126,416 | 14,209 | 157,517 |
| Europe | 15,884 | 1,911 | 13,486 | 1,131 | 32,412 | 83 | 89,566 | - | 89,649 |
| America | 13,250 | 975 | 21,198 | 326 | 35,749 | 134 | 24,359 | 3,296 | 27,789 |
| Others | 2,675 | 3,844 | 267 | 20 | 6,806 | 7 | 3,724 | - | 3,731 |
| **Total** | **2,043,682** | **298,164** | **206,167** | **15,941** | **2,563,954** | **46,643** | **1,310,564** | **80,255** | **1,437,462** |

[1] Based on customer's country of residence

[2] Including interbank and money market items but excluding general provisions

Unit: Million Baht

| Customer's country of residence [1] | The Group 31 December 2013 On-statement of financial position assets: Net loans and accrued interest receivables[2] | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Off-statement of financial position items before multiplying by credit conversion factors: Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
|---|---|---|---|---|---|---|---|---|---|
| Thailand | 1,628,032 | 273,611 | 16,138 | 10,938 | 1,928,719 | 35,689 | 805,297 | 72,372 | 913,358 |
| Asia | 279,732 | 20,572 | 111,224 | 2,006 | 413,534 | 18,712 | 109,462 | 18,096 | 146,270 |
| Europe | 16,099 | 1,220 | 11,491 | 550 | 29,360 | 90 | 88,493 | - | 88,583 |
| America | 12,233 | 4,870 | 15,538 | 163 | 32,804 | 248 | 18,521 | 3,281 | 22,050 |
| Others | 3,151 | 3,408 | 820 | 113 | 7,492 | 15 | 7,165 | - | 7,180 |
| **Total** | **1,939,247** | **303,681** | **155,211** | **13,770** | **2,411,909** | **54,754** | **1,028,938** | **93,749** | **1,177,441** |

[1] Based on customer's country of residence

[2] Including interbank and money market items but excluding general provisions

Bangkok Bank

Unit: Million Baht

| Customer's country of residence [1] | The Bank 31 December 2014 On-statement of financial position assets | | | | | Off-statement of financial position items before multiplying by credit conversion factors | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Net loans and accrued interest receivables [2] | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
| Thailand | 1,707,577 | 261,666 | 12,718 | 11,094 | 1,993,055 | 29,527 | 1,066,501 | 62,750 | 1,158,778 |
| Asia | 245,600 | 14,950 | 102,260 | 3,198 | 366,008 | 12,713 | 116,523 | 17,505 | 146,741 |
| Europe | 15,884 | 1,911 | 13,482 | 1,032 | 32,309 | 83 | 89,557 | - | 89,640 |
| America | 13,250 | 975 | 20,934 | 326 | 35,485 | 134 | 24,359 | 3,296 | 27,789 |
| Others | 2,675 | 3,844 | 254 | 20 | 6,793 | 8 | 3,706 | - | 3,714 |
| **Total** | **1,984,986** | **283,346** | **149,648** | **15,670** | **2,433,650** | **42,465** | **1,300,646** | **83,551** | **1,426,662** |

[1] Based on customer's country of residence

[2] Including interbank and money market items but excluding general provisions

Unit: Million Baht

| Customer's country of residence [1] | The Bank 31 December 2013 On-statement of financial position assets | | | | | Off-statement of financial position items before multiplying by credit conversion factors | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Net loans and accrued interest receivables [2] | Net investment in debt securities | Deposits (including accrued interest receivables) | Derivatives assets | Total | Avals, loan guarantees, letters of credit | OTC derivatives | Undrawn committed lines | Total |
| Thailand | 1,633,133 | 268,594 | 9,944 | 10,913 | 1,922,584 | 35,689 | 805,356 | 72,371 | 913,416 |
| Asia | 224,161 | 12,611 | 71,592 | 1,936 | 310,300 | 13,803 | 97,291 | 21,378 | 132,472 |
| Europe | 16,099 | 1,220 | 11,457 | 549 | 29,325 | 90 | 88,442 | - | 88,532 |
| America | 12,233 | 4,870 | 15,347 | 163 | 32,613 | 248 | 18,521 | 3,281 | 22,050 |
| Others | 3,151 | 3,408 | 810 | 112 | 7,481 | 15 | 7,097 | - | 7,112 |
| **Total** | **1,888,777** | **290,703** | **109,150** | **13,673** | **2,302,303** | **49,845** | **1,016,707** | **97,030** | **1,163,582** |

[1] Based on customer's country of residence

[2] Including interbank and money market items but excluding general provisions

**Table 9: Loans and accrued interest receivables (including interbank and money market items) and investment in debt securities before credit risk mitigation classified by customer's country of residence and by asset classification guidelines specified by regulators**

Unit: Million Baht

| | The Group | | | | | | |
|---|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | | |
| Customer's country of residence* | Loans and accrued interest receivables | | | | | | Investment in debt securities: Doubtful of Loss |
| | Normal | Special Mentioned | Substandard | Doubtful | Doubtful of Loss | Total | |
| Thailand | 1,695,503 | 29,352 | 5,627 | 16,979 | 19,651 | 1,767,112 | 306 |
| Asia | 303,296 | 6,689 | 176 | 175 | 2,280 | 312,616 | 47 |
| Europe | 15,885 | 2 | - | - | 3 | 15,890 | - |
| America | 13,247 | - | - | 1 | 170 | 13,418 | - |
| Others | 2,667 | 1,464 | - | 1 | 5 | 4,137 | 1 |
| **Total** | **2,030,598** | **37,507** | **5,803** | **17,156** | **22,109** | **2,113,173** | **354** |

* Based on customer's country of residence

Unit: Million Baht

| | The Group | | | | | | |
|---|---|---|---|---|---|---|---|
| | 31 December 2013 | | | | | | |
| Customer's country of residence* | Loans and accrued interest receivables | | | | | | Investment in debt securities: Doubtful of Loss |
| | Normal | Special Mentioned | Substandard | Doubtful | Doubtful of Loss | Total | |
| Thailand | 1,623,101 | 31,001 | 5,947 | 5,466 | 27,661 | 1,693,176 | 589 |
| Asia | 276,944 | 2,659 | 111 | 455 | 3,437 | 283,606 | 100 |
| Europe | 16,100 | 1 | - | 1 | 4 | 16,106 | - |
| America | 12,229 | - | - | 13 | 159 | 12,401 | - |
| Others | 2,784 | 2,197 | - | 2 | 8 | 4,991 | - |
| **Total** | **1,931,158** | **35,858** | **6,058** | **5,937** | **31,269** | **2,010,280** | **689** |

* Based on customer's country of residence

Unit: Million Baht

| Customer's country of residence* | The Bank | | | | | | |
|---|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | | |
| | Loans and accrued interest receivables | | | | | | Investment in debt securities: Doubtful of Loss |
| | Normal | Special Mentioned | Substandard | Doubtful | Doubtful of Loss | Total | |
| Thailand | 1,698,577 | 29,352 | 5,624 | 16,883 | 19,651 | 1,770,087 | 305 |
| Asia | 242,021 | 5,814 | 109 | 173 | 1,506 | 249,623 | 11 |
| Europe | 15,885 | 1 | - | 1 | 3 | 15,890 | - |
| America | 13,247 | - | - | 1 | 170 | 13,418 | - |
| Others | 2,666 | 1,466 | - | 1 | 5 | 4,138 | 1 |
| **Total** | **1,972,396** | **36,633** | **5,733** | **17,059** | **21,335** | **2,053,156** | **317** |

* Based on customer's country of residence

Unit: Million Baht

| Customer's country of residence* | The Bank | | | | | | |
|---|---|---|---|---|---|---|---|
| | 31 December 2013 | | | | | | |
| | Loans and accrued interest receivables | | | | | | Investment in debt securities: Doubtful of Loss |
| | Normal | Special Mentioned | Substandard | Doubtful | Doubtful of Loss | Total | |
| Thailand | 1,628,203 | 31,001 | 5,946 | 5,371 | 27,661 | 1,698,182 | 590 |
| Asia | 222,532 | 1,020 | 106 | 454 | 2,964 | 227,076 | 7 |
| Europe | 16,100 | 1 | - | 1 | 4 | 16,106 | - |
| America | 12,229 | - | - | 13 | 159 | 12,401 | - |
| Others | 2,784 | 2,197 | - | 2 | 8 | 4,991 | - |
| **Total** | **1,881,848** | **34,219** | **6,052** | **5,841** | **30,796** | **1,958,756** | **597** |

* Based on customer's country of residence

**Table 10 : General and specific provisions and bad debt written off for loans and accrued interest receivables (including interbank and money market items) and investment in debt securities classified by customer's country of residence**

Unit: Million Baht

| Customer's country of residence* | The Group 31 December 2014 | | | |
|---|---|---|---|---|
| | Loans and accrued interest receivables | | | Investment in debt securities: Specific provision |
| | General provision | Specific provision | Bad debt written off | |
| Thailand | | 62,606 | 9,164 | 3,092 |
| Asia | | 5,249 | 667 | 48 |
| Europe | | 6 | - | - |
| America | | 168 | - | - |
| Others | | 1,462 | - | 1 |
| **Total** | **23,103** | **69,491** | **9,831** | **3,141** |

* Based on customer's country of residence

Unit: Million Baht

| Customer's country of residence* | The Group 31 December 2013 | | | |
|---|---|---|---|---|
| | Loans and accrued interest receivables | | | Investment in debt securities: Specific provision |
| | General provision | Specific provision | Bad debt written off | |
| Thailand | | 65,144 | 2,207 | 3,108 |
| Asia | | 3,874 | 1,279 | 100 |
| Europe | | 7 | 157 | - |
| America | | 168 | - | - |
| Others | | 1,840 | - | - |
| **Total** | **22,170** | **71,033** | **3,643** | **3,208** |

* Based on customer's country of residence

Unit: Million Baht

| Customer's country of residence* | The Bank 31 December 2014 Loans and accrued interest receivables: General provision | Specific provision | Bad debt written off | Investment in debt securities: Specific provision |
|---|---|---|---|---|
| Thailand | | 62,510 | 9,164 | 3,092 |
| Asia | | 4,023 | 477 | 11 |
| Europe | | 6 | - | - |
| America | | 168 | - | - |
| Others | | 1,463 | - | 1 |
| **Total** | **21,790** | **68,170** | **9,641** | **3,104** |

* Based on customer's country of residence

Unit: Million Baht

| Customer's country of residence* | The Bank 31 December 2013 Loans and accrued interest receivables: General provision | Specific provision | Bad debt written off | Investment in debt securities: Specific provision |
|---|---|---|---|---|
| Thailand | | 65,049 | 2,207 | 3,108 |
| Asia | | 2,915 | 1,279 | 7 |
| Europe | | 7 | 157 | - |
| America | | 168 | - | - |
| Others | | 1,840 | - | - |
| **Total** | **21,009** | **69,979** | **3,643** | **3,115** |

* Based on customer's country of residence

Bangkok Bank

**Table 11: Loans and accrued interest receivables (including interbank and money market items) before credit risk mitigation, classified by business type and by asset classification guidelines specified by regulators**

Unit: Million Baht

| | The Group | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | |
| **Type of Business** | **Normal** | **Special Mentioned** | **Substandard** | **Doubtful** | **Doubtful of Loss** | **Total** |
| Agriculture and mining | 34,362 | 850 | 178 | 104 | 349 | 35,843 |
| Manufacturing and commercial | 767,856 | 20,117 | 2,775 | 15,012 | 14,500 | 820,260 |
| Real estate and construction | 151,056 | 5,086 | 1,058 | 456 | 3,088 | 160,744 |
| Utilities and services | 301,651 | 6,217 | 1,238 | 410 | 1,508 | 311,024 |
| Housing loans | 186,484 | 1,793 | 482 | 531 | 2,341 | 191,631 |
| Others | 589,189 | 3,444 | 72 | 643 | 232 | 593,671 |
| **Total** | **2,030,598** | **37,507** | **5,803** | **17,156** | **22,109** | **2,113,173** |

Unit: Million Baht

| | The Group | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2013 | | | | | |
| **Type of Business** | **Normal** | **Special Mentioned** | **Substandard** | **Doubtful** | **Doubtful of Loss** | **Total** |
| Agriculture and mining | 32,572 | 937 | 20 | 102 | 391 | 34,022 |
| Manufacturing and commercial | 798,238 | 19,080 | 3,702 | 3,695 | 20,486 | 845,201 |
| Real estate and construction | 144,056 | 2,734 | 304 | 411 | 6,357 | 153,862 |
| Utilities and services | 279,280 | 8,194 | 1,583 | 559 | 1,234 | 290,850 |
| Housing loans | 165,903 | 1,345 | 346 | 664 | 2,483 | 170,741 |
| Others | 511,109 | 3,568 | 103 | 506 | 318 | 515,604 |
| **Total** | **1,931,158** | **35,858** | **6,058** | **5,937** | **31,269** | **2,010,280** |

Bangkok Bank

Unit: Million Baht

| | The Bank | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | |
| Type of Business | Normal | Special Mentioned | Substandard | Doubtful | Doubtful of Loss | Total |
| Agriculture and mining | 31,550 | 695 | 178 | 104 | 349 | 32,876 |
| Manufacturing and commercial | 731,836 | 19,448 | 2,714 | 15,012 | 13,784 | 782,794 |
| Real estate and construction | 146,791 | 5,038 | 1,058 | 456 | 3,088 | 156,431 |
| Utilities and services | 298,791 | 6,217 | 1,238 | 410 | 1,508 | 308,164 |
| Housing loans | 186,482 | 1,793 | 481 | 531 | 2,339 | 191,626 |
| Others | 576,946 | 3,442 | 64 | 546 | 267 | 581,265 |
| **Total** | **1,972,396** | **36,633** | **5,733** | **17,059** | **21,335** | **2,053,156** |

Unit: Million Baht

| | The Bank | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2013 | | | | | |
| Type of Business | Normal | Special Mentioned | Substandard | Doubtful | Doubtful of Loss | Total |
| Agriculture and mining | 30,046 | 753 | 20 | 102 | 391 | 31,312 |
| Manufacturing and commercial | 762,833 | 17,699 | 3,702 | 3,695 | 20,072 | 808,001 |
| Real estate and construction | 141,066 | 2,682 | 304 | 411 | 6,357 | 150,820 |
| Utilities and services | 277,508 | 8,177 | 1,583 | 559 | 1,234 | 289,061 |
| Housing loans | 165,900 | 1,343 | 346 | 664 | 2,481 | 170,734 |
| Others | 504,495 | 3,565 | 97 | 410 | 261 | 508,828 |
| **Total** | **1,881,848** | **34,219** | **6,052** | **5,841** | **30,796** | **1,958,756** |

**Table 12: General and specific provisions and bad debt written off for loans and accrued interest receivables (including interbank and money market items) classified by business type**

Unit: Million Baht

| | The Group | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | 31 December 2013 | | |
| Type of Business | General provision | Specific provision | Bad debt written off | General provision | Specific provision | Bad debt written off |
| Agriculture and mining | | 757 | 9 | | 742 | 6 |
| Manufacturing and commercial | | 41,581 | 6,620 | | 43,949 | 2,592 |
| Real estate and construction | | 5,961 | 2,413 | | 7,684 | 242 |
| Utilities and services | | 13,002 | 415 | | 11,131 | 73 |
| Housing loans | | 3,682 | 92 | | 3,659 | 34 |
| Others | | 4,508 | 282 | | 3,868 | 696 |
| **Total** | **23,103** | **69,491** | **9,831** | **22,170** | **71,033** | **3,643** |

Unit: Million Baht

| | The Bank | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | 31 December 2013 | | |
| Type of Business | General provision | Specific provision | Bad debt written off | General provision | Specific provision | Bad debt written off |
| Agriculture and mining | | 698 | 9 | | 723 | 6 |
| Manufacturing and commercial | | 40,620 | 6,430 | | 43,191 | 2,592 |
| Real estate and construction | | 5,933 | 2,413 | | 7,671 | 242 |
| Utilities and services | | 12,977 | 415 | | 11,116 | 73 |
| Housing loans | | 3,681 | 92 | | 3,658 | 34 |
| Others | | 4,261 | 282 | | 3,620 | 696 |
| **Total** | **21,790** | **68,170** | **9,641** | **21,009** | **69,979** | **3,643** |

**Table 13: Reconciliation of general and specific provisions for loans and accrued interest receivables (including interbank and money market items)**

Unit: Million Baht

| Item | The Group | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | 31 December 2013 | | |
| | General provision | Specific provision | Total | General provision | Specific provision | Total |
| Beginning balance | 22,170 | 71,033 | 93,203 | 21,876 | 66,007 | 87,883 |
| Bad debt written off | - | (9,831) | (9,831) | - | (3,643) | (3,643) |
| Doubtful accounts | 933 | 8,633 | 9,566 | 294 | 8,496 | 8,790 |
| Others | - | (344) | (344) | - | 173 | 173 |
| **Ending balance** | **23,103** | **69,491** | **92,594** | **22,170** | **71,033** | **93,203** |

Unit: Million Baht

| Item | The Bank | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | 31 December 2013 | | |
| | General provision | Specific provision | Total | General provision | Specific provision | Total |
| Beginning balance | 21,009 | 69,979 | 90,988 | 21,067 | 65,007 | 86,074 |
| Bad debt written off | - | (9,641) | (9,641) | - | (3,643) | (3,643) |
| Doubtful accounts | 781 | 7,919 | 8,700 | (58) | 8,466 | 8,408 |
| Others | - | (87) | (87) | - | 149 | 149 |
| **Ending balance** | **21,790** | **68,170** | **89,960** | **21,009** | **69,979** | **90,988** |

**Table 14: On-statement of financial position assets and credit equivalent amount of off-statement of financial position items, net of specific provisions, classified by asset type under SA approach**

Unit: Million Baht

| Type of Asset | The Group | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | 31 December 2013 | | |
| | On-statement of financial position assets | Off-statement of financial position items* | Total | On-statement of financial position assets | Off-statement of financial position items* | Total |
| Performing | | | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 437,537 | 102,374 | 539,911 | 343,906 | 99,139 | 443,045 |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | 270,807 | 29,160 | 299,967 | 254,104 | 21,262 | 275,366 |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | 1,283,711 | 165,761 | 1,449,472 | 1,294,029 | 170,606 | 1,464,635 |
| - Retail | 233,469 | 10,779 | 244,248 | 224,456 | 11,597 | 236,053 |
| - Residential mortgage loans | 182,639 | - | 182,639 | 162,063 | - | 162,063 |
| - Other assets | 223,583 | - | 223,583 | 208,429 | - | 208,429 |
| Non-performing | 18,282 | 942 | 19,224 | 12,521 | 429 | 12,950 |
| **Total** | **2,650,028** | **309,016** | **2,959,044** | **2,499,508** | **303,033** | **2,802,541** |

* Including repo-style transactions

Unit: Million Baht

| Type of Asset | The Bank | | | | | |
|---|---|---|---|---|---|---|
| | 31 December 2014 | | | 31 December 2013 | | |
| | On-statement of financial position assets | Off-statement of financial position items * | Total | On-statement of financial position assets | Off-statement of financial position items* | Total |
| Performing | | | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 414,088 | 102,374 | 516,462 | 323,806 | 99,139 | 422,945 |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | 229,327 | 29,601 | 258,928 | 223,086 | 21,749 | 244,835 |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | 1,222,478 | 160,052 | 1,382,530 | 1,238,588 | 164,105 | 1,402,693 |
| - Retail | 229,962 | 10,571 | 240,533 | 221,593 | 11,399 | 232,992 |
| - Residential mortgage loans | 182,605 | - | 182,605 | 162,015 | - | 162,015 |
| - Other assets | 242,885 | - | 242,885 | 224,967 | - | 224,967 |
| Non-performing | 17,939 | 940 | 18,879 | 12,494 | 428 | 12,922 |
| **Total** | **2,539,284** | **303,538** | **2,842,822** | **2,406,549** | **296,820** | **2,703,369** |

* Including repo-style transactions

### 2.1.3 Credit Rating

In assigning risk weights for the calculation of risk weighted assets (RWA) using the Standardized Approach (SA) under Basel III, the Bank and the subsidiaries in the Group use credit ratings from the external credit assessment institutions (ECAIs) who meet the qualifications specified by the BOT. The credit rating from Standard & Poor's is applied for sovereign and financial institutions, while the credit ratings from Fitch Ratings (Thailand) and TRIS Rating are applied for corporate. The process of mapping the ECAI's ratings with the borrower risk weights is prescribed by the BOT.

Bangkok Bank

## Table 15: On-statement of financial position assets and credit equivalent amount of off-statement of financial position items, net of specific provisions, after credit risk mitigation for each asset type classified by risk weights under SA approach

Unit: Million Baht

| Type of Asset | The Group | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | | | | | | | | | | |
| | Rating | | | | | No rating | | | | | | | | | |
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** | **0** | **20** | **35** | **50** | **75** | **100** | **250** | **625** | **937.5** | **100/8.5%** |
| Performing | | | | | | | | | | | | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 513,871 | 6,982 | 6,952 | 4,493 | 3,069 | | | | - | | - | | | | |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | - | 163,408 | 32,825 | 32,014 | 1,506 | | | | | | - | | | | |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | - | 44,706 | 51,950 | 42,280 | 30,578 | | | | 5,626 | | 1,205,742 | | | | |
| - Retail | | | | | | | | | | 203,182 | 6,359 | | | | |
| - Residential mortgage loans | | | | | | | | 159,822 | | 20,624 | 2,168 | | | | |
| - Other assets | | | | | | 78,578 | 1,435 | | | | 140,735 | 568 | - | 1 | 13 |
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** | | | | | | | | | | |
| Non-performing | 33 | | 1,378 | 15,295 | 2,416 | | | | | | | | | | |
| Items deducted from capital | 140 | | | | | | | | | | | | | | |

Unit: Million Baht

| Type of Asset | The Group | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 31 December 2013 | | | | | | | | | | | | | | |
| | Rating | | | | | No rating | | | | | | | | | |
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** | **0** | **20** | **35** | **50** | **75** | **100** | **250** | **625** | **937.5** | **100/8.5%** |
| Performing | | | | | | | | | | | | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 446,931 | - | 3,989 | 1,994 | 2,617 | | | | - | | - | | | | |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | - | 138,454 | 31,052 | 16,523 | 362 | | | | | | - | | | | |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | - | 46,594 | 63,970 | 42,032 | 24,945 | | | | 3,892 | | 1,212,317 | | | | |
| - Retail | | | | | | | | | | 196,152 | 5,632 | | | | |
| - Residential mortgage loans | | | | | | | | 140,898 | | 19,743 | 1,408 | | | | |
| - Other assets | | | | | | 68,757 | 1,132 | | | | 136,182 | 484 | 4 | - | - |
| | | | | | | | | | | | | | | | |
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** | | | | | | | | | | |
| Non-performing | 136 | - | 1,464 | 9,572 | 1,708 | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Items deducted from capital | - | | | | | | | | | | | | | | |

Unit: Million Baht

| Type of Asset | The Bank | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 31 December 2014 | | | | | | | | | | | | | | |
| | Rating | | | | | No rating | | | | | | | | | |
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** | **0** | **20** | **35** | **50** | **75** | **100** | **250** | **625** | **937.5** | **100/8.5%** |
| Performing | | | | | | | | | | | | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 490,422 | 6,982 | 6,953 | 4,492 | 3,069 | | | | | | - | | | | |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | - | 126,912 | 29,798 | 32,014 | 1,507 | | | | | | - | | | | |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | - | 44,706 | 51,950 | 42,280 | 30,578 | | | | 5,626 | | 1,143,626 | | | | |
| - Retail | | | | | | | | | | 201,185 | 6,043 | | | | |
| - Residential mortgage loans | | | | | | | | 159,821 | | 20,590 | 2,168 | | | | |
| - Other assets | | | | | | 76,428 | 1,348 | | | | 165,053 | 43 | - | 1 | 13 |

| | | | | | |
|---|---|---|---|---|---|
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** |
| Non-performing | 33 | - | 1,378 | 14,952 | 2,413 |

| | |
|---|---|
| Items deducted from capital | 129 |

Unit: Million Baht

| Type of Asset | The Bank 31 December 2013 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rating | | | | | No rating | | | | | | | | | |
| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** | **0** | **20** | **35** | **50** | **75** | **100** | **250** | **625** | **937.5** | **100/8.5%** |
| Performing | | | | | | | | | | | | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 426,831 | - | 3,989 | 1,994 | 2,617 | | | | - | | - | | | | |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial Institutions | - | 107,139 | 32,940 | 16,523 | 362 | | | | | | - | | | | |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | - | 46,595 | 63,970 | 42,031 | 24,945 | | | | 3,892 | | 1,157,099 | | | | |
| - Retail | | | | | | | | | | 194,328 | 5,585 | | | | |
| - Residential mortgage loans | | | | | | | | 140,898 | | 19,693 | 1,409 | | | | |
| - Other assets | | | | | | 66,369 | 943 | | | | 157,608 | - | 43 | 4 | - |

| **Risk weight (%)** | **0** | **20** | **50** | **100** | **150** |
|---|---|---|---|---|---|
| Non-performing | 136 | - | 1,464 | 9,555 | 1,699 |

| | |
|---|---|
| Items deducted from capital | - |

**2.1.4 Credit Risk Mitigation**

It is a policy of the Bank and the subsidiaries in the Group to mitigate credit risk through the use of collateral to reduce the potential loss which may arise when borrowers are unable or unwilling to repay loans. Documentation relating to collateral must be in order and verified for validity prior to loan drawdown and ongoing compliance with the conditions of the collateral agreement shall be monitored. Processes, procedures and regulations for collateral valuation have been defined, consistent with the BOT's guidelines on collateral valuation and foreclosed assets obtained from debt repayment of financial institutions.

Credit risk mitigations used in the Bank's and the Group's capital adequacy calculation under Basel III - SA approach are as follows:

1. For financial collaterals such as cash, deposits, debt securities and equity securities, the Comprehensive Approach is currently adopted for credit risk mitigation and the Standard Supervisory Haircut specified by the BOT is used.
2. On-balance sheet netting is used for repo-style transactions where the counterparties enter into a Global Master Repurchase Agreement that complies with the BOT guidelines.
3. Guarantees that may be used as credit risk mitigants must be issued by qualified guarantors from either of the following 2 groups:
   - Guarantors which are sovereigns, central banks, provincial organizations, government entities, state enterprises, financial institutions and securities companies, provided that the guarantors must have risk weights lower than the borrower.
   - Corporate guarantors must have risk weights lower than the borrower.

Credit risk mitigation is applied in accordance with the BOT guidelines.

Bangkok Bank

**Table 16: Secured portion of credit exposures after on- and off-balance sheet netting for each asset type under SA approach classified by credit risk mitigation types**

Unit: Million Baht

| Type of Asset | The Group | | | |
|---|---|---|---|---|
| | 31 December 2014 | | 31 December 2013 | |
| | Financial collateral | Guarantees and credit derivatives | Financial collateral | Guarantees and credit derivatives |
| Performing | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 94,004 | - | 94,546 | - |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial institutions | 325 | 79,488 | 280 | 97,132 |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | 59,279 | 29,107 | 62,046 | 27,100 |
| - Retail | 24,446 | 10,261 | 24,771 | 9,497 |
| - Residential mortgage loans | 26 | - | 14 | - |
| - Other assets | 2,253 | - | 1,870 | - |
| Non-performing | 103 | 53 | 69 | 177 |
| **Total** | **180,436** | **118,909** | **183,596** | **133,906** |

Bangkok Bank

Unit: Million Baht

| Type of Asset | The Bank | | | |
|---|---|---|---|---|
| | 31 December 2014 | | 31 December 2013 | |
| | Financial collateral | Guarantees and credit derivatives | Financial collateral | Guarantees and credit derivatives |
| Performing | | | | |
| - Sovereigns and central banks, Multilateral development banks (MDBs), and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Sovereigns | 94,004 | - | 94,546 | - |
| - Financial institutions, Securities firms, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Financial institutions | 325 | 79,488 | 255 | 97,132 |
| - Corporates, and Provincial organizations/ Government entities/ State enterprises (PSEs) which have the same risk weight as Corporates | 52,937 | 30,624 | 54,244 | 28,178 |
| - Retail | 23,043 | 10,261 | 23,580 | 9,499 |
| - Residential mortgage loans | 26 | - | 14 | - |
| - Other assets | - | - | - | - |
| Non-performing | 102 | 53 | 69 | 176 |
| **Total** | **170,437** | **120,426** | **172,708** | **134,985** |

## 2.2 Market Risk

Market risk is the risk of loss in on- and off-balance sheet positions of the Bank and the Group arising from movements in market prices such as interest rates, equity prices, foreign exchange rates, and commodity prices.

### 2.2.1 Market Risk Management

The primary objective of market risk management is to manage the risks resulting from changes in market factors to be at acceptable levels and in line with the overall risk management policy. The Bank and the subsidiaries in the Group have therefore established market risk management policies and specified market risk measurement metrics and limits taking into consideration the nature and complexities of the respective financial activities. The Bank may consider using interest rate and/or currency-related derivatives with the purpose of hedging interest rate and foreign exchange risks, or of providing financial derivative services to sophisticated corporate customers and/or domestic and international financial institutions. Such financial derivatives include cross currency and interest rate swap, interest rate swap, and foreign exchange forward. The committee and functional units that are mainly responsible for managing, monitoring and controlling the market risk are :

- The Asset-Liability Management Committee is responsible for establishing and reviewing policies and guidelines for asset and liability management and market risk management as well as monitoring and controlling these risks to be at acceptable levels and in compliance with the risk management policy set by the Risk Management Committee and the Board of Directors.
- The Treasury Division is responsible for executing the trading strategy for the Bank through buying and selling financial products such as foreign exchange, bonds, and derivatives instruments, as well as managing the Bank's foreign exchange risk, interest rate risk and liquidity risk to be within the limits according to ALCO's guidelines and the Bank's acceptable risk level.
- Market Risk unit, which is part of the Risk Management Division, is accountable for assessing, monitoring, reporting and controlling market risk positions against specified limits. The Market Risk unit reports to ALCO and senior management on a regular basis and is responsible for proposing the enhancement of the market risk policies, measurement metrics and limits in response to change in operating environment, the Bank's business plans, and the complexities of financial activities. Moreover, the Market Risk unit coordinates with the subsidiaries of the Group to ensure that their risk management policies and processes are in line with the Bank's practices.

The market risk management practices of the subsidiaries in the Group are similar to the Bank's practices, although the relevant units responsible for overseeing, monitoring and managing the risks may differ depending on each company's organizational structure.

### 2.2.2 Traded Market Risk

The main traded market risks for the Bank and the Group are interest rate risk and foreign exchange risk.

**Risk Assessment and Monitoring for Traded Market Risk**

Various tools and measurement techniques are used to assess market risk exposures in the trading book, including:

1. Value-at-Risk (VaR)

VaR is a statistical technique that estimates the maximum potential losses on risk exposures as a result of movements in market rates and prices over a specified time horizon and at a given level of confidence. For example, if VaR for a one-day holding period, with a 99 percent confidence level, equals Baht 1 million, it means that the Bank's potential loss could be no greater than Baht 1 million for 99 days out of 100 business days. The Bank uses a historical simulation approach at a 99% confidence level over a one-day holding period to measure interest rate risk (only for general market risk) and foreign exchange risk. Historical Simulation VaR estimates the maximum potential losses assuming plausible future scenarios from the observed historical market movements. To validate the accuracy of the VaR model, the Bank conducts back testing against hypothetical profit and loss of the trading book positions and analyses whether the number of exceptions, i.e. the incidents where hypothetical profit and loss exceed the calculated VaR, are within an acceptable range. Hypothetical profit and loss is calculated by assuming that the previous day's exposures remain unchanged.

2. Other measurements

Apart from the statistical measurement technique, the Bank also uses non-statistical measurements, such as Present Value of a Basis Point (PV01), portfolio size, and mark-to-market profit and loss, to regularly assess major market risk exposures in the trading book as deemed appropriate for each transaction type. The PV01 measures the sensitivity of the value of securities to one basis point change in interest rate.

3. Stress Testing

The Bank performs market risk stress testing on its trading book position at least on a quarterly basis to determine if the impact of potential losses from extreme market movements or crisis situations on the Bank's capital are within the risk tolerance limits. Stress testing also enhances the Bank's understanding of its risk exposures and vulnerability as well as facilitates proactive risk management.

**Risk Control for Traded Market Risk**

Traded market risk is controlled primarily through a series of limits, such as VaR Limit, PV01 Limit, and Maximum Loss Limit, etc. These limits are specified by ALCO, and approved by the Risk Management Committee, the Board of Executive Directors and the Board of Directors. They are reviewed and updated at least once a year or more frequently when warranted by a material change in circumstances.

By using the historical simulation approach, in 2014 the minimum, maximum and average VaR of the Bank's trading book for a one-day holding period, with a 99 percent confidence level, was Baht 38 million, Baht 110 million and Baht 65 million, respectively.

The subsidiaries in the Group also use, to varying degrees based on the size and complexity of transactions, similar measurement tools and techniques to assess their market risk exposures in the trading book and have specified limits to control these exposures.

**Capital Treatment for Traded Market Risk**

The Bank currently adopts the Standardized Approach (SA) for the calculation of minimum capital requirement for market risk at both the Bank level and the Group level. In addition, the Bank and the subsidiaries in the Group use VaR models internally to measure, monitor and control traded market risks, as mentioned above in the risk assessment and monitoring section.

Minimum capital requirement for market risk at the Bank and the Group level as at December 31,2014 and June 30, 2014 are as follows:

**Table 17: Minimum capital requirements for market risk based on Standardized Approach (SA)**

Unit: Million Baht

| | The Group | | The Bank | |
|---|---|---|---|---|
| **Capital requirements for market risk** | **31 December 2014** | **30 June 2014** | **31 December 2014** | **30 June 2014** |
| Interest Rate Risk | 2,016 | 1,730 | 2,003 | 1,679 |
| Equity Price Risk | 137 | 144 | - | - |
| Foreign Exchange Risk | 483 | 453 | 620 | 625 |
| Commodity Price Risk | - | - | - | - |
| **Total Capital Requirement** | **2,636** | **2,327** | **2,623** | **2,304** |

**2.2.3 Interest Rate Risk in the Banking Book (IRRBB)**

Interest rate risk in the banking book normally arises when the repricing and/or maturity schedule of assets, liabilities, and off-balance sheet positions are not matched, or when the movements of reference interest rates on assets and liabilities are not correlated, negatively affecting net interest income (NII) and/or economic value of equity (EVE).

**Sources of Interest Rate Risk** can be classified as follows:

- Repricing risk arises from timing differences in maturity (for fixed rate items) and repricing period (for floating rate items) of the Bank's assets, liabilities, and off-balance sheet positions. Repricing risk is the primary form of interest rate risk.
- Yield curve risk arises from changes in the shape and slope of yield curves arising from unparallel shifts of the yield curves, including yield curve twist.
- Basis risk arises from imperfect correlation of reference interest rates applicable to the Bank's assets, liabilities and off-balance sheet positions.
- Embedded option risk arises from changes in interest rate, causing uncertainty of cash flows due to the options embedded in assets, liabilities and off-balance sheet positions, such as non-maturity deposits and loans without prepayment penalty.

**Risk Assessment and Monitoring for IRRBB**

The measurement of interest rate risk in the banking book provides an assessment of the potential impact of interest rate change on NII, which will help the Bank and the subsidiaries in the Group to manage the risk and determine alternative balance sheet strategies to achieve business return targets. Furthermore, it also provides an assessment of the potential impact on EVE reflecting the sensitivity of the value of assets, liabilities and off-balance sheet positions to changes in interest rates.

The Bank employs both static analysis tools and dynamic simulation techniques to assess interest rate risk in the banking book, including:

1. Repricing Gap Analysis and Sensitivity Analysis

Repricing gap analysis is a traditional method widely used to assess the interest rate risk of current balance sheet positions. It captures repricing risk which is a primary form of interest rate risk, but does not capture yield curve risk, basis risk and embedded option risk.

The Bank uses repricing gap analysis to assess NII impact in the year ahead assuming assets, liabilities and off-balance sheet positions are static and interest rates change immediately across the curves. Repricing gap analysis is also used in conjunction with duration-based weights to estimate the potential impact of interest rate change on EVE.

The Bank assesses and monitors interest rate risk in the banking book through NII impact and EVE impact on a monthly basis.

2. Net Interest Income Simulation (NII Simulation)

NII simulation is a more granular and complex technique than repricing gap analysis. The Bank also uses NII simulation to measure interest rate risk because this technique allows for a projection of future NII under various interest rate scenarios, based on current positions of assets, liabilities, and off-balance sheet items, and assumptions regarding new business activities (dynamic position). This includes assumptions regarding the growth in the positions of balance sheet items, maturity profile of new transactions, product pricing, and the launch of new products. NII simulation is able to capture other types of interest rate risks i.e. yield curve risk, basis risk, and embedded option risk.

The Bank uses NII simulation technique to assess interest rate risk and project future NII from the business plan at least once a year.

3. Stress Testing

The Bank performs stress testing for interest rate risk in the banking book at least on a quarterly basis using static NII simulation on the current position, to assess the potential negative impact to NII under various stress scenarios. The results of stress testing are analyzed and used to determine alternative balance sheet strategies more suited to the business environment in order to achieve the business return target under an acceptable level of risk.

The NII impact for the Bank and the Group of a 100 bps interest rate change using NII Simulation as at December 31, 2014 and 2013 are as follows:

### Table 18: Net Interest Income Impact if interest rate rises by 100 bps

Unit: Million Baht

| Currency | The Group | | | |
|---|---|---|---|---|
| | 31 December 2014 | | 31 December 2013 | |
| | NII Impact | % Earning at Risk | NII Impact | % Earning at Risk |
| THB | 1,784 | 3.02% | 960 | 1.72% |
| USD | 1,548 | 2.62% | 1,618 | 2.90% |
| EUR | 7 | 0.01% | 17 | 0.03% |
| Others | 338 | 0.57% | 350 | 0.63% |
| **Total NII Impact** | **3,677** | **6.23%** | **2,945** | **5.27%** |
| Estimated NII in next 12 months | **58,997** | | **55,879** | |

Unit: Million Baht

| Currency | The Bank | | | |
|---|---|---|---|---|
| | 31 December 2014 | | 31 December 2013 | |
| | NII Impact | % Earning at Risk | NII Impact | % Earning at Risk |
| THB | 1,781 | 3.17% | 901 | 1.68% |
| USD | 1,528 | 2.72% | 1,565 | 2.91% |
| EUR | 7 | 0.01% | 13 | 0.02% |
| Others | 196 | 0.35% | 193 | 0.36% |
| **Total NII Impact** | **3,512** | **6.26%** | **2,672** | **4.97%** |
| Estimated NII in next 12 months | **56,093** | | **53,788** | |

#### Risk Control for IRRBB

The Bank monitors and controls interest rate risk by specifying a NII Impact Limit (being the cumulative NII impact within 1 year) and an EVE Impact Limit, assuming interest rates change immediately by 100 bps. These limits are reviewed by ALCO and approved by the Board of Executive Directors, the Risk Management Committee and the Board of Directors at least annually or more frequently when warranted by material changes in circumstances.

The Bank manages the interest rate risk by adjusting its asset and liability structure in line with forecast interest rate trends, taking into consideration the changes in NII impact and EVE impact. The Bank may deploy plain vanilla derivatives, such as interest rate swaps and cross currency interest rate swaps, to hedge or mitigate interest rate risk to be within the risk tolerance limit, and manage the risk in accordance with ALCO's guidelines.

The subsidiaries in the Group with significant interest rate risks in the banking book use repricing gap analysis to assess and control IRRBB in the similar fashion as mentioned above.

### 2.2.4 Equity Exposure in the Banking Book

Equity price risk is the risk associated with equity price changes resulting in the deterioration of investment value and affecting the Bank's and the Group's capital.

Objectives of equity investment in the banking book are as follows

- To enhance income in terms of dividends and capital gains for medium to long-term investments
- To support core banking business by establishing good relationships with customers and creating networks of strategic investment partners
- To exchange for debt repayments from debt restructuring agreements

The Bank and the subsidiaries in the Group classify equity investments in the banking book in accordance with the applicable accounting standards, with marketable securities classified as available-for-sale investment, non-marketable securities classified as general investment, investment in subsidiaries and investment in associated companies.

**Risk Assessment and Monitoring for Equity Exposure in the Banking Book**

The market risk management policy is used as a guideline by the Bank and the subsidiaries in the Group in assessing, monitoring, and controlling equity price risk. Measurement techniques for the assessment of equity price risk can be categorized by equity type as follows:

- Listed equity securities: Fair value is used for risk assessment. Stress testing is performed on a quarterly basis, based on the stress scenarios implied from historical movements of the security exchange indices, to estimate the maximum potential losses that may occur during volatile market conditions.
- Other equity securities: Fair value is used for risk assessment, the reliability of which is reviewed at least annually or more frequently as warranted by market conditions.

In managing equity risk in the banking book, the Bank, as the parent company, controls the ratio of equity exposures to total capital to be in accordance with the BOT's regulation.

**Valuation Policy for Equity Exposure in the Banking Book**

In establishing the fair value of equity securities, the Bank and the subsidiaries in the Group adopts the following valuation policy:

- Listed equity securities are fair valued by referencing the last bid price on the last business day of the period. If this is not available, the last closing price will be applied. Listed equity securities under rehabilitation are fair valued using the discounted cash flow approach or the net asset value approach, as appropriate.
- Other equity securities that are non-listed equity securities are fair valued using the discounted cash flow approach or the net asset value approach, as appropriate. For unit trusts, the fair value is based on net asset value (NAV) as at the end of the period.

Equity exposure in the banking book for the Bank and the Group as at December 31, 2014 and 2013 are as follows:

**Table 19: Equity exposures in the banking book**

Unit: Million Baht

| | The Group | | The Bank | |
|---|---|---|---|---|
| **Equity exposures** | **31 December 2014** | **31 December 2013** | **31 December 2014** | **31 December 2013** |
| Equity exposures * | | | | |
| ● Equity securities listed on a securities exchange (domestic and foreign) | | | | |
| - Cost value | 22,276 | 23,413 | 22,238 | 23,375 |
| - Market value | 54,391 | 49,214 | 54,324 | 49,175 |
| ● Other equity securities (both in domestic and foreign) | 28,828 | 24,364 | 60,497 | 54,455 |
| Gains (losses) on sales of equity securities for the year | 3,527 | 1,897 | 3,507 | 1,897 |
| Unrealized gains (losses) on revaluation from available-for-sale equity securities | 34,353 | 27,977 | 34,348 | 27,962 |
| Minimum capital for equity exposures under SA approach | 7,184 | 6,348 | 9,805 | 8,845 |

* Net of the impairment charges for the investment in equity securities

## 2.3 Operational Risk

Operational Risk is the risk of loss from failed or inadequate internal processes, people and systems, or from external events. This includes legal risks, but does not include strategic risks and reputational risks.

The Bank is of the view that good operational risk management is vital to sustainable business success, particularly in the current environment of uncertainty, both domestically and internationally. Thus, effective operational risk management with sufficient coverage of all aspects of operations is a key priority for the Bank and the Group, and includes being well-prepared to deal promptly with unexpected events.

Furthermore, the Bank pays close attention to fraud risk management related to bank products and services such as credit cards, ATM cards and other electronic services to ensure customers’ confidence. In relation to a new product launch, the product risks must be well analyzed, assessed and controlled to be at the acceptable level, and the appropriate risk control procedures must be in place.

### Operational Risk Management

The process by which the Bank and the subsidiaries in the Group addresses operational risk management covers defining, assessing, monitoring, mitigating and controlling risk. Each unit in the organization is directly responsible for managing its operational risk and for establishing measures to mitigate and control risk to the designated level by allocating appropriate resources to this effort and for embedding operational risk management as part of the organizational culture.

The Bank has established the Operational Risk Management unit within the Risk Management Division to be responsible for operational risk management. This includes monitoring and supporting every unit in implementing the operational risk management framework at the unit level, managing operational risk at the organization level, reviewing operational risk management aspects in product and service development process, calculating the capital requirements for operational risk in line with the Basel II framework, and maintaining the operational risk database and analyzing the loss data in the database, etc.

The Bank also ensures the cooperation among Operational Risk Unit, Compliance and Audit and Control Division, in respect of information sharing, analyzing and setting of controls to enhance the efficiency of operational risk management and internal control of the Bank

Likewise, the subsidiaries in the Group have assigned the responsibility for operational risk management at both the unit and the organization level, in line with the Bank's practices, although the relevant units responsible for overseeing, monitoring, and managing operational risk may differ depending on each company's organizational structure.

**Operational Risk Assessment and Monitoring**

A key principle underlying the operational risk management framework of the Bank and the subsidiaries in the Group is that operational risk management is the responsibility of every staff member in the organization. Everyone in the organization is trained to have a consistent understanding of operational risk, and to build an operational risk culture across the Bank, so that they are able to accurately and completely identify the operational risks, assess risk as well as develop options for mitigating risks based on careful analysis, and subsequently to implement the selected solutions to minimize risks. This is followed by systematic monitoring of progress, measurement of potential risk, as well as regular reviews of the entire process.

Loss data arising from operational risk events for the Bank and the subsidiaries in the Group are maintained in a database. Reports on operational risk exposures and operational risk management are provided on a regular basis.

**Operational Risk Mitigation**

An important mechanism in controlling, preventing, and mitigating operational risk is an effective internal control system with strong participation of management. Each business unit must enforce operational controls vigorously, ensure compliance with regulations including anti-money laundering measures, implement the segregation of duties and procedures for verification and reconciliation, define approval authorities as well as establish limits commensurate with the scale of the business, the business type and level of staff. The reliability of the information technology system and the security measures related thereto is also of paramount importance.

To help minimize the impact of operational risk loss events from external factors, the Bank and the subsidiaries in the Group have implemented business continuity management practices such as political unrest in 2010, severe flooding in 2011 and political unrest in 2013. The Bank has adopted the Business Continuity Management Policies approved by the Board of Directors of each company. The Business Continuity Plans are developed pursuant thereto and is reviewed, updated in accordance with potential threats, as well as being rehearsed on a regular basis.

**The Calculation of Value Equivalent to Operational Risk-weighted Asset**

The Bank currently uses the Standardized Approach – Operation Risk (SA–OR) to calculate the value equivalent to operational risk-weighted asset at both the Bank level and the Group level. This calculation approach allocates the gross income into business lines and multiplies with a Beta value each business line as prescribed by the BOT.