

# "Make Life Simple เรื่องเงิน เรื่องง่าย"

# Basel III Pillar III Disclosures As at December 31, 2019

#### Table of Content

		Page
1.	Introduction	5
2.	Scope of application	5
3.	The namelist and business type of companies in financial business group under Full	6
	Consolidation Level	
4.	Capital information	7
	4.1 Capital structure	8
	4.2 Capital adequacy	9
5.	Risk exposure and assessment	11
6.	Credit risk	12
	6.1 General information of credit risk exposure	12
	6.2 Credit risk exposures under the Standardized Approach	41
	6.3 Credit risk mitigation under the Standardized Approach	41
7.	Market risk	47
8.	Operational risk	50
9.	Equity exposures in the banking book	52
10	. Interest rate risk in the banking book	54
11	.Liquidity risk management	56
12	. Additional disclosure per the requirement Basel Committee on Banking Supervision (BCBS)	60

#### Table of Figure

		Page
Table 1	Capital structure	8
Table 2	Minimum capital requirements classified by types of risk	10
Table 3	Capital adequacy ratio	11
Table 4	Outstanding significant balance of assets on-statement of financial position and	22
	significant off-balance items before credit risk mitigation	
Table 5	Outstanding balance of assets on-statement of financial position and off-balance	23
	items before credit risk mitigation classified by country or geographic area of debtors	
Table 6	Outstanding balance of assets on-statement of financial position and off-balance	27
	items before credit risk mitigation classified by remaining term to maturity	
Table 7	Loans and accrued interest receivables and investment in debt securities before	31
	credit risk mitigation classified by country or geographic area of debtors and by asset	
	classification specified by the BOT's regulation	
Table 8	Provisions (general provisions and specific provisions) and debt charge - offs for	33
	loans and accrued interest receivables and investment in debt securities classified	
	by countries or geographic areas	
Table 9	Loans and accrued interest receivables before credit risk mitigation classified by	35
	type of business and by asset classification specified by the BOT	
Table 10	Provisions (general provisions and specific provisions) and bad debt charge-offs for	37
	loans and accrued interest receivables classified by type of business	
Table 11	Reconciliation of changes in provisions (general provisions and specific provisions)	38
	for loans including accrued interest receivables	
Table 12	Outstanding balance of assets on-statement of financial position and off-balance	39
	items for credit risk under the Standardized Approach classified by type of assets	
Table 13	Outstanding balance of assets on-statement of financial position and off-balance	42
	items after credit risk mitigation for each type of assets classified by risk weight under	
	the Standardized Approach	
Table 14	Outstanding balance of asset with collateral under the Standardized Approach	46
	classified by type of assets and collateral	
Table 15	Equity exposures in the banking book	54
Table 16	The effect of changes in interest rates to earnings (net)	55
Table 17	The effect of changes in yield curve to economic value of equity	56
Table 18	Significant information of financial instrument eligible for capital fund	60

#### Table of Figure

		Page
Table 19	Reconciliation of regulatory capital components	66
Table 20	Disclosure of capital under Basel III during transitional period	74



### Basel III Pillar III Disclosures As at December 31, 2019

#### 1. Introduction

Guideline on capital supervised by the Bank of Thailand (BOT) is referred from global regulatory framework on BASEL determined by Basel Committee on Banking Supervision (BCBS). The objective of this supervisory guideline is to improve the quality of the financial institution's capital so as to able to support the loss which may incur in the normal and crisis situations. Under Basel framework, it uses a "three pillars" concept which can be detailed as follows:

#### Pillar 1: Minimum capital requirement

The first pillar deals with maintenance of minimum capital to cover the credit risk, market risk and operational risk.

#### Pillar 2: Supervisory review process

The second pillar determines the role for the financial institution and the supervisor. For the financial institution, it requires the financial institution to have the qualified risk management framework as well as a systematic and continuous process for assessing the adequacy of capital in relation to all risk profile including the risk which are not covered in Pillar I e.g. liquidity risk, credit concentration risk and the loss which may incur in the crisis situation.

For the role of supervisor, the supervisor should review, monitor and evaluate the risk management framework, assess the capital adequacy and take appropriate supervisory action with the financial institution that have the problem.

#### Pillar 3: Market discipline

The third pillar aims to have the financial institution to disclose the capital maintenance, the risk exposures, risk assessment processes in order for the external shareholders and market participants have the enough information to analyze and assess the risk of the financial institution.

#### 2. Scope of application

As a result of Basel III Pillar III: Market discipline, the Bank has disclosed this information on a solo basis and full consolidation basis in accordance to BOT's Notification No. SorNorSor. 4/2556 Re: Information Disclosure as Regards to Capital Maintenance for Commercial Banks and No. SorNorSor. 5/2556 Re: Information Disclosure as Regards to Capital Maintenance for the Financial Business Group.



## 3. The namelist and business type of companies in financial business group under Full Consolidation level

The companies under financial business group under Full Consolidation level totaled 22 companies are as following:

Companies	Business Type
Bank of Ayudhya Public Company Limited	Commercial banking
2. Ayudhya Development Leasing Company Limited	Hire-purchase and leasing
3. Ayudhya Capital Auto Lease Public Company Limited	Hire-purchase and auto leasing
4. Ngern Tid Lor Company Limited	Hire-purchase and motorcycle loans
5. Ayudhya Capital Services Company Limited	Credit cards and personal loans
6. General Card Services Limited	Credit cards and personal loans
7. Krungsriayudhya Card Company Limited	Credit cards and personal loans
8. Siam Realty and Services Security Company Limited	Car rental services and personnel services
9. Total Services Solutions Public Company Limited	Collection services
10. Krungsri Asset Management Company Limited	Fund management
11. Krungsri Ayudhya AMC Limited	Asset management
12. Krungsri Securities Public Company Limited	Securities
13. Krungsri Nimble Company Limited	Factoring and information Technology
	services
14. Krungsri Life Assurance Broker Limited	Life assurance broker
15. Krungsri General Insurance Broker Limited	General insurance broker
16. Tesco Lotus Money Services Limited	Credit cards and personal loans
17. Tesco Life Assurance Broker Limited	Life assurance broker
18. Tesco General Insurance Broker Limited	General insurance broker
19. Krungsri Leasing Services Company Limited	Hire-purchase, leasing and sales finance
20. Hattha Kaksekar Limited	Micro finance
21. Krungsri Finnovate Company Limited	Venture capital
22. Hattha Services Company Limited	Lease Real Estate



#### 4. Capital information

#### 4.1 Capital structure

#### Tier 1 Capital

#### Common Equity Tier 1

- Issued and fully paid-up share capital and net premium
- Legal reserve
- Retained earnings after appropriation, already approved by annual general shareholders and/or Board of Directors meetings
- Other reserves
  - O Surplus on revaluation of land and building or units in condominium
  - O Surplus (deficit) on revaluation of available for sales investment in debt and equity securities
  - O Profit (loss) from conversion of financial statements from a foreign operation
  - O Other items from owner changes, namely, capital surplus (deficit) due to the merger of businesses
- Deferred tax assets (deducted item)
- Goodwill (deducted item)
- Intangible assets (deducted item)

#### Additional Tier 1

Components, which eligible for additional tier 1 of the Bank's financial business group,
 only portion held by non-controlling interest and third parties.

#### Tier 2 Capital

- Long-term subordinated debentures
- General provision
- Components, which eligible for tier 2 of the Bank's financial business group, only portion held by non-controlling interest and third parties.



Table 1 Capital structure

	Financial Bus	siness Group	Bank-	Only Only
Item	December 31,	December 31,	December 31,	December 31,
	2019	2018	2019	2018
1. Tier 1 Capital (1.1+1.2)	236,739	209,011	191,672	175,377
1.1 Common Equity Tier1 (CET1)	232,977	207,971	191,672	175,377
1.1.1 Issued and paid up share capital	73,558	73,558	73,558	73,558
1.1.2 Premium on share capital	52,879	52,879	52,879	52,879
1.1.3 Legal reserve	6,871	5,891	6,871	5,891
1.1.4 Net profit after appropriation by resolution of	121,496	95,769	66,056	53,785
the general meeting of shareholders or by				
the regulations of the banks registered in the				
country				
1.1.5 Other reserves	-		-	-
1.1.5.1 Accumulated other comprehensive	9,429	7,280	10,544	7,806
income	·	,	·	,
1.1.5.2 Other items from owner changes	(5,218)	(5,218)	(5,218)	(5,218)
1.1.6 Items to be deducted from CET1	(26,038)	(22,188)	(13,018)	(13,324)
1.2 Additional Tier 1	3,762	1,040	_	-
1.2.1 Components, which eligible for additional tier	3,762	1,040	_	-
1 of the Bank's financial business group,	2,122	,,,,,		
-				
only portion held by non-controlling interest				
and third parties				
2. Tier 2 Capital	81,132	60,469	75,337	53,599
2.1 Subordinated debentures	60,811	41,985	60,811	41,985
2.2 General provision	19,458	18,235	14,526	11,614
2.3 Components, which eligible for tier 2 of the Bank's	863	249	-	-
financial business group, only portion held by non-				
controlling interest and third parties				
3. Total Regulatory Capital (1+2)	317,871	269,480	267,009	228,976



#### 4.2 Capital adequacy

The Bank has adopted the following Basel Approach for capital calculation:

- Standardized Approach "SA" for credit risk.
- Standardized Approach "SA" for market risk
- Standardized Approach "SA-OR" for operational risk

Recognizing the importance of capital and its adequacy, for 2019, the Bank maintains, as a policy, a minimum capital adequacy ratio above the minimum official requirement, which currently required at 11.5% (8.5% of the minimum capital adequacy ratio plus 2.5% of the conservation buffer and plus 0.5% of D-SIBs ratio) for credit risk, market risk, and operational risk by the BOT.

In addition, the Bank closely and regularly monitors and assesses both internal and external factors and developments that could have an impact on the capital level - both economic and operating environment. The 3-year strategic business plan, which is conducted annually, is also taken into consideration when the Bank assesses and forecasts both capital adequacy and requirement.

In compliance with Basel Pillar II guideline, the Bank also has in place an Internal Capital Adequacy Assessment Process (ICAAP), which calls for a regular assessment of capital adequacy under the stress testing scenarios. If the result of the stress test indicates a possibility of that the capital falling below the prescribed level, the Bank's management must immediately prepare an action plan to ensure that capital for the Bank and the financial business group is adequate at all times.



Table 2 Minimum capital requirements classified by types of risks

		Financial Bus	siness Group	Bank-Only			
	Minimum capital requirements	December 31,	December 31,	December 31,	December 31,		
		2019	2018	2019	2018		
Perf	orming assets	130,634	122,542	122,335	115,210		
1.	Claims on sovereigns and central banks, multilateral	502	552	255	349		
	development banks (MDBs) and public sector						
	entities (PSEs) that are treated as claims on						
	sovereigns						
2.	Claims on banks, public sector entities (PSEs) that	3,177	3,866	3,025	3,701		
	are treated as claims on banks and securities						
	companies						
3.	Claims on corporate and public sector entities	59,330	55,466	64,762	60,058		
	(PSEs) that are treated as claims on corporate						
4.	Claims on retail portfolios	51,896	46,369	35,070	31,369		
5.	Residential mortgage exposures	10,970	11,645	10,819	11,485		
6.	Other assets	4,759	4,644	8,404	8,248		
Non	-performing assets	1,682	1,456	1,548	1,329		
Mini	mum capital requirements for credit risk	132,316	123,998	123,883	116,539		
1.	Interest rate risk	2,144	2,163	2,219	2,164		
2.	Equity price risk	-	-	-	-		
3.	Foreign exchange rate risk	617	641	173	151		
4.	Commodity price risk	-	-	-	-		
Mini	mum capital requirements for market risk	2,761	2,804	2,392	2,315		
Mini	mum capital requirements for operational risk	16,651	15,050	10,803	9,744		
Tota	al minimum capital requirements	151,728	141,852	137,078	128,598		

<sup>\*</sup> The minimum capital requirements are calculated based on the minimum regulatory capital adequacy ratio at 8.5%. If capital conservation buffer of 2.5% and D-SIBs 0.5% for 2019 had been included, total capital requirements as of December 31, 2019, would have been Baht 205,277 million on a Financial Business Group basis and Baht 185,439 million on a Bank-Only basis.



Table 3 Capital adequacy ratio

Unit: %

	Minimum BOT	requirement*	Financial Bu	siness Group	Bank-Only		
Ratios	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018	
Total capital / Total risk weighted assets	11.5	10.375	17.81	16.15	16.56	15.13	
Total Tier 1 capital / Total risk weighted assets	9	7.875	13.26	12.52	11.89	11.59	
Total Common Equity Tier 1 capital / Total risk weighted assets	7.5	6.375	13.05	12.46	11.89	11.59	

<sup>\*</sup> The BOT requires banks to maintain minimum CAR at 8.5% and gradually increase the capital conservation buffer at 0.625% per year starting January 1, 2016 until reaching 2.5% by January 1, 2019.

#### Remark:

The BOT has adopted the supervisory framework for Domestic Systemically Important Banks (D-SIBs) by requiring qualified banks to maintain higher capital to better absorb losses from their operations. The Bank is identified as a D-SIB and required to maintain additional 1.0% of common equity tier 1 ratio. This new requirement will be phasing in starting at 0.5% on January 1, 2019 and 1.0% on January 1, 2020.

#### Risk exposure and assessment

#### Risk Management Principles

The Bank's risk management covers 3 major risks, namely credit risk, market risk, and operational risk. The Bank has in place separate policies to manage these risks, since each has different characteristics. However, there are common risk management practices, for example, ceiling limits, control mechanism, risk assessment and risk monitoring procedure, and reporting procedure. These common risk management practices are for the relevant parties to promptly manage and/or handle with the risk. The Bank also invests in risk assessment tools for each risk and good data governance in order to enhance the efficiency and effectiveness of risk control, risk measurement, and risk monitoring.

In addition to credit risk, market risk, and operational risk, the Bank has put in place an ICAAP under the Pillar 2 guideline. The ICAAP covers the additional risks – credit concentration risk, interest rate risk in the banking book, liquidity risk, strategic risk, reputation risk, and etc. The Bank ensures that appropriate procedures are in place to minimize each of these risks, and regularly conducts a stress test to assess the impact of a severe event on the Bank's capital.



#### Roles and duties of internal auditors in auditing risk management process

Internal auditors of the Bank have the duty to audit and assess the adequacy and Effectiveness of the Bank's risk management process to ensure that it is adequate and appropriate to the complexity of the Bank's transactions. The audit of the risk management process is conducted to provide reasonable assurance that the Bank's operations, which shall be within the Bank's acceptable risk level, will meet the established objectives and targets.

The scope of work of the internal audit encompasses all activities of the Bank undertaken by its entities in Thailand, overseas branches and companies under its financial business group (full consolidation). Internal audit of risk management activities, among others, include the following:

- Roles and responsibilities of risk management function;
- Policies and operation process on relevant risk management;
- Risk management processes regarding risk identification, risk measurement and assessment, risk management, risk monitoring and reporting.

The audit of the risk management process covers credit risk, market risk, liquidity risk and operational risk, including reviewing the ICAAP, stress test process, and reporting the review result to the Board of Directors through the Audit Committee to ensure that the ICAAP process is appropriate to the Bank's risk level that has been changed.

#### 6. Credit Risk

#### 6.1 General information of credit risk exposure

#### Credit Risk Management

Credit risk is the risk that the Bank's counterparty will not be able to fulfill its obligation with the Bank, resulting in a loss to the Bank's income and capital.

Credit risk management principle and guideline, credit analysis, and credit approval process, are detailed in the Bank's Policy for Credit Risk Management and other relevant papers. The supervision of the requirements is conducted by an independent Risk Unit. The Risk Management Group is responsible for establishing credit risk management policy, credit risk analysis, portfolio risk measurement, reporting of portfolio status while the Credit Review Department is responsible for reviewing credits and contingent liabilities and the Credit Audit Department is responsible for auditing the credit process of the Bank and its subsidiaries to ensure that internal controls, risk management, governance processes are adequate, effective and in accordance with the Bank's policies and other relevant laws and state regulations. Both departments are under Credit Examination Division, Internal Audit Group.



#### Credit Risk Management Structure

The Risk Management Group is authorized to formulate risk management policies and procedures appropriate for each type of risk, developed in accordance with our defined risk appetite, endorsed by the Risk Management Committee, and approved by the Board of Directors (the Board). It is also responsible for monitoring and reporting portfolio quality, highlighting key risks, and developing strategies to manage potential portfolio and account risks for the Board and relevant committees. The authority and responsibilities of those involved in managing risk are allocated to seven parties:

#### Board of Directors

The Board defines our risk appetite, and delegates approval authority for loan applications corresponding with credit risk types, risk amounts and credit risk ratings, to the Credit Committee through the Executive Committee.

#### Credit Committee

The Credit Committee comprises senior executives from the Risk Management Group and The Credit Underwriting Group, as well as senior executives from relevant functions including business functions.

#### Risk Management Committee

Primary responsibilities:

Approving and recommending to the Board integrated risk management policies and procedures for Krungsri Group;

- Reviewing Krungsri Group portfolio quality;
- Reviewing key market and operational risks, operational losses (such as fraud), as well
  as related systems and human error; and
- Ensuring that Krungsri risk management methodologies are followed.

#### Credit Portfolio Subcommittee

The subcommittee's primary responsibility is to ensure sound portfolio management in accordance with Krungsri's policies and procedures by:

- Monitoring our portfolio credit concentration, risk trends, and policies for handling specific industries;
- Considering credit policies for specific companies to avoid credit concentration; and
- Considering the management and operation of country risks.



#### NPL/NPA/TDR Monitoring Subcommittee Primary responsibilities:

- Establishing and reviewing policies, regulations, guidelines, and methods to improve NPL/NPA/TDR;
- Supervising and continually monitoring progress of these to speed debt restructuring and prevent debt quality deterioration; and
- Approving principles for bid pricing and participation in collateral auctions for legal execution or asset sales.

#### Collateral Valuation Committee Primary responsibilities:

- Establishing and reviewing policies and procedures for collateral valuation submitted with loan applications and foreclosed assets or auctioned properties in accordance with asset revaluation regulations;
- Overseeing and offering guidance to in-house appraisers to ensure that they act with integrity and accuracy in compliance with Krungsri and Bank of Thailand procedures;
- Reviewing and approving the results of appraisals carried out by both in-house and external appraisers.

#### • Capital Management Subcommittee Primary responsibilities:

- Supervising capital management and ensuring alignment with applicable regulations, as well as capital management that corresponds to the Bank's risk appetite and capital demand;
- Supervising, reviewing, and providing recommendations for stress testing used as a tool for risk management; and
- Reviewing and approving capital allocation and accessing capital demand while adhering to the business plan and risk levels in both normal and crisis situations, and considering capital contingency plans whenever the Bank's capital changes significantly

#### Key Risk Factors and our Management

#### Enterprise-Wide Risk Management

To support sustainable growth and manage risk with an integrated perspective, we established the Enterprise-wide Risk Management Framework (ERM) to oversee and manage all types of risk that may arise from changes in external or internal environments, using an internal capital adequacy assessment process (ICAAP) integrated into this framework.



#### Enterprise-wide Risk Management Framework (ERM)

Under this framework of enterprise wide risk management, tools are implemented to ensure that all material risks are identified, measured, and responded to, within acceptable limits.

The Risk Appetite Framework is an overall risk governance framework including policies, procedures, controls, and systems through which risk appetite is established, communicated, and monitored. It is meant to ensure that Krungsri Group has clear guidelines for risk levels that are appropriate for our risk capacity and business strategies.

The Risk Map was developed to identify potential risk events with material impact on Krungsri Group's business or risk profiles.

The Heat Map is implemented to measure and monitor the current risk status of key risk areas in an integrated manner using key risk indicators.

Top Risks are material risks identified through the Heat Map and the Risk Map that warrant close monitoring and require action plans within a reasonable timeframe for their prevention or mitigation.

#### • The Internal Capital Adequacy Assessment Process (ICAAP) Integration

In response to ICAAP regulatory requirements, we have integrated this process with our ERM framework, under which material risks can be dynamically identified considering the external and internal environment, our business plan, and the complexity of the Bank's businesses. Risk appetite is established and managed to ensure that our capital position is within acceptable limits and meets regulatory requirements under normal and stress conditions. Stress tests are conducted regularly and are overseen by the Capital Management Subcommittee, through which timely and effective action plans can be deployed.

#### Organization and Structure

Enterprise-wide risk is managed under our enterprise-wide risk management policy approved by the Board of Directors. The policy stipulates the risk management structure, roles and responsibilities, reporting lines, and broad guidelines governing enterprise-wide risk. This division manages the ERM framework, including identifying and monitoring potential risks and Krungsri Group's consolidated status for all significant risks. The division also collaborates with risk owners to capture emerging risks, assess risk levels, and establish risk mitigation and prevention plans. Risk status, including risk mitigation and prevention plans, is regularly reported to the Board via the Risk and Compliance Committee, the Executive Committee, and the Risk Management Committee.



#### Credit Risk Management

'Credit risk' refers to the possibility of Krungsri facing a loss caused by declining or loss of asset value (including off-balance asset), resulting from deterioration in a borrower's financial conditions and a subsequent failure to meet financial obligations, or even default. Such developments could negatively impact both capital and loan loss reserve adequacy.

An international-standard credit risk management structure has been embraced with the intent of maintaining a good balance between business interests and credit underwriting. The establishment of checks and balances between credit underwriters and relationship managers ensures a transparent work environment. These two stakeholders have a common purpose in promoting the quality of credit growth and maintaining existing loans effectively.

Within the aforementioned credit risk management framework, Krungsri developed an enhanced automation support system to meet high standards. In addition, the Bank has developed operational guidelines, roles, and responsibilities for loan officers at all levels, and provides employees with a shared understanding of credit principles and practices so that all parties can communicate well, with the Bank providing training courses on credit knowledge for relevant employees.

Krungsri's strategy for managing credit risk is continuously determined according to our risk appetite. To identify clear goals for practitioners, the Bank establishes policies and operational plans as guidelines which are in accordance with our strategy including credit policy, credit risk management procedures, and credit rating policies. Customer risk is managed based on international standards and conformity with Bank of Thailand rules and regulations.

#### Credit Risk Control

The objective of credit risk control is to avoid making unsound loans, whether from the outset or after disbursement. The credit risk management unit's responsibilities are divided between two teams, commercial and consumer, with these respective functions:

#### Commercial Credit Risk

The Commercial Credit Risk Management Division manages borrower credit risk through our internal credit risk rating framework that is enhanced continuously to meet MUFG's high standards. We currently categorize business customers into two main groups based on their characteristics and size: Thai Global (large Thai companies with global trading transactions) and JPC/MNC as one group, and Thai Corporate and SME as the other. With such categorization, we can measure the probability of default (PD), loss given default (LGD), and exposure at default (EAD) more accurately and can better address the unique characteristics of customers of various sizes. The Bank assesses the credit quality of its Thai Global and JPC/MNC customers and assigns risk ratings based on an MUFG credit rating model, while using our own internally developed model for Thai Corporate and SME.



The internal credit rating models of both MUFG and the Bank are used to assign risk ratings for customers at origination or acquisition, are reassessed annually, and are adjusted for changes in credit quality over the life of the exposure through our credit review process.

In assessing the risk rating of a loan or lending-related commitment, we consider factors that could potentially impact customer debt capacity including customer earnings and repayment sources, management's ability and track record, and the industry and location of the customer. We acknowledge that each customer is different, and thus the source of information used to evaluate debt repayment capacity must be tailored to each type of customer.

Such evaluation and rating assignment would be based on financial statements used for tax filings, also accounting for other quantitative and qualitative factors to reflect business capacity and potential for growth to ensure that our credit rating framework meets their standards.

The Bank has collaborated with MUFG on enhancing its internal credit rating framework to include additional qualitative customer factors; for example, support from parent companies is incorporated into risk adjustment procedures. Special types of customers are handled with special risk model forms. These special customers include government organizations, religious institutions, academic institutions, special-purpose companies (SPCs), and project finance.

Model development in compliance with Thai Financial Reporting Standards 9 (TFRS9) is in place following the main principles and protocols of regulators, i.e. the Japanese Financial Services Agency (JFSA) and the Bank of Thailand. We have collaborated with MUFG to establish a new credit rating framework to better reflect the Bank's actual credit risks by leveraging MUFG's expertise and know-how. Continuous model validation and adjustment along with systems development and enhancement are in place to support credit risk control in an ever-changing environment, so that our risk management practices are of the highest international standards, in line with our goal of becoming a truly globalized bank.

#### Consumer Credit Risk Management

Consumer portfolios are managed at the portfolios or homogeneous-pool level. The Consumer Credit Risk Management Division establishes product program criteria and proposals for approval by the Bank's Board of Directors or delegated authorities such as the Risk and Compliance Committee, and the Risk Management Committee. For effective risk control and consistency in credit decisions, the Bank leverages risk technology and digitalization in the credit decision process. Credit applications are processed in a Loan Origination System (LOS), whereby credit approval decision and line assignment is based mainly on online credit bureau report retrieval, and an automated credit criteria



algorithm in accordance with approved credit criteria. Verification of credit application data and final credit decisions are conducted by credit underwriters. Where applicable, line enhancement is based on behavior score and risk grade. Past-due management is centralized and is managed by a separate unit.

The Consumer Credit Risk Management Division has adopted risk management principles of 1) risk identification; 2) risk assessment; 3) risk monitoring and control; and 4) risk reporting in daily operation and management. Executives of the Bank received regular updates and reporting on portfolio performance, issues to consider, and proposed corrective actions.

As part of digital transformation, the Bank is exploring alternative lending using informationbased tools.

The Bank also develops models to comply with Bank of Thailand's regulations and international standards, while the Expected Credit Loss models is develop in accordance with Thai Financial Reporting Standards No.9 (TFRS9) for 2020 adoption.

#### Country Risk Management

'Country risk' refers to risk arising from economic, social, and political uncertainties, or from other external factors such as natural disasters or sociopolitical unrest in countries that the Bank has granted credit to, made an investment in, or created contingent liabilities for (with their residents), to the extent that the risk level or the creditworthiness of such countries is affected, and the ability to pay or to meet credit obligations is jeopardized.

For country risk management, a country limit has been established to ensure exposures to each country are within control. The country limit is set in accordance with risk appetite, country grade, as well as sovereign rating and external credit rating agency ratings. These guidelines enable us to manage country and cross-border risks, including concentration risks, so that we may prudently expand our business to all countries, in particular those of the ASEAN Economic Community (AEC).

#### Credit Concentration Risk

Krungsri has mitigated concentration risk from granting credit to, investing in, creating contingent liabilities for, or making credit-like transactions to a particular customer or industry, in order to avoid any customer or industry likely to generate heavy losses due to credit risk.

The Bank also manages concentrated credit risk by determining thresholds and limits for granting credit to, investing in, creating contingent liabilities for, or making credit-like transactions to large borrower groups and their related parties which are defined by regulators' conditions as a large borrower group.



Furthermore, a threshold limit has been established and adjusted for Krungsri credit risk arising from industry concentration, by controlling and monitoring the outstanding balance for each industry, which must not exceed a given industry's threshold and limit.

#### Counterparty Credit Risk

Counterparty credit risk is the risk arising from the possibility that the counterparty may default on amounts owed on a market-related transaction where the value of the contract in the future is uncertain, subject to the fluctuation of market risk factors such as interest rates, foreign exchange rates, and so forth. Krungsri's counterparties are normally customers that need to square their positions and minimize their risk exposure.

To determine each counterparty's credit risk limit, we use the same approval criteria as for other credit risks, and closely monitor counterparty credit status for aggregate exposure, credit equivalent amounts, and credit valuation adjustments – information that is promptly and regularly reported to senior management.

To mitigate risk arising from customer transactions, we may partially or fully hedge our risk exposure through offsetting agreements with other counterparties – mostly other banks. In addition, Krungsri also enters into an International Swaps and Derivatives Association (ISDA) and Credit Support Annex (CSA), where cash collateral or highly liquid securities are required should the fair market value of any contract exceed the risk threshold.

#### Credit Risk Management and Review

We rigorously monitor and review customer and portfolio risk in the following ways:

#### Reserve Adequacy

Loan loss provisions are calculated based on Bank of Thailand regulations. Reserves are calculated by the Risk Management Group, while the adequacy of reserves is reviewed and approved by the Chief Risk Officer and the Chief Financial Officer. Specific reserves are allocated to portfolios as required, with regular stress tests conducted to ensure that reserves are adequate.

#### Credit Risk Audit

The Credit Examination Division is an independent central unit under Internal Audit Group of the Bank that is responsible for examining and reviewing all credit risk management operations. The credit audit plan is approved by Audit Committee and the credit review plan is approved by Audit Committee and Board of Directors. Whereby, the credit audit and credit review cover overall credit risk management, correctness of credit ratings, compliance with credit conditions set by the Bank, and compliance with the Bank's credit policies as well as with relevant Bank of Thailand criteria.



#### Credit Information Monitoring and Management

We regularly report credit risk levels to the Board of Directors, relevant committees, and senior management. Our monthly credit portfolio report includes information on portfolio quality and segment trends by facility, ratings, location, industry, and delinquency. In addition, ad hoc reports are occasionally conducted in response to irregular situations that may affect the Bank's credit portfolio.

#### Stress Testing

The Risk Management Group conducts stress tests based on our stress test policy for both commercial and consumer portfolios. Stress tests use past historical trends as well as future macroeconomic projections to determine potential losses and their possible impact on the Bank's capital. Regulator-required stress test results are reported to the Capital Management Subcommittee, the Risk Management Committee, the Risk and Compliance Committee, and the Board. Internal stress test results are conducted periodically and reported to the Capital Management Subcommittee. We have strategies and action plans in place to prevent any adverse effects. In addition, Krungsri's stress test complies with the Bank of Thailand and Japanese Financial Services Agency (JFSA) requirements as well as MUFG global requirements.

#### Subsidiary Management

All subsidiaries maintain independent risk organizations headed by senior risk executives. The Bank's Chief Risk Officer supervises subsidiary risk management activities. These subsidiary risk management units must comply with our overall risk management strategy, ensure sufficient capacity with the required risk-related infrastructure, and comply with our risk appetite objectives and reporting requirements. All product, policy, and procedural changes must be approved by the Chief Risk Officer and the Risk Management Committee.

#### Non-performing Loan Management

Non-performing loans (NPLs) are managed by a dedicated team of specialists experienced in handling past-due accounts. They manage all high-volume loans and determine the best approaches to optimize payment from customers so as to improve asset quality, minimize losses and maximize recovery. They also conduct NPL sales based on guidance and approval from the Board of Directors.



#### Guidelines/statistical methods used to calculate general provision and specific

#### Provision

Allowance for doubtful accounts is determined through methods in accordance with the BOT's regulation. The Bank and its financial business group categorize their loan portfolio into 6 categories and determine allowance for doubtful accounts subject to different levels of provisioning. Allowance for doubtful accounts for loans classified as normal and special mention are calculated based on the minimum percentage in accordance with the BOT's guidelines by using the value of collateral for calculation of reserve. For loans classified as substandard, doubtful and doubtful of loss, the allowance rate is 100 percent of the difference between the outstanding loan value and the present value of expected cash flow from proceeds of the collateralized assets. The Bank has also assessed and considered the additional reserve in according to the new BOT's provisions (Loan Impairment).

The companies under the Bank's financial business group which involved in hire-purchase businesses, with qualified portfolios under the BOT regulations, calculate allowance for doubtful accounts by using the collective approach which classifies a group of loans having similar credit risk characteristics based on the historical loss experience of each loan category.

The companies under the Bank's financial business group which involved in the securities business provide an allowance for doubtful debts based on a review of the debtor's ability to make repayment, taking into consideration recovery risk and the value of the collateral. Such debt classifications and provisions are made in accordance with the guidelines of the Securities and Exchange Commission.

For the calculation of capital to risk weighted assets of the Banks and its financial business group by SA approach, reserves has been set aside for assets on the statement of financial position and off-statement of financial position items as follows:

#### Specific Provision

Refers to reserve set aside for specific asset in the statement of financial position and offstatement of financial position, including the decline of the market price adjustment of debt and equity securities held for trading and available for sale and impairment but excluding reserve for assets classified as normal counted to Tier 2.

#### General Provision

Refers to the reserve for assets classified as normal but exclude reserve for assets classified as normal counted in specific provision.



Table 4 Outstanding significant balance of assets on-statement of financial position and off-balance items before credit risk mitigation

	Financial Bus	iness Group	Bank-	-Only
Items	December 31,	December 31,	December 31,	December 31,
	2019	2018	2019	2018
1. Assets on-statement of financial position	2,251,485	2,050,086	2,072,519	1,887,894
1.1 Net loans <sup>1/</sup>	2,055,449	1,834,632	1,881,788	1,679,567
1.2 Net investment in debt securities 2/	110,731	129,247	111,914	129,247
1.3 Deposits (including accrued interest)	63,300	71,930	56,756	64,799
1.4 Derivatives assets	22,005	14,277	22,061	14,281
2. Off-balance items <sup>3/</sup>	1,966,464	1,870,423	1,973,446	1,878,189
2.1 Aval of bills, guarantees and letters	9,912	9,358	9,912	9,358
of credit				
2.2 OTC derivatives 4/	1,911,726	1,821,104	1,915,433	1,823,871
2.3 Undrawn committed lines	44,826	39,959	48,101	44,960

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivable and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but excluding accrued interest receivables and net of revaluation and impairment allowances.

<sup>&</sup>lt;sup>3/</sup> Before multiplying by CCF.

<sup>&</sup>lt;sup>4/</sup> Including derivative in equity securities.



Table 5 Outstanding balance of assets on-statement of financial position and off-balance items before credit risk mitigation classified by country or geographic area of debtors

		Financial Business Group										
	December 31, 2019											
		Assets on-sta	tement of final	ncial position			Off-balanc	e items 3/				
Country or geographic area of debtor	Total	Net loans 1/	Net investment in debt securities 2/	Deposits (including accrued interest)	Derivatives assets	Total	Aval of bills, guarantees, and letters of credit	OTC derivatives	Undrawn committed lines			
1. Thailand	2,154,964	2,023,185	110,564	8,024	13,191	1,168,895	9,843	1,114,766	44,286			
2. Asia Pacific	89,855	52,417	167	32,949	4,322	428, 104	69	427,515	520			
North America and Latin     America	25,105	2,119	-	21,226	1,760	208,342	-	208,322	20			
4. Africa and Middle East	22	22	-	-	-	-	-	-	-			
5. Europe	7,015	3,182	-	1,101	2,732	161,123	-	161,123	-			
Total	2,276,961	2,080,925	110,731	63,300	22,005	1,966,464	9,912	1,911,726	44,826			
Less: General  Provision	(25,476)	(25,476)	-	-	-	-						
Total	2,251,485	2,055,449	110,731	63,300	22,005	1,966,464	9,912	1,911,726	44,826			

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

<sup>3/</sup> Before multiplying by CCF



				Finan	cial Business (	Group					
	December 31, 2018										
Country or		Assets on-s	tatement of fina	ancial position			Off-balance	e items <sup>3/</sup>			
geographic area	Total	Net loans <sup>1/</sup>	Net investment in debt securities 2/	Deposits (including accrued interest)	Derivatives assets	Total	Aval of bills, guarantees, and letters of credit	OTC derivatives	Undrawn committed lines		
1. Thailand	1,949,834	1,800,816	129,017	13,253	6,748	1,102,512	9,319	1,053,762	39,431		
2. Asia Pacific	91,770	52,266	230	34,531	4,743	402,361	39	401,794	528		
North America     and Latin America	26,521	2,518	-	22,448	1,555	209,746	-	209,746	-		
4. Europe	4,447	1,518	-	1,698	1,231	155,804	-	155,804	-		
Total	2,072,572	1,857,118	129,247	71,930	14,277	1,870,423	9,358	1,821,106	39,959		
Less: General Provision	(22,486)	(22,486)	-	-	-	-	-	-	-		
Total	2,050,086	1,834,632	129,247	71,930	14,277	1,870,423	9,358	1,821,106	39,959		

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

 $<sup>^{\</sup>mbox{\tiny 3/}}$  Before multiplying by CCF.



					Bank-Onl	у						
		December 31, 2019										
	А	ssets on-stat	ement of fina	ancial positio	n		Off-balance items 3/					
Country or geographic			Net	Deposits			Aval of bills,					
area of debtor		1/	investment	(including	Derivatives		guarantees,	отс	Undrawn			
	Total	Net loans 1/	in debt	accrued	assets	Total	and letters	derivatives	committed			
			securities <sup>2/</sup>	interest)			of credit		lines			
1. Thailand	2,001,058	1,870,461	111,747	5,659	13,191	1,168,798	9,843	1,114,766	44,189			
2. Asia Pacific	54, 171	20,778	167	28,848	4,378	435, 182	69	431,222	3,891			
3. North America and	24,979	2,071		21,148	1,760	208,343	-	208,322	21			
Latin America			-									
4. Africa and Middle East	12	12	-	-	-	-	-	-	-			
5. Europe	6,825	2,992	-	1,101	2,732	161,123	-	161,123	-			
Total	2,087,045	1,896,314	111,914	56,756	22,061	1,973,446	9,912	1,915,433	48,101			
Less: General	(14,526)	(14,526)				-						
Provision												
Total	2.072.519	1.881.788	111.914	56.756	22.061	1.973.446	9.912	1.915.433	48,101			

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

<sup>&</sup>lt;sup>3/</sup> Before multiplying by CCF.

					Bank-Only							
Country or geographic area of debtor	December 31, 2018											
		Assets on-sta	atement of fina	ancial position			Off-balance	e items <sup>3/</sup>				
	Total	Net loans <sup>1/</sup>	Net investment in debt securities 2/	Deposits (including accrued interest)	Derivatives assets	Total	Aval of bills, guarantees, and letters of credit	OTC derivatives	Undrawn committed lines			
1. Thailand	1,807,001	1,660,128	129,017	11,108	6,748	1,110,554	9,319	1,061,804	39,431			
2. Asia Pacific	62,865	27,238	230	30,650	4,747	412,351	39	406,783	5,529			
North America and     Latin America	26,342	2,475	-	22,312	1,555	196,762	-	196,762	-			
4. Europe	3,300	1,340	-	729	1,231	158,522	-	158,522	-			
Total	1,899,508	1,691,181	129,247	64,799	14,281	1,878,189	9,358	1,823,871	44,960			
Less: General Provision	(11,614)	(11,614)	-	-	-	-	-	-	-			
Total	1,887,894	1,679,567	129,247	64,799	14,281	1,878,189	9,358	1,823,871	44,960			

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

 $<sup>^{\</sup>mbox{\tiny 3/}}$  Before multiplying by CCF.



Table 6 Outstanding balance of assets on-statement of financial position and off-balance items before credit risk mitigation classified by remaining term to maturity

	Financial Business Group							
		December 31, 2019						
Items	Within 1 year	Over 1 year	Total	Less: General Provision	Total			
1. Assets on-statement of financial position	931,205	1,345,756	2,276,961	(25,476)	2,251,485			
1.1 Net loans 1/	791,750	1,289,175	2,080,925	(25,476)	2,055,449			
1.2 Net investment in debt securities 2/	68,154	42,577	110,731	-	110,731			
1.3 Deposits (including accrued interest)	63,300	-	63,300	-	63,300			
1.4 Derivatives assets	8,001	14,004	22,005	-	22,005			
2. Off-balance items <sup>3/</sup>	1,307,041	659,423	1,966,464	-	1,966,464			
2.1 Aval of bills, guarantees and letters of credit	8,784	1,128	9,912	-	9,912			
2.2 OTC derivatives	1,259,787	651,939	1,911,726	-	1,911,726			
2.3 Undrawn committed lines	38,470	6,356	44,826	-	44,826			

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

<sup>3/</sup> Before multiplying by CCF



		Financ	ial Business	Group				
	December 31, 2018							
Items	Within 1 year	Over 1 year	Total	Less: General Provision	Total			
1. Assets on-statement of financial position	773,693	1,298,879	2,072,572	(22,486)	2,050,086			
1.1 Net loans 1/	662,152	1,194,966	1,857,118	(22,486)	1,834,632			
1.2 Net investment in debt securities 2/	33,129	96,118	129,247	-	129,247			
1.3 Deposits (including accrued interest)	71,930	-	71,930	-	71,930			
1.4 Derivatives assets	6,482	7,795	14,277	-	14,277			
2. Off-balance items <sup>3/</sup>	1,142,269	728,154	1,870,423	-	1,870,423			
2.1 Aval of bills, guarantees and letters of credit	8,261	1,097	9,358	-	9,358			
2.2 OTC derivatives	1,100,753	720,353	1,821,106	-	1,821,106			
2.3 Undrawn committed lines	33,255	6,704	39,959	-	39,959			

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

<sup>&</sup>lt;sup>3/</sup> Before multiplying by CCF



	Bank-Only						
	December 31, 2019						
ltems	Within 1 year	Over 1 year	Total	Less: General Provision	Total		
1. Assets on-statement of financial position	854,409	1,232,636	2,087,045	(14,526)	2,072,519		
1.1 Net loans 1/	721,471	1,174,843	1,896,314	(14,526)	1,881,788		
1.2 Net investment in debt securities <sup>2/</sup>	68,180	43,734	111,914	-	111,914		
1.3 Deposits (including accrued interest)	56,756	-	56,756	-	56,756		
1.4 Derivatives assets	8,002	14,059	22,061	-	22,061		
2. Off-balance items <sup>3/</sup>	1,310,168	663,278	1,973,446	-	1,973,446		
2.1 Aval of bills, guarantees and letters of credit	8,784	1,128	9,912	-	9,912		
2.2 OTC derivatives	1,259,639	655,794	1,915,433	-	1,915,433		
2.3 Undrawn committed lines	41,745	6,356	48,101	-	48,101		

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances

<sup>&</sup>lt;sup>3/</sup> Before multiplying by CCF



			Bank-Only						
		December 31, 2018							
Items	Within 1 year	Over 1 year	Total	Less: General Provision	Total				
Assets on-statement of financial position	692,646	1,206,862	1,899,508	(11,614)	1,887,894				
1.1 Net loans 1/	588,236	1,102,945	1,691,181	(11,614)	1,679,567				
1.2 Net investment in debt securities 2/	33,129	96,118	129,247	-	129,247				
1.3 Deposits (including accrued interest)	64,799	-	64,799	-	64,799				
1.4 Derivatives assets	6,482	7,799	14,281	-	14,281				
2. Off-balance items <sup>3/</sup>	1,147,462	730,727	1,878,189	-	1,878,189				
2.1 Aval of bills, guarantees and letters of credit	8,261	1,097	9,358	-	9,358				
2.2 OTC derivatives	1,100,945	722,926	1,823,871	-	1,823,871				
2.3 Undrawn committed lines	38,256	6,704	44,960	_	44,960				

<sup>&</sup>lt;sup>1/</sup> Including accrued interest receivables and net of deferred revenues, allowances for doubtful accounts and revaluation allowances for debt restructuring and including interbank and money market item-net.

<sup>&</sup>lt;sup>2/</sup> Including investment in accounts receivable but, excluding accrued interest receivables and net of revaluation and impairment allowances.

<sup>&</sup>lt;sup>3/</sup> Before multiplying by CCF



Table 7 Loans and accrued interest receivables and investment in debt securities before credit risk mitigation classified by countries or geographic areas of debtors and by asset classification specified by the BOT's regulation.

		Financial Business Group							
Countries or			Dec	ember 31, 2	2019				
geographic areas of	Loans a	Loans and accrued interest receivables net of deferred revenue debt se							
debtors	Normal	Special	Substandard	Doubtful	Doubtful	Total	Doubtful of		
		mentioned			of loss		loss		
1. Thailand	1,962,514	60,780	13,080	6,473	22,528	2,065,375			
2. Asia Pacific	51,916	4,466	54	58	14	56,508	-		
3. North America and	85	2,077	1	-	-	2,163	-		
Latin America									
4. Africa and Middle East	21	2	-	-	-	23	-		
5. Europe	3,180	4	5	-	4	3,193	-		
Total	2,017,716	67,329	13,140	6,531	22,546	2,127,262	-		

		Financial Business Group							
Countries or			De	cember 31,	2018				
geographic areas of	Loans	Loans and accrued interest receivables net of deferred revenue							
debiol 3	Normal	Special mentioned	Substandard	Total	Doubtful of loss				
1. Thailand	1,747,807	54,137	10,644	5,423	22,823	1,840,834			
2. Asia Pacific	51,380	3,969	61	76	49	55,535	-		
North America and     Latin America	2,541	2	1	-	-	2,544	-		
4. Europe	1,516	8	1	2	9	1,536	-		
Total	1,803,244	58,116	10,707	5,501	22,881	1,900,449	-		

<sup>&</sup>lt;sup>1/</sup> Including interbank and money market item.

 $<sup>^{\</sup>mbox{\scriptsize 2/}}$  Including investment in accounts receivable.



			I	Bank-Only				
Countries or			Dece	ember 31, 2	2019			
geographic areas of	Loans an	Loans and accrued interest receivables net of deferred revenue ir						
debtors	Normal	Special	Substandard	Doubtful	Doubtful	Total	Doubtful of	
		mentioned					loss	
1. Thailand	1,817,479	50,953	9,314	6,306	19,903	1,903,955	-	
2. Asia Pacific	20,135	4,289	3	1	9	24,437	-	
3. North America and	36	2,077	-	-	-	2,113	-	
Latin America								
4. Africa and Middle East	11	1	-	-	-	12	-	
5. Europe	2,990	2	2	-	5	2,999	-	
Total	1,840,651	57,322	9,319	6,307	19,917	1,933,516	-	

	Bank-Only								
Countries or	December 31, 2018								
geographic areas of	Loans a	Loans and accrued interest receivables net of deferred revenue in							
debiors	Normal	Special	Substandard	Doubtful	Doubtful	Total	Doubtful of		
	Normal	mentioned of loss		-		-		Total	loss
1. Thailand	1,614,380	45,234	7,555	4,972	19,739	1,691,880	-		
2. Asia Pacific	26,308	3,762	-	2	5	30,077	-		
3. North America and	2,499	1	1	-	-	2,501	-		
Latin America									
4. Europe	1,338	6	-	2	9	1,355	-		
Total	1,644,525	49,003	7,556	4,976	19,753	1,725,813	-		

<sup>1/</sup> Including interbank and money market item.

 $<sup>^{2/}</sup>$  Including investment in accounts receivable.



Table 8 Provisions (general provisions and specific provisions) and bad debt charge - offs for loans and accrued interest receivables and investment in debt securities classified by countries or geographic areas

		December 31, 2019						
Countries or geographic areas of	Loans and	Loans and accrued interest receivables 1/						
debtors	debt securitie							
	General Provision Specific Provision		Charge-off	Charifia Draviaian				
	General Provision	Specific Provision	during the year	Specific Provision				
1. Thailand	) -	42,191	23,324	2				
2. Asia Pacific	-	4,090	147	-				
3. North America and Latin America	25,476	44	2	-				
4. Africa and Middle East	-	-	3	-				
5. Europe	12 3							
Total	25,476	46,337	23,479	2				

		December :	31, 2018	
Countries or geographic areas of debtors	Loans and	Investment in debt securities 2/		
	General Provision	Specific Provision	Charge-off	Specific
	General Provision	Specific Provision	during the year	Provision
1. Thailand	) 0	40,018	17,911	214
2. Asia Pacific	0	3,269	131	11
3. North America and Latin America	22,486	26	-	-
4. Europe	) 0	-		
Total	22,486	43,331	18,043	225

Including provisions and charge-offs for loans and accrued interest receivables of interbank and money market item.

 $<sup>^{2/}</sup>$  Including investment in accounts receivable.



		Bank-Only					
	December 31, 2019						
Countries or geographic areas of debtors	Loans and a	Investment in debt securities 2/					
	General Provision	Charge-off charge-off during the year		Specific Provision			
1. Thailand	-	33,495	13,012	2			
2. Asia Pacific	-	3,659	147	-			
3. North America and Latin America	14,526	42	2	-			
4. Africa and Middle East	-	-	3	-			
5. Europe	_	-					
Total	14,526	37,202	13,167	2			

	Bank-Only								
		December 31, 2018							
Countries or geographic areas of debtors		Loans and	Investment in debt securities 2/						
		General Provision	Specific Provision	Charge-off during the year	Specific Provision				
1. Thailand	)	-	31,753	8,428	3				
2. Asia Pacific		-	2,838	1	11				
3. North America and Latin America		11,614	25	-	-				
4. Europe	_ 15 1								
Total		11,614	34,631	8,430	14				

<sup>&</sup>lt;sup>1/</sup> Including provisions and charge-offs for loans and accrued interest receivables of interbank and money market item.

 $<sup>^{\</sup>mbox{\scriptsize 2/}}$  Including investment in accounts receivable.



Table 9 Loans and accrued interest receivables\* before credit risk mitigation classified by type of business and by asset classification specified by the BOT

Type of business	Financial Business Group					
	December 31, 2019					
	Normal	Special mentioned	Substandard	Doubtful	Doubtful of loss	Total
Agriculture and mining	20,919	1,099	156	152	798	23,124
2. Manufacturing and trading	395,336	13,264	2,809	1,357	9,980	422,746
3. Real estate and construction	126,151	3,073	382	365	1,741	131,712
4. Public utilities and services	162,814	9,683	198	238	1,870	174,803
5. Housing loans	257,228	4,281	1,882	1,427	5,780	270,598
6. Others	1,055,268	35,929	7,713	2,992	2,377	1,104,279
Total	2,017,716	67,329	13,140	6,531	22,546	2,127,262

Type of business	Financial Business Group						
	December 31, 2018						
	Normal	Special mentioned	Substandard	Doubtful	Doubtful of loss	Total	
Agriculture and mining	22,028	1,030	140	118	836	24,152	
2. Manufacturing and trading	382,030	10,640	2,178	1,268	10,810	406,926	
3. Real estate and construction	107,084	3,418	451	260	1,704	112,917	
4. Public utilities and services	162,900	12,461	222	138	1,798	177,519	
5. Housing loans	241,154	3,284	1,414	1,008	4,105	250,965	
6. Others	888,048	27,283	6,302	2,709	3,628	927,970	
Total	1,803,244	58,116	10,707	5,501	22,881	1,900,449	

<sup>\*</sup> Including loans and accrued interest receivables of interbank and money market item.



Type of business	Bank-Only						
	December 31, 2019						
	Normal	Special	Substandard	Doubtful	Doubtful of	,	
		mentioned			loss		
Agriculture and mining	16,360	1,093	144	128	194	17,919	
2. Manufacturing and trading	389,126	13,245	2,758	1,351	9,352	415,832	
3. Real estate and construction	124,306	3,051	380	364	1,703	129,804	
4. Public utilities and services	162,814	9,683	197	238	1,571	174,503	
5. Housing loans	255,101	4,277	1,879	1,423	5,768	268,448	
6. Others	892,944	25,974	3,961	2,803	1,329	927,011	
Total	1,840,651	57,323	9,319	6,307	19,917	1,933,517	

Type of business	Bank-Only						
	December 31, 2018						
	Normal	Special	Substandard	Doubtful	Doubtful of	Total	
		mentioned			loss		
Agriculture and mining	17,846	1,012	121	83	198	19,260	
2. Manufacturing and trading	377,204	10,603	2,169	1,078	10,280	401,334	
3. Real estate and construction	105,768	3,381	443	256	1,653	111,501	
4. Public utilities and services	162,889	12,461	222	138	1,489	177,199	
5. Housing loans	238,829	3,283	1,412	1,004	4,091	248,619	
6. Others	741,990	18,263	3,189	2,417	2,042	767,901	
Total	1,644,526	49,003	7,556	4,976	19,753	1,725,814	

<sup>\*</sup> Including loans and accrued interest receivables of interbank and money market item.



Table 10 Provisions (general provisions and specific provisions) and bad debt charge-offs for loans and accrued interest receivables\* classified by type of business

			Financial Bus	siness Group		
	Dec	cember 31, 20	)19	Dec	cember 31, 20	)18
Type of business	General provision	Specific provision	Bad debt charge-off during the year	General provision	Specific provision	Bad debt charge-off during the year
Agriculture and mining	) -	769	281	<u> </u>	844	197
2. Manufacturing and trading	-	11,975	2,456	-	12,355	1,748
3. Real estate and	-	1,365	369	-	1,378	151
4. Public utilities and services	-	5,731	2,066	-	4,908	1,311
5. Housing loans	-	3,581	77	-	2,672	77
6. Others	25,476	22,916	18,230	22,486	21,174	14,559
Total	25,476	46,337	23,479	22,486	43,331	18,043

	Bank-Only									
	Dec	ember 31, 20	119	De	cember 31, 2	018				
Type of business	General provision	Specific provision	Bad debt charge-off during the year	General provision	Specific provision	Bad debt charge-off during the year				
1. Agriculture and mining	)	445	281	)	468	197				
2. Manufacturing and trading		11,509	2,456		11,838	1,748				
3. Real estate and construction		1,314	369	-	1,315	151				
4. Public utilities and services	-	5,495	2,066	-	4,663	1,311				
5. Housing loans	-	3,550	77.00	-	2,638	77				
6. Others	14,526	14,889	7,918	11,614	13,709	4,946				
Total	14,526	37,202	13,167	11,614	34,631	8,430				

 $<sup>^{\</sup>star}$  Including loans and accrued interest receivables of interbank and money market item



Table 11 Reconciliation of changes in provisions (general provisions and specific provisions) for loans including accrued interest receivables\*

	Financial Business Group										
	Dec	cember 31, 20	119	De	cember 31, 20	18					
Items	General provision	Specific provision	Total	General provision	Specific provision	Total					
Provisions at the beginning of the years	22,486	43,331	65,817	19,358	37,768	57,126					
Bad debt charge-offs during the years	-	(23,479)	(23,479)	-	(18,043)	(18,043)					
Increase or decrease of provisions during the years	3,058	26,513	29,571	3,132	23,610	26,742					
Others	(68)	(28)	(96)	(4)	(4)	(8)					
Provisions at the end of the years	25,476	46,337	71,813	22,486	43,331	65,817					

	Bank-Only										
	Dec	ember 31, 20	19	December 31, 2018							
Items	General	Specific	<b>.</b>	General	Specific	<b></b>					
	provision	provision	Total	provision	provision	Total					
Provisions at the beginning of the years	11,614	34,631	46,245	9,517	29,390	38,907					
Bad debt charge-offs during the years	-	(13,167)	(13,167)	-	(8,430)	(8,430)					
Increase or decrease of provisions during	2,913	15,738	18,651	2,098	13,671	15,769					
the years											
Others	(1)	-	(1)	(1)	-	(1)					
Provisions at the end of the years	14,526	37,202	51,728	11,614	34,631	46,245					

 $<sup>^{\</sup>star}$  Including loans and accrued interest receivables of interbank and money market item



Table 12 Outstanding balance of assets on-statement of financial position and off-balance items\* for credit risk under the Standardized Approach classified by type of assets

Financial Business Group  December 31, 2019  December 31, 2018											
			Dece	ember 31, 2	2019	Dec	ember 31, 20	)18			
		Type of assets	Assets on- statement of financial position	Off- balance items**	Total	Assets on- statement of financial position	Off- balance items**	Total			
1.	Perf	orming assets	2,304,653	203,824	2,508,477	2,129,460	151,552	2,281,012			
	1.1	Claims on sovereigns and central	266,787	46,286	313,073	206,172	34,908	241,080			
		banks, multilateral development									
		banks (MDBs) and public sector									
		entities (PSEs) that are treated as									
		claims on sovereigns									
	1.2	Claims on banks, public sector	63,045	88,877	151,922	89,292	54,288	143,580			
		entities (PSEs) that are treated as									
		claims on banks and securities									
		companies									
	1.3	Claims on corporate and public	766,395	57,998	824,393	738,703	50,699	789,402			
		sector entities (PSEs) that are									
		treated as claims on corporate									
	1.4	Claims on retail portfolios	818,719	10,663	829,382	732,012	11,645	743,657			
	1.5	Residential mortgage exposures	248,409	-	248,409	234,778	12	234,790			
	1.6	Other assets	141,298	-	141,298	128,503	-	128,503			
2.	Non	-performing assets	19,242	118	19,360	16,312	201	16,513			
		Total	2,323,895	203,942	2,527,837	2,145,772	151,753	2,297,525			

<sup>\*</sup> After multiplying by CCF and net of specific provisions.

 $<sup>\</sup>ensuremath{^{**}}$  Including repo-style transactions and reverse repo.



					Ban	k-Only		: Million Bant
			Dece	ember 31, 20	)19	Dec	ember 31, 20	18
		Type of assets	Assets on- statement of financial position	Off- balance items**	Total	Assets on- statement of financial position	Off- balance items**	Total
1.	Perf	orming assets	2,142,014	205,622	2,347,636	1,987,744	153,880	2,141,624
	1.1	Claims on sovereigns and central	263,881	46,286	310,167	203,778	34,908	238,686
		banks, multilateral development						
		banks (MDBs) and public sector						
		entities (PSEs) that are treated as						
		claims on sovereigns						
	1.2	Claims on banks, public sector	59,401	88,891	148,292	84,554	54,306	138,860
		entities (PSEs) that are treated as						
		claims on banks and securities						
		companies						
	1.3	Claims on corporate and public	849,634	59,699	909,333	810,792	52,944	863,736
		sector entities (PSEs) that are						
		treated as claims on corporate						
	1.4	Claims on retail portfolios	554,879	10,746	565,625	496,384	11,710	508,094
	1.5	Residential mortgage exposures	246,052	-	246,052	232,273	12	232,285
	1.6	Other assets	168,167	-	168,167	159,963	-	159,963
2.	Non-	-performing assets	17,829	118	17,947	14,925	202	15,127
		Total	2,159,843	205,740	2,365,583	2,002,669	154,082	2,156,751

<sup>\*</sup> After multiplying by CCF and net of specific provisions.

<sup>\*\*</sup> Including repo-style transactions and reverse repo.



# 6.2 Credit risk exposures by the Standardized Approach

The Bank calculates its capital to credit risk weighted assets under the Standardized Approach. The Bank uses ratings assigned from the following 5 External Credit Agency Rating Institutions ("ECAIs") i. e. Standard & Poor's, Moody's, Fitch Ratings, Fitch Ratings (Thailand) and TRIS Rating, and the information from the OECD Country Risk Classification, in identifying the risk weight of each customer.

# 6.3 Credit risk mitigation by the Standardized Approach

- 1. The Bank manages and revalues collateral in accordance with the BOT's guidelines.
- 2. The main credit risk mitigation is financial collateral, namely cash, equity instrument and debt instrument that comply with the BOT's guidelines.
- The main eligible guarantors and credit derivative providers are government, state enterprises, and high-quality corporate, all of whom have characteristics that comply with the BOT's guidelines.
- 4. Currently, the Bank does not apply the netting for both on and off statement of financial positions as credit risk mitigation.



Table 13 Outstanding balance of assets on-statement of financial position and off-balance items<sup>1/</sup> after credit risk mitigation for each type of assets classified by risk weight under the Standardized Approach

							F	inancial Busine	ess Group							
Type of Assets								December 31	, 2019							
		Ra	ated outstandir	ng						Unrate	ed outstanding					
Risk weight %	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Performing assets																
Claims on sovereigns and central	333,298	-	6,018	-	2,893											
banks, multilateral development																
banks (MDBs) and public sector						-	-	-	-	-	-	-				
entities (PSEs) that are treated as																
claims on sovereigns																
Claims on banks, public sector	19	55,872	15,609	18,401	-											
entities (PSEs) that are treated as						-	-	-	-	-	-	-				
claims on banks and securities																
Claims on corporate and public	-	67,868	90,971	37,244	96	132	-	-	139	-	601,489					
sector entities (PSEs) that are												-				
treated as claims on corporate																
4. Claims on retail portfolios	-	-	-	-	-	-	-	-	-	789,650	18,298	-				
Residential mortgage exposures	-	-	-	-	-	-	-	143,258	-	104,940	210	-				
6. Other assets	-	-	-	-	-	162,457	4,534	-	-	-	55,083	-				
RW(%)	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Non-performing assets 2/	-	-	-	726	-	146	3	-	2,756	2,155	8,577	4,996				
Assets specified by the BOT as items to																
be deducted from capital fund								27,840	)							

After multiplying by CCF

 $<sup>^{2/}</sup>$  For no credit risk mitigation part, risk weights depend on the ratio of provisions to total exposures.



															Unit	: Million Bant
							Fir	nancial Busines	ss Group							
Type of Assets								December 31,	2018							
		R	ated outstanding	g						Unrated	loutstanding					
Risk weight %	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Performing assets																
Claims on sovereigns and central banks, multilateral development banks     (MDBs) and public sector entities     (PSEs) that are treated as claims on sovereigns	255,499	-	8,229	2,378	-	-					-		-			
Claims on banks, public sector entities     (PSEs) that are treated as claims on     banks and securities companies	100	49,186	32,941	19,178	-	-	-	-	-	-	-	-	-			
Claims on corporate and public sector entities (PSEs) that are treated as claims on corporate	-	83,020	85,969	38,180	161	-	-	-	21	-	554,519	-	-			
Claims on retail portfolios	-	-	-	-	-	-	-	-	-	700,803	19,917	-	-			
Residential mortgage exposures	-	-	-	-	-	-	-	97,800	-	136,878	111	-	-			
6. Other assets	-	-	-	-	-	136,836	5,808	-	-	-	53,477	-	-			
RW(%)	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Non-performing assets 2/	-	-	0	867	-	131	3	-	2,091	1475	7,610	4,336	-			
Assets specified by the BOT as items to be								22,190								

<sup>1/</sup> After multiplying by CCF

deducted from capital fund

<sup>&</sup>lt;sup>2/2</sup> For no credit risk mitigation part, risk weights depend on the ratio of provisions to total exposures.



								Bank	-Only							
Type of Assets								Decembe	r 31, 2019							
		R	ated outstandin	ıg						Un	rated outstandi	ng				
Risk weight %	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Performing assets																
Claims on sovereigns and central banks,	333,298	-	6,004	-	-											
multilateral development banks (MDBs)																
and public sector entities (PSEs) that are						-	-	-	-	-	-	-	-			
treated as claims on sovereigns																
Claims on banks, public sector entities	19	53,573	15,609	17,071	-											
(PSEs) that are treated as claims on						-	-	-	-	-	-	-	-			
banks and securities companies																
Claims on corporate and public sector	-	81,030	112,465	38,393	96	-	-	-	139	-	650,865					
entities (PSEs) that are treated as claims												-	-			
on corporate																
4. Claims on retail portfolios	-	-	-	-	-	-	-	-	-	528,822	15,970	-	-			
Residential mortgage exposures	-	-	-	-	-	-	-	143,258	-	102,586	207	-	-			
6. Other assets	-	-	-	-	-	145,740	4,522	-	-	-	97,967	-	-	-	-	-
RW(%)	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Non-performing assets 2/	-	-	-	726	-	146	3	-	2,525	2,155	7,969	4,422	-			
Assets specified by the BOT as items to be								- 10	046							
deducted from capital fund		13,316														

<sup>1/</sup> After multiplying by CCF

<sup>&</sup>lt;sup>2/</sup> For no credit risk mitigation part, risk weights depend on the ratio of provisions to total exposures.



Unit<sup>-</sup> Million Baht

															Unit:	: Million Baht
								Bank-On	ly							
Type of Assets								December 31	, 2018							
		R	ated outstandin	ıg						Unrate	d outstanding					
Risk weight %	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Performing assets																
Claims on sovereigns and central	255,499	-	8,214	-	-	-	-	-	-	-	-	-	-			
banks, multilateral development																
banks (MDBs) and public sector																
entities (PSEs) that are treated as																
claims on sovereigns																
2. Claims on banks, public sector	100	45,719	32,941	17,925	-	-	-	-	-	-	-	-	-			
entities (PSEs) that are treated as																
claims on banks and securities																
Claims on corporate and public	-	97,061	104,648	38,839	161	-	-	-	21	-	595,742	-	-			
sector entities (PSEs) that are																
treated as claims on corporate																
Claims on retail portfolios	-	-	-	-	-	-	-	-	-	466,700	19,019	-	-			
Residential mortgage exposures	-	-	-	-	-	-	-	97,800	-	134,374	111	-	-			
6. Other assets	-	-	-	-	-	125,378	5,421	-	-	-	95,952	-	-	-	_	-
RW(%)	0	20	50	100	150	0	20	35	50	75	100	150	250	625	937.5	100/8.5%
Non-performing assets 2/	-	-	-	867	-	131	3	-	1,841	1,475	6,943	3,866	-			
Assets specified by the BOT as items								10.004								
to be deducted from capital fund								13,324								

<sup>1/</sup> After multiplying by CCF

to be deducted from capital fund

 $<sup>^{2/2}</sup>$  For no credit risk mitigation part, risk weights depend on the ratio of provisions to total exposures.



Table 14 Outstanding balance of assets with collateral under Standardized Approach classified by type of assets and collateral

		Financial Bus	siness Grou	р	Bank-Only							
	Decembe	r 31, 2019	Decembe	r 31, 2018	Decembe	r 31, 2019	Decembe	r 31, 2018				
Type of assets	Eligible	Guarantees	Eligible	Guarantees	Eligible	Guarantees	Eligible	Guarantees				
	financial	and credit	financial	and credit	financial	and credit	financial	and credit				
	collateral	derivatives	collateral	derivatives	collateral	derivatives	collateral	derivatives				
Performing assets	173,329	19,621	136,373	33,513	172,615	19,621	135,542	33,513				
1. Claims on sovereigns and	42,924	-	32,073	-	42,924	-	-	-				
central banks, multilateral												
development banks (MDBs)												
and public sector entities												
(PSEs) that are treated as												
claims on sovereigns												
2. Claims on banks, public	64,424	1,128	32,855	14,402	64,424	1,128	64,928	14,402				
sector entities (PSEs) that												
are treated as claims on												
banks and securities												
companies												
3. Claims on corporate and	44,668	18,371	49,565	18,053	44,556	18,371	49,297	18,053				
public sector entities (PSEs)												
that are treated as claims												
on corporate												
4. Claims on retail portfolios	21,312	122	21,878	1,058	20,711	122	21,316	1,058				
5. Residential mortgage	1	-	2	-	-	-	1	-				
exposures												
Non-performing assets	177	726	134	867	177	726	134	867				
Total	173,506	20,347	136,507	34,380	172,792	20,347	135,676	34,380				



### 7. Market Risk

'Market risk' refers to the risk of loss caused by price fluctuations in the trading and banking books related to interest rates, exchange rates, equity instruments, and commodities.

# 7.1 Market Risk Management

To achieve sustainable growth and returns for shareholders, the Bank manages market risk under a robust risk management framework, monitoring and mitigating market risk in an appropriate and timely manner within the risk appetite approved by the Board of Directors (BOD) and adjust risk management systems that comply with all regulations and the best practice standards stipulated by the Bank of Thailand (BOT) and other regulatory authorities.

The market risk policies and limits have been regularly reviewed and approved by the Board to ensure that they are commensurate with the scope, volume, and complexity of transactions, and support prudent business expansion. In order to effectively manage market risk, the Internal Capital Adequacy Assessment Process (ICAAP) and Enterprise-wide Risk Management Framework (ERM) concepts have been adopted. With this framework, the Bank assesses all material risks to develop comprehensive risk management guidelines, establish risk limits, and maintain sufficient capital for both normal and stressed business conditions.

### 1) Structure of Market Risk Management

The Bank's organizational structure clearly segregates the responsibilities and duties of the units responsible for executing transactions, operations, and risk management to avoid conflicts of interest. Market risk is overseen by the Risk Management Committee (RMC) and managed by Asset and Liability Management Committee (ALCO).

The Market Risk Management Division has provided strategic risk management options and reported risk exposure to the RMC to manage and control market risk consistent with the Bank's policy. The Global Markets Group executes transactions and manages positions as well as provides analysis of the Bank's and competitors' balance sheet management and strategic risk options to the ALCO for more effective market risk management under approved risk limits.

# 2) Market Risk Management Policy

The Bank has established the market risk management policy approved by BOD to ensure having an appropriate framework and management system for managing and controlling market risk. In addition, a series of risk limits are set up and approved by BOD as a key control mechanism to ensure that the risk exposure will be assessed and monitored on a regular basis. The policies and limits will be reviewed at least once a year or upon any significant changes to ensure that they are commensurate with the scope, volume, and complexity of transactions, and support prudent business expansion.



To effectively control market risk, the Bank classified the market risk exposures into two main portfolios based on the nature and purpose of a transaction, namely trading book and banking book.

- A trading book consists of positions in financial instruments held either for trading or hedging other elements of the trading book.
- The banking book includes positions in financial instruments or other transactions not intended for trading, or financial instruments meant to be held for a long period or until reaching maturity.

# 7.2 Market Risk in Trading Book

The Bank's trading activities are exposed to interest rate risk, foreign exchange risk, and equity price risk, all of which may affect income or shareholders' equity. The Bank assesses and monitors these market risks under trading book on a daily basis.

- Interest Rate Risk refers to loss affecting income and/or shareholder equity due to interest rate changes that can be on- or off-balance sheet in the trading book.
- Foreign Exchange Risk refers to loss affecting income and/or shareholder equity due to exchange rate fluctuations that affect foreign currency transactions and foreign currency assets and liabilities. Most foreign currency transactions are services provided to our customers.
- Equity Price Risk refers to loss affecting income and/or shareholder equity due to equity price movements.

### Risk Measurement and Control

The Bank also emphasized the necessity of closely monitoring market risk exposure for timely response to changes in the business environment. With this regard, various tools and measurements are used to assess the market risk exposure in trading book. The market risk in trading book is currently controlled and monitored through various limits such as Value-at-Risk (VaR) limit, stop loss limit, PV01 limit, FX position limit, and etc.

Value-at-Risk (VaR) is a statistical tool used to assess the potential maximum losses on risk exposure. The Bank applies a historical simulation approach at a 99% confidence level over a 10-day holding period to measure of interest rate risk, foreign exchange risk, and equity price risk. In 2019, the Bank's aggregate market risk in trading book was well within acceptable level with the average VaR of THB 85.45 mio.



To validate the VaR model reliability, the Bank regularly conducts the back testing by comparing 1-day Hypothetical P/L and 1-day VaR to analyze whether the number of exceptions are within the acceptable range. In 2019, the Bank's back testing result shows that the VaR model is reliable.

In addition, the Bank actively alerts relevant parties through flash reports when there will be the major events that will have impact on portfolio of the Bank. The Bank also conducts stress testing to assess the market risk and estimate maximum loss under crisis situations based on various scenarios including FX rate change, interest rate change, bond yield changes, THB volatility, and stock price movement.

# • Market Risk Exposure in Trading Book and Activities in 2019

The Bank continues to enhance market risk measurement in response to internal management and new regulations, through measures including the development or modification of risk measurement tools for potential new products, and preparation for future implementation.

# Market Risk Management in 2019

# Enhanced / Implemented

A new trading system for money market, repurchase agreement, FX

Enhancement of risk control and monitoring for taking the role of an outright primary dealer appointed by the Ministry of Finance (MOF)

and Bond products

Enhancement of reporting tools for new market risk datasets for improvement of the Bank of Thailand (BOT)'s monitoring quality

Enhancement of risk measurement tools for long- term bond trading

# Preparing

Adoption of Thailand FX
Code as the standard of
good practices for the FX
market

London Interbank Offered
Rate (LIBOR) Transition and
Benchmark Reform

In 2019, market products actively offered to our customers included FX and interest rate derivatives for hedging and notes with derivatives embedded for yield enhancement, while bond trading was notably active.

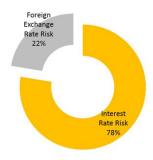
Risk positions associated with derivative transactions are handled carefully, while being decomposed into basic risks and analyzed, so that the inherent risk profile is clearly understood in order to effectively control and manage them in accordance with the complexity of such derivative products.



### Market Risk Capital Requirement

The Bank assesses and maintains the Bank's and Financial Business Group's capital charges or market risk in compliance with the BOT notification on guidelines for financial institutions' market risk supervision. Currently, the Bank uses Standardized Approach (SA) for the calculation of minimum capital requirement for market risk.

Financial Group:
Minimum Market Risk
Capital Requirement
As of December 31, 2019



# 8. Operational Risk

# Objectives and Key Risk Factors

The Bank's operational risk definition includes the risk of loss resulting from inadequate or failed internal procedures, technology problems, human factors, and external events; the definition also includes legal risk but excludes strategic risk.

Key risk factors can arise from the misconduct of internal and external individuals, inadequate procedural design and internal controls, noncompliance with laws or regulations, system collapse or inadequate systems that may lead to data corruption, programming errors, security breaches, and system failures. The risk factors from external events are uncontrollable such as political crises, pandemics, flooding, and other environmental impacts.

Operational risks may occur in any part of the Bank's business and will result in financial or non-financial impacts including legal and regulatory breaches or reputational impacts.

The Bank commits to effectively manage and mitigate major operational risks with a proactive approach as well as continuing to embed a culture of operational risk awareness throughout the Bank and the companies under its financial business group.



### Principles

The Bank recognizes that operational risk is a significant concern and will provide sufficient resources to manage risk by promoting sound operational risk management governance and frameworks. Every employee is accountable for managing operational risk.

### Organization and Structure

Operational risk is managed under the Group's operational risk management policies, approved by the Board of Directors. Bank policy stipulates the minimum requirements for a framework that is implemented throughout the organizational structure along three lines of defense to ensure independent oversight of operational risk management throughout the Bank's financial business group. All business units as primary operational risk owners and risk-takers have prime responsibility for day-to-day identifying and managing of operational risk inherent in their products, activities, procedures, and systems according to Bank policy.

The RMC assigned by the Executive Committee, is responsible for formulating strategies and for oversight of the adequacy of risk and control procedures. The RMC meets monthly to review and make recommendations on operational risk profiles. The Operational Risk Management Division, an independent function reporting to the Chief Risk Officer, is responsible for designing, maintaining, and continuously developing the operational risk framework and measurement system to ensure that operational risk is well-mitigated and properly managed. In addition, the internal audit functions conduct audits to provide independent and reasonable assurance that operational governance, risk management and internal controls are adequate, appropriate and effective.

# Operational Risk Management Framework and Tools

The Bank's information technology enhancement, as part of our endeavor to deliver digital banking products and services with new technology and innovation, could result in a greater diversity of operational risks, including information technology risks and cyber threats. We continue to improve our risk management framework and tools covering information technology risks and cyber threats to brace for potential risks. When initiating new products, services and systems, an assessment of operational and IT risk is performed to ensure that proper controls are in place.

The Risk and Control Self-Assessment (RCSA) Program, a tool that provides a forward-looking view of key risks, is reviewed regularly based on historical loss data and changes in the business environment. We also



conduct risk assessment on new products, processes, and technologies to ensure that all new products, new technologies or significant changes of existing processes and systems are subject to comprehensive risk evaluation and approved by the management before launch.

Key risk indicators are collected and tracked for both the Bank and the business units to provide early warning signals of deterioration in Bank's internal controls. Appropriate action plans must be put in place to prevent losses should that the risk level exceeds acceptable thresholds.

All departments are responsible for reporting operational risk incidents that result in direct and indirect losses beyond a certain threshold, including near-miss and non-financial impact events, to the Operational Risk Management Division. The Bank has established a Significant Incident Management Working Group for such incidents; the root cause is analyzed and addressed in a working group discussion to ensure that effective preventive measures are engaged, and to leverage lessons learned from significant operational risk incidents to other business units.

Any significant information technology incidents or problems, and significant cyber threats or cyberattack incidents are reported, managed and presented to the Risk Management Committee, the Executive Committee, the Risk and Compliance Committee, and the Board of Directors, respectively.

An ongoing process to manage and monitor potential operational risks that might stem from outsourcing or insourcing arrangements is in place: When considering the continuity of business operations, providing customer service, and suitable protection of customer information are our main benchmarks for accountability.

The Bank recognizes the importance of business continuity management to ensure that if disruptions occur anywhere across the bank, key products and customer services can be provided or recovered within a reasonable period. Key risks and threats are periodically assessed and reviewed by senior management from a business-continuity perspective, including political crises, pandemics, technology disruptions, flooding, and other environmental impacts.

Our operational risk profiles and performance reports are then regularly prepared and delivered to the Risk Management Committee, the Risk and Compliance Committee, the Executive Committee and the Board to detect early changes in key operational risks within Krungsri Group and to drive decision-making processes.



### Capital Requirements

The Bank currently uses the Standardized Approach (SA) to calculate operational risk capital within the Financial Business Group.

# 9. Equity exposures in the banking book

### 9.1 General information for equity position risk in the banking book

### Equity price risk in the banking book

The Bank monitors and reports the equity price risk in the banking book to ensure that the level of capital fund is appropriate and sufficient to absorb losses arising from positions in the banking book.

# Management of equity price risk in the banking book

The Bank's Board of Directors determines the total limit which shall be regularly reviewed at least once a year. Additionally, the Asset and Liability Management Committee (ALCO) is responsible for approving transactions of the banking book items in cases that are specified in the Market Risk Management Policy based on the authority delegated by the Bank's Board of Directors (BOD) while Executive Committee is responsible for approving investment policy in order to ensure that the investments are effectively and appropriately undertaken and in alignment with economic situation and competition in the financial business.

Global Markets Group is responsible for executing transactions under the risk limits approved by the Bank's Board of Directors as well as assessing the value of positions at least once a month. Furthermore, Securities Investment Department also monitors and reports the equity positions to the ALCO on a monthly basis.

### 9.2 The different of risk management policy for equity securities:

# 9.2.1 Equity investment for the purpose of capital gain

As the purpose of the investment is to earn capital gain and dividend via a medium to long term investment, equity of the Bank is then directly affected by the change in market price of a security. The Bank, therefore, places importance on market risk management and also regulates the investment to be in accordance with the investment policy which has been regularly reviewed at least once a year. Furthermore, an investment performance monitoring is reported to the ALCO on monthly basis.

# 9.2.2 Equity investment for other purposes

The Bank invests in the company established to support and promote the government policy, other companies to generate a return on investment and the companies obtained from debt restructuring process, which risk management guideline requires performance monitoring to be conducted and report to the Financial Management Committee on monthly basis.



# 9.3 Key policies on fair value measurement in accordance with the accounting standards, assumptions and guidelines on fair value measurement, including significant changes in the guidelines

The Bank has the Mark-to-Market Model Procedure and the Bank's policy for Group Accounting for measurement of fair value. According to the international standards and measurement of value of positions in alignment with the academic principle and market practice, the Bank also keep updating that the Validated Rate for Revaluation Procedure to have the liquid and reasonable price from the reliable sources such as the Securities and Exchange Commission.

Table 15 Equity exposures in the banking book

Unit: Million Baht

	Financial Bus	iness Group	Bank-	Only
Equity exposures	December 31,	December 31,	December 31,	December 31,
	2019	2018	2019	2018
1. Equity exposures				
1.1 Equities listed and publicly traded in the Stock				
Exchange (both domestic and foreign)				
- At cost	6,485	5,303	6,366	5,193
- Market value	5,856	5,077	5,846	5,077
1.2 Other equities (both domestic and foreign)	734	590	66,234	58,537
<ol> <li>Gains (losses) of sale of equities during the reporting periods</li> </ol>	(4,694)	(128)	(5,436)	190
Revaluation surplus (deficit) on investment in equity     securities – available for sales	(627)	(221)	(517)	(111)
Minimum capital requirements for equity exposures     by SA approach	593	526	4,831	4,602

# 10. Interest Rate Risk in Banking Book

The Bank is exposed to interest rate risk in banking book when mismatches between the interest rate structure of assets, liabilities, and off-balance sheet position adversely impact the Bank's earnings and capital.

### Risk Measurement and Control

To manage interest rate risk, the Bank conducts reprising gap analysis by both static and dynamic simulations based on projected interest rate trends, on a monthly basis or upon any significant change. The Bank also assesses the potential impact on net interest income (NII impact) as earnings perspective for short-term effect analysis while analyzing the sensitivity of the economic value of shareholder equity (BVE impact) as economic value perspective for long-term effect analysis on a monthly basis.



The results and impacts from various simulations are submitted to senior management and related committees for prompt decision-making and to ensure that interest rate risk is within the risk appetite approved by the Board.

Additionally, the Bank has specified the NII limit (being the cumulative NII impact within 1 year) and BVE limit to monitor and control the interest rate risk in banking book. These limits are reviewed and proposed for BOD approval at least once a year or upon any significant changes.

Results of Financial Business Group's interest rate risk assessment (assuming a 1.00-percent increase in interest rates of all rate-sensitive types of assets, liabilities, and off-balance sheet items at their different reprising periods) are shown below:

Table 16: The effect of changes in interest rates\* to earnings (net)

Office Million Ball				Office Willifelf Baric	
	Net Interest Income Impacts				
Currency **	Financial Business Group		Bank	-Only	
	December 31,	December 31,	December 31,	December 31,	
	2019	2018	2019	2018	
Baht	(38)	(1,022)	(186)	(1,221)	
Foreign Currencies	(455)	(590)	(390)	(524)	
Total effect of changes in interest rates	(493)	(1,612)	(576)	(1,745)	
% of estimate interest income-net for	(0.60%)	(2.11%)	(0.94%)	(2.58%)	
the next year					

<sup>\*</sup> Use the percentage changes in increase interest rates of 100 bps.

<sup>\*\*</sup> All currencies converted into THB



Table 17: The effect of changes in yield curve\* to economic value of equity

	Economic Value of Equity Impacts				
Currency **	Financial Business Group		Bank-Only		
	December 31,	December 31,	December 31,	December 31,	
	2019	2018	2019	2018	
Baht	(5,419)	(6,806)	(4,748)	(6,794)	
Foreign Currencies	(326)	(295)	74	(37)	
Total effect of changes in yield curve	(5,745)	(7,101)	(4,674)	(6,831)	
% of total capital fund	(1.81%)	(2.64%)	(1.75%)	(2.98%)	

<sup>\*</sup> Use the percentage changes in increase yield curve of 100 bps.

# • Interest Rate Risk Exposure in Banking Book and Activities in 2019

To meet the 'Final Rule re: Interest Rate Risk in Banking Book (IRRBB)' as published by the Basel Committee on Banking Supervision (BCBS) on April 21, 2016 and prepare for the future implementation in Thailand, the Bank has already prepared the following actions to ensure that the compliance will not impact the Bank's interest rate risk management framework.

- Conduct BVE simulations under a set of interest rate shock scenarios to ensure that the Bank's BVE is within 15% of Tier 1 Capital.
- Continue developing database systems for various information in order to assess the interest rate risk for assets, liabilities and off-balance sheet items with uncertain repricing period or remaining maturity (e.g. Non maturity deposits ("NMD"), Term Deposits, Mortgage loans, Commitment lines, etc.) in order to appropriately correspond with the actual behavior of the customers and effectively manage risk.

# 11. Liquidity Risk Management

Liquidity risk arises from failure to pay debts and contingent liabilities by the due date because of an inability to convert assets into cash; it also relates to failure to obtain sufficient funds, or finding that fund procurement comes at a higher cost, thus adversely affecting income and capital funds.

The Bank recognizes the importance of regulatory changes and manage liquidity risks as deemed appropriate based on market conditions and acceptable risk levels

# 1) Structure of Liquidity Risk Management

The Bank's organizational structure clearly segregates the responsibilities and duties of the units responsible for executing transactions, operations, and risk management to avoid conflicts of interest. Overall

<sup>\*\*</sup> All currencies converted into THB



liquidity risk is overseen by the Risk Management Committee (RMC) and managed by Asset and Liability Management Committee (ALCO).

The Market Risk Management Division provides strategic risk management options to RMC, while the Global Markets Group analyses the Bank's and competitors' balance sheet management to ALCO, including our liquidity risk and funding strategic options, and manages daily liquidity positions under risk limits approved by the Board.

### 2) Liquidity Risk Management Policy

The Bank has established the liquidity risk management policy approved by BOD to ensure having an appropriate framework and management system for managing and controlling liquidity risk. In addition, a series of risk limits are set up and approved by BOD as a key control mechanism to ensure that the risk exposure will be assessed and monitored on a regular basis. The policies and limits will be reviewed at least once a year or upon any significant changes to ensure that they are commensurate with the scope, volume, and complexity of transactions, and support prudent business expansion.

### 3) Risk Measurement and Control

The Bank realizes the importance of adequate measurement tools for the size and complexity of transactions both on- and off-balance sheet. With this regard and effective internal risk management, the Bank conducts liquidity gap analysis covering both normal business and crisis situations that may adversely affect the Bank's liquidity position. A manageable level of maturity mismatches of cash flows from assets and liabilities shall then be consistently maintained and regularly monitored with liquidity stress testing, together with sufficient liquidity reserves. The Bank has constantly monitored and reported the liquidity position to senior management and relevant parties to ensure adequate liquidity for business operation with appropriate cost of fund.

The Bank also analyses funding concentration to ensure that funding sources are well-diversified by customer type, deposit type, and maturity. To control risks from funding concentration, the Bank has set up a concentration trigger level which defines the maximum funding exposure for the Top 1 and Top 20 of customer groups. Early warning indicators have also been established to warn of any looming liquidity crisis, as a preventive liquidity risk management system.

In addition, the Bank has a liquidity contingency plan that outlines the roles and responsibilities of management and relevant departments, and has early-warning indicators together with an action plan that allows the Bank to promptly manage crisis events and successfully resume normal operations.



# • Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) Management

The Bank focuses on regulatory compliance deposit restructuring, and cost management to comply with Liquidity Coverage Ratio (LCR) at the minimum requirement of 100 percent on January 1, 2020, and Net Stable Funding Ratio (NSFR) guidelines with the minimum requirement of 100 percent, effective July 1, 2018.

Timelines for Regulatory Requirement

**BOT minimum requirement on LCR** 

	Jan	Jan	Jan	Jan	Jan
LCR	2016	2017	2018	2019	2020
					onwards
BOT requirement	≥ 60%	≥ 70%	≥ 80%	≥ 90%	≥ 100%

**BOT minimum requirement on NSFR** 

NSFR	2016	2017	Jul 2018 onwards
BOT requirement	Obser Per	vation riod	≥ 100%

For monitoring and management, the LCR is applied for short-term liquidity management to ensure maintenance of adequate liquid assets, while the NSFR is applied for long-term liquidity management to ensure maintenance of stable funding. In addition, the Bank has reinforced the database management system for managing liquidity risk in response to the strength and frequency of measurement based on regulatory requirement. This is to ensure an adequate supply of cash and other liquid assets for the business operations of the Bank and to prepare for support of regulatory changes.

# Liquidity Coverage Ratio Management in 2019

To comply with BOT Notification SorNorSor. 2/2561 regarding Liquidity Coverage Ratio Disclosure Standards dated January 25, 2018, the Bank has provided essential information on LCR to shareholders and investors for assessing the liquidity risk of the Bank and encouraging market discipline.

Average LCR as of 4Q/19 was 138% which was still well above the 90% minimum requirement of BOT in 2019 and the Bank's internal trigger level. The Bank maintains high-quality liquid assets (HQLA) which can be liquidated or realized as needed in order to meet its financial obligations under both normal business and crisis situations. In 4Q/19, the Bank has maintained an increased volume of Level 1 HQLA by 21% compared to 4Q/18 mainly due to increasing deposit balance and issuance of long-term debentures. Of this amount, 98 percent consisted of Level 1 assets including government bonds, central bank bonds, PSEs bonds guaranteed by Ministry of Finance, and cash, etc.

The expected cash outflows were predominantly from wholesale deposit. Since wholesale deposit is a main deposit portion, the Bank continuously encourages the corporate customers having deposits account to facilitate clearing, custody or cash management service in order to boost operational deposit and ensure that the Bank's LCR is consistently above the BOT minimum requirement.



Other outflows include borrowing from MUFG considered as a funding source from our great partnership which is one of the world's largest banks. Meanwhile, most of expected cash inflows were from money market operations and the payment of performing loans which continuously expand.



# 12. Additional disclosure per the requirement Basel Committee on Banking Supervision (BCBS)

# Table 18: Significant information of financial instrument eligible for capital fund

	Topic	Unique identifier BAY272A / BAY27NA	Unique identifier BAY27NB / BAY 296A
1	Issuer	Bank of Ayudhya Public Company Limited	Bank of Ayudhya Public Company Limited
2	Unique identifier	TH0023037201/ TH0023037B09	TH0023A37B03 / TH0023039603
	BOT's regulation treatment		
3	Type of financial instruments (common equity tier 1/ additional tier 1/ tier 2)	Tier 2 Capital	Tier 2 Capital
4	Qualified or non-qualified Basel III	Qualified under Basel III rules	Qualified under Basel III rules
5	If non-qualified Basel III, please specify	_	_
6	Transitional phase out or fully countable	Fully countable but gradual reduction on capital calculation for the remaining 5 years.	Fully countable but gradual reduction on capital calculation for the remaining 5 years.
7	Eligible at the Bank/ financial business group/ financial business group and the Bank	Financial business group level and the Bank level	Financial business group level and the Bank level



	Topic	Unique identifier BAY272A / BAY27NA	Unique identifier BAY27NB / BAY 296A
8	Amount recognized in regulatory capital (unit: Million Baht)	Baht 10,000 million / Baht 17,007 million	Baht 14,978 million / Baht 18,825.7 million
9	Par value of instrument (unit: Baht)	Baht 1,000	Baht 1,000
10	Accounting classification	Liabilities measured at amortized cost	Liabilities measured at amortized cost
11	Original date of issuance	August 11, 2016 / May 24, 2017	November 17, 2017 / 14 June, 2019
12	Perpetual or dated	Having maturity date	Having maturity date
13	Original maturity date	February 11, 2027 / November 24, 2027	November 17, 2027 / 14 June, 2029
14	Issuer's authority to call subject to	Having right to early redeem if permission in	Having right to early redeem if permission in
	prior supervisory approval	writing is granted by the BOT	writing is granted by the BOT



	Topic	Unique identifier BAY272A / BAY27NA	Unique identifier BAY27NB / BAY 296A
15	Optional call date, contingent call	November 11, 2021 / August 24, 2022	November 17, 2022 / 14 June, 2024
	dates and redemption amount	Subject to obtaining the prior written approval of	Subject to obtaining the prior written approval of
		the BOT and compliance with any other condition	the BOT and compliance with any other condition
		imposed by the BOT. The Subordinate	imposed by the BOT. The Subordinate Instruments
		Instruments will be redeemed according to the	will be redeemed according to the par value per
		par value per unit together with payment of the	unit together with payment of the interest. The
		interest. The issuer may early redeem prior to the	issuer may early redeem prior to the maturity date,
		maturity date, if it falls under any of the following	if it falls under any of the following events:-
		events:-	
		(a) On any interest payment date falling after the	(a) On the 5 <sup>th</sup> . anniversary of the issue date or any
		lapse of 5 years from the issue date.	interest payment date thereafter.



	Topic	Unique identifier BAY272A / BAY27NA	Unique identifier BAY27NB / BAY 296A
		<ul> <li>(b) If there is a change in tax law after the issue date which results in a change to the tax treatment of the Subordinate Instruments that is not to the benefit of the Issuer.</li> <li>(c) If the Subordinate Instruments are fully excluded from Tier 2 capital as a result of the change in the applicable regulations.</li> <li>(d) Any other event as permitted by the BOT after the Issue Date.</li> </ul>	<ul> <li>(b) If there is a change in tax law after the issue date which results in a change to the tax treatment of the Subordinate Instruments that is not to the benefit of the Issuer.</li> <li>(c) If the Subordinate Instruments are fully excluded from Tier 2 capital as a result of the change in the applicable regulations.</li> <li>(d) Any other event as permitted by the BOT after the Issue Date.</li> </ul>
16	Subsequent call dates, if applicable	On any interest payment date after the 5 <sup>th</sup> (fifth) anniversary of the date of issuance of the Subordinate Instruments.	On any interest payment date after the 5 <sup>th</sup> (fifth) anniversary of the date of issuance of the Subordinate Instruments.
	Coupons / dividends		
17	Fixed or floating dividend/coupon	Fixed Rate until maturity date	Fixed Rate until maturity date
18	Coupon rate and any related index	None	None
19	Existence of a dividend stopper	No dividend stopper	No dividend stopper



	Topic	Unique identifier BAY272A / BAY27NA	Unique identifier BAY27NB / BAY 296A
20	Fully discretionary, partially	Mandatory and comply with the Terms and	Mandatory and comply with the Terms and
	discretionary or mandatory	Conditions governing the rights and obligations	Conditions governing the rights and obligations of
		of the issuers and the instrument holders.	the issuers and the instrument holders.
21	Existence of step up or other incentive	No incentive to redeem	No incentive to redeem
	to redeem		
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	None	None
25	If convertible, full or partial	None	None
26	If convertible, conversion rate	None	None
27	If convertible, specify instrument type	None	None
	convertible into		
28	If convertible, specify issuer of	None	None
	instrument it converts into		
29	Write-down feature	Write-down feature	Write-down feature



	Topic	Unique identifier BAY272A / BAY27NA	Unique identifier BAY27NB / BAY 296A
30	If write-down, write-down trigger(s)	Upon the occurrence of the Non-Viability Events of the Issuer and the government authority decides to grant financial assistance to it. The Instrument holders shall be forced to write-down.	Upon the occurrence of the Non-Viability Events of the Issuer and the government authority decides to grant financial assistance to it. The Instrument holders shall be forced to write-down.
31	If write-down, full or partial	Full or partial write-down	Full or partial write-down
32	If write-down, permanent or temporary	Permanent	Permanent
33	If temporary write-down, description of how to write-down	_	_
34	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Superior to the holders of  (a) all classes of equity securities of the issuer, including holders of preference shares  (b) Additional Tier 1 securities  (c) Other Liabilities (if any) of the issuer that by their terms or by operation of law rank junior to the Subordinated Instruments (together, the Junior Instruments).	Superior to the holders of  (a) all classes of equity securities of the issuer, including holders of preference shares  (b) Additional Tier 1 securities  (c) Other Liabilities (if any) of the issuer that by their terms or by operation of law rank junior to the Subordinated Instruments (together, the Junior Instruments).



Table 19: Reconciliation of regulatory capital components

Unit: Million Baht Amount as disclosed Amount as in the statement of disclosed in public Capital related items financial position under Ref. financial statements as at December 31, 2019 the consolidated Financial Position supervision 2/ ASSETS 1. CASH 33,830 33,970 2. INTERBANK AND MONEY MARKET ITEMS - NET 331,431 332,238 3. CLAIMS ON SECURITY 9,612 9,612 4. DERIVATIVES ASSETS 21,841 21,841 5. INVESTMENTS - NET 118,340 117,157 6. INVESTMENTS IN SUBSIDIIARIES, ASSOCIATES AND 11,952 JOINT VENTURES- NET 7. TOTAL LOANS TO CUSTOMERS AND ACCRUED INTEREST RECEIVABLE - NET 7.1 LOANS TO CUSTOMERS 1,909,362 1,946,780 7.2 ACCRUED INTEREST RECEIVABLES 4,484 5,007 TOTAL LOANS TO CUSTOMERS AND ACCRUED 1,951,787 1,913,846 INTEREST RECEIVABLE 7.3 LESS:DEFERRED REVENUE (91,485)(93,793)7.4 LESS:ALLOWANCE FOR DOUBTFUL ACCOUNTS (65,710)(69,611)Qualified as capital (19,458)S Non-qualified as capital (50, 153)LESS: REVALUATION ALLOWANCE FOR DEBT 7.5 (1,674)(1,872)RESTRUCTURING TOTAL LOANS TO CUSTOMERS AND ACCRUED 1,754,977 1,786,511 INTEREST RECEIVABLE - NET 8. CUSTOMER'S LIABILITIES UNDER ACCEPTANCE 299 299 9. PROPERTIES FOR SALE, NET 3,500 3,579 10 PREMISES AND EQUIPMENT, NET 29,030 29,706 11. GOODWILL AND OTHER INTANGIBLE ASSETS, NET 16,903 22,319 Goodwill 16,975 I Intangible assets 5,344 K 12. DEFERRED TAX ASSETS 5,521 4,479 Deferred tax liabilities of intangible assets (295)1 Deferred tax liabilities of good will (644)J Deferred tax asset of other items 6,460 24,246 13. OTHER ASSETS, NET 23,398 TOTAL ASSETS 2,359,592 2,386,999



		O	ion Ban
Capital related items as at December 31, 2019	Amount as disclosed in public financial statements  - Financial Position <sup>1/</sup>	Amount as disclosed in the statement of financial position under the consolidated supervision 2/	Ref.
LIABILITIES			
14. DEPOSITS	1,566,885	1,565,064	
15 INTERBANK AND MONEY MARKET ITEMS - NET	252,121	257,621	
16. LIABILITIES PAYABLE ON DEMAND	3,802	3,802	
17. LIABILITIES TO DELIVER SECURITY	9,612	9,612	
18. DERIVATIVES LIABILITIES	23,326	23,326	
19 DEBT ISSUED AND BORROWINGS	175,667	187,595	
Debt instruments that are qualified as capital	-	60,811	R
Other issued debt and borrowings	-	126,784	
20. BANK'S LIABILITIES UNDER ACCEPTANCES	299	299	
21. PROMSIONS	9,718	9,881	
22 DEFERRED TAX LIABILITIES	1,823	1,802	
Deferred tax liabilities of intangible assets	-	2	М
Deferred tax liabilities of good will	-	-	
Deferred tax assets of other items	-	1,800	0
23. OTHER LIABILITIES	44,223	47,530	
TOTAL LIABILITIES SHAREHOLDERS' EQUITY	2,087,476	2,106,532	
24. SHAREHOLDERS' EQUITY			
24 ISSUED AND PAID-UP SHARE CAPITAL (COMMON SHARE)	73,558	73,558	Α
24 PREMIUM (DISCOUNT) ON COMMON SHARE	52,879	52,879	В
24 OTHER RESERVES	-	-	
24.3.1 Appraisal surplus	10,626	10,626	E
24.3.2 Revaluation surplus (deficit) on investments	(82)	(183)	F
Investment in equity securities	-	-	
Investment in debt securities	-	-	
24.3.3 Profit (loss) from conversion of financial statement from a foreign operation	(1,014)	(1,014)	G
24.3.4 Deficit from business combination under common control	(5,218)	(5,218)	Н



	Capital related items as at December 31, 2019	Amount as disclosed in public financial statements – Financial Position 1/	Amount as disclosed in the statement of financial position under the consolidated supervision 2/	Ref.
24	RETAINED EARNINGS			
	24.4.1 APPROPRIATED - LEGAL RESERVE	6,871	6,871	С
	24.4.2 UNAPPROPRIATED	133,170	133,873	
	Net profit which already approved	-	121,496	D
	Net profit await for approval	-	12,377	
25	NON-CONTROLLING INTEREST	1,326	9,075	
	Qualified as AT1 capital	-	3,762	Р
	Qualified as T2 capital	-	863	Q
	Non-qualified as capital	-	4,450	
TOTAL	SHAREHOLDERS' EQUITY	272,116	280,467	
TOTAL	LIABILITIES AND SHAREHOLDERS' EQUITY	2,359,592	2,387,999	

# <u>Note</u>

 $<sup>^{\</sup>mbox{\tiny 1/2}}$  This represents Consolidated statement of financial position publically disclosed in SEC website

<sup>&</sup>lt;sup>2/</sup> This represents Consolidated statement of financial position prepared under BOT's regulation that all entities listed out in content 3: The companies under financial business group under Full Consolidation, are included in this consolidated statement of financial position.



# Disclosure of reconciliation of regulatory capital components

Unit: Million Baht References base on Component of statement of financial Capital related items as at regulatory capital position under the December 31, 2019 reported by financial consolidated business group supervision Total Tier 1 Capital (T1 = CET1+AT1) 236,739 Common Equity Tier 1 (CET1) 232,977 1. Issued and paid up share capital 73,558 2. Premium on share capital 52,879 В 3. Legal reserve С 6,871 4. Retained earnings after appropriation D 121,496 5. Other comprehensive income 5.1 Changes in capital surplus from appraisal of lands, buildings or 10,626 Ε units in condominium 5.2 Revaluation surplus (deficit) on investment in equity and debt (183)F securities - available for sales 5.3 Profit (loss) from conversion of financial statement from a foreign (1,014)G operation 5.4 Other items from owner changes (5,218)Н 6. Regulatory deduction 6.1 Goodwill I+J (16,331)6.2 Intangible assets K+L-M<sup>1/</sup> (5,047)6.3 Deferred tax assets (4,660)N-O Additional Tier 1 Capital (AT1) 3,762 7. Non-controlling interest of consolidated companies under the Bank's  $p^{2/}$ 3,762 financial business group to additional tier 1 Tier 2 Capital (T2) 81,132 8. Proceeds from issuing subordinated debentures R 60,811 9. General provision S 19,458  $Q^{2/}$ 10. Non-controlling interest of consolidated companies under the Bank's 863 financial business group to tier 2 capital Total Regulatory Capital (TC = T1+T2) 317,871

<sup>&</sup>lt;sup>1/</sup> Starting from 1 January 2018, no remaining amount of item to be included in/or deducted from capital under the Basel III because all items are 100% included in/or deducted.

<sup>&</sup>lt;sup>2/</sup> Non-controlling interest qualified as capital is calculated based on BOT's requirement.



		3111ti 111111	ion Baht
Capital related items	Amount as disclosed in public financial	Amount as disclosed in the statement of	
		financial position under	r Ref.
as at December 31, 2018	statements – Financial	the consolidated	
	Position 1/	supervision 2/	
ASSETS			
1. CASH	34,679	35,071	
2. INTERBANK AND MONEY MARKET ITEMS - NET	245,553	246,396	
3. CLAIMS ON SECURITY	12,739	12,739	
4. DERIVATIVES ASSETS	14,115	14,115	
5. INVESTMENTS - NET	134,749	134,749	
6. INVESTMENTS IN SUBSIDIIARIES, ASSOCIATES AND JOINT	2,620	-	
VENTURES- NET	_,,,		
7. TOTAL LOANS TO CUSTOMERS AND ACCRUED INTEREST			
RECEIVABLE - NET			
7.1 LOANS TO CUSTOMERS	1,749,254	1,801,122	
7.2 ACCRUED INTEREST RECEIVABLES	4,326	4,544	
TOTAL LOANS TO CUSTOMERS AND ACCRUED	1,753,580	1,805,666	
INTEREST RECEIVABLE	1,1 00,000	.,000,000	
7.3 LESS:DEFERRED REVENUE	(77,236)	(80,131)	
7.4 LESS:ALLOWANCE FOR DOUBTFUL ACCOUNTS	(59,791)	(63,622)	
Qualified as capital	-	(18,235)	S
Non-qualified as capital	-	(45,387)	
7.5 LESS:REVALUATION ALLOWANCE FOR DEBT	(1,569)	(1,747)	
RESTRUCTURING	( ,,		
TOTAL LOANS TO CUSTOMERS AND ACCRUED	1,614,984	1,660,166	
INTEREST RECEIVABLE - NET			
8. CUSTOMER'S LIABILITIES UNDER ACCEPTANCE	565	565	
9. PROPERTIES FOR SALE, NET	3,478	3,536	
10. PREMISES AND EQUIPMENT, NET	26,239	26,841	
11. GOODWILL AND OTHER INTANGIBLE ASSETS, NET	16,642	16,908	
Goodwill	-	12,519	I
Intangible assets	-	4,389	K
12. DEFERRED TAX ASSETS	4,274	5,281	
Deferred tax liabilities of intangible assets			L
Deferred tax liabilities of good will	-	(573)	J
Deferred tax asset of other items	-	6,122	N
13. OTHER ASSETS, NET	62,985	24,268	
TOTAL ASSETS	2,173,622	2,180,635	



		Unit: Millio	ni Dani	
Capital related items as at December 31, 2018	Amount as disclosed in public financial statements – Financial Position 1/	Amount as disclosed in the statement of financial position under the consolidated supervision 2/	Ref.	
LIABILITIES				
14. DEPOSITS	1,426,348	1,425,022		
15. INTERBANK AND MONEY MARKET ITEMS - NET	244,097	248,097		
16 LIABILITIES PAYABLE ON DEMAND	5,991	5,991 5,991		
17. LIABILITIES TO DELIVER SECURITY	12,739	12,739		
18 DERIVATIVES LIABILITIES	13,540	13,540		
19 DEBT ISSUED AND BORROWINGS	155,650	167,875		
Debt instruments that are qualified as capital	-	41,985	R	
Other issued debt and borrowings	-	125,890		
20 BANK'S LIABILITIES UNDER ACCEPTANCES	565	565		
21 PROVISIONS	7,764	7,865		
22. DEFERRED TAX LIABILITIES	4	4		
Deferred tax liabilities of intangible assets	-	2	М	
Deferred tax liabilities of good will	-	2		
Deferred tax assets of other items	-	-	0	
23. OTHER LIABILITIES	63,205	52,569		
TOTAL LIABILITIES	1,929,903	1,934,267		
SHAREHOLDERS' EQUITY				
24. SHAREHOLDERS' EQUITY				
24 ISSUED AND PAID-UP SHARE CAPITAL (COMMON SHARE)	73,558	73,558	Α	
24 PREMIUM (DISCOUNT) ON COMMON SHARE	52,879	52,879	В	
24 OTHER RESERVES	-	-		
24.3.1 Appraisal surplus	7,895	7,895	Е	
24.3.2 Revaluation surplus (deficit) on investments	(90)	(178)	F	
Investment in equity securities	-	(177)		
Investment in debt securities	-	(1)		
24.3.3 Profit (loss) from conversion of financial statement from a foreign operation	(437)	(437)	G	
24.3.4 Deficit from business combination under common	(5,218)	(5,218)	Н	
control				



	Capital related items as at December 31, 2018	Amount as disclosed in public financial statements - Financial Position	Amount as disclosed in the statement of financial position under the consolidated supervision 2/	Ref.
24	RETAINED EARNINGS			
	24.4.1 APPROPRIATED - LEGAL RESERVE	5,891	5,891	С
	24.4.2 UNAPPROPRIATED	108,159	108,276	
	Net profit which already approved	-	95,769	D
	Net profit await for approval	-	12,507	
25	NON-CONTROLLING INTEREST	1,082	3,702	
	Qualified as AT1 capital	-	1,040	Р
	Qualified as T2 capital	-	249	Q
	Non-qualified as capital	-	2,412	
TOTAL	SHAREHOLDERS' EQUITY	243,719	246,368	
TOTAL	LIABILITIES AND SHAREHOLDERS' EQUITY	2,173,622	2,180,635	

### Note

 $<sup>^{1/}\</sup>text{This}$  represents Consolidated statement of financial position publically disclosed in SEC website

<sup>&</sup>lt;sup>2/</sup>This represents Consolidated statement of financial position prepared under BOT's regulation that all entities listed out in content 3: The companies under financial business group under Full Consolidation, are included in this consolidated statement of financial position.



# Disclosure of reconciliation of regulatory capital components

Unit: Million Baht References base on Component of statement of financial Capital related items as at regulatory capital position under the December 31, 2018 reported by financial consolidated business group supervision Total Tier 1 Capital (T1 = CET1+AT1) 209,011 Common Equity Tier 1 (CET1) 207,971 1. Issued and paid up share capital 73,558 Α 2. Premium on share capital В 52,879 3. Legal reserve 5,891 С 4. Retained earnings after appropriation 95,769 D 5. Other comprehensive income 5.1 Changes in capital surplus from appraisal of lands, buildings or 7,895 Ε units in condominium 5.2 Revaluation surplus (deficit) on investment in equity and debt (178)F securities - available for sales 5.3 Profit (loss) from conversion of financial statement from a foreign (437)G 5.4 Other items from owner changes (5,218)Н 6. Regulatory deduction 6.1 Goodwill (11,946)I+J  $K+L-M^{1/}$ 6.2 Intangible assets (4,120)6.3 Deferred tax assets N-O (6,122)Additional Tier 1 Capital (AT1) 1,040  $P^{2/}$ 7. Non-controlling interest of consolidated companies under the Bank's 1,040 financial business group to additional tier 1 Tier 2 Capital (T2) 60,469 8. Proceeds from issuing subordinated debentures 41,985 R 9. General provision 18.235 S  $\Omega^{2/}$ 10 Non-controlling interest of consolidated companies under the Bank's 249 financial business group to tier 2 capital

Total Regulatory Capital (TC = T1+T2)

269,480

<sup>&</sup>lt;sup>1/3</sup> Starting from 1 January 2018, no remaining amount of item to be included in/or deducted from capital under the Basel III because all items are 100% included in/or deducted.

<sup>&</sup>lt;sup>2/</sup> Non-controlling interest qualified as capital is calculated based on BOT's requirement.



Table 20: Disclosure of capital under Basel III during transitional period

Unit: Million Baht Financial Business Group December 31, 2018 December 31, 2019 Capital amount, eligible items, **Transitional** Transitional Capital Capital adjustment items and deduction items adjustment adjustment amount amount amount\* amount\* Total Tier 1 Capital (T1 = CET1+AT1) 236,739 209,011 Common Equity Tier 1 capital (CET1) 232,977 207,971 1. Issued and paid up share capital 73,558 73,558 2. Premium on share capital 52,879 52,879 3. Legal reserve 6,871 5,891 4. Retained earnings after appropriation 121,496 95,769 5. Other comprehensive income Changes in capital surplus from appraisal of 5.1 10,626 7,895 lands, buildings or units in condominium Revaluation surplus (deficit) on investment in 5.2 (501)(177)equity securities Revaluation surplus (deficit) on investment in 5.3 318 (1) debt securities Profit (loss) from conversion of financial 5.4 (1,014)(437)statement from a foreign operation 5.5 Other items from owner changes (5,218)(5,218)6. Regulatory deduction 6.1 Goodwill (16,331)(11,946)6.2 Intangible assets (5,047)(4,120)Deferred tax assets 6.3 (4,660)(6,122)Additional Tier 1 capital (AT1) 3,762 1,040 7. Non-controlling interest of consolidated companies 1,040 3,762 under the Bank's financial business group to additional tier 1\*\* Tier 2 capital (T2) 81,132 60,469 8. Proceeds from issuing subordinated debentures 60,811 41,985 9. General provision 19,458 18,235 10. Non-controlling interest of consolidated companies 863 249 under the Bank's financial business group to tier 2

317,871

Total Regulatory Capital (TC = T1 + T2)

269,480

Starting from 1 January 2018, no remaining amount of item to be included in/or deducted from capital under the Basel III because all items are 100% included in/or deducted.

Non-Controlling interest qualified as capital is calculated based on BOT's requirement.



			Bank-Only			
			December 31, 2019		December 31, 2018	
		Capital amount, eligible items,		Transitional		Transitional
		adjustment items and deduction items	Capital amount	adjustment	Capital amount	adjustment
				amount*		amount*
То	tal Tier	1 Capital (T1 = CET1+AT1)	191,672	-	175,378	-
Сс	mmon	Equity Tier 1 capital (CET1)	191,672	-	175,378	-
1.	Issue	ed and paid up share capital	73,558	-	73,558	
2.	Prem	ium on share capital	52,879	-	52,879	
3.	Lega	reserve	6,871	-	5,891	
4.	Retai	ned earnings after appropriation	66,056	-	53,786	
5.	Othe	r comprehensive income	-	-	-	
	5.1	Changes in capital surplus from appraisal of lands,	10,626		7,895	
		buildings or units in condominium		-		
	5.2	Revaluation surplus (deficit) on investment in equity	(413)		(88)	
		securities		-		
	5.3	Revaluation surplus (deficit) on investment in debt	331		(1)	
		securities		-		
	5.4	Other items from owner changes	(5,218)	-	(5,218)	
6.	Regu	latory deduction		-	-	
	6.1	Goodwill	(10,010)	-	(10,214)	
	6.2	Intangible assets	(3,008)	-	(2,629)	
	6.3	Deferred tax assets	-	-	(481)	
Ad	ditional	Tier 1 capital (AT1)	-	-	-	-
Tier 2 capital (T2)		75,337	-	53,599	-	
7.	Proce	eeds from issuing subordinated debentures	60,811	-	41,985	
8.	Gene	eral provision	14,526	-	11,614	
То	tal Reg	gulatory Capital (TC = T1 + T2)	267,009	-	228,977	-

<sup>\*</sup> Starting from 1 January 2018, no remaining amount of item to be included in/or deducted from capital under the Basel III because all items are 100% included in/or deducted.