

BASEL II PILLAR 3 DISCLOSURES

JPMorgan Chase Bank, National Associate, Bangkok Branch

Financial year ending December 31, 2018

**JPMorgan Chase Bank, National Association, Bangkok Branch
Financial year ending December 31, 2018**

Disclosures under the New Capital Adequacy Framework (Basel II guidelines) for the year ended December 31, 2018

The Basel II Pillar 3 disclosure ("Basel P3") included herein is made solely to meet the requirements in Thailand, and related solely to the activities of the Bangkok Branch of JPMorgan Chase Bank, National Association, a wholly-owned bank subsidiary of JPMorgan Chase & Co.

All quantitative disclosures are reported in Thousand Baht.

A. Scope of application

The Basel II Capital Framework as prescribed by Bank of Thailand is applied to the operations of JPMorgan Chase Bank, National Association, (a bank incorporated in the United States of America) in Bangkok, i.e. to JPMorgan Chase Bank, National Association, Bangkok Branch ("the Branch"); being its sole branch in Thailand.

JPMorgan Chase Bank, National Association is one of the principal subsidiaries of JPMorgan Chase & Co. (collectively, "JPMC", "the Group" or "the Firm"), the financial holding company incorporated in the United States. JPMC operates in Thailand through the Branch and through other subsidiaries owned by one or more of its principal subsidiaries. None of its Thailand subsidiaries are owned by the Branch in Thailand. Also, the Branch does not have any interest in insurance entities.

For a comprehensive discussion of risk management at JPMorgan Chase & Co., including its consolidated subsidiaries, please refer to Firm's Annual Report for the year ended December 31, 2018, which is available in the Investor Relations section of www.jpmorganchase.com or access to the following links:

2018 Annual Report: <http://investor.shareholder.com/jpmorganchase/annual.cfm>

B. Capital**(I) Capital Structure**

The capital of the Branch consists principally of the Head Office account representing Capital remitted by Head Office and remittable surplus/deficit (if any) retained in Bangkok

Quantitative Disclosure:**Capital of Foreign Banks Branch (Table 2)**

Unit: Thousand Baht

Item	Dec. 31, 18	Jun. 30, 18
1. Assets required to be maintained under Section 32	11,468,427	9,662,243
2. Sum of net capital for maintenance of assets under Section 32 and net balance of inter-office accounts (2.1+2.2)	11,694,611	13,513,504
2.1 Capital for maintenance of assets under Section 32	10,468,404	10,489,924
2.2 Net balance of inter-office accounts which the branch is the debtor (the creditor) to the head office and other branches located in other countries, the parent company and subsidiaries of the head office	1,226,207	3,023,580
3. Total regulatory capital (3.1-3.2)	10,468,404	9,662,243
3.1 Total regulatory capital before deductions (The lowest amount among item 1 item 2 and item 2.1)	10,468,404	9,662,243
3.2 Deductions	-	-

(II) Capital Adequacy

On a group-wide basis, Firm's capital management framework is intended to ensure that there is sufficient capital to support the underlying risks of the Firm's business activities and to maintain "well-capitalized" status under US regulatory requirements. In addition, the Firm holds capital above these requirements as deemed appropriate to achieve management's regulatory and debt rating objectives. The Firm assesses its capital adequacy relative to the risks underlying the Firm's business activities, utilizing internal risk-assessment methodologies.

At local level, the Branch leverages as far as possible the group-wide capital management framework and risk assessment methodologies, supplemented where appropriate by a consideration of branch-specific issues including local stress tests. These considerations are formalized as part of a local Internal Capital Adequacy Assessment Process (ICAAP), as required by Basel II (Pillar 2) regulation.

The Capital Management process at the Branch level is coordinated within the Finance organization with input from appropriate local and firm-wide risk specialists, and is reviewed by the Thailand Location Management Committee (LMC) and/or Thailand Risk / Asset and Liability Committee (RALCO), where appropriate. It is the responsibility of the local management and/or risk committee (where appropriate) to determine the appropriate level of capitalization for the Branch at the present and in the future as well as to ensure the businesses are managed within those capital limits or to request for any additional capitals in accordance with the Firm's () policy. In the normal course of events, the LMC and/or RALCO, where appropriate, review the adequacy of capital annually or with increased frequency if circumstances demand.

The Branch is required to maintain the minimum capital requirement of 10.375% in accordance with Bank of Thailand's regulation. The Capital Adequacy Ratio is reported to Thailand Location Management Committee on a monthly basis and the internal threshold of minimum capital requirement is established in order to trigger an escalation to the local management and relevant groups for further discussion and decision.

A summary of the Branch's capital requirement for credit risk, market risk and operational risk and the capital adequacy ratio as on December 31, 2018 is presented below.

Quantitative Disclosure:

Minimum capital requirement for credit risk classified by type of assets under Standardized Approach (Table 3)

Unit: Thousand Baht

Minimum capital requirement for credit risk classified by type of assets under the SA	Dec. 31, 18	Jun. 30, 18
Performing claims	1,935,270	2,143,861
1. Claims on sovereigns and central banks, multilateral development banks (MDBs), and non-central government public sector entities (PSEs) treated as claims on sovereigns	14,259	7,915
2. Claims on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	1,230,325	1,602,333
3. Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	666,082	503,605
4. Claims on retail portfolios	-	-
5. Claims on housing loans	-	-
6. Other assets	24,604	30,008
Non-performing claims	-	-
First-to-default credit derivatives and Securitisation	-	-
Total minimum capital requirement for credit risk under the SA	1,935,270	2,143,861

Minimum capital requirement for market risk for positions in the trading book (Table 6)

Unit: Thousand Baht

Minimum capital requirement for market risk (positions in the trading book)	Dec. 31, 18	Jun. 30, 18
Calculated based on Standardized approach (SA)	4,411,884	4,524,010

Minimum capital requirement for operational risk (Table 7)

Unit: Thousand Baht

Minimum capital requirement for operational risk	Dec. 31, 18	Jun. 30, 18
Calculated based on Basic Indicator Approach (BIA)	209,967	143,944

Total risk-weighted capital ratio (Table 8)

Unit: %

Ratio	Dec. 31, 18		Jun. 30, 18	
	Capital ratio of the bank	Minimum capital ratio according to the BOT regulation	Capital ratio of the bank	Minimum capital ratio according to the BOT regulation
Total capital to total risk-weighted assets	16.56	10.375	14.72	10.375

C. Risk Exposures and Assessment

Credit Risk

I. General information on Credit Risk

Qualitative Disclosure:

Credit Risk Management Policy

Credit risk is the risk of loss from obligor or counterparty default. The Firm provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. The Firm is exposed to credit risk through its underwriting, lending and derivatives activities with and for clients and counterparties, as well as through its operating services activities, such as cash management and clearing activities. A portion of the loans originated or acquired by the Firm's wholesale businesses are generally retained on the balance sheet. The Firm's syndicated loan business distributes a significant percentage of originations into the market and is an important component of portfolio management.

Credit risk organization

Credit risk management is overseen by the Firm's Chief Risk Officer and implemented with the lines of business (LOBs). The Firm's credit risk management governance consists of the following primary functions:

- Establishing a comprehensive credit risk policy framework.
- Monitoring and managing credit risk across all portfolio segments, including transaction and line approval.
- Assigning and managing credit authorities in connection with the approval of all credit exposure.
- Managing criticized exposures and delinquent loans
- Determining the allowance for credit losses and ensuring appropriate credit risk-based capital management.

Risk identification and measurement

The Firm is exposed to credit risk through its lending, capital markets activities and operating services businesses. Credit Risk Management works in partnership with the business segments in identifying and aggregating exposures across all lines of businesses.

To measure credit risk, the Firm employs several methodologies for estimating the likelihood of obligor or counterparty default. Credit risk measurement is based on the amount of exposure should the obligor or the counterparty default, the probability of default and the loss severity given a default event.

Based on these factors and related market-based inputs, the Firm estimates probable and unexpected credit losses for the portfolios as follows:

- Probable credit losses inherent in the Firm's loan portfolio and related commitments are reflected in the allowance for credit losses and lending-related commitments.
- Potential and unexpected losses are reflected in the allocation of credit risk capital and represent the potential volatility of actual losses relative to the established allowances for loan losses and lending-related commitments.

Credit loss estimates are based on estimates of the probability of default and loss severity given a default. The estimation process begins with risk-ratings that are assigned to each loan facility to differentiate risk within the portfolio. These risk-ratings are reviewed on an ongoing basis by Credit Risk management and revised as needed to reflect the borrower's current financial position, risk profile and related collateral. The probability of default is estimated for each borrower, and a loss given default is estimated considering the collateral and structural support for each credit facility.

Risk monitoring and management

The Firm has developed policies and practices that are designed to preserve the independence and integrity of decision-making of extending credit to ensure credit risks are assessed accurately, approved properly, monitored regularly and managed actively at both the transaction and portfolio levels.

The Credit Risk function in Thailand is overseen by the Country Credit Officer.

Risk reporting

To enable monitoring of credit risk and decision-making, aggregate credit exposure, credit quality forecasts, concentration levels and risk profile changes are reported regularly to senior Credit Risk Management. Detailed portfolio reporting of industry, customer, product and geographic concentrations occurs monthly, and the appropriateness of the allowance for credit losses is reviewed by management at least on a quarterly basis. Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with, management.

Locally at the Bangkok branch, all proposals with relevant details of exposure are subjected to the relevant credit authority approval in accordance with the Global Credit Policy and to follow the global risk management process outlined above where appropriate. Officer with Credit Approval Authority are expected to understand the credit policies, guidelines and procedures applicable to their responsibilities.

The Branch's capital will be committed following thorough research and analysis, utilizing all expertise appropriately available in the organization which may contribute to our risk assessment. Certain transactions will require special approval due to their risk attributes or level of sensitivity.

Exposure to credit risk is managed through regular analysis of the ability of borrowers and potential borrowers to meet interest and principal repayment obligations and by changing these lending limits where appropriate. Exposure to credit risk is also managed in part by obtaining collateral if applicable.

(1) Derivatives - The Branch maintains strict control limits on net open derivative positions (i.e., the difference between purchase and sale contracts), by both amount and term. At any one time, the amount subject to credit risk is limited to the current fair value of instruments that are favorable to the Branch (i.e., assets where their fair value is positive), which in relation to derivatives is only a small fraction of the contract, or notional values used to express the volume of instruments outstanding. This credit risk exposure is managed as part of the overall lending limits with customers, together with potential exposures from market movements. Collateral or other security is not usually obtained for credit risk exposures on these instruments, except where the Branch requires margin deposits from counterparties.

(2) Master netting arrangements - The Branch further restricts its exposure to credit losses by entering into master netting arrangements with counterparties with which it undertakes a significant volume of transactions. Master netting arrangements do not generally result in an offset of balance sheet assets and liabilities, as transactions are usually settled on a gross basis. However, the credit risk associated with favorable contracts is reduced by a master netting arrangement to the extent that if an event of default occurs, all amounts with the counterparty are terminated and settled on a net basis. The Branch's overall exposure to credit risk on derivative instruments subject to master netting arrangements can change substantially within a short period, as it is affected by each transaction subject to the arrangement.

(3) Credit-related commitments - The primary purpose of these instruments is to ensure that funds are available to a customer as required. Guarantees and standby letters of credit, which represent irrevocable assurances that the Branch will make payments in the event that a customer cannot meet its obligations to third parties, carry the same credit risk as loans. Documentary and commercial letters of credit which are written undertakings by the Branch on behalf of a customer authorizing a third party to draw drafts on the Branch up to a stipulated amount under specific terms and conditions are collateralized by the underlying shipments of goods to which they relate and therefore carry less risk than a direct borrowing.

Commitments to extend credit represent unused portions of authorizations to extend credit in the form of loans, guarantees or letters of credit. With respect to credit risk on commitments to extend credit, the Branch is potentially exposed to loss in an amount equal to the total unused commitments. However, the

likely amount of loss is less than the total unused commitments, as most commitments to extend credit are contingent upon customers maintaining specific credit standards. The Branch monitors the term to maturity of credit commitments because longer-term commitments generally have a greater degree of credit risk than shorter-term commitments.

Definition of past due and impaired

In line with Bank of Thailand’s regulation, the "90 days' overdue" norm for identification of non-performing assets (NPA) has been adopted. Any amount due to the Branch under any credit facility is 'overdue' if it is not paid on the due date fixed by the Branch (i.e. is not paid as per the date the obligor is obligated to pay the Branch). A NPA shall be a loan or an advance where any amount to be received (as per the contractual terms) remains overdue for a period of more than 90 days or in respect of an Overdraft/Cash Credit the account remains ‘out of order’ for a period of more than 90 days.

Guidelines on loan classification and provisions

Loans are generally stated at the principal amounts outstanding. The asset classification and provision are primarily based on the management’s review and assessment of the status of individual debtor as well as the Notification of the Bank of Thailand No. Sor Nor Sor. 31/2551 dated 3 August 2008 (RE: Classification and Provisions of the Financial Institutions).

In addition, the assessment (asset classification and provision) takes into consideration various factors including the risks involved, the value of collateral and the status of an individual debtor including the relationship of allowance for doubtful debts against the loan balance through the economic situation which may have impact on the customers’ ability to pay.

Quantitative Disclosure:

Outstanding amounts of significant on-balance sheet assets and off-balance sheet items before adjusted by credit risk mitigation (Table 9)

Unit: Thousand Baht

Item	Average balance during the year 2018	Dec. 31, 18	Average balance during the year 2017	Dec. 31, 17
1. On-balance sheet assets (1.1 + 1.2 + 1.3+1.4)	65,678,896	64,623,201	59,147,928	61,464,083
1.1 Net Loans ^{1/}	4,478,640	4,349,172	6,129,416	9,076,178
1.2 Net Investment in debt securities ^{2/}	31,837,349	32,956,605	32,821,925	31,683,881
1.3 Deposits (including accrued interest receivables)	6,112,937	5,074,958	937,934	1,617,099
1.4 Derivatives	23,249,970	22,242,466	19,258,653	19,086,925
2. Off-balance sheet items ^{3/}(2.1 + 2.2 + 2.3)	2,126,478,575	2,266,860,546	1,629,869,791	1,800,775,778
2.1 Aval of bills, guarantees, and letter of credits	-	-	103,591	-
2.2 OTC derivatives	2,126,478,575	2,261,490,482	1,623,567,154	1,795,485,646
2.3 Undrawn committed line	5,504,030	5,370,064	6,199,046	5,290,132

^{1/} Including accrued interest receivables and net of deferred incomes, allowances for doubtful accounts and allowances for revaluation from debt restructuring and including net loans of interbank and money market.

^{2/} Including investments in receivables, but excluding accrued interest receivables and net of allowances for revaluation of securities and allowances for impairment of securities

^{3/} Before multiplying credit conversion factor

Outstanding amounts of on-balance sheet assets and off-balance sheet items before adjusted credit risk mitigation classified by country of geographic area of debtor (Table 10)

The geographical areas are classified base on the country of incorporation.

2018

Unit: Thousand Baht

Country or geographic area of debtor	On-balance sheet assets					Off-balance sheet items ^{3/}			
	Total	Net loans ^{1/}	Net Investment in debt securities ^{2/}	Deposits (including accrued interest receivables)	Derivatives	Total	Aval of bills, guarantees, and letter of credits	OTC derivatives	Undrawn committed line
1. Thailand	52,107,401	4,349,172	32,956,605	4,912,513	9,889,111	1,176,162,090	-	1170,792,026	5,370,064
2. Asia Pacific (exclude Thailand)	2,724,965	-	-	17,118	2,707,847	173,796,602	-	173,796,602	-
3. North America and Latin America	8,887,358	-	-	-	8,887,358	784,518,069	-	784,518,069	-
4. Africa and Middle East	-	-	-	-	-	-	-	-	-
5. Europe	903,477	-	-	145,327	758,150	132,383,785	-	132,383,785	-
Total	64,623,201	4,349,172	32,956,605	5,074,958	22,242,466	2,266,860,546	-	2,261,490,482	5,370,064

2017

Unit: Thousand Baht

Country or geographic area of debtor	On-balance sheet assets					Off-balance sheet items ^{3/}			
	Total	Net loans ^{1/}	Net Investment in debt securities ^{2/}	Deposits (including accrued interest receivables)	Derivatives	Total	Aval of bills, guarantees, and letter of credits	OTC derivatives	Undrawn committed line
6. Thailand	51,545,482	9,076,178	31,654,899	1,419,762	9,394,643	933,668,374	-	928,378,241	5,290,133
7. Asia Pacific (exclude Thailand)	2,992,466	-	28,982	5,668	2,957,816	172,113,785	-	172,113,785	-
8. North America and Latin America	6,060,558	-	-	-	6,060,558	632,080,706	-	632,080,706	-
9. Africa and Middle East	-	-	-	-	-	-	-	-	-
10. Europe	865,577	-	-	191,669	673,908	62,912,914	-	62,912,914	-
Total	61,464,083	9,076,178	31,683,881	1,617,099	19,086,925	1,800,775,779	-	1,795,485,646	5,290,133

^{1/} Including accrued interest receivables and net of deferred incomes, allowances for doubtful accounts and allowances for revaluation from debt restructuring and including net loans of interbank and money market.

^{2/} Including investments in receivables, but excluding accrued interest receivables and net of allowances for revaluation of securities and allowances for impairment of securities

^{3/} Before multiplying credit conversion factor

Outstanding amounts of on-balance sheet assets and off balance sheet items before credit risk mitigation classified by residual maturity (Table 11)

Unit: Thousand Baht

Item	2018		
	Maturity not exceeding 1 year	Maturity exceeding 1 year	Total
1. On-balance sheet assets (1.1 + 1.2 + 1.3+1.4)	40,161,833	24,461,368	64,623,201
1.1 Net loans ^{1/}	2,601,046	1,748,126	4,349,172
1.2 Net Investment in debt securities ^{2/}	26,079,828	6,876,777	32,956,605
1.3 Deposits (including accrued interest receivables)	5,074,958	-	5,074,958
1.4 Derivatives	6,406,001	15,836,465	22,242,466
2. Off-balance sheet items ^{3/} (2.1 + 2.2 + 2.3)	1,105,754,340	1,161,106,206	2,266,860,546
2.1 Aval of bills, guarantees, and letter of credits	-	-	-
2.2 OTC derivatives	1,102,362,268	1,159,128,214	2,261,490,482
2.3 Undrawn committed line	3,392,072	1,977,992	5,370,064

Unit: Thousand Baht

Item	2017		
	Maturity not exceeding 1 year	Maturity exceeding 1 year	Total
1. On-balance sheet assets (1.1 + 1.2 + 1.3+1.4)	36,715,977	24,748,106	61,464,083
1.1 Net loans ^{1/}	8,990,992	85,186	9,076,178
1.2 Net Investment in debt securities ^{2/}	22,414,498	9,269,383	31,683,881
1.3 Deposits (including accrued interest receivables)	1,617,099	-	1,617,099
1.4 Derivatives	3,693,388	15,393,537	19,086,925
2. Off-balance sheet items ^{3/} (2.1 + 2.2 + 2.3)	861,956,237	938,819,542	1,800,775,779
2.1 Aval of bills, guarantees, and letter of credits	-	-	-
2.2 OTC derivatives	858,593,340	936,892,306	1,795,485,646
2.3 Undrawn committed line	3,362,897	1,927,236	5,290,133

^{1/} Including accrued interest receivables and net of deferred incomes, allowances for doubtful accounts and allowances for revaluation from debt restructuring and including net loans of interbank and money market.

^{2/} Including investments in receivables, but excluding accrued interest receivables and net of allowances for revaluation of securities and allowances for impairment of securities

^{3/} Before multiplying credit conversion factor

Outstanding amounts of loans including accrued interest receivables and investment in debt securities before adjusted by credit risk mitigation classified by country or geographical area of debtor and asset classification as prescribed by the Bank of Thailand (Table 12)

The geographical areas are classified base on the country of incorporation.

2018

Unit: Thousand Baht

Country or geographic area of debtor	Loans including accrued interest receivables ^{1/}						Investment in debt securities Doubtful loss
	Normal	Special mentioned	Substandard	Doubtful	Doubtful loss	Total	
1.Thailand	4,376,443	-	-	-	-	4,376,443	81,424
2.Asia Pacific (exclude Thailand)	-	-	-	-	-	-	-
3.North America and Latin America	-	-	-	-	-	-	-
4.Africa and Middle East	-	-	-	-	-	-	-
5.Europe	-	-	-	-	-	-	-
Total	4,376,443	-	-	-	-	4,376,443	81,424

2017

Unit: Thousand Baht

Country or geographic area of debtor	Loans including accrued interest receivables ^{1/}						Investment in debt securities Doubtful loss
	Normal	Special mentioned	Substandard	Doubtful	Doubtful loss	Total	
1.Thailand	9,167,817	-	-	-	1,436	9,169,253	30,943
2.Asia Pacific (exclude Thailand)	-	-	-	-	-	-	-
3.North America and Latin America	-	-	-	-	-	-	-
4.Africa and Middle East	-	-	-	-	-	-	-
5.Europe	-	-	-	-	-	-	-
Total	9,167,817	-	-	-	1,436	9,169,253	30,943

^{1/} Including outstanding amounts of loans and accrued interest receivables of interbank and money market

Provisions (General provision and Specific provision) and bad debt written-off during period for loan including accrued interest receivables and investment in debt securities classified by country or geographic area (Table 13)

The geographical areas are classified base on the country of incorporation.

2018

Unit: Thousand Baht

Country or geographic area of debtor	Loans including accrued interest receivables ^{1/}			Specific provision for Investment in debt securities
	General provision	Specific provision	Bad debt written-off during period	
1.Thailand		-	-	81,424
2.Asia Pacific (exclude Thailand)		-	-	-
3.North America and Latin America		-	-	-
4.Africa and Middle East		-	-	-
5.Europe		-	-	-
Total	27,271	-	-	81,424

2017

Unit: Thousand Baht

Country or geographic area of debtor	Loans including accrued interest receivables ^{1/}			Specific provision for Investment in debt securities
	General provision	Specific provision	Bad debt written-off during period	
1.Thailand		1,436	-	30,943
2.Asia Pacific (exclude Thailand)		-	-	-
3.North America and Latin America		-	-	-
4.Africa and Middle East		-	-	-
5.Europe		-	-	-
Total	91,638	1,436	-	30,943

^{1/} Including provision and bad debt written-off during period of loans including accrued interest receivables of interbank and money market

Outstanding amount of loans including accrued interests before adjusted by credit risk mitigation classified by type of business (Table 14)

2018

Unit: Thousand Baht

Type of business	Normal	Special mentioned	Substandard	Doubtful	Doubtful loss	Total
Agriculture and mining	430,094	-	-	-	-	430,094
Manufacturing and commerce	1,667,633	-	-	-	-	1,667,633
Real estate business and construction	-	-	-	-	-	-
Public utilities and services	377,448	-	-	-	-	377,448
Housing loans	-	-	-	-	-	-
Others	-	-	-	-	-	-
- Commercial Bank	1,715,591	-	-	-	-	1,715,591
- Others	185,677	-	-	-	-	185,677
Total	4,376,443	-	-	-	-	4,376,443

2017

Unit: Thousand Baht

Type of business	Normal	Special mentioned	Substandard	Doubtful	Doubtful loss	Total
Agriculture and mining	-	-	-	-	-	-
Manufacturing and commerce	441,960	-	-	-	-	441,960
Real estate business and construction	-	-	-	-	-	-
Public utilities and services	303,189	-	-	-	-	303,189
Housing loans	-	-	-	-	-	-
Others	-	-	-	-	-	-
- Commercial Bank	8,237,984	-	-	-	-	8,237,984
- Others	184,683	-	-	-	1,436	186,119
Total	9,167,816	-	-	-	1,436	9,169,252

Provisions (General provision and Specific provision) and bad debt written-off during period for loans including accrued interest receivables classified by types of business (Table 15)

Unit: Thousand Baht

Type of business	2018		
	General provision	Specific provision	Bad debt written-off during period
Agriculture and mining		-	-
Manufacturing and commerce		-	-
Real estate business and construction		-	-
Public utilities and services		-	-
Housing loans		-	-
Others		-	-
Total	27,271	-	-

Unit: Thousand Baht

Type of business	2017		
	General provision	Specific provision	Bad debt written-off during period
Agriculture and mining		-	-
Manufacturing and commerce		-	-
Real estate business and construction		-	-
Public utilities and services		-	-
Housing loans		-	-
Others		1,436	-
Total	91,638	1,436	-

Reconciliation of change in provisions (General provision and Specific provision) for loans including accrued interest receivables* (Table 16)

Unit: Thousand Baht

Item	2018		
	General provision	Specific provision	Total
Provisions at the beginning of the period	91,638	1,436	93,074
Bad debts written-off during the period	-	-	-
Increases or (Decreases) of provisions during the period	(64,367)	(1,436)	(65,803)
Provisions at the end of the period	27,271	-	27,271

Unit: Thousand Baht

Item	2017		
	General provision	Specific provision	Total
Provisions at the beginning of the period	75,368	7,297	82,665
Bad debts written-off during the period	-	-	-
Increases or (Decreases) of provisions during the period	16,270	(5,861)	10,409
Provisions at the end of the period	91,638	1,436	93,074

*Including outstanding amount of loans and accrued interest receivables of interbank and money market

Outstanding amounts of on-balance sheet assets and credit equivalent amount of off-balance sheet items classified by type of assets under the SA (Table 17)

Unit: Thousand Baht

Type of asset	2018		
	On balance sheet assets	Off balance sheet item	Total
1. Performing claims			
1.1 Claim on sovereigns and central banks, multilateral development banks (MDBs), and non-central government public sector entities (PSEs) treated as claims on sovereigns	26,008,446	274,878	26,283,324
1.2 Claim on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	1,106,616	27,041,634	28,148,250
1.3 Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	2,717,635	3,727,781	6,445,416
1.4 Claims on retail portfolios	-	-	-
1.5 Housing loans	-	-	-
1.6 Other assets	22,261,747	-	22,261,747
2. Non-performing claims	-	-	-
3. First-to-default credit derivatives and Securitisation	-	-	-
Total	52,094,444	31,044,293	83,138,737

Unit: Thousand Baht

Type of asset	2017		
	On balance sheet assets	Off balance sheet item	Total
4. Performing claims			
1.1 Claim on sovereigns and central banks, multilateral development banks (MDBs), and non-central government public sector entities (PSEs) treated as claims on sovereigns	19,349,344	438,039	19,787,383
1.2 Claim on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	9,704,464	23,282,014	32,986,478
1.3 Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	932,302	2,718,135	3,650,437
1.4 Claims on retail portfolios	-	-	-
1.5 Housing loans	-	-	-
1.6 Other assets	18,935,108	-	18,938,108
5. Non-performing claims	-	-	-
6. First-to-default credit derivatives and Securitisation	-	-	-
Total	48,921,218	26,438,188	75,359,406

II. Credit Risk: Standardized Approach (SA)

Qualitative Disclosure:

The Branch uses credit ratings which are assigned by the accredited External Credit Rating Agencies, which are Standard & Poor's (S&P) and Moody's, to assign risk weights for capital adequacy purposes according to the Notification of the Bank of Thailand No. Sor Nor Sor 15/2555 dated 8 November 2012 (RE: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standard Approach (SA)). Where multiple ratings are available, the second worst rating has been considered.

Quantitative Disclosure:

Outstanding amount of net on-balance sheet assets and credit equivalent amount of off-balance sheet items after credit risk mitigation for each type of asset, classified by risk weight under the SA (Table 19)

Unit: Thousand Baht

Type of asset	2018								
	Rated outstanding amount				Unrated outstanding amount				
Risk Weight (%)	0	20	50	100	150	35	75	100	150
Performing claims									
1. Claims on sovereigns and central banks, multilateral development banks (MDBs), and non-central government public sector entities (PSEs) treated as claims on sovereigns	26,008,445	-	274,878	-	-				-
2. Claims on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	-	19,520,675	1,396,910	7,255,963	-			-	-
3. Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	-	-	113	346,736	-			6,073,269	-
4. Claims on retail portfolios							-		
5. Claims on housing loans						-			
6. Other assets								22,261,747	
Risk weight (%)			50	100	150				
Non-performing claims			-	-	-				
Capital deduction items prescribed by the Bank of Thailand									

Unit: Thousand Baht

Type of asset	2017								
	Rated outstanding amount				Unrated outstanding amount				
Risk Weight (%)	0	20	50	100	150	35	75	100	150
Performing claims									
7. Claims on sovereigns and central banks, multilateral development banks (MDBs), and non-central government public sector entities (PSEs) treated as claims on sovereigns	12,543,250	-	7,244,132	-	-				-
8. Claims on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	-	14,143,871	9,564,242	9,278,366					-
9. Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	-	-	-	174,122	-			3,476,315	-
10. Claims on retail portfolios							-		
11. Claims on housing loans						-			
12. Other assets								18,935,108	
Risk weight (%)			50	100	150				
Non-performing claims			-	-	-				
Capital deduction items prescribed by the Bank of Thailand									

III. Credit risk mitigation under the Standard Approach (SA)**Qualitative Disclosure:**

The Branch does not apply or use any Credit Risk Mitigation (CRM) to any on or off balance sheet exposures according to the Notification of the Bank of Thailand No. Sor Nor Sor 15/2555 dated 8 November 2012 (RE: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standard Approach (SA)).

Quantitative Disclosure:**Part of outstanding that is secured by collateral under SA classified by type of assets and collateral (Table 28)**

Type of asset	2018		2017	
	Eligible financial collateral	Guarantee and credit derivatives	Eligible financial collateral	Guarantee and credit derivatives
Performing assets				
1. Claims on sovereigns and central banks, multilateral development banks (MDBs), and non-central government public sector entities (PSEs) treated as claims on sovereigns	-	-	-	-
2. Claims on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	-	-	-	-
3. Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	-	-	-	-
4. Claims on retail portfolios	-	-	-	-
5. Claims on housing loans	-	-	-	-
6. Other assets	-	-	-	-
Non-Performing assets				
Total	-	-	-	-

Market risk

I. General information on Market Risk

Qualitative Disclosure:

Market risk management

Market risk is the exposure to an adverse change in the market value of portfolios and financial instruments caused by a change in market parameters. The primary categories of market risk parameters are interest rate, foreign exchange rates, equity prices, credit spreads and commodity prices. The Group separates exposures to market risk into either trading or non-trading portfolios.

Trading portfolios include those positions arising from market-making transactions where the Group acts as principal with clients or with the market. The Group manages market risk mainly along lines of business. Non-trading portfolios primarily arise from the interest rate management of the Firm's banking assets and liabilities and foreign exchange risks arising from the Firm's investments.

Market risk management framework

At group level, market risk is identified, analysed, monitored, and controlled by an independent corporate risk governance function. Market risk group seeks to facilitate efficient risk/return decisions, reduce volatility in operating performance and make the Firm's market risk profile transparent to senior management, the Board of Directors and regulators. Market risk is overseen by the Chief Risk Officer (CRO) and participates in the following primary functions:

- i. Establishment of a comprehensive market risk policy framework;
- ii. Independent analysis, monitoring and control of business segment market risk;
- iii. Definition, approval and monitoring of limits; and
- iv. Performance of stress testing and qualitative risk assessments.

The Firm's business segments also have valuation teams whose function is to provide independent oversight of the accuracy of the valuations of positions that expose the Firm to market risk. These valuation functions reside within Finance.

Market risk monitoring and control

Market risk is controlled primarily through a series of limits. Limits reflect the Firm's risk appetite in the context of the market environment and business strategy. In setting limits, the Firm takes into consideration factors such as market volatility, product liquidity, business trends and management experience.

Market Risk regularly reviews and updates risk limits. Senior management, including the Firm's CEO and CRO, is responsible for reviewing and approving risk limits at least once a year. Market Risk further controls the Firm's exposure by specifically designating approved financial instruments and tenors, known as instrument authorities, for each business segment.

The Firm maintains different levels of limits. Corporate-level limits include VaR and stress. Similarly, line of business limits include VaR and stress limits and may be supplemented by loss advisories, non-statistical measurements and instrument authorities. Businesses are responsible for adhering to established limits, against which exposures are monitored and reported. Limits are set by business, as well as by legal entity depending on regulatory requirements. Limit breaches are reported in a timely manner to senior management, and the affected business segment is required either to reduce trading positions or consult with senior management on the appropriate action.

Market risk reporting

Non-statistical exposures, VaR, loss advisories and limit excesses are reported daily, by the Risk Reporting, Finance and Information Management (RRF&IM) team, for the Firm's trading and non-trading business with market risk exposure. Market risk exposure trends, VaR trends, P&L, and portfolio

concentrations are reported weekly. The team is also responsible for completeness and accuracy of data used in capital calculations. Stress-test results are reported weekly to business and senior management.

Market risk measurement

Because no single measure can reflect all aspects of market risk, the Group uses various metrics, both statistical and non-statistical.

(i) Non-statistical measures

Non-statistical risk measures include sensitivities to variables used to value positions, such as credit spread sensitivities, interest rate basis point values and market values. These measures provide granular information on the Group's market risk exposure.

(ii) Statistical measures

The Firm uses "Value-at-Risk" (VaR) as a statistical risk management tool for assessing risk under normal market conditions consistent with the day-to-day risk decisions made by the lines of business. VaR is not used to estimate the impact of stressed market conditions or to manage any impact from potential stress events.

VaR statistically measures the potential loss from adverse market moves in an ordinary market environment and provides a consistent cross-business measure of risk profiles and levels of risk diversification. JPMorgan Chase uses VaR to compare risks within and across businesses, monitor exposure relative to limits, and as an input to economic and regulatory capital. VaR provides risk transparency in a normal trading environment and reflects the potential loss of a position, risk type or business within a certain time horizon and at a given confidence level, based on price changes that occur over a specified time period. Each business day, the Firm performs a comprehensive VaR calculation for its market risk activities. VaR calculates risk to general (systemic) moves in the market.

An historical simulation approach is used to calculate VaR. Risk sensitivities (such as delta, gamma and vega) are combined with daily market moves from an historical time series to calculate P&L changes. The key assumption in this approach is that historical changes in market values are representative of future changes.

The daily P&Ls are ranked in descending order. The average of the seven worst days determines the VaR of each position. This seven day average can be shown to correspond to a 99% confidence level with averaging resulting in a more appropriate tail measure. The daily P&L measures are additive, allowing for compilation by risk type and business for each day, with subsequent calculation of VaR of the risk type or business. This calculation methodology provides simplicity and transparency. VaR is calculated using a one-day time horizon.

Stress testing is also employed in cross-business risk management. Stress testing results, trends and explanations based on current market risk positions are reported to JPM's management and to the lines of business to allow them to better understand event risk-sensitive positions and manage risks with more transparency. The Firm has implemented a grid based stress infrastructure (firm-wide stress initiative (FSI)) which allows for flexibility in scenario building and identification of stress P&L drivers.

Local Governance

Thailand Risk and Asset and Liability Committee (RALCO) of the Branch is responsible for the overall management of risk limits and review of the risk reports. The committee discusses the market strategy at least in the monthly RALCO meeting and reviews the reported VaR with the defined VaR limits.

The Branch establishes a limit on the BPV for THB derivatives, which are monitored on a daily basis. These limits are reviewed on a monthly basis at the RALCO meetings and breaches, if any, along with the reasons for the same are reviewed and noted by the RALCO.

Bangkok branch also performs monthly stress testing of its trading and of its banking book in line with the approved Stress Testing Policy for the Branch. The results of the same are reviewed in RALCO. The stress factors applied and the policy are reviewed and approved at least on an annual basis by the RALCO. The breaches in any limits are reviewed by the RALCO along with the reasons for the same.

II. Market Risk: Standardized Approach (SA)

Qualitative Disclosure:

For Market Risk, the Branch applies Standardized Approach (SA) to calculate capital requirement and uses Contingent Loss Method or Scenario Analysis Method to calculate capital requirement for options according to the Notification of the Bank of Thailand No. Sor Nor Sor 94/2551 dated 27 November 2008 (RE: Guideline on Supervision of Market Risk and Capital Requirement for Market Risk of Financial Institutions). There are no equity and commodity position risks in the Branch.

Quantitative Disclosure:

Minimum capital requirements for each type of market risk under the Standardized Approach
(Table 30)

Unit: Thousand Baht

Minimum capital requirement for market risk under the Standardized Approach	Dec. 31, 18	Jun. 30, 18
Interest rate risk	4,289,738	4,426,640
Equity position risk	-	-
Foreign exchange rate risk	122,146	97,370
Commodity risk	-	-
Total minimum capital requirements	4,411,884	4,524,010

Operational risks

I. General information on Operational Risk

Qualitative Disclosure:

Operational risk management

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors or due to external events that are neither market nor credit-related. Operational risk is inherent in the Firm's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, and inappropriate behavior of employees, failure to comply with applicable laws and regulations or failure of vendors to perform in accordance with their arrangements. These events could result in financial losses, litigation and regulatory fines, as well as other damage to the Firm. The goal is to keep operational risk at appropriate levels, in light of the Firm's financial strength, the characteristics of its businesses, the markets in which it operates, and the competitive and regulatory environment to which it is subject.

Operational risk management framework

To monitor and control operational risk, the Firm maintains an overall Operational Risk Management Framework ("ORMF") designed to enable the Firm to maintain a sound and well-controlled operational environment. The four main components of the ORMF include: governance, risk identification and assessment, monitoring and reporting, and measurement.

The Firm has a process for capturing, tracking and monitoring operational risk events. The Firm analyzes errors and losses and identifies trends. Such analysis enables identification of the causes associated with risk events faced by the lines of business.

Risk monitoring and reporting

The Bank has standard operating procedures to control and reduce risk arising from operational error and continue to revise plans to suit current operating environment. The Branch closely monitors capacity limit for handling transaction in each operations area. The respective unit's Operation Managers are responsible for escalating to their line regional managers and Senior country business manager if there is any capacity constraint.

Local Governance

At the Branch level, The Thailand Location Operating Committee (LOC) is chaired by the Chief Administrative Officer (CAO) of the Branch, who is ultimately responsible for managing operational risk within the location. LOC meetings are held regularly and include a review of various aspects of operational risk, relevant changes in regulatory framework and general ledger controls. Volume trends are also closely monitored and discussed at this meeting. The LOC consisted of CAO, all location team leads of each operation team within Corporate & Investment Bank (CIB), Credit Risk Management Middle Office, Credit Products Delivery (CPD), Finance, Compliance, Internal Audit, Operation Risk Management (ORM), Human Resources (HR), Global Technology & Information (GTI), Information Technology Risk Management and Resiliency Risk Management.

In the LOC meeting, Compliance would update any material changes of laws and regulations to the committee. This is to ensure that all relevant parties are aware of and will be in line with all local rules and regulations. Moreover, both Compliance and Internal Audit would share the results according to their monitoring or audit programs to the LOC members when any significant issues are found during the audit period.

II. Operational Risk Capital Assessment

As required by the Bank of Thailand, the Branch follows the Basic Indicator Approach (BIA) to compute capital requirements for operational risk. Please refer to Table 7 for quantitative disclosures on the Branch's operational risk.

Equity exposures in the banking book**I. General information on Equity exposures in the banking book****Qualitative Disclosure:**

The Branch has no policy to invest in equity securities in either trading or banking book purpose. As of December 2018 and 2017, the Branch did not have any outstanding equity exposures in the banking book.

Quantitative Disclosure:**Equity exposures in banking book (Table 32)**

Unit: Thousand Baht

Equity exposures	2018	2017
1. Equity exposures		
1.1 Equities listed and publicly traded in the Stock Exchange		
▪ Book value	-	-
▪ Fair value	-	-
1.2 Other equities	-	-
2. Gains (losses) on sale of equities in the reporting period	-	-
3. Net revaluation surplus (deficits) from valuation of AFS equity	-	-
4. Minimum capital requirements for equity exposures classified by the calculation methods SA	-	-

Interest Rate Risk in the Banking Book (IRRBB)

I. General information on Interest rate risk in the banking book

Qualitative Disclosure:

Interest Rate Risk in the Banking Book

Interest Rate Risk in the Banking Book (“IRRBB”) is defined as interest rate risk resulting from the firm’s traditional banking activities (accrual accounted on and off balance sheet positions) which includes extension of loans and credit facilities, taking deposits and issuing debt (collectively referred to as ‘non-trading’ activities); and also the impact from CIO investment portfolio and other related CIO, Treasury activities. IRR from non-trading activities can occur due to a variety of factors, including but not limited to:

- Difference in the timing of re-pricing of assets, liabilities and off-balance sheet instruments
- Differences in the balances of assets, liabilities and off-balance sheet instruments that re-price at the same time
- Differences in the amounts by which short-term and long-term market interest rates change
- Impact of changes in the duration of various assets, liabilities or off-balance sheet instruments as interest rates change

Interest Rate Risk in the Banking Book management framework

Governance for Firmwide IRR is defined in the IRR Management policy which is approved by Directors’ Risk Policy Committee (DRPC). The CIO, Treasury and Other Corporate Risk Committee (“CTC RC”) is the governing committee with respect to IRRBB.

- Reviews the IRR Management policy;
- Reviews the IRR profile of the Firm and compliance with IRR limits;
- Provides Governance on legal entity related exposures; and
- Reviews significant models and/or assumptions including the changes related to IRR management

Local Governance

The Bangkok Risk Asset Liability Committee (RALCO), chaired by the Legal Entity Risk Manager, is responsible for providing IRR oversight at LE level and ensuring appropriate governance, controls and limits(as applicable) are in place. The Bangkok RALCO will review this framework on an annual basis.

As governed by the Bangkok RALCO Terms of Reference, where required, matters will be escalated from Bangkok RALCO to the Bangkok Location Management Committee, APRC or APCALC.

Risk monitoring and management

At the legal entity level, IRR is evaluated using Economic Value Sensitivity (“EVS”) and Earning at Risk (“EaR”). EVS measures the change in asset/liability values under two parallel and four non-parallel shifts in interest rate curve on the economic value of the banking book, the magnitude of the interest rate shocks are prescribed by the Basel Committee on Banking Supervision (BCBS). EaR measures the sensitivity of pre-tax income to changes in interest rates over a rolling 12 months compared to a base scenario.

Interest rate risk in the banking book could arise from lending and deposit taking activities of the branch, as well as from interbank money market takings and placings, investment securities and repo positions managed by T/CIO and for the purposes of managing the funding and/or structural

interest rate risk positions of the branch. Banking book interest rate risk is transferred from the operating businesses to T/CIO. Currently, there is minimal option risk in this entity as the branch does not offer products such as mortgage loans that have embedded optionality

Quantitative Disclosure:

The effect of changes in interest rate to net interest income (Table 33)

Unit: Thousand Baht

Earnings at Risk ("EaR)	2018	
	+200bps changes in interest rate	-200bps changes in interest rate
THB	150,151	(158,308)
USD	(212,661)	207,458
Others	839	(480)
Total effect from changes in interest rate	(61,671)	48,671
% of anticipated net interest income for the next one year	-10.3%	8.1%

D. Additional disclosure of capital information under the BCBS requirements (Composition of capital disclosure requirements)

Item 2: Disclosure of capital information in transitional period under the Basel III

Unit: Thousand Baht

Value of capital, inclusions, adjustments and deductions for the period of December 31, 2018	
2. In case of foreign bank branch	
2.1 Capital of foreign bank branch	10,468,404
2.2 Less deduction from capital of foreign bank branch	-
Total capital of foreign bank branch	10,468,404

Unit: Thousand Baht

Value of capital, inclusions, adjustments and deductions for the period of June 30, 2018	
2. In case of foreign bank branch	
2.1 Capital of foreign bank branch	9,662,243
2.2 Less deduction from capital of foreign bank branch	-
Total capital of foreign bank branch	9,662,243

Roles and Responsibilities of Internal Audits and Compliance

Internal Audit's role is to provide the Audit Committee, executive and senior business management, and our regulators with an independent assessment of the firm's ability to manage and control risk and to influence and advise business managers on ways of enhancing their business' capacity to manage risk.

We achieve this through:

- Developing and maintaining an efficient and effective program of audit coverage and appropriate reporting processes that provide reasonable assurance that the system of internal control, as designed, achieves its objectives;
- Fostering a continuous, self-checking control environment in partnership with senior management and the firm's risk management and control communities;
- Disseminating best practices and lessons learned across businesses; and
- Conducting or participating in special projects and investigations.

In addition, the management of the Firm supports a strong compliance culture and believe that all employees globally share a common duty to both adhere to the highest standard of integrity and fair dealing, and comply with the laws, regulations, and policies that govern our businesses and activities. The LOB will receive first level support and assistance from Compliance including:

- Providing guidance on regulatory issues such as, updates on changes in regulatory requirements and performing ongoing regulatory reviews;
- Sign-offs of LOB policies, procedures and compliant letters,
- Providing front-end reviews of marketing copy and telemarketing scripts;
- Providing timely reports of compliance issues to LOB; and
- Collaborating with and educating LOB management on compliance issue