

**JPMORGAN CHASE BANK, N.A. - BANGKOK BRANCH**

**FINANCIAL STATEMENTS**

**31 DECEMBER 2016**



## **Independent auditor's report**

To the Board of Directors of JPMorgan Chase Bank, N.A.

### **My opinion**

In my opinion, the financial statements of JPMorgan Chase Bank, N.A. - Bangkok Branch (the Bank) present fairly, in all material respects, the financial position of Bank as at 31 December 2016, and its financial performance and its cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

### **What I have audited**

I have audited the accompanying financial statements of Bank, which comprise the statement of financial position as at 31 December 2016, and the statement of profit or loss and other comprehensive income and statement of changes in Head office's equity and other branches under the same entity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

### **Basis for opinion**

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my report. I am independent of the Bank in accordance with the Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### **Responsibilities of management for the financial statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.



### **Auditor's responsibilities for the audit of the financial statements**

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

PricewaterhouseCoopers ABAS Ltd.

A handwritten signature in black ink, appearing to read "Sinsiri", with a stylized flourish at the end.

**Sinsiri Thangsombat**

Certified Public Accountant (Thailand) No. 7352

Bangkok

20 April 2017

**JPMorgan Chase Bank, N.A. - Bangkok Branch**

**Statement of Financial Position**

**As at 31 December 2016**

	<b>Notes</b>	<b>2016 Baht</b>	<b>2015 Baht</b>
<b>Assets</b>			
Cash		1,420,957	5,096,577
Interbank and money market items, net	6	6,737,234,700	4,674,651,520
Accounts receivable from securities trading		367,494,168	23,391,045
Financial derivatives assets	7	20,708,273,105	25,068,095,830
Investments, net	8	29,640,564,343	33,546,804,676
Loans and accrued interest receivables	9		
Loans		1,546,803,450	4,449,583,608
Accrued interest receivables		4,973,269	9,938,809
Total loans and accrued interest receivables		1,551,776,719	4,459,522,417
<u>Less</u> Deferred revenue		(2,742,080)	(8,585,460)
<u>Less</u> Allowance for doubtful debts	10	(22,665,011)	(51,725,844)
Loans and accrued interest receivables, net		1,526,369,628	4,399,211,113
Equipment, net	11	26,400,750	33,451,209
Intangible assets, net	12	2,282,359	3,838,983
Deferred tax assets	17	183,634,948	115,326,330
Other assets, net	13	126,818,012	84,380,931
<b>Total assets</b>		<b>59,320,492,970</b>	<b>67,954,248,214</b>

(Mr. Jarin Pintusopon)

Branch Manager

The accompanying notes are an integral part of the financial statements.

**JPMorgan Chase Bank, N.A. - Bangkok Branch**

**Statement of Financial Position (Cont'd)**

**As at 31 December 2016**

	<b>Notes</b>	<b>2016 Baht</b>	<b>2015 Baht</b>
<b>Liabilities and Head Office's equity and balances with other branches under the same entity</b>			
<b>Liabilities</b>			
Deposits	14	10,330,185,963	9,629,467,636
Interbank and money market items	15	1,323,160,076	5,186,447,481
Accounts payable from securities trading		503,687,661	1,218,374,559
Liability payable on demand		98,104,154	34,413,390
Financial liabilities designated at fair value through profit or loss	16	17,861,102,881	14,420,179,629
Financial derivatives liabilities	7	18,266,672,986	25,108,470,185
Provision for employee benefit plan	19	60,612,701	52,885,763
Other liabilities	18	419,445,848	1,659,019,458
<b>Total liabilities</b>		<b>48,862,972,270</b>	<b>57,309,258,101</b>
<b>Head Office's equity and balances with other branches under the same entity</b>			
Fund remitted into Thailand for maintaining assets under law	22	9,494,909,666	9,494,909,666
Net balance of inter-office accounts with Head Office and other branches under the same entity	22	698,012,051	704,494,402
Others component of accounts with head office and other branches under the same entity		12,101,323	16,464,415
Retained earnings		252,497,660	429,121,630
<b>Total Head Office's equity and balances with other branches under the same entity</b>		<b>10,457,520,700</b>	<b>10,644,990,113</b>
<b>Total liabilities and Head Office's equity and balances with other branches under the same entity</b>		<b>59,320,492,970</b>	<b>67,954,248,214</b>

The accompanying notes are an integral part of the financial statements.

**JPMorgan Chase Bank, N.A. - Bangkok Branch**  
**Statement of Profit or Loss and Other Comprehensive Income**  
**For the year ended 31 December 2016**

		<b>2016</b>	<b>2015</b>
	<b>Notes</b>	<b>Baht</b>	<b>Baht</b>
Interest income	27	850,642,580	931,246,554
Interest expense	28	(313,531,818)	(447,629,680)
<b>Net interest income</b>		<b>537,110,762</b>	<b>483,616,874</b>
Fee and service income	29	29,216,228	33,935,753
Fee and service expenses		(10,834,060)	(9,986,988)
<b>Net fee and service income</b>		<b>18,382,168</b>	<b>23,948,765</b>
Gains on trading and foreign exchange transactions	30	1,380,164,870	682,066,755
Losses from financial liabilities designated at fair value through profit or loss	31	(1,359,362,798)	(498,942,064)
Other operating income	32	326,452,897	166,727,531
<b>Total operating income</b>		<b>902,747,899</b>	<b>857,417,861</b>
<b>Other operating expenses</b>			
Employee expenses		301,783,683	279,997,187
Premise and equipment expenses		42,277,532	42,130,748
Taxes and duties		110,465,208	78,473,273
Others	33	537,322,721	578,632,079
<b>Total other operating expenses</b>		<b>991,849,144</b>	<b>979,233,287</b>
Bad debt and doubtful accounts	34	17,027,236	10,206,994
<b>Loss before income tax</b>		<b>(106,128,481)</b>	<b>(132,022,420)</b>
Income tax expense	35	(70,495,489)	(79,671,976)
<b>Net loss for the year</b>		<b>(176,623,970)</b>	<b>(211,694,396)</b>

The accompanying notes are an integral part of the financial statements.

**JPMorgan Chase Bank, N.A. - Bangkok Branch**

**Statement of Profit or Loss and Other Comprehensive Income (Cont'd)**

**For the year ended 31 December 2016**

	<b>Note</b>	<b>2016 Baht</b>	<b>2015 Baht</b>
<b>Other comprehensive income (expense)</b>			
Items that will not be subsequently reclassified to profit or loss			
Remeasurements of provision for employment benefits plan		-	3,413,081
Income tax relating to components of other comprehensive income that will not be subsequently reclassified to profit or loss	17	-	(682,616)
<b>Total items that will not be subsequently reclassified to profit or loss</b>		-	2,730,465
Items that will be subsequently reclassified to profit or loss			
Gains (losses) on changes in fair value of available-for-sale securities		(6,912,640)	2,084,789
Income tax relating to components of other comprehensive income that will be subsequently reclassified to profit or loss	17	1,382,528	(410,540)
<b>Total items that will be reclassified subsequently to profit or loss</b>		(5,530,112)	1,674,249
<b>Other comprehensive income (expense)</b>		(5,530,112)	4,404,714
<b>Total comprehensive expense</b>		(182,154,082)	(207,289,682)

The accompanying notes are an integral part of the financial statements.

**JPMorgan Chase Bank, N.A. - Bangkok Branch**

**Statement of Changes in Head Office's equity and Other Branches Under the Same Entity**

For the year ended 31 December 2016

	Note	Fund remitted into Thailand for maintaining assets under law		Net balance of inter-office accounts with Head Office and other branches under the same entity		Other components of accounts with Head Office and other branches under the same entity			
		Baht	Baht	Baht	Baht	Unrealised gain (loss) on changes in fair value of available-for-sale securities	Provision for share-based payment	Retained earnings	Total Baht
<b>Balance as at 1 January 2015</b>		9,494,909,666		1,722,702,036		(2,853,432)	16,783,059	740,650,692	11,972,182,021
Net loss for the year		-		-		-	-	(211,694,396)	(211,694,396)
Decrease during the year		-		(1,018,207,634)		-	-	-	(1,018,207,634)
Profit remittance to Head Office		-		-		-	-	(102,565,131)	(102,565,131)
Unrealised gain on changes in fair value of available-for-sale securities		-		-		2,084,789	-	-	2,084,789
Provision for share-based payment		-		-		-	870,539	-	870,539
Remeasurements of provision for employment benefit plan		-		-		-	-	3,413,081	3,413,081
Income tax relating to other component of other comprehensive income for the year	17	-		-		(410,540)	-	(682,616)	(1,093,156)
<b>Balance as at 31 December 2015</b>		<u>9,494,909,666</u>		<u>704,494,402</u>		<u>(1,189,183)</u>	<u>17,653,598</u>	<u>429,121,630</u>	<u>10,644,990,113</u>
<b>Balance as at 1 January 2016</b>		9,494,909,666		704,494,402		(1,189,183)	17,653,598	429,121,630	10,644,990,113
Net profit for the year		-		-		-	-	(176,623,970)	(176,623,970)
Decrease during the year		-		(6,482,351)		-	-	-	(6,482,351)
Profit remittance to Head Office		-		-		-	-	-	-
Unrealised loss on changes in fair value of available-for-sale securities		-		-		(6,912,640)	-	-	(6,912,640)
Provision for share-based payment		-		-		-	1,167,020	-	1,167,020
Income tax relating to other component of other comprehensive income for the year	17	-		-		1,382,528	-	-	1,382,528
<b>Balance as at 31 December 2016</b>		<u>9,494,909,666</u>		<u>698,012,051</u>		<u>(6,719,295)</u>	<u>18,820,618</u>	<u>252,497,660</u>	<u>10,457,520,700</u>

The accompanying notes are an integral part of the financial statements.



**JPMorgan Chase Bank, N.A. - Bangkok Branch**

**Statement of Cash Flows**

**For the year ended 31 December 2016**

	<b>2016</b>	<b>2015</b>
	<b>Baht</b>	<b>Baht</b>
<b>Cash flows from operating activities:</b>		
Net loss from operating before income tax	(106,128,481)	(132,022,420)
Adjustments to reconcile net profit from operating before income tax to net cash provided by (used in) operating activities:		
Bad debt and doubtful accounts	17,027,236	10,206,994
Depreciation and amortisation	24,885,348	27,288,927
Provision for employee benefit plan	17,230,597	12,408,172
Provision for share based payment expense	1,167,020	870,539
Unrealised (gain) loss on changes in fair value of trading securities	112,922,623	29,354,447
Amortised discount on investments in securities	(251,279,105)	(345,020,656)
Loss on write-off of equipment	44,031	415,624
Unrealised (gain) loss on changes in fair value of financial derivative instruments	(2,481,974,474)	431,897,871
Interest income	(850,642,580)	(931,246,554)
Interest expense	313,531,818	447,629,680
Operating loss before changes in operating assets and liabilities	(3,203,215,967)	(448,217,376)
(Increase) decrease in operating assets:		
Interbank and money market items	(4,600,000,000)	605,401,707
Investments in trading securities	(2,056,315,801)	4,941,767,104
Loans	2,896,848,709	(1,631,328,611)
Other assets	(7,336,181)	(4,031,354)
Increase (decrease) in operating liabilities:		
Deposits	700,718,327	(7,896,524,139)
Interbank and money market items	(3,863,287,405)	168,837,572
Liability payable on demand	63,690,764	(634,791,170)
Financial liabilities designated at fair value through profit or loss	3,440,923,252	3,973,439,397
Provision for employee benefit plan	(9,503,659)	-
Other liabilities	(80,236,971)	111,422,809
Net balance of inter-office accounts with Head Office and other branches under the same entity	35,125,152	(901,619,011)
Net cash used in operating activities before interest received, interest paid and income tax paid - carried forward	(6,682,589,780)	(1,715,643,072)

The accompanying notes are an integral part of the financial statements.

**JPMorgan Chase Bank, N.A. - Bangkok Branch**

**Statement of Cash Flows (Cont'd)**

**For the year ended 31 December 2016**

	<b>2016</b>	<b>2015</b>
	<b>Baht</b>	<b>Baht</b>
Net cash used in operating activities before interest received, interest paid and income tax paid - brought forward	(6,682,589,780)	(1,715,643,072)
Interest received	810,007,460	967,185,912
Interest paid	(1,445,147,281)	(228,201,406)
Income tax paid	(165,142,755)	(154,685,014)
<b>Net cash used in operating activities</b>	<b>(7,482,872,356)</b>	<b>(1,131,343,580)</b>
<b>Cash flows from investing activities:</b>		
Purchase of investments in securities	(39,594,790,045)	(48,008,388,737)
Proceed from matured investments in securities	44,630,000,000	43,340,000,000
Purchase of equipment	(6,034,261)	(24,591,125)
Purchase of leasehold improvement	-	(1,524,439)
<b>Net cash provided by (used in) investing activities</b>	<b>5,029,175,694</b>	<b>(4,694,504,301)</b>
<b>Cash flows from financing activities:</b>		
Profit remittance to Head Office	-	(92,308,618)
Tax paid from profit remittance	-	(10,256,513)
<b>Net cash used in financing activities</b>	<b>-</b>	<b>(102,565,131)</b>
<b>Net decrease in cash and cash equivalents</b>	<b>(2,453,696,662)</b>	<b>(5,928,413,012)</b>
Cash and cash equivalents at the beginning of the year	3,560,301,527	9,488,714,539
<b>Cash and cash equivalents at end of the year</b>	<b>1,106,604,865</b>	<b>3,560,301,527</b>
<b>Cash and cash equivalents</b>		
Cash on hand	1,420,957	5,096,577
Interbank and money market items	796,756,892	3,288,385,437
Net balance of inter-office accounts with Head Office and other branches under the same entity	308,427,016	266,819,513
	<b>1,106,604,865</b>	<b>3,560,301,527</b>
<b>Non cash item:</b>		
Accounts receivable from securities trading	367,494,168	23,391,045
Accounts payable from securities trading	503,687,661	1,218,374,559

The accompanying notes are an integral part of the financial statements.

## **1 General information**

JPMorgan Chase Bank, N.A., which is a bank established under the law of the State of New York, United States of America, operates as a full branch in Thailand, namely Bangkok Branch, herein referred to as "the Bank". The address of the Bank's registration in Thailand is as follows:

Bubhajit Building, 20 North Sathorn Road, Silom, Bangrak, Bangkok 10500.

The Bank's financial statements have been approved for issue by the Bank's management on 20 April 2017.

## **2 Basis of preparation**

The Bangkok Branch is a segment of JPMorgan Chase Bank, N.A. and is not a separate legal entity. The financial statements of the Thailand operations of JPMorgan Chase Bank have been prepared from the records of the Thailand operations and only reflect transaction recorded locally.

The financial statements have been prepared in accordance with procedures, policies and notifications of the Bank of Thailand regarding the preparation of the financial statements of commercial banks and Thai Financial Reporting Standards issued under the Accounting Act B.E. 2543, being those Thai Financial Reporting Standards issued under the Accounting Profession Act B.E. 2547. The primary financial statements (i.e. statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in Head Office's equity and other branches under the same entity and statement of cash flows) are prepared in the format as required by the Notification of the Bank of Thailand ("BOT"), No. SorNorSor. 21/2558, "The Preparation and Format of the Financial Statements of Commercial Bank and Holding Parent Company of Financial Group" dated on 4 December 2015.

The Bank's financial statements have been prepared under the historical cost convention except some of transactions as disclosed in the accounting policies below.

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Bank's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 4.

An English version of the financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

### **3 Summary of significant accounting policies**

#### **New/revised financial reporting standards, and related interpretations**

3.1 New/revised financial reporting standards and interpretations are effective on 1 January 2016.

- a) New/revised financial reporting standards and interpretation which are relevant and have a significant impact to the Bank:

TAS 24 (revised 2015)	Related party disclosures
TFRS 2 (revised 2015)	Share-based payment
TFRS 13 (revised 2015)	Fair value measurement

TAS 24 (revised 2015), 'Related party disclosures' includes as a related party an entity that provides key management personnel services to the reporting entity or to the parent of the reporting entity (the 'management entity'). Disclosure of the amounts charged to the reporting entity is required

TFRS 2 (revised 2015), 'Share based payments' clarifies the definition of a 'vesting condition' and separately defines 'performance condition' and 'service condition'.

TFRS 13 (revised 2015), 'Fair value measurement' is amended to clarify that the portfolio exception in TFRS 13 applies to all contracts (including non-financial contracts) within the scope of TAS 39 (when announced) or TFRS 9 (when announced).

The management has already assessed that those accounting standards have no significant impact on the Bank financial statements.

- b) Financial reporting standards with minor changes

There are 40 financial reporting standards with minor changes. Those accounting standards do not have an impact on the Bank.

3.2 Revised financial reporting standards are effective for annual periods beginning on or after 1 January 2017. The Bank has not yet early adopted these revised standards

- a) Financial reporting standards, which have significant changes and are relevant to the Bank:

TAS 1 (revised 2016)	Presentation of financial statements
TAS 19 (revised 2016)	Employee benefits

TAS 1 (revised 2016), the amendments provide clarifications on a number of issues, including:

- Materiality - an entity should not aggregate or disaggregate information in a manner that obscures useful information. Where items are material, sufficient information must be provided to explain the impact on the financial position or performance.
- Disaggregation and subtotals - line items specified in TAS 1 may need to be disaggregated where this is relevant to an understanding of the entity's financial position or performance. There is also new guidance on the use of subtotals.
- Notes - confirmation that the notes do not need to be presented in a particular order.
- OCI arising from investments accounted for under the equity method - the share of OCI arising from equity-accounted investments is grouped based on whether the items will or will not subsequently be reclassified to profit or loss. Each group should then be presented as a single line item in the statement of other comprehensive income.

### **3 Summary of significant accounting policies (Cont'd)**

#### **New/revised financial reporting standards, and related interpretations (Cont'd)**

3.2 Revised financial reporting standards are effective for annual periods beginning on or after 1 January 2017. The Bank has not yet early adopted these revised standards (Cont'd)

- a) Financial reporting standards, which have significant changes and are relevant to the Bank: (Cont'd)

TAS 19 (revised 2016), the amendments clarify that when determining the discount rate for post-employment benefit obligations, it is the currency that the liabilities are denominated in that is important and not the country where they arise.

The management has already assessed that those accounting standards have no significant impact on the Bank financial statements.

- b) Financial reporting standards with minor changes

There are 47 financial reporting standards with minor changes. The management assesses that they do not have an impact on the Bank financial statements

#### **3.3 Recognition of income**

Interest income on loans and receivable is recognised on an accrual basis. The Bank discontinues recognition of accrued interest income for loans overdue more than three months since the due date or there is uncertainty of collectability, and a collection basis is applied. The Bank also reverses interest income on such loans in order to comply with the Bank of Thailand's notification.

Interest on investment in debt securities is recognised as income by using the effective interest rate method.

Other income is recognised as income on an accrual basis.

#### **3.4 Recognition of interest expenses**

Interests on interbank and money market items, borrowings and deposits are recognised as expenses on an accrual basis.

#### **3.5 Cash and cash equivalents**

Cash and cash equivalents comprise of cash on hand, interbank and money market items and balance of inter-office accounts with Head Office and other branches under the same entity, other short-term highly liquid investments with maturities less than three months from an acquisition date.

### **3 Summary of significant accounting policies (Cont'd)**

#### **3.6 Investments**

Investments are recognised on the trade date.

The classification is dependent on the purpose for which the investments were acquired. Management determines the appropriate classification of its investments at the time of the purchase and re-evaluates such designation on a regular basis.

Investments that are acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading investments. Investments in debt securities which are classified as trading securities are carried at fair value. Fair value of traded debt securities is reference to the last quoted bid price and if securities are not traded in the established market, fair value is calculated by reference to the risk-free yield curve adjusted by an appropriate risk premium (if any). Increases or decreases in the carrying amount are recognised in the statement of profit or loss and other comprehensive income when incurred.

Investments intended to be held for an indefinite period of time, which may be sold in response to liquidity needs or changes in interest rates are classified as available-for-sale. Investments in debt securities which are classified as available-for-sale securities are carried at fair value by reference to the last quoted bid price. Fair value of debt securities, not traded in the established market, is calculated using the generally accepted method which is discounted cash flow by reference to the risk-free yield curve adjusted by an appropriate risk premium (if any). Increases or decreases in the carrying amount are credited or charged against unrealised gains or losses on change in fair value of investments in securities under Head Office's equity and balances with other branches under the same entity.

Investments are initially recognised at cost, which is equal to the fair value of consideration paid plus transaction cost.

A test for decrease in value is carried out when there is a factor indicating that such investment might decrease in value. If the carrying value of the investment is greater than its recoverable amount, loss from the decrease in value is charged to the statement of profit or loss and other comprehensive income when incurred.

The Bank uses the First-in, First-out method in determining the cost of the disposed securities. Gain or loss on disposal of all types of investments is taken to the statements of comprehensive income in the period which the transactions take place.

#### **3.7 Loans and allowance for doubtful accounts**

Loans are recognised on the trade date.

Loans are generally stated at the principal amounts outstanding. The allowance increases by provisions charged to expense and decreases by write-offs, net of recoveries after receiving cash. The allowance is based on the Bank management's review and assessment of the status of an individual debtor as well as the Bank of Thailand's guidelines. Such assessment 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 balances through the economic situation which may have an impact on the customers' ability to pay.



### **3 Summary of significant accounting policies (Cont'd)**

#### **3.8 Equipment and depreciation**

Equipment is stated at historical cost less accumulated depreciation and allowance for decrease in value (if any).

Depreciation is calculated on a straight-line basis to write off the cost of each asset over its estimated useful life as follows:

Computer equipment	3 years
Office equipment	5 years
Furniture and fixtures & fitting	10 years
Motor vehicles	5 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount. Estimated recoverable amount is the higher of the anticipated discounted future cash flows from the continuing use of the asset or the amount obtainable from the sale of the asset less any costs of disposal.

Gains and losses on disposals are determined by comparing proceeds with carrying amount and are included in operating profits.

Repairs and maintenance are charged to the statements of profit or loss and other comprehensive income during the accounting period in which they are incurred. The cost of major renovations is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Bank. Major renovations are depreciated over the remaining useful life of the related asset.

#### **3.9 Intangible assets**

Acquired intangible assets are capitalised and amortised using the straight-line basis over their useful lives, generally over 4 years. Intangible assets are not revalued, but are presented at cost less accumulated amortisation. The carrying amount of each intangible asset is reviewed annually and adjusted for impairment where it is considered necessary.

The estimated useful life is reviewed and revised as necessary in every financial position date.

#### **3.10 Leasehold right**

The cost of leasehold right on building for the period of 30 years, which is presented as other assets, is amortised as an operating expense on a straight-line method over the life of the agreement.

### **3 Summary of significant accounting policies (Cont'd)**

#### **3.11 Impairment of assets**

Assets that have an indefinite useful life, for example goodwill, are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

#### **3.12 Leases**

Leases - where the Bank is the lessee

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognised as an expense in the period in which such termination takes place.

#### **3.13 Related parties**

Enterprises or individuals that, directly or indirectly through one or more intermediaries, control, or are under controlled by, or are under common control with, the Bank, including holding entities, subsidiaries and fellow subsidiaries are related parties of the Bank. Associates and individuals owning, directly or indirectly, an interest in the voting power of the Bank that gives them significant influence over the Bank, key management personnel, including directors and officers of the Bank and close members of the family of these individuals and entities associated with these individuals also constitute related parties.

In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

#### **3.14 Foreign currency translation**

##### **a) Functional and presentation currency**

Items included in the financial statements of the Bank are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The financial statements are presented in Thai Baht, which is the Bank's functional presentation currency.

##### **b) Transactions and balances**

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured using the reference rates of exchange of the Bank of Thailand ruling at the date. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.



### **3 Summary of significant accounting policies (Cont'd)**

#### **3.15 Derivatives**

Financial derivative instruments are recognised on the trade date.

Derivative financial instruments including foreign exchange forward contracts, forward rate agreements, currency option agreements, interest rate option agreements, interest and currency swap agreements, credit derivative agreements and commodity derivative agreements are recognised at fair values. Fair values are either the market price in the market or obtained from widely used methods such as discounted cash flow models. Changes in fair value are reflected in the statements of profit or loss and other comprehensive income.

#### **3.16 Provision for share based payment**

##### **Restricted stock units**

The Bank operates a number of equity-settled share based compensation plan, under which the Bank receives services from employees as consideration of shares of the ultimate parent company. The ultimate parent company is the guarantor for share based compensation plan and the Bank does not have any obligation for the granted shares. The fair value of the granted shares is recognised as an expense in the statements of comprehensive income against its Head office's equity and balances with other branches under the same entity during the grant date and the vesting date. The Head office's equity and balances with other branches under the same entity is reversed when the Bank pays back to the ultimate parent company.

#### **3.17 Employee benefits**

The Bank has post-employment benefits both defined contribution plan and defined benefit plan.

##### **Defined Contribution Plan or Provident Fund**

The Bank operates a provident fund, being a defined contribution plan, the assets for which are held in a separate trustee-administered fund. Such fund is managed by an external fund manager in accordance with the provident fund Act. B.E. 2530. The provident fund is funded by payments from employees and contributions by the Bank. The Bank has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Bank's contributions to the provident fund are charged to the statement of profit or loss and other comprehensive income in the period which the transactions take place.

### **3 Summary of significant accounting policies (Cont'd)**

#### **3.17 Employee benefits (Cont'd)**

##### **Defined Benefit Plan**

A defined benefit plan is a plan that is not a defined contribution plan. Typically, the defined benefit plan defines an amount of benefit that an employee will receive on retirement or retrenchment without cause, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognised in the statement of financial position in respect of defined benefit plans is the present value of the defined benefit obligation at the end of the reporting period, together with adjustments for unrecognised past-service costs. The defined benefit obligation is calculated by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using weighted average discount rate of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability.

Remeasurements of defined benefit plans arising from experience adjustments and changes in actuarial assumptions are recognised in other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in the statement of profit or loss and other comprehensive income.

Under Labour Laws applicable in Thailand and the Bank's employment policy, all employees completing 120 days of service are entitled to severance pay on termination or retrenchment without cause or upon retirement age of 60. The severance pay will be at the rate according to number of years of service as stipulated in the Labor Law which is currently at a maximum rate of 300 days of final salary.

##### **Long service awards**

The Bank provides long service awards to employees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as is used for defined benefit retirement plans.

Remeasurements of defined benefit plans arising from experience adjustments and changes in actuarial assumptions are recognised in other comprehensive income in the period in which they arise.

These obligations are valued in every 3 years by independent qualified actuaries.

#### **3.18 Provisions**

In addition to provisions for post-employment benefits and long service awards, provisions are recognised when the Bank has a present legal or constructive obligation as a result of past events. It is probable that an outflow of resources will be required to settle the obligations, and a reliable estimate of the amount can be made. Where the Bank expects provisions to be reimbursed, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

### **3 Summary of significant accounting policies (Cont'd)**

#### **3.19 Offsetting**

Financial assets and financial liabilities are presented in the statement of financial position by the net amount when there is a legally enforceable right to set off the recognised amounts and the Bank has an intention to settle on a net basis, or realise the financial asset and settle the financial liability simultaneously.

#### **3.20 Current and deferred income taxes**

The tax expense for the period comprises of the current and deferred income taxes. Income tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in head office's equity and balances with other branches under the same entity. In this case the income tax is also recognised in other comprehensive income or directly in head office's equity and balances with other branches under the same entity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period in the countries where the Bank's operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements.

Deferred income tax is determined using tax rates that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is recognised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

#### **3.21 Financial liabilities designated at fair value through profit or loss**

The Bank designated certain borrowings upon initial recognition of financial liabilities at fair value through statements of profit or loss and other comprehensive income (fair value option); this designation cannot be changed subsequently. The fair value option is applied, as the borrowing consists of borrowing host contract and embedded derivatives that must otherwise be separated if it is not designated as fair value through profit or loss.

Financial liabilities for which the fair value option is applied are recognised in the statement of financial position as "Financial liabilities designated at fair value through profit or loss". Fair value changes relating to financial liabilities designated at fair value through profit or loss are recognised in "Gains (losses) from financial liabilities designated at fair value through profit or loss" in profit or loss.

#### **4 Critical accounting estimates, assumptions and judgements**

Estimates, assumptions and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the related actual results.

##### **a) Decrease in value of loans**

The Bank maintains an allowance for doubtful accounts to reflect decrease in value of loans relating to estimated losses resulting from the inability of customers to make required payments. Management believed that estimation are reasonable.

##### **b) Decrease in value of investments**

Investments are reviewed for losses on decrease in value whenever events or changes in circumstances indicate that the carrying amount may not be recovered, in determining the losses on decrease in value. Management believed that estimation are reasonable.

##### **c) Fair value of financial derivative Instruments**

In determining the fair value of financial derivative instruments, the management has made judgement in valuing derivative instruments by using widely accepted valuation techniques and guidelines. Management believed that estimation are reasonable.

##### **d) Post-employment benefits**

In accordance with Thai Labour Law, the Bank has commitment on post-retirement benefits to employees on reaching retirement age. The present value of employee benefit liabilities recognised in the statement of financial position is determined on the present value of estimated future cash outflows for staff. The assumptions used in determining the net annual cost for employee benefits include the salary and years of services of respective employees which are payable in the future year and discount rate (government bond). Any changes in these assumptions will impact the net annual cost recorded for employee benefits. At each period ends, the Bank revises the appropriate discount rate, which represents the rate that should be used to determine the present value of future cash flows to settle the nearly reached retired employee benefits at the end of period when there are material impacts.

##### **e) Fair value of financial liabilities designated at fair value through profit or loss**

Management uses various methodologies and assumptions in the determination of Fair value. Valuations are based on discounted cash flow analyses that consider the embedded derivative and the terms and payment structure of the note.

Moreover, the embedded derivative features are considered using models such as the Black-Scholes option pricing model, simulation models, or a combination of models that use observable or unobservable valuation inputs, depending on the embedded derivative. The specific inputs used vary according to the nature of the embedded derivative features, as described in the discussion above regarding derivative valuation. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value.

## **5 Capital risk management**

The Bank's objective when managing capital is to safeguard the Bank's ability to continue as a going concern in order to provide returns for Head Office and other branches under the same entity.

The Bank maintains a capital adequacy ratio in accordance with the Act on undertaking of Banking Business B.E. 2551. Capital funds are disclosed in note 22.

## **6 Interbank and money market items, net (assets)**

	<b>2016</b>		
	<b>Demand Baht</b>	<b>Time Baht</b>	<b>Total Baht</b>
<b>Domestic items</b>			
The Bank of Thailand	511,478,984	-	511,478,984
Commercial banks	214,870,829	6,000,000,000	6,214,870,829
Total	726,349,813	6,000,000,000	6,726,349,813
<u>Add</u> Accrued interest receivable	-	477,808	477,808
<u>Less</u> Allowance for doubtful accounts	-	(60,000,000)	(60,000,000)
Total domestic items, net	726,349,813	5,940,477,808	6,666,827,621
<b>Foreign items</b>			
Japanese Yen	8,100,515	-	8,100,515
Euro	45,775,055	-	45,775,055
Swiss Franc	311,458	-	311,458
Australian Dollar	6,453,602	-	6,453,602
Singapore Dollar	2,906,926	-	2,906,926
Others	6,859,523	-	6,859,523
Total foreign items, net	70,407,079	-	70,407,079
Total interbank and money market items, net	796,756,892	5,940,477,808	6,737,234,700
<b>2015</b>			
	<b>Demand Baht</b>	<b>Time Baht</b>	<b>Total Baht</b>
<b>Domestic items</b>			
The Bank of Thailand	278,733,431	2,800,000,000	3,078,733,431
Commercial banks	161,425,883	1,400,000,000	1,561,425,883
Total	440,159,314	4,200,000,000	4,640,159,314
<u>Add</u> Accrued interest receivable	-	266,083	266,083
<u>Less</u> Allowance for doubtful accounts	-	(14,000,000)	(14,000,000)
Total domestic items, net	440,159,314	4,186,266,083	4,626,425,397
<b>Foreign items</b>			
Japanese Yen	5,080,306	-	5,080,306
Euro	25,191,517	-	25,191,517
Swiss Franc	8,113,190	-	8,113,190
Australian Dollar	8,775,901	-	8,775,901
Singapore Dollar	260,386	-	260,386
Others	804,823	-	804,823
Total foreign items, net	48,226,123	-	48,226,123
Total interbank and money market items, net	488,385,437	4,186,266,083	4,674,651,520

## 7 Financial derivatives

### Trading derivatives

Fair value and notional amount classified by types of risks as at 31 December 2016 and 2015 comprise of the followings:

Types of risks	2016		
	Fair value		Notional amount
	Assets Baht	Liabilities Baht	
Foreign exchange rate	12,536,344,672	9,403,792,930	3,782,022,611,591
Interest rate	8,054,202,443	7,346,157,051	1,369,843,679,896
Credit risk	72,190,361	624,026,837	40,626,669,075
Index	45,535,629	-	1,215,880,502
Others	-	892,696,168	-
Total trading derivatives	20,708,273,105	18,266,672,986	5,193,708,841,064

  

Types of risks	2015		
	Fair value		Notional amount
	Assets Baht	Liabilities Baht	
Foreign exchange rate	15,959,943,793	14,444,020,468	616,056,431,493
Interest rate	9,055,463,482	9,064,201,741	1,004,413,812,558
Credit risk	52,688,555	847,735,147	29,275,381,875
Other	-	752,512,829	-
Total trading derivatives	25,068,095,830	25,108,470,185	1,649,745,625,926

Proportion of derivative contract balances as at 31 December 2016 and 2015 classified by counterparties comprise of the followings:

	2016 Percentage	2015 Percentage
Financial institutions	39	74
Affiliated companies	59	22
Third parties	2	4
Total trading derivatives	100	100



**8 Investments, net**

	<b>2016</b> <b>Fair value</b> <b>Baht</b>	<b>2015</b> <b>Fair value</b> <b>Baht</b>
<b>Trading securities</b>		
Government	10,658,119,873	9,773,516,716
Total	10,658,119,873	9,773,516,716
<b>Available-for-sale securities</b>		
Government	18,982,444,470	23,773,287,960
Total	18,982,444,470	23,773,287,960
Total investment, net	29,640,564,343	33,546,804,676

**9 Loans and accrued interest receivables, net**

**9.1 Classified by types of loans:**

	<b>2016</b> <b>Baht</b>	<b>2015</b> <b>Baht</b>
Loans	1,546,803,450	4,449,583,608
Total loans	1,546,803,450	4,449,583,608
<u>Less</u> Deferred revenue	(2,742,080)	(8,585,460)
Total loans net from deferred revenue	1,544,061,370	4,440,998,148
<u>Add</u> Accrued interest receivables	4,973,269	9,938,809
Total loans net from deferred revenue, adding accrued interest receivables	1,549,034,639	4,450,936,957
<u>Less</u> Allowance for doubtful accounts	(22,665,011)	(51,725,844)
Total loans and interest receivables, net	1,526,369,628	4,399,211,113

**9.2 Classified by currencies and domiciles of customers:**

		<b>2016</b>	
	<b>Domestic</b> <b>Baht</b>	<b>Foreign</b> <b>Baht</b>	<b>Total</b> <b>Baht</b>
Thai Baht	1,544,061,370	-	1,544,061,370
Total loans net from deferred revenue	1,544,061,370	-	1,544,061,370
		<b>2015</b>	
	<b>Domestic</b> <b>Baht</b>	<b>Foreign</b> <b>Baht</b>	<b>Total</b> <b>Baht</b>
Thai Baht	2,820,704,696	-	2,820,704,696
US Dollar	1,620,293,452	-	1,620,293,452
Total loans net from deferred revenue	4,440,998,148	-	4,440,998,148

**9 Loans and accrued interest receivables, net (Cont'd)**

**9.3 Classified by types of business and classification:**

	2016					Total Baht
	Normal Baht	Special mentioned Baht	Substandard Baht	Doubtful Baht	Doubtful of loss Baht	
Manufacturing and commerce	1,046,805,490	-	-	-	5,861,295	1,052,666,785
Utilities and services	489,958,509	-	-	-	-	489,958,509
Others	-	-	-	-	1,436,076	1,436,076
Total loans net from deferred revenue	1,536,763,999	-	-	-	7,297,371	1,544,061,370

  

	2015					Total Baht
	Normal Baht	Special mentioned Baht	Substandard Baht	Doubtful Baht	Doubtful of loss Baht	
Manufacturing and commerce	3,759,460,467	-	-	-	5,861,295	3,765,321,762
Utilities and services	674,148,028	-	-	-	-	674,148,028
Others	-	-	-	-	1,528,358	1,528,358
Total loans net from deferred revenue	4,433,608,495	-	-	-	7,389,653	4,440,998,148

**9.4 Classified by classification:**

The Bank has loans net from deferred revenue and accrued interest receivables and the allowance for doubtful accounts which can be classified in accordance with the Bank of Thailand (BOT) guidelines as follows:

Classification	2016			
	Loans net from deferred revenue and accrued interest receivables Baht	Net amount used as a basis for setting allowance for doubtful accounts Baht	Allowance for doubtful accounts Minimum % required according to BOT guidelines	Total allowance Baht
Normal	1,541,737,268	1,536,763,999	1	15,367,640
Doubtful of loss	7,297,371	7,297,371	100	7,297,371
Total	1,549,034,639	1,544,061,370		22,665,011

  

Classification	2015			
	Loans net from deferred revenue and accrued interest receivables Baht	Net amount used as a basis for setting allowance for doubtful accounts Baht	Allowance for doubtful accounts Minimum % required according to BOT guidelines	Total Allowance Baht
Normal	4,443,547,198	4,433,608,494	1	44,336,085
Doubtful of loss	7,389,759	7,389,759	100	7,389,759
Total	4,450,936,957	4,440,998,253		51,725,844



**JPMorgan Chase Bank, N.A. - Bangkok Branch**  
**Notes to the Financial Statements**  
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**10 Allowance for doubtful accounts**

	2016					Total Baht
	Normal Baht	Special mentioned Baht	Substandard Baht	Doubtful Baht	Doubtful of loss Baht	
Balance at the beginning of the year	44,336,085	-	-	-	7,389,759	51,725,844
Allowance for doubtful accounts (Reversal) (Note 34)	(28,968,445)	-	-	-	(92,388)	(29,060,833)
Balance at the end of the year	15,367,640	-	-	-	7,297,371	22,665,011

  

	2015					Total Baht
	Normal Baht	Special mentioned Baht	Substandard Baht	Doubtful Baht	Doubtful of loss Baht	
Balance at the beginning of the year	28,022,272	-	-	-	7,442,561	35,464,833
Allowance for doubtful accounts (Reversal) (Note 34)	16,313,813	-	-	-	(52,802)	16,261,011
Balance at the end of the year	44,336,085	-	-	-	7,389,759	51,725,844

**11 Equipment, net**

	Computer equipment Baht	Office equipment Baht	Furniture and fixture Baht	Motor vehicles Baht	Fixed assets in progress Baht	Total Baht
<b>As at 1 January 2015</b>						
Cost	90,411,985	40,506,510	27,078,939	48,000	776,487	158,821,921
<u>Less</u> Accumulated depreciation	(78,439,798)	(31,796,014)	(20,151,076)	(47,999)	-	(130,434,887)
Net book value	11,972,187	8,710,496	6,927,863	1	776,487	28,387,034
<b>For the year ended 31 December 2015</b>						
Opening net book value	11,972,187	8,710,496	6,927,863	1	776,487	28,387,034
Additions	9,161,869	4,890,973	5,300,917	-	981,355	20,335,114
Transfer of assets	757,187	-	-	-	(757,187)	-
Write off, net	(158,841)	(4,645)	(232,838)	-	(19,300)	(415,624)
Depreciation charge	(10,138,634)	(3,223,512)	(1,493,169)	-	-	(14,855,315)
Closing net book value	11,593,768	10,373,312	10,502,773	1	981,355	33,451,209
<b>As at 31 December 2015</b>						
Cost	87,688,312	37,017,425	27,898,431	48,000	981,355	153,633,523
<u>Less</u> Accumulated depreciation	(76,094,544)	(26,644,113)	(17,395,658)	(47,999)	-	(120,182,314)
Net book value	11,593,768	10,373,312	10,502,773	1	981,355	33,451,209
<b>For the year ended 31 December 2016</b>						
Opening net book value	11,593,768	10,373,312	10,502,773	1	981,355	33,451,209
Additions	2,477,278	3,437,330	119,653	-	-	6,034,261
Transfer of assets	339,355	642,000	-	-	(981,355)	-
Write off, net	(29,911)	(7,438)	-	(1)	-	(37,350)
Depreciation charge	(7,088,168)	(4,144,082)	(1,815,120)	-	-	(13,047,370)
Closing net book value	7,292,322	10,301,122	8,807,306	-	-	26,400,750
<b>As at 31 December 2016</b>						
Cost	76,598,178	41,085,200	28,018,084	-	-	145,701,463
<u>Less</u> Accumulated depreciation	(69,305,856)	(30,784,078)	(19,210,778)	-	-	(119,300,713)
Net book value	7,292,322	10,301,122	8,807,306	-	-	26,400,750

**12 Intangible assets, net**

	<b>Computer software Baht</b>	<b>Total Baht</b>
<b>As at 1 January 2015</b>		
Cost	5,022,940	5,022,940
<u>Less</u> Accumulated amortisation	(4,587,288)	(4,587,288)
Net book value	<u>435,652</u>	<u>435,652</u>
<b>For the year ended 31 December 2015</b>		
Opening net book value	435,652	435,652
Additions	4,256,011	4,256,011
Amortisation charge	(852,680)	(852,680)
Closing net book value	<u>3,838,983</u>	<u>3,838,983</u>
<b>As at 31 December 2015</b>		
Cost	9,278,951	9,278,951
<u>Less</u> Accumulated amortisation	(5,439,968)	(5,439,968)
Net book value	<u>3,838,983</u>	<u>3,838,983</u>
<b>For the year ended 31 December 2016</b>		
Opening net book value	3,838,983	3,838,983
Write off, net	(6,681)	(6,681)
Amortisation charge	(1,549,943)	(1,549,943)
Closing net book value	<u>2,282,359</u>	<u>2,282,359</u>
<b>As at 31 December 2016</b>		
Cost	9,232,810	9,232,810
<u>Less</u> Accumulated amortisation	(6,950,451)	(6,950,451)
Net book value	<u>2,282,359</u>	<u>2,282,359</u>

**13 Other assets, net**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Leasehold right and leasehold improvement, net	46,872,258	57,160,293
Accrued interest receivables	61,923,598	16,534,663
Prepaid expenses	3,989,694	3,692,834
Other receivables	14,032,462	6,993,141
Total other assets, net	<u>126,818,012</u>	<u>84,380,931</u>
The amortisation cost of leasehold right and depreciation of leasehold improvement for the year	<u>10,288,035</u>	<u>11,580,932</u>

## 14 Deposits

### 14.1 Classified by types of deposits:

	2016 Baht	2015 Baht
On demand	5,794,659,611	4,059,311,138
Savings	4,210,526,352	5,492,156,498
Fixed	325,000,000	78,000,000
Total deposits	10,330,185,963	9,629,467,636

### 14.2 Classified by currencies and domiciles of depositors:

	2016		
	Domestic Baht	Foreign Baht	Total Baht
Thai Baht	6,586,226,449	102,913,660	6,689,140,109
US Dollar	3,614,873,945	5,010,771	3,619,884,716
Euro	21,161,138	-	21,161,138
Total deposits	10,222,261,532	107,924,431	10,330,185,963

	2015		
	Domestic Baht	Foreign Baht	Total Baht
Thai Baht	5,429,308,768	390	5,429,309,158
US Dollar	4,186,599,584	275,947	4,186,875,531
Euro	13,282,947	-	13,282,947
Total deposits	9,629,191,299	276,337	9,629,467,636

## 15 Interbank and money market items (liabilities)

	2016		
	Demand Baht	Time Baht	Total Baht
<b>Domestic items</b>			
Other financial institutions	20,837,146	1,300,000,000	1,320,837,146
Total domestic items	20,837,146	1,300,000,000	1,320,837,146
<b>Foreign items</b>			
Thai Baht	2,322,930	-	2,322,930
Total foreign items	2,322,930	-	2,322,930
Total interbank and money market items	23,160,076	1,300,000,000	1,323,160,076

**15 Interbank and money market items (liabilities) (Cont'd)**

	<b>2015</b>		
	<b>Demand Baht</b>	<b>Time Baht</b>	<b>Total Baht</b>
<b>Domestic items</b>			
Other financial institutions	36,150,649	5,150,000,000	5,186,150,649
Total domestic items	36,150,649	5,150,000,000	5,186,150,649
<b>Foreign items</b>			
Thai Baht	296,832	-	296,832
Total foreign items	296,832	-	296,832
Total interbank and money market items	36,447,481	5,150,000,000	5,186,447,481

**16 Financial liabilities designated at fair value through profit or loss**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Bill of exchange	17,861,102,881	14,420,179,629
Total financial liabilities designated at fair value through profit or loss	17,861,102,881	14,420,179,629

**Proportion of transactions being classified by type of counterparties**

	<b>2016 Percentage</b>	<b>2015 Percentage</b>
Financial institutions	100	100
Total proportion of transactions being classified by type of counterparties	100	100

**Changes in fair value due to credit risks**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Balance of unrealised gain at beginning of the year	183,623,964	622,512,631
Decrease during the year	(686,663,969)	(507,767,679)
Translation adjustment	509,322,201	68,879,012
Balance unrealised gain (loss) at end of the year	6,282,196	183,623,964

**17 Deferred income tax**

The analysis of deferred tax assets and liabilities is as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
Deferred tax assets:		
Deferred tax asset to be recovered within 12 months	584,283	309,101
Deferred tax asset to be recovered after more than 12 months	197,032,927	166,461,006
	<u>197,617,210</u>	<u>166,770,107</u>
Deferred tax liabilities:		
Deferred tax liabilities to be settled within 12 months	(13,982,262)	(14,066,596)
Deferred tax liability to be settled after more than 12 months	-	(37,377,181)
	<u>(13,982,262)</u>	<u>(51,443,777)</u>
Deferred tax assets (liabilities) (net)	<u>183,634,948</u>	<u>115,326,330</u>

The gross movement and the deferred income tax account is as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
As at 1 January	115,326,330	(35,411,884)
Credited to profit or loss	66,926,090	151,831,370
Tax (debited) credited in other comprehensive income	1,382,528	(1,093,156)
As at 31 December	<u>183,634,948</u>	<u>115,326,330</u>

17 Deferred income tax (Cont'd)

The movement in deferred tax assets and liabilities during the year is as follows:

	Derivative liabilities from option sold premium Baht	Provision for employee benefits Baht	Provision for restricted stock units Baht	Losses on changes in fair value of available-for- sale securities Baht	Provision for derivatives Baht	Losses from change in fair value of financial liabilities under fair value option Baht	Others Baht	Total Baht
<b>Deferred tax assets</b>								
As at 1 January 2016	288,708	10,577,152	3,530,719	20,393	150,502,566	-	1,850,569	166,770,107
Charged to profit and loss	128,247	1,545,388	233,404	-	28,252,456	355,616	185,057	30,700,168
Recognised in other comprehensive income	-	-	-	146,935	-	-	-	146,935
As at 31 December 2016	416,955	12,122,540	3,764,123	167,328	178,755,022	355,616	2,035,626	197,617,210
<b>Deferred tax assets</b>								
As at 1 January 2015	263,704	8,778,134	3,356,611	24,307	96,374,551	-	1,942,573	110,739,880
Charged (credited) to profit and loss	25,004	2,481,634	174,108	-	54,128,015	-	(92,004)	56,716,757
Recognised in other comprehensive income	-	(682,616)	-	(3,914)	-	-	-	(686,530)
As at 31 December 2015	288,708	10,577,152	3,530,719	20,393	150,502,566	-	1,850,569	166,770,107

**JPMorgan Chase Bank, N.A. - Bangkok Branch**  
**Notes to the Financial Statements**  
**For the year ended 31 December 2016**

**17 Deferred income tax (Cont'd)**

**Deferred tax liabilities**  
**As at 1 January 2016**  
Charged (credited) to profit and loss  
Recognised in other comprehensive income  
  
**As at 31 December 2016**

**Deferred tax liabilities**  
**As at 1 January 2015**  
Charged (credited) to profit and loss  
Recognised in other comprehensive income  
  
**As at 31 December 2015**

Gain on changes in fair value of trading securities Baht	Gain on changes in fair value of available-for- sale securities Baht	Derivative assets for option purchased premium Baht	Gain from change in fair value of financial liabilities under fair value option Baht	Total Baht
13,351,590	1,235,593	131,800	36,724,794	51,443,777
(6,950,194)	-	7,449,066	(36,724,794)	(36,225,922)
-	(1,235,593)	-	-	(1,235,593)
6,401,396	-	7,580,866	-	13,982,262
20,820,270	828,967	-	124,502,527	146,151,764
(7,468,680)	-	131,800	(87,777,733)	(95,114,613)
-	406,626	-	-	406,626
13,351,590	1,235,593	131,800	36,724,794	51,443,777

**18 Other liabilities**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Accrued interest payable	1,833,352	1,133,448,815
Accrued bonuses	60,522,507	55,391,445
Accrued FIDF charges	45,712,192	45,068,187
Cash received in advance from forward contracts	112,683,181	231,860,596
Income tax payable	56,463,701	84,184,877
Withholding tax payable	42,104,350	47,373,765
Others	100,126,565	61,691,773
Total other liabilities	<u>419,445,848</u>	<u>1,659,019,458</u>

**19 Provision for employment benefits plan**

Provision for post-employment benefits is for employees with more than 120 days of service and who resign in accordance with the rules and conditions stipulated under the labour laws applicable in Thailand and for long service awards.

As at 31 December 2016 and 2015, the post-employment benefits provided unfunded obligation as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
Present value of obligations	57,682,597	50,393,381
Provision for long service award	2,930,104	2,492,382
Total provision for employee benefits plan	<u>60,612,701</u>	<u>52,885,763</u>

Movements of provision for post-employment benefits are as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
As at 1 January	50,393,381	41,548,395
Current service costs	14,847,070	11,113,003
Interest costs	1,662,980	1,810,064
Remeasurements:		
Actuarial (gains) losses		
- Demographic assumptions	-	(3,306,323)
- Financial assumptions	-	7,172,654
- Experience (gains)/loss	-	(7,077,741)
<u>Less</u> Benefits paid for the year	<u>(9,220,834)</u>	<u>(866,671)</u>
As at 31 December	<u>57,682,597</u>	<u>50,393,381</u>



**19 Provision for post-employment benefits (Cont'd)**

Expenses for post-employment benefits were recognised in the statement of profit or loss and other comprehensive income as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
Current service costs	14,847,070	11,113,003
Interest costs	1,662,980	1,810,064
Remeasurements	-	(3,211,410)
<b>Total</b>	<b>16,510,050</b>	<b>9,711,657</b>

Significant assumptions used in the actuarial calculation are summarised as follows:

	<b>2016</b>	<b>2015</b>
Discount rate	3.30%	3.30%
Salary increase rate	11%	11%
Pre-retirement mortality rate	100% of Thai Mortality Ordinary Table 2008	100% of Thai Mortality Ordinary Table 2008
Disability rate	5% of Thai Mortality Ordinary Table 2008	5% of Thai Mortality Ordinary Table 2008
Pre-retirement withdrawal rate	From 5 years historical data	From 5 years historical data
Retirement age	60 years old	60 years old
Turnover rate	9%	9%

Sensitivity analysis on key assumptions changes are as follows:

	<b>Increase (Decrease) 2016 Baht</b>	<b>2015 Baht</b>
Discount rate		
Increase 1%	(8,234,193)	(6,492,688)
Decrease 1%	9,721,652	7,707,795
Salary rate		
Increase 1%	9,868,782	7,269,718
Decrease 1%	(8,517,209)	(6,289,974)
Turnover rate		
Increase 1%	(33,875,929)	(26,461,747)
Decrease 1%	27,262,349	22,967,508

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the provision for post-employment benefits recognised within the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

**19 Provision for post-employment benefits (Cont'd)**

Maturity profile of post-employment benefits is as follows:

	<b>2016</b>	<b>2015</b>
Maturity duration of the post-employment benefits (Years)	20.31	21.44
Maturity analysis of benefits to be paid		
Less than 1 year (Baht)	-	-
Between 1 - 2 years (Baht)	7,145,910	2,656,915
Between 2 - 5 years (Baht)	1,503,586,907	1,487,272,364
Over 5 years (Baht)	-	-

**20 Provident fund**

The Bank established a contributory registered provident fund in accordance with the Provident Fund Act B.E. 2530, which contributions are made by both the employees and the Bank. For the year ended 31 December 2016, the Bank contributed Baht 11.7 million (31 December 2015: Baht 11.6 million).

**21 Provision for share based payment**

The restricted stock units of the ultimate parent company, JPMorgan Chase & Co., will be awarded at no cost to employees who are eligible according to the group entity's regulations, upon their grant. The awards are measured at their grant dates based on their fair value. This amount is recognised as an expense evenly over the vesting periods and the head office's equity and balances with other branches under the same entity is treated as a capital contribution. The exercise price of the granted shares is lower of the market price of the shares on the date of grant or the vesting date. The restricted stock units are generally granted annually and can be vested for 50% of granted amount after two years and for another 50% of granted amount after three years. The restricted stock units are converted into shares of JPMorgan Chase & Co. at the vesting date. The employees are able to continue their vesting upon voluntary employment termination, which would be based on the age and year of service requirements. Before vesting, the restricted stock units entitle the recipient to receive cash payments equivalent to dividend paid on the underlying common stocks during the period the restricted stock units are outstanding. However, all of these awards are subject to forfeiture until the vesting date and they contain clawback provisions that may result in cancellation prior to vesting under certain specified circumstances.

**21 Provision for share based payment (Cont'd)**

The movements in the number of outstanding shares and their related weighted average share prices at the grant dates are as follows:

	<b>Average price Baht per share</b>	<b>Average price USD per share</b>	<b>Number of awards</b>
<b>As at 1 January 2016</b>	1,963.20	54.40	9,746
Granted during the year	2,050.95	57.24	4,412
Exercised during the year	2,114.73	59.02	(4,872)
Transferred during the year	2,055.61	57.37	560
<b>As at 31 December 2016</b>	<b>2,055.61</b>	<b>57.37</b>	<b>9,846</b>
<b>As at 1 January 2015</b>	1,583.42	48.04	13,833
Granted during the year	2,017.59	55.91	3,811
Exercised during the year	2,130.49	59.04	(6,068)
Cancelled during the year	1,975.19	54.73	(1,830)
<b>As at 31 December 2015</b>	<b>1,963.20</b>	<b>54.40</b>	<b>9,746</b>

For the year ended 31 December 2016, the total share based payment expense recognised during the year amounting to Baht 6.3 million (31 December 2015: Baht 3.6 million).

**22 Capital funds**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Assets maintained in accordance with Section 32	9,662,837,715	9,666,804,387
Total funds for maintaining assets in accordance with Section 32 and net balance of inter-office accounts		
Funds for maintaining assets in accordance with Section 32	9,494,909,666	9,494,909,666
Net inter-office balance which branch is debtor of the head office, others branches and subsidiary	698,012,051	704,494,402
<b>Total</b>	<b>10,192,921,717</b>	<b>10,199,404,068</b>
Total fund are remitted into Thailand for maintaining assets under section 32	9,494,909,666	9,494,909,666
Total deductions that the Bank of Thailand requires to deduct from capital	(2,282,359)	(3,838,983)
<b>Capital funds</b>	<b>9,492,627,307</b>	<b>9,491,070,683</b>
Total capital funds to risk weighted assets ratio (%)	15.64	14.75

The Bank will disclose capital maintenance information as at 31 December 2016 in accordance with the notification of the Bank of Thailand Re: Public Disclosure of Capital Maintenance Information for Commercial Banks on its website at [www.th.jpmorgan.com](http://www.th.jpmorgan.com) within April 2017.

## **23 Assets pledged as collateral**

The Bank has investments in government securities which are pledged as collaterals for structured bills of exchange. The book values of such securities as at 31 December 2016 amounted to Baht 6,376,096,623 (31 December 2015: Baht 4,262,808,523).

## **24 Commitments**

As at 31 December 2016 and 2015, the Bank has the following commitments (excluding derivatives in Note 7) which were incurred in the normal course of business as follows:

	<b>2016</b>		
	<b>Thai Baht Baht</b>	<b>Foreign currencies Baht</b>	<b>Total Baht</b>
Guarantees	91,834,327	338,578,329	430,412,656
Unused overdraft credit line	680,000,000	-	680,000,000
Unused credit facilities	-	2,615,637,450	2,615,637,450
<b>Total commitments</b>	<b>771,834,327</b>	<b>2,954,215,779</b>	<b>3,726,050,106</b>

  

	<b>2015</b>		
	<b>Thai Baht Baht</b>	<b>Foreign currencies Baht</b>	<b>Total Baht</b>
Letter of Credit	-	2,242,333,504	2,242,333,504
Guarantees	123,700,540	663,084,988	786,785,528
Unused overdraft credit line	719,000,000	-	719,000,000
Unused credit facilities	-	541,328,250	541,328,250
<b>Total commitments</b>	<b>842,700,540</b>	<b>3,446,746,742</b>	<b>4,289,447,282</b>

The management anticipates no material losses as a result of these transactions.

## **25 Related party transactions**

The significant related party transactions are transacted with the Group companies of JPMorgan Chase.

The ultimate parent company is JPMorgan Chase & Co., a company incorporated in the United States of America. JPMorgan Chase Bank, N.A. is a wholly-owned subsidiary of JPMorgan Chase & Co.

### **Relationships of related parties**

#### **Head Office**

- JPMorgan Chase & Co.
- JPMorgan Chase Bank, N.A.

#### **Other Branches**

- J.P. Morgan Chase Bank Berhad
- JPMorgan Chase Bank, N.A. - London Branch
- JPMorgan Chase Bank, N.A. - Sydney Branch
- JPMorgan Chase Bank, N.A. - Tokyo Branch
- JPMorgan Chase Bank, N.A. - Hong Kong Branch
- JPMorgan Chase Bank, N.A. - Singapore Branch
- JPMorgan Chase Bank, N.A. - Jakarta Branch
- JPMorgan Chase Bank, N.A. - Manila Branch

#### **Fellow subsidiaries**

- J.P. Morgan (S.E.A.) Limited
- J.P. Morgan A.G.
- J.P. Morgan International Finance Limited
- J.P. Morgan Securities (Asia Pacific) Limited
- J.P. Morgan Securities (Thailand) Limited
- J.P. Morgan Ventures Energy Corporation
- J.P. Morgan Securities Plc - Paris Branch
- J.P. Morgan Australia Ltd.
- J.P. Morgan Overseas Capital Corporation
- J.P. Morgan Securities Plc. - Frankfurt Branch
- J.P. Morgan Securities Asia Private Limited
- J.P. Morgan Securities LLC
- J.P. Morgan Securities Plc
- JPMorgan Securities Japan Co., Ltd.
- J.P. Morgan Treasury Technology Corporation
- J.P. Morgan Europe Limited
- J.P. Morgan Securities Plc - Zurich Branch

**25 Related party transactions (Cont'd)**

The significant related party transactions, outstanding balances as of 31 December 2016 and 2015 and income and expenses for the years then ended 31 December 2016 and 2015 consisted of the followings:

	<b>2016</b>	<b>2015</b>
	<b>Million Baht</b>	<b>Million Baht</b>
<b>Statements of financial position</b>		
Interbank and money market items, net (assets)		
J.P. Morgan, A.G.	46	25
Interbank and money market items (liabilities)		
J.P. Morgan Securities (Thailand) Ltd.	1,321	1,387
Provision for share based payment		
J.P. Morgan Chase & Co	19	18
Net balance of inter-office accounts with Head Office and other branches under the same entity		
JPMorgan Chase Bank, N.A.	(752)	(718)
Other Branches	54	13
<b>Off statement of financial position with Head office, Other branches and Fellow subsidiaries</b>		
Commitments	385,378	359,906
<b>Statements of profit or loss and other comprehensive income with Head office, Other branches and Fellow subsidiaries</b>		
Interest expense	21	18
Fees and service incomes	13	11
Other operating income	332	162
Employee expenses	6	4
Fees and services expenses and other expenses	458	494

Transactions between the Bank and related parties had been priced at and contain similar conditions with the Bank's general customers and conformed to normal course of banking business practice.

**26 Important position and performance classified by type of domestic or foreign transactions**

**26.1 Position classified by type of transaction**

	2016			2015		
	Domestic Million Baht	Foreign Million Baht	Total Million Baht	Domestic Million Baht	Foreign Million Baht	Total Million Baht
Total assets	58,924	-	58,924	67,954	-	67,954
Interbank and money market items, net (assets)	6,737	-	6,737	4,675	-	4,675
Investments, net	29,641	-	29,641	33,547	-	33,547
Loans and accrued interest receivables, net	1,526	-	1,526	4,399	-	4,399
Deposits	10,330	-	10,330	9,629	-	9,629
Interbank and money market items (liabilities)	1,323	-	1,323	5,186	-	5,186
Financial liabilities designated at fair value through profit or loss	17,861	-	17,861	14,420	-	14,420

**26.2 Performance classified by types of transaction**

	2016			2015		
	Domestic Million Baht	Foreign Million Baht	Total Million Baht	Domestic Million Baht	Foreign Million Baht	Total Million Baht
Interest income	851	-	851	931	-	931
Interest expense	(313)	-	(313)	(447)	-	(447)
Net interest income	538	-	538	484	-	484
Net fee and service income	18	-	18	24	-	24
Other operating incomes	347	-	347	350	-	350
Other operating expenses	(992)	-	(992)	(990)	-	(990)
Profit (loss) before income tax	(89)	-	(89)	(132)	-	(132)

**27 Interest income**

	2016 Baht	2015 Baht
Interbank and money market items, net (assets)	129,270,280	120,715,255
Investments and trading transactions	375,330,121	350,947,879
Investments in debt securities, available-for-sales	269,292,461	356,223,774
Loans	76,749,718	103,359,646
Total interest income	850,642,580	931,246,554

**28 Interest expense**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Deposits	24,141,208	105,085,964
Interbank and money market items (liabilities)	200,005,837	241,167,251
Contribution fee to the Deposit Protection Agency and Financial Institution Development Fund	88,248,498	100,065,010
Others	1,136,275	1,311,455
Total interest expense	<u>313,531,818</u>	<u>447,629,680</u>

**29 Fee and service income**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Money transfer and collection services	11,134,121	11,116,364
Fee relating to letter of credit	330,943	4,358,862
Service fees from related companies	13,400,044	11,131,018
Fee relating to import bill collection	287,046	1,763,670
Others	4,064,074	5,565,839
Total fee and service income	<u>29,216,228</u>	<u>33,935,753</u>

**30 Gains on trading and foreign exchange transactions**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Gains on foreign currencies and foreign exchange rate derivatives	238,934,142	547,803,908
Gains on interest rate derivatives	40,348,645	225,385,118
Gains (losses) on debt securities	(163,260,257)	11,306,882
Others	1,264,142,340	(102,429,153)
Total gains on trading and foreign exchange transactions	<u>1,380,164,870</u>	<u>682,066,755</u>

**31 Losses from financial liabilities designated at fair value through profit or loss**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Changes in fair value of:		
Bill of exchange	(1,080,039,170)	(212,318,409)
Losses on redemption and interest expense paid	(279,323,628)	(286,623,655)
Total losses from financial liabilities designated at fair value through profit or loss	<u>(1,359,362,798)</u>	<u>(498,942,064)</u>

Changes in fair value include changes in fair value due to credit risks are as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
Charges in fair value due to change in credit risks	(686,663,969)	(507,767,679)



**32 Other operating income**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Revenue sharing from related parties	326,339,189	162,301,155
Others	113,708	4,426,376
Total other operating income	<u>326,452,897</u>	<u>166,727,531</u>

**33 Other expenses**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Service fees to related companies	457,710,746	493,719,797
Brokerage commissions	13,554,307	20,179,347
Others	66,057,668	64,732,935
Total other expenses	<u>537,322,721</u>	<u>578,632,079</u>

**34 Bad debt and doubtful accounts**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Interbank and money market items, net	46,000,000	(6,054,017)
Loans (Note 10)	(28,972,764)	16,261,011
Total bad debt and doubtful accounts	<u>17,027,236</u>	<u>10,206,994</u>

**35 Income tax expense**

	<b>2016 Baht</b>	<b>2015 Baht</b>
Current income tax:		
Current income tax on profits for the year	137,421,579	231,503,346
Total current income tax	<u>137,421,579</u>	<u>231,503,346</u>
Deferred income tax:		
Origination and reversal of temporary differences	(66,926,090)	(151,831,370)
Total deferred income taxes	<u>(66,926,090)</u>	<u>(151,831,370)</u>
Total income tax expense	<u>70,495,489</u>	<u>79,671,976</u>

The income tax on profits before tax of the Bank differs from the theoretical amount that would arise using the basic income tax rate of the home country of the Bank as follows:

	<b>2016 Baht</b>	<b>2015 Baht</b>
Loss before tax	(106,128,481)	(132,022,420)
Tax calculated at a tax rate of 20%	(21,225,696)	(26,404,484)
Tax effect of:		
Income not subjected to tax	(98,329)	608,926
Expenses not deductible for tax purpose	91,819,514	105,467,534
Income tax charge	<u>70,495,489</u>	<u>79,671,976</u>

The weighted average applicable income tax rate was 66% (31 December 2015: 60%).

## **36 Financial risk management**

### **Strategy in using financial instruments**

The Bank has developed and implemented comprehensive policies and procedures to identify, mitigate, and monitor risk across the entity, which are based on JPMorgan Chase policies. These practices rely on constant communication, judgment, and knowledge of products and markets by the people closest to them, combined with regular oversight by a central risk management group and senior management.

#### **(a) Credit risk**

Credit risk is the risk of losses resulting from failure by the Bank's counterparties and customers to meet their obligations. The carrying amount of cash, interbank and money market, investments in debts, loans to and accrued interest receivable, accounts receivable from securities trading and commitments represent the maximum exposure of the Bank to credit risk. With respect to derivative financial instruments, the maximum credit exposure of the Bank is represented by the positive fair values, mainly pertaining to derivative transactions with financial institutions, including intercompany balances.

"Know Your Customer" is the key element to credit risk management.

JPMorgan Chase has developed policies and practices that are designed to ensure that credit risks are accurately assessed, properly approved, continuously monitored and actively managed at both the transaction and portfolio levels. The policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies, portfolio-review parameters and problem-loan management.

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

Officers with Credit Approval Authority are expected to understand the credit policies, guidelines and procedures applicable to their responsibilities.

The new business initiative process requires a thorough understanding of the credit risk (and all other forms of risk) inherent in all proposed activities or undertakings. New initiatives will only be introduced after appropriate new control systems are implemented, in accordance with the Bank's New Business Initiative Process.

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.

**36 Financial risk management (Cont'd)**

**(a) Credit risk (Cont'd)**

**1) Derivatives**

The Bank 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 favourable to the Bank (i.e., assets which 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 Bank requires margin deposits from counterparties.

**2) Master netting arrangements**

The Bank 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 statement of financial position assets and liabilities, as transactions are usually settled on a gross basis. However, the credit risk associated with favourable 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 Bank'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 Bank 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 Bank on behalf of a customer authorising a third party to draw the drafts on the Bank up to a stipulated amount under specific terms and conditions are collateralised 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 authorisations to extend credit in the form of loans, guarantees or letters of credit. With respect to credit risk on commitments to extend credit, the Bank is potentially exposed to loss in an amount equal to the total unused commitments. However, the potential loss may be less than the total unused commitments, as most commitments to extend credit are contingent upon customers maintaining specific credit standards. The Bank monitors the term to maturity of credit commitments because longer-term commitments generally have a greater degree of credit risk than shorter-term commitments.

36 Financial risk management (Cont'd)

(b) Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Bank's operations. Sensitivity to interest rates arises from mismatches in the interest rate characteristics of the assets and their corresponding funding liability. One of the major causes of these mismatches is timing differences in the repricing of the assets and liabilities. These mismatches are actively managed by the Branch and its Head Office as part of the overall risk management process which is conducted within internal guidelines and in conjunction with market risk.

As at 31 December 2016 and 2015, financial assets and liabilities classified by type of interest rate were as follows:

Descriptions	2016			
	Floating interest rate Million Baht	Fixed interest rate Million Baht	Non-interest bearing Million Baht	Total Million Baht
<b>Financial assets</b>				
Cash	-	-	1	1
Interbank and money market items, net	70	6,000	667	6,737
Accounts receivable from securities trading	-	-	367	367
Investments, net	-	29,640	-	29,640
Loan and accrued interest receivables	-	1,540	12	1,552
Deferred revenue	-	-	(3)	(3)
Allowance for doubtful account	-	-	(23)	(23)
Other assets	-	-	76	76
<b>Total financial assets</b>	<b>70</b>	<b>37,180</b>	<b>1,097</b>	<b>38,347</b>
<b>Financial liabilities</b>				
Deposits	-	9,621	709	10,330
Interbank and money market items	23	1,300	-	1,323
Accounts payable from securities trading	-	-	504	504
Demand liabilities	-	-	98	98
Other liabilities	-	-	298	298
<b>Total financial liabilities</b>	<b>23</b>	<b>10,921</b>	<b>1,609</b>	<b>12,553</b>
Descriptions	2015			
	Floating interest rate Million Baht	Fixed interest rate Million Baht	Non-interest bearing Million Baht	Total Million Baht
<b>Financial assets</b>				
Cash	-	-	5	5
Interbank and money market items, net	48	4,200	427	4,675
Accounts receivable from securities trading	-	-	23	23
Investments, net	-	33,547	-	33,547
Loan and accrued interest receivables	1,624	2,819	17	4,460
Deferred revenue	-	-	(9)	(9)
Allowance for doubtful account	-	-	(52)	(52)
Other assets	-	-	24	24
<b>Total financial assets</b>	<b>1,672</b>	<b>40,566</b>	<b>435</b>	<b>42,673</b>
<b>Financial liabilities</b>				
Deposits	-	8,998	631	9,629
Interbank and money market items	36	5,150	-	5,186
Accounts payable from securities trading	-	-	1,218	1,218
Demand liabilities	-	-	34	34
Other liabilities	-	-	1,658	1,658
<b>Total financial liabilities</b>	<b>36</b>	<b>14,148</b>	<b>3,541</b>	<b>17,725</b>

**36 Financial risk management (Cont'd)**

**(b) Interest rate risk (Cont'd)**

As at 31 December 2016 and 2015, financial assets and liabilities classified by type of interest rate were as follows: (Cont'd)

Transactions	2016						Total Million Baht
	Repricing or maturity date						
	At call Million Baht	0 - 3 months Million Baht	3 - 12 months Million Baht	1 - 5 years Million Baht	Over 5 years Million Baht	No maturity Million Baht	
<b>Financial assets</b>							
Cash	-	-	-	-	-	1	1
Interbank and money market items, net	797	5,940	-	-	-	-	6,737
Accounts receivable from securities trading	-	-	-	-	-	367	367
Investments, net	-	9,366	13,094	4,230	2,950	-	29,640
Loans and accrued interest receivables	784	264	-	497	-	7	1,552
Deferred revenue	-	-	-	-	-	(3)	(3)
Allowance for doubtful account	-	-	-	-	-	(23)	(23)
Other assets	-	-	-	-	-	76	76
Total financial assets	1,581	15,570	13,094	4,727	2,950	425	38,347
<b>Financial liabilities</b>							
Deposits	9,296	325	-	-	-	709	10,330
Interbank and money market items	23	1,300	-	-	-	-	1,323
Accounts payable from securities trading	-	-	-	-	-	504	504
Demand liabilities	-	-	-	-	-	98	98
Other liabilities	-	-	-	-	-	298	298
Total financial liabilities	9,319	1,625	-	-	-	1,609	12,553

Transactions	2015						Total Million Baht
	Repricing or maturity date						
	At call Million Baht	0 - 3 months Million Baht	3 - 12 months Million Baht	1 - 5 years Million Baht	Over 5 years Million Baht	No maturity Million Baht	
<b>Financial assets</b>							
Cash	-	-	-	-	-	5	5
Interbank and money market items, net	489	4,186	-	-	-	-	4,675
Accounts receivable from securities trading	-	-	-	-	-	23	23
Investments, net	-	18,346	9,724	4,432	1,045	-	33,547
Loans and accrued interest receivables	1,780	361	-	2,312	-	7	4,460
Deferred revenue	-	-	-	-	-	(9)	(9)
Allowance for doubtful account	-	-	-	-	-	(52)	(52)
Other assets	-	-	-	-	-	24	24
Total financial assets	2,269	22,893	9,724	6,744	1,045	(2)	42,673
<b>Financial liabilities</b>							
Deposits	9,551	78	-	-	-	-	9,629
Interbank and money market items	36	1,350	3,800	-	-	-	5,186
Accounts payable from securities trading	-	-	-	-	-	1,218	1,218
Demand liabilities	-	-	-	-	-	34	34
Other liabilities	-	-	-	-	-	1,658	1,658
Total financial liabilities	9,587	1,428	3,800	-	-	2,910	17,725

**36 Financial risk management (Cont'd)**

**(b) Interest rate risk (Cont'd)**

The outstanding balances of loans which have floating interest rates or fixed interest rates include loans on which interest recognition is discontinued (presented before deducting allowance for doubtful account losses).

The average balances of the financial assets and liabilities of the Bank generating revenues and expenses, calculated based on the average balances outstanding during the period, and the average interest rate the years ended 31 December 2016 and 2015, can be summarised as follows:

	2016			2015		
	Average balances Million Baht	Interest and dividend Million Baht	Average rate (%)	Average balances Million Baht	Interest and dividend Million Baht	Average rate (%)
<u>Performing financial assets</u>						
Interbank and money market items, net	9,314	129	1.39	8,844	121	1.37
Investments, net	31,719	645	2.03	33,941	707	2.08
Loans and accrued interest receivables	2,283	77	3.37	3,514	103	2.93
Total	43,316	851		46,229	931	
<u>Performing financial liabilities</u>						
Deposits	11,457	24	0.21	15,984	105	0.66
Interbank and money market items	4,140	200	4.83	4,925	241	4.89
Total	15,597	224		20,909	346	

**36 Financial risk management (Cont'd)**

**(c) Currency risk**

Currency risk is the risk to earnings and value of financial instruments caused by the fluctuations in foreign exchange rates. It is managed in conjunction with market risk.

The Bank manages currency risk within the limit which is approved by the Thailand Risk Committee. In addition, the Bank limits the net foreign currency position of each currency at 15% of the total fund of the Bank, and limits the net foreign currency in aggregate of every currency at 20% of total funds of the Bank. The ratio is complied with the regulation of the Bank of Thailand.

The following table presents a currency analysis for monetary assets and liabilities on statement of financial position as at 31 December 2016 and 2015 as follow:

	2016				
	Baht Million Baht	US Dollar Million Baht	Japanese Yen Million Baht	Others Million Baht	Total Million Baht
Cash	1	-	-	-	1
Interbank and money market items, net	6,667	-	8	62	6,737
Accounts receivable from securities trading	367	-	-	-	367
Financial derivative assets	7,669	12,449	577	13	20,708
Investments, net	29,640	-	-	-	29,640
Loans and accrued interest receivables	1,552	-	-	-	1,552
Deferred revenue	(3)	-	-	-	(3)
Allowance for doubtful account	(23)	-	-	-	(23)
Other assets	68	8	-	-	76
<b>Total assets</b>	<b>45,938</b>	<b>12,457</b>	<b>585</b>	<b>75</b>	<b>59,055</b>
Deposits	6,689	3,620	-	21	10,330
Interbank and money market items	1,323	-	-	-	1,323
Accounts payable from securities trading	504	-	-	-	504
Demand liabilities	98	-	-	-	98
Financial liabilities designated at fair value through profit or loss	17,859	2	-	-	17,861
Financial derivative liabilities	5,370	12,171	713	13	18,267
Other liabilities	95	151	-	52	298
<b>Total liabilities</b>	<b>31,938</b>	<b>15,944</b>	<b>713</b>	<b>86</b>	<b>48,681</b>
Net foreign currency position in the statement of financial position	14,000	(3,487)	(128)	(11)	10,374
Net foreign currency position off-statement of financial position	826,295	644,596	3,576,378	150,166	5,197,435



**36 Financial risk management (Cont'd)**

**(c) Currency risk (Cont'd)**

The following table presents a currency analysis for monetary assets and liabilities on statement of financial position as at 31 December 2015 and 2014 as follow: (Cont'd)

	2015				
	Baht Million Baht	US Dollar Million Baht	Japanese Yen Million Baht	Others Million Baht	Total Million Baht
Cash	5	-	-	-	5
Interbank and money market items, net	4,627	-	5	43	4,675
Accounts receivable from securities trading	23	-	-	-	23
Financial derivative assets	(31,835)	69,007	3,586	(15,690)	25,068
Investments, net	33,547	-	-	-	33,547
Loans and accrued interest receivables	2,833	1,627	-	-	4,460
Deferred revenue	(5)	(4)	-	-	(9)
Allowance for doubtful account	(36)	(16)	-	-	(52)
Other assets	23	1	-	-	24
<b>Total assets</b>	<b>9,182</b>	<b>70,615</b>	<b>3,591</b>	<b>(15,647)</b>	<b>67,741</b>
Deposits	5,429	4,187	-	13	9,629
Interbank and money market items	5,186	-	-	-	5,186
Accounts payable from securities trading	1,218	-	-	-	1,218
Demand liabilities	34	-	-	-	34
Financial liabilities designated at fair value through profit or loss	14,604	(184)	-	-	14,420
Financial derivative liabilities	(44,104)	81,317	3,585	(15,690)	25,108
Other liabilities	1,380	275	-	3	1,658
<b>Total liabilities</b>	<b>(16,253)</b>	<b>85,595</b>	<b>3,585</b>	<b>(15,674)</b>	<b>57,253</b>
<b>Net foreign currency position in the statement of financial position</b>	<b>25,435</b>	<b>(14,980)</b>	<b>6</b>	<b>27</b>	<b>10,488</b>
<b>Net foreign currency position off-statement of financial position</b>	<b>985,913</b>	<b>614,436</b>	<b>21,204</b>	<b>32,482</b>	<b>1,654,035</b>

**(d) Liquidity risk**

Liquidity risk is the risk that a firm, although solvent, either does not have available sufficient financial resources to enable it to meet its obligations as they fall due, or can secure such resources only at excessive cost. The Bank's liquidity management framework is intended to maximise liquidity access and minimise funding costs. Management uses a variety of measures to mitigate liquidity and related risks, taking into consideration market conditions, funding needs and the profile of the location's liability base.

Treasury is responsible for day to day oversight and management of the liquidity of the Bank, and for ensuring compliance with regulations and the liquidity risk management policy. It is responsible for monitoring, managing and reporting the liquidity risk profile for the Bank. It formulates the location's liquidity strategies, including contingency planning; monitors cash flow requirements to determine potential funding gaps; maintains ongoing interaction with lines of business to track funding and business trends; and through all of the above seeks to avoid funding stress through early detection of liquidity issues.

36 Financial risk management (Cont'd)

(d) Liquidity risk (Cont'd)

The liquidity management framework has well-defined roles and responsibilities. Daily liquidity risk management tools are used by local Treasury traders to monitor the liquidity profile of the Bank. Funding limits and guidelines have been established, which in conjunction with the monthly liquidity stress tests provide assurance that sufficient funding is available even during periods of market stress.

The following table presents a maturity analysis for monetary assets and liabilities on statement of financial position as at 31 December 2016 and 2015.

	2016						
	At call Million Baht	Within 3 months Million Baht	3 to 12 months Million Baht	1 to 5 years Million Baht	Over 5 years Million Baht	No maturity Million Baht	Total Million Baht
Cash	1	-	-	-	-	-	1
Interbank and money market items, net	797	5,940	-	-	-	-	6,737
Accounts receivable from securities trading	-	367	-	-	-	-	367
Financial derivative assets	-	2,517	2,494	6,673	9,024	-	20,708
Investments, net	-	9,366	13,094	4,230	2,950	-	29,640
Loans and accrued interest receivables	784	264	-	497	-	7	1,552
Deferred revenue	-	(1)	-	(2)	-	-	(3)
Allowance for doubtful accounts	(8)	(3)	-	(5)	-	(7)	(23)
Other monetary assets	-	60	16	-	-	-	76
<b>Total assets</b>	<b>1,574</b>	<b>18,510</b>	<b>15,604</b>	<b>11,393</b>	<b>11,974</b>	<b>-</b>	<b>59,055</b>
Deposits	10,005	325	-	-	-	-	10,330
Interbank and money market items	23	1,300	-	-	-	-	1,323
Accounts payable from securities trading	-	504	-	-	-	-	504
Demand liabilities	98	-	-	-	-	-	98
Financial liabilities designated at fair value through profit or loss	-	-	-	3,280	14,581	-	17,861
Financial derivative liabilities	-	3,004	2,184	7,460	5,619	-	18,267
Other monetary liabilities	-	298	-	-	-	-	298
<b>Total liabilities</b>	<b>10,126</b>	<b>5,431</b>	<b>2,184</b>	<b>10,740</b>	<b>20,200</b>	<b>-</b>	<b>48,681</b>
<b>Liquidity, net</b>	<b>(8,552)</b>	<b>13,079</b>	<b>13,420</b>	<b>653</b>	<b>(8,226)</b>	<b>-</b>	<b>10,374</b>

**36 Financial risk management (Cont'd)**

**(d) Liquidity risk (Cont'd)**

The following table presents a maturity analysis for monetary assets and liabilities on statement of financial position as at 31 December 2016 and 2015. (Cont'd)

	2015						
	At call Million Baht	Within 3 months Million Baht	3 to 12 months Million Baht	1 to 5 years Million Baht	Over 5 years Million Baht	No maturity Million Baht	Total Million Baht
Cash	5	-	-	-	-	-	5
Interbank and money market items, net	489	4,186	-	-	-	-	4,675
Accounts receivable from securities trading	-	23	-	-	-	-	23
Financial derivative assets	-	3,210	5,027	7,944	8,887	-	25,068
Investments, net	-	18,346	9,724	4,432	1,045	-	33,547
Loans and accrued interest receivables	1,780	361	-	2,312	-	7	4,460
Deferred revenue	-	(1)	-	(8)	-	-	(9)
Allowance for doubtful accounts	(18)	(4)	-	(23)	-	(7)	(52)
Other monetary assets	-	11	13	-	-	-	24
Total assets	2,256	26,132	14,764	14,657	9,932	-	67,741
Deposits	9,551	78	-	-	-	-	9,629
Interbank and money market items	36	1,350	3,800	-	-	-	5,186
Accounts payable from securities trading	-	1,218	-	-	-	-	1,218
Demand liabilities	34	-	-	-	-	-	34
Financial liabilities designated at fair value through profit or loss	-	-	-	1,934	12,486	-	14,420
Financial derivative liabilities	-	4,480	5,581	8,910	6,137	-	25,108
Other monetary liabilities	-	431	1,216	-	-	11	1,658
Total liabilities	9,621	7,557	10,597	10,844	18,623	11	57,253
Liquidity, net	(7,365)	18,575	4,167	3,813	(8,691)	(11)	10,488

The table above classified monetary assets and liabilities of the Bank into relevant maturity groupings based on the remaining period at statement of financial position date to the contractual maturity date. It is unusual for banks to have completely matched maturities since business transactions are often of uncertain terms and of different types. In addition, the Bank obtains a large proportion of domestic funding from customer deposits, interbank and money market item and financial liabilities under fair value option, and foreign funding from Head Office and other branches abroad. The Bank has demonstrated that a substantial level of such funding provides a stable source of long term funding for the Bank.

### 37 Management benefits

	2016 Baht	2015 Baht
Short-term employee benefits	106,618,838	94,336,075
Post-employment benefits	7,051,007	4,906,937
Share based payment	5,727,192	4,137,840

### 38 Long-term lease agreement

The Bank has signed a 30 years lease agreement for the office space. The termination date of the lease agreement is 31 July 2023. The lump-sum rental fee was paid when the contract was signed. The amortisation of the prepaid amount to rental expense is approximately Baht 405,176 per month. The Bank has the right to transfer the leasehold right or to sub-lease the office space, either all or partial, to the third parties without a prior written consent from the lessor. When the lease agreement is terminated under any circumstances, the Bank is obligated to remove all assets and to restore the office to proper conditions at its own expense within 60 days.

### 39 Fair value

#### 39.1 Fair value measurement

The fair value of the financial instruments are defined into the following three different levels by valuation method as follows:

1. Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1).
2. Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (Level 2).
3. Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (Level 3).

The financial assets and liabilities that are measured at fair value by different level of valuation method at 31 December 2016 and 2015 as follows:

	Book value Million Baht	2016 Fair value			Total Million Baht
		Level 1 Million Baht	Level 2 Million Baht	Level 3 Million Baht	
<b>Assets</b>					
Financial derivatives assets	20,708	-	20,708	-	20,708
Investment, net	29,640	-	29,640	-	29,640
<b>Total assets</b>	<b>50,348</b>	<b>-</b>	<b>50,348</b>	<b>-</b>	<b>50,348</b>
<b>Liabilities</b>					
Financial liabilities designated at fair value through profit or loss	17,861	-	-	17,861	17,861
Financial derivatives liabilities	18,267	-	18,267	-	18,267
<b>Total liabilities</b>	<b>36,128</b>	<b>-</b>	<b>18,267</b>	<b>17,861</b>	<b>36,128</b>

**39 Fair value (Cont'd)**

**39.1 Fair value measurement (Cont'd)**

The financial assets and liabilities that are measured at fair value by different level of valuation method at 31 December 2016 and 2015 as follows: (Cont'd)

	Book value Million Baht	2015 Fair value			Total Million Baht
		Level 1 Million Baht	Level 2 Million Baht	Level 3 Million Baht	
<b>Assets</b>					
Financial derivatives assets	25,068	1	25,067	-	25,068
Investment, net	33,547	-	33,547	-	33,547
<b>Total assets</b>	<b>58,615</b>	<b>1</b>	<b>58,614</b>	<b>-</b>	<b>58,615</b>
<b>Liabilities</b>					
Financial liabilities designated at fair value through profit or loss	14,420	-	-	14,420	14,420
Financial derivatives liabilities	251,08	1	25,107	-	25,108
<b>Total liabilities</b>	<b>39,528</b>	<b>1</b>	<b>25,107</b>	<b>14,420</b>	<b>39,528</b>

There were no transfers between Levels 1 and 2 during the year.

**39.2 Valuation techniques used to derive level 2 and 3 fair values**

**Derivatives**

Derivatives that are valued using models such as the Black-Scholes option pricing model, simulation models or a combination of models, that use observables or unobservable valuation inputs.

Input include:

- Contractual terms including the period to maturity
- Readily observable parameters including interest rates and volatility
- Credit quality of the counterparty and of the Bank
- Market funding levels
- Correlation levels

In addition, the following specific inputs are used for the following derivatives that are valued based on models with significant unobservable inputs:

Structured credit derivatives, specific inputs include:

- CDS spreads and recovery rates
- Credit correlation between the underlying debt instruments
- Actual transactions, where available, are used to regularly recalibrate unobservable parameters

### 39 Fair value (Cont'd)

#### 39.2 Valuation techniques used to derive level 2 and 3 fair values (Cont'd)

Derivatives related to interest rate and exchange rate which are complexed, specific inputs include:

- Interest rate correlation
- Volatility of interest rate spread
- Exchange rate correlation
- Correlation between interest rate and exchange rate
- Parameters explaining the reference interest rate

Commodity derivatives, specific inputs include:

- Commodity volatility
- Forward commodity price

Additionally, adjustments are made to reflect counterparty credit quality (credit valuation adjustments or "CVA") and funding valuation adjustment ("FVA") to incorporate the impact of funding.

Debt investments are fair valued using a discounted cash flow approach, which discounts the contractual cash flows using discount rates derived from observable market prices of other quoted debt instruments of the counterparties.

#### Investments

Fair value of trading and available-for-sale debt securities are calculated using the last quoted bid price or using the discounted cash flow by reference to the risk-free yield curve adjusted by an appropriate risk premium.

#### 39.3 Fair value measurements using significant unobservable inputs (Level 3)

	<b>Financial liabilities designated at fair value</b>	
	<b>2016 Million Baht</b>	<b>2015 Million Baht</b>
As at 1 January	14,420	10,447
Total realised/unrealised gain (losses) recognised in profit and loss	1,081	212
New issuance	2,660	3,930
Settlement	(300)	(100)
Translation adjustment	-	(69)
As at 31 December	<b>17,861</b>	<b>14,420</b>

The ranges of unobservable inputs for interest rate correlation are (30%) - 50% (31 December 2015: 30% - 95%) and Credit quanto are (40%) - (10%) (31 December 2015: 65% - 85%).

There were no other changes in valuation techniques during the year.

### 39 Fair value (Cont'd)

#### 39.4 Bank's valuation processes

Risk-taking functions are responsible for providing fair value estimates for assets and liabilities carried on the statement of financial position at fair value. The Bank's valuation control function is responsible for verifying these estimates and determining any fair value adjustments that may be required to ensure that the Bank's positions are recorded at fair value.

The Model Risk function is independent of the model owners and reviews and approves a wide range of models, including risk management, valuation and certain regulatory capital models used by the Bank. The Model Risk function performs an annual firmwide model risk assessment where developments in the product or market are considered in determining whether valuation models which have already been reviewed need to be reviewed and approved again.

#### 39.5 Fair value of financial assets and liabilities measured at amortised cost

The financial assets and liabilities that are not measured at fair value as at 31 December 2016 and 2015 are as follows;

	Book value Million Baht	2016 Fair value			Total Million Baht
		Level 1 Million Baht	Level 2 Million Baht	Level 3 Million Baht	
<b>Assets</b>					
Cash	1	1	-	-	1
Interbank and money market items, net	6,737	797	5,940	-	6,737
Accounts receivable from securities trading	367	367	-	-	367
Loans and accrued interest receivables, net	1,526	-	1,526	-	1,526
<b>Total assets</b>	<b>8,631</b>	<b>1,165</b>	<b>7,466</b>	<b>-</b>	<b>8,631</b>
<b>Liabilities</b>					
Deposits	10,330	-	10,330	-	10,330
Interbank and money market items	1,323	23	1,300	-	1,323
Accounts payable from securities trading	504	504	-	-	504
Liability payable on demand	98	98	-	-	98
<b>Total liabilities</b>	<b>12,255</b>	<b>625</b>	<b>11,630</b>	<b>-</b>	<b>12,255</b>



39 Fair value (Cont'd)

39.5 Fair value of financial assets and liabilities measured at amortised cost (Cont'd)

	2015				
	Fair value				Total Million Baht
	Book value Million Baht	Level 1 Million Baht	Level 2 Million Baht	Level 3 Million Baht	
<b>Assets</b>					
Cash	5	5	-	-	5
Interbank and money market items, net	4,675	4,675	-	-	4,675
Accounts receivable from securities trading	23	23	-	-	23
Loans and accrued interest receivables, net	4,399	-	4,399	-	4,399
<b>Total assets</b>	<b>9,102</b>	<b>4,703</b>	<b>4,399</b>	<b>-</b>	<b>9,102</b>
<b>Liabilities</b>					
Deposits	9,629	-	9,629	-	9,629
Interbank and money market items	5,816	5,186	-	-	5,186
Accounts payable from securities trading	1,218	1,218	-	-	1,218
Liability payable on demand	34	34	-	-	34
<b>Total liabilities</b>	<b>16,067</b>	<b>6,438</b>	<b>9,629</b>	<b>-</b>	<b>16,067</b>

Other financial instruments not carried at fair value are typically short-term in nature and reprice to current market rate frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. This includes cash, saving deposits and current deposits presented as both interbank and money market assets and liabilities items, account receivable from securities trading, saving deposits and current deposits, account payable from securities trading and liabilities payable on demand.

Fair value of the following assets and liabilities are estimated for the purpose of disclosure as described below:

**Loans to customers and accrued interest receivable, net**

The fair value is the outstanding balance of loans and accrued interest less allowance for doubtful accounts. The majority of loans are fixed rate. The management has assessed the existing effective rate of the outstanding loans is a reasonable approximation of market effective rate.

**Interbank and money market items**

The interbank and money market items (assets) are loans to financial institutions which are short-term or at call. Accordingly, their carrying amount is a reasonable approximation of fair value.

The interbank and money market items (liabilities) are borrowing and fixed deposits which are short-term. Accordingly, their carrying amount is a reasonable approximation of fair value.

**Deposits**

The deposits are on demand, savings and fixed deposits which are short-term. Accordingly, their carrying amount is a reasonable approximation of fair value.