Chang Hwa Commercial Bank, Ltd.

Financial Statements for the
Years Ended December 31, 2018 and 2017 and
Independent Auditors' Report

Deloitte.

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders
Chang Hwa Commercial Bank, Ltd.

Opinion

We have audited the accompanying financial statements of Chang Hwa Commercial Bank, Ltd. (the "Bank"), which comprise the balance sheets as of December 31, 2018 and 2017, and the statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Bank as of December 31, 2018 and 2017, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks, Regulations Governing the Preparation of Financial Reports by Securities Firms.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements of Financial Institutions by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Bank in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The following are the descriptions of the key audit matters in the audit of the financial statements of the Bank for the year ended December 31, 2018.

<u>Impairment Assessment of Loans</u>

Loans are the most important assets of the Bank. As of December 31, 2018, the Bank's total amount of loans was $1,320,077,226 thousand, accounting for 64% of the Bank's total assets. Refer to Notes 4, 5 and 12 to the Bank's financial statements for related information. In addition, evaluating the impairment of loans depends on management's estimation of future cash flows. Therefore, we considered the impairment assessment of loans to be a key audit matter.

When assessing the appropriateness of the impairment of loans, we understood and tested the internal controls for lending operations and determined the provisions for impairment losses. We collected publicly available market information to identify whether there are any instances in which a counterparty may have objective evidence of impairment relating to the loans and receivables of the Bank but has not been included in the Bank's individual impairment assessment. We tested the calculation of expected credit loss (ECLs) to determine whether the ECLs of loans would be assessed in groups based on debtor, credit risk level and collateral and evaluated the rationality of the input value used by the Bank. Finally, we checked the Bank's compliance with regulations on assessment of impairment.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks, Regulations Governing the Preparation of Financial Reports by Securities Firms, 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.

Those charged with governance, including the audit committee, are responsible for overseeing the Bank's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our 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 auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in the Republic of China 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 auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. 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 our 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.

2. 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.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. 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 we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Bank to cease to continue as a going concern.

5. 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.

6. Obtain sufficient and appropriate audit evidence regarding the financial information of entities or business activities within the Bank to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the Bank audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the year ended December 31, 2018 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Tza Li Gung and Tung Feng Lee.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 26, 2019

<u>Notice to Readers</u>

The accompanying financial statements are intended only to present the financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such financial statements are those generally applied in the Republic of China.

For the convenience of readers, the independent auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and financial statements shall prevail.

CHANG HWA COMMERCIAL BANK, LTD.

BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
Cash and cash equivalents (Notes 4, 6 and 40)	$ 50,278,750	2	$ 74,835,132	4
Due from the Central Bank and call loans to banks (Notes 4, 6 and 40)	196,829,214	10	165,015,057	8
Financial assets at fair value through profit or loss (Notes 4 and 7)	10,917,490	1	13,552,513	1
Financial assets at fair value through other comprehensive income (Notes 4 and 8)	90,390,520	4	-	-
Financial assets for hedging (Notes 4 and 15)	244,763	-	-	-
Derivative financial assets for hedging (Notes 4 and 15)	-	-	243,372	-
Investments in debt instruments at amortized cost (Notes 4, 5, 9, 38 and 41)	268,059,805	13	-	-
Receivables, net (Notes 4, 11 and 12)	28,984,785	1	24,670,023	1
Current tax assets (Notes 4 and 34)	289,771	-	135,714	-
Discounts and loans, net (Notes 4, 5, 12, 39 and 40)	1,320,077,226	64	1,377,040,660	68
Available-for-sale financial assets, net (Notes 4, 13 and 41)	-	-	73,175,886	3
Held-to-maturity financial assets, net (Notes 4, 5, 14 and 41)	-	-	237,412,046	12
Investments accounted for using the equity method, net (Notes 4 and 19)	12,536,866	1	-	-
OTHER FINANCIAL ASSETS, NET				
Financial assets at cost (Notes 4 and 16)	-	-	4,167,009	-
Investments in debt instruments without active market (Notes 4 and 17)	-	-	64,609	-
Other miscellaneous financial assets (Notes 4, 18 and 41)	51,821,709	2	27,015,755	1
Other financial assets, net	51,821,709	2	31,247,373	1
Property and equipment, net (Notes 4 and 20)	20,200,024	1	20,639,732	1
Investment property, net (Notes 4 and 21)	13,742,376	1	13,747,787	1
Intangible assets, net (Notes 4 and 22)	714,842	-	436,176	-
Deferred tax assets (Notes 4 and 34)	3,001,405	-	3,175,050	-
Other assets, net (Notes 23, 36 and 41)	990,474	-	931,879	-
TOTAL	$ 2,069,080,020	100	$ 2,036,258,400	100
LIABILITIES AND EQUITY				
Deposits from the Central Bank and banks (Notes 4, 24 and 40)	$ 110,858,179	5	$ 108,151,867	5
Financial liabilities at fair value through profit or loss (Notes 4 and 7)	11,047,488	1	12,309,330	1
Securities sold under repurchase agreements (Note 4)	5,285,890	-	3,118,536	-
Payables (Notes 4, 25 and 32)	35,699,603	2	34,849,855	2
Current tax liabilities (Notes 4 and 34)	218,866	-	954,609	-
Deposits and remittances (Notes 4, 26 and 40)	1,680,087,976	81	1,672,079,784	82
Bank notes payable (Notes 4, 27 and 38)	49,549,055	3	41,739,657	2
Other financial liabilities (Notes 4 and 28)	4,387,078	-	3,662,600	-
Reserve for liabilities (Notes 4, 5 and 30)	5,272,477	-	4,758,835	-
Deferred income tax liabilities (Notes 4 and 34)	7,350,045	-	7,019,970	1
Other liabilities (Notes 4, 29 and 36)	2,761,732	-	2,665,793	-
Total liabilities	1,912,518,389	92	1,891,310,836	93
EQUITY (Notes 4, 32 and 34)				
Capital stock				
Common stock	97,895,207	5	94,130,007	5
Retained earnings				
Legal reserve	31,038,668	1	27,410,736	1
Special reserve	12,141,416	1	12,080,950	1
Unappropriated earnings	12,091,349	1	11,779,842	-
Other equity	3,394,991	-	(453,971)	-
Total equity	156,561,631	8	144,947,564	7
TOTAL	$ 2,069,080,020	100	$ 2,036,258,400	100

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

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017		Percentage Increase (Decrease)
	Amount	%	Amount	%	%
INTEREST INCOME (Notes 4, 33 and 40)	$ 38,335,813	116	$ 34,602,915	113	11
INTEREST EXPENSE (Notes 33 and 40)	(15,210,271)	(46)	(11,946,045)	(39)	27
NET INCOME OF INTEREST	23,125,542	70	22,656,870	74	2
NET NON-INTEREST INCOME (LOSS)					
Net service fee income (Notes 4 and 33)	4,862,338	15	4,798,618	15	1
Gain on financial assets or liabilities measured at fair value through profit or loss (Notes 4, 7 and 33)	2,711,956	8	2,342,942	7	16
Realized gain on available-for-sale financial assets (Notes 4 and 33)	-	-	564,466	2	(100)
Realized gain on financial assets at fair value through other comprehensive income (Notes 4 and 33)	781,888	2	-	-	-
Loss arising from derecognition of financial assets at amortized cost	(101,029)	-	-	-	-
Foreign exchange gain (loss) (Notes 4 and 38)	745,536	2	(76,604)	-	-
Share of profit of associates and joint ventures (Notes 4 and 19)	394,394	1	-	-	-
Net other non-interest income (Note 15)	475,471	2	510,427	2	(7)
Net non-interest income	9,870,554	30	8,139,849	26	21
NET REVENUE AND GAINS	32,996,096	100	30,796,719	100	7
BAD DEBTS EXPENSE, COMMITMENT AND GUARANTEE LIABILITY PROVISION (Notes 4 and 12)	(2,213,028)	(7)	(791,185)	(3)	180

(Continued)

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017		Percentage Increase (Decrease)
	Amount	**%**	**Amount**	**%**	**%**
OPERATING EXPENSES					
Employee benefits expenses (Notes 4 and 33)	$ (10,731,285)	(33)	$ (10,607,874)	(34)	1
Depreciation and amortization expenses (Notes 4 and 33)	(714,083)	(2)	(718,826)	(2)	(1)
Other general and administrative expenses	(4,631,166)	(14)	(4,494,615)	(15)	3
Total operating expenses	(16,076,534)	(49)	(15,821,315)	(51)	2
INCOME BEFORE INCOME TAX	14,706,534	44	14,184,219	46	4
INCOME TAX EXPENSE (Notes 4 and 34)	(2,059,999)	(6)	(2,091,113)	(7)	(1)
NET INCOME	12,646,535	38	12,093,106	39	5
OTHER COMPREHENSIVE INCOME (LOSS)					
Items that will not be reclassified to profit or loss, net of tax:					
Remeasurement of defined benefit plans (Notes 4 and 31)	(317,259)	(1)	(421,325)	(1)	(25)
Revaluation losses on investments in equity instruments measured at fair value through other comprehensive income	(237,132)	-	-	-	-
Changes in fair value of financial liabilities attributable to changes in credit risk of liabilities	900	-	(82)	-	-
Income tax related to items that will not be reclassified to profit or loss (Notes 4 and 34)	63,452	-	71,625	-	(11)

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CHANG HWA COMMERCIAL BANK, LTD.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017		Percentage Increase (Decrease)
	Amount	**%**	**Amount**	**%**	**%**
Items that will be reclassified to profit or loss, net of tax:					
Exchange differences on translation (Note 4)	$ 657,497	2	$ (1,383,702)	(4)	-
Unrealized gains on valuation of available-for-sale financial assets (Note 4)	-	-	701,409	2	(100)
Share of other comprehensive income (loss) of subsidiaries, associates and joint ventures accounted for using the equity method related to items that will be reclassified to profit or loss	7,338	-	-	-	-
Revaluation losses on investments in debt instruments measured at fair value through other comprehensive income	(55,506)	-	-	-	-
Impairment loss on investments in debt instruments measured at fair value through other comprehensive income	(26,948)	-	-	-	-
Income tax related to items that will be reclassified to profit or loss (Notes 4 and 34)	17,192	-	128,210	-	(87)
Other comprehensive income (loss), net of income tax	109,534	1	(903,865)	(3)	-
TOTAL COMPREHENSIVE INCOME	$ 12,756,069	39	$ 11,189,241	36	14
EARNINGS PER SHARE (Note 35)					
Basic	$ 1.29		$ 1.24		
Diluted	$ 1.28		$ 1.23		4

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

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Shares of Capital Stock)

	Equity Attributable to Owners of the Bank									
						Other Equity				
	Capital Stock		Retained Earnings							
	Common Stock (In Thousands)	Amount	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translation of Foreign Financial Statements	Unrealized Gains (Losses) on Available-for-sale Financial Assets	Unrealized Gains (Losses) on Financial Assets Measured at Fair Value Through Other Comprehensive Income	Change in Fair Value of Financial Liability Attributable to Change in Credit Risk of Liability	Total Equity
BALANCE AT JANUARY 1, 2017	8,964,762	$ 89,647,626	$ 23,784,945	$ 12,020,521	$ 11,970,239	$ (8,125)	$ 108,319	$ -	$ -	$ 137,523,525
Appropriation of 2016 earnings										
Legal reserve appropriated	-	-	3,625,791	-	(3,625,791)	-	-	-	-	-
Special reserve appropriated	-	-	-	60,429	(60,429)	-	-	-	-	-
Cash dividends	-	-	-	-	(3,765,202)	-	-	-	-	(3,765,202)
Stock dividends	448,239	4,482,381	-	-	(4,482,381)	-	-	-	-	-
Net income for the year ended December 31, 2017	-	-	-	-	12,093,106	-	-	-	-	12,093,106
Other comprehensive income (loss) for the year ended December 31, 2017, net of tax	-	-	-	-	(349,700)	(1,243,733)	689,650	-	(82)	(903,865)
Total comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	11,743,406	(1,243,733)	689,650	-	(82)	11,189,241
BALANCE AT DECEMBER 31, 2017	9,413,001	94,130,007	27,410,736	12,080,950	11,779,842	(1,251,858)	797,969	-	(82)	144,947,564
Effect of retrospective application	-	-	-	-	(347,750)	-	(797,969)	4,239,567	-	3,093,848
BALANCE AT JANUARY 1, 2018 AS RESTATED	9,413,001	94,130,007	27,410,736	12,080,950	11,432,092	(1,251,858)	-	4,239,567	(82)	148,041,412
Appropriation of 2017 earnings										
Legal reserve appropriated	-	-	3,627,932	-	(3,627,932)	-	-	-	-	-
Special reserve appropriated	-	-	-	60,466	(60,466)	-	-	-	-	-
Cash dividends	-	-	-	-	(4,235,850)	-	-	-	-	(4,235,850)
Stock dividends	376,520	3,765,200	-	-	(3,765,200)	-	-	-	-	-
Net income for the year ended December 31, 2018	-	-	-	-	12,646,535	-	-	-	-	12,646,535
Other comprehensive income (loss) for the year ended December 31, 2018, net of tax	-	-	-	-	(253,807)	637,065	-	(274,624)	900	109,534
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	12,392,728	637,065	-	(274,624)	900	12,756,069
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	-	(44,023)	-	-	44,023	-	-
BALANCE AT DECEMBER 31, 2018	9,789,521	$ 97,895,207	$ 31,038,668	$ 12,141,416	$ 12,091,349	$ (614,793)	$ -	$ 4,008,966	$ 818	$ 156,561,631

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

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income before income tax	$ 14,706,534	$ 14,184,219
Non-cash (income and gains) or expenses and losses		
Expected credit loss recognized on trade receivables	2,213,028	-
Provision for bad debt expenses and guarantee liabilities	-	791,185
Depreciation expense	512,577	539,021
Amortization expense	201,506	179,805
Share of (profit) loss of subsidiaries	(394,394)	-
Interest income	(38,335,813)	(34,602,915)
Dividend income	(464,340)	(366,054)
Interest expense	15,210,271	11,946,045
Net gain on financial assets or liabilities at fair value through profit or loss	(3,505,054)	(818,409)
Gain on disposal of investments	(324,537)	(434,481)
Unrealized foreign exchange losses (gains)	793,098	(1,524,533)
Other adjustments	(5,694)	(57,237)
Changes in operating assets and liabilities		
(Increase) decrease in due from the Central Bank	(1,542,799)	5,014,917
Decrease in financial assets at fair value through profit or loss	1,206,800	18,374,678
Increase in receivables	(3,893,701)	(4,320,831)
Decrease (increase) in discounts and loans	38,228,187	(10,101,128)
Increase in financial assets at fair value through other comprehensive income	(14,418,844)	-
Decrease in available-for-sale financial assets	-	6,473,481
Increase in investments in debt instruments at amortized cost	(21,311,579)	-
Increase in held-to-maturity financial assets	-	(32,547,505)
Increase in other financial assets	(24,805,955)	(8,568,278)
Increase in other assets	(25,953)	(399,581)
Increase (decrease) in deposits from the Central Bank and banks	1,148,580	(39,852)
Increase in deposits and remittances	16,530,545	47,649,967
Increase in payables	478,135	621,026
Decrease in financial liabilities at fair value through profit or loss	(2,133,537)	(928,116)
Decrease in reserve for liabilities	(233,785)	(153,811)
Increase in other financial liabilities	724,478	943,636
Increase (decrease) in other liabilities	143,773	(614,310)
Cash flows (used in) generated from operations	(19,298,473)	11,240,939
Interest received	37,023,453	32,988,589
Dividends received	464,340	366,054
Interest paid	(14,617,359)	(11,553,981)
Income taxes paid	(2,428,163)	(1,867,200)
Income tax refunded	-	31,183
Net cash flows generated from operating activities	1,143,798	31,205,584

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CHANG HWA COMMERCIAL BANK, LTD.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of investment accounted for using the equity method	$ (11,235,849)	$ -
Acquisition of property and equipment	(492,646)	(430,775)
Acquisition of investment property	(1,281)	(390)
Proceeds from disposal of property and equipment	1,061	4,287
Acquisition of intangible assets	(347,039)	(181,941)
Net cash flows used in investing activities	(12,075,754)	(608,819)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase (decrease) in due to the Central Bank and banks	10,973,906	(30,970,863)
Proceeds from issuing bank notes	10,000,000	10,200,000
Repayments of bank notes	(2,200,000)	-
Cash dividends paid	(4,235,850)	(3,765,202)
Increase in securities sold under repurchase agreement	2,167,354	163,555
Net cash flows generated from (used in) financing activities	16,705,410	(24,372,510)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	1,207,986	(1,383,702)
NET INCREASE IN CASH AND CASH EQUIVALENTS	6,981,440	4,840,553
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	172,818,258	167,977,705
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 179,799,698	$ 172,818,258

	December 31	
	2018	2017
Reconciliation of cash and cash equivalents		
Cash and cash equivalents in balance sheet	$ 50,278,750	$ 74,835,132
Call loans to banks qualifying as cash and cash equivalents under the definition of IAS 7 permitted by the Financial Supervisory Commission	129,520,948	97,983,126
Cash and cash equivalents at end of period	$ 179,799,698	$ 172,818,258

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

1. ORGANIZATION AND BUSINESS SCOPE

Chang Hwa Commercial Bank, Ltd. (the "Bank") was incorporated under Banking Law, Securities and Exchange Law and Taiwan Company Law on March 1, 1947 and got license from the Ministry of Economic Affairs in July 1950. Since February 1962 the Bank's stocks have been listed and traded on the Taiwan Stock Exchange (TWSE).

The Bank mainly engages in the following business:

a. All commercial banking operations allowed by the Banking Law;
b. Trust operations;
c. International banking operations;
d. Overseas branch operations authorized by the respective foreign governments; and
e. Other operations authorized by the central authority.

The financial statements are presented in the Bank's functional currency, the New Taiwan dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Bank's board of directors on February 26, 2019.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the FSC

   Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Bank's accounting policies.

   1) IFRS 9 "Financial Instruments" and related amendments

      IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 4 for information relating to the relevant accounting policies.

      The requirements for classification, measurement and impairment of financial assets have been applied retrospectively starting from January 1, 2018. IFRS 9 is not applicable to items that have already been derecognized as of December 31, 2017.

Classification, measurement and impairment of financial assets

On the basis of the facts and circumstances that existed as of January 1, 2018, the Bank has performed an assessment of the classification of recognized financial assets and has elected not to restate prior reporting periods.

The following table shows the original measurement categories and carrying amount under IAS 39 and the new measurement categories and carrying amount under IFRS 9 for each class of the Bank's financial assets and financial liabilities as of January 1, 2018.

	Measurement Category		**Carrying Amount**		
Financial Asset	**IAS 39**	**IFRS 9**	**IAS 39**	**IFRS 9**	**Remark**
Cash and cash equivalents	Loans and receivables	Amortized cost	$ 74,835,132	$ 74,835,132	
Due from the Central Bank and call loans to banks	Loans and receivables	Amortized cost	165,015,057	165,015,057	
Financial assets at fair value through profit or loss	Measured as at fair value through profit or loss (FVTPL)	Measured as at FVTPL	8,226,633	-	
	Designated as at FVTPL	Designated as at FVTPL	5,325,880	179,831	
		Mandatorily at FVTPL	-	8,405,593	
		Amortized cost	-	4,452,000	
Derivative financial assets for hedging	Derivative financial assets for hedging	Financial assets for hedging	243,372	243,372	
Receivables	Loans and receivables	Amortized cost	24,670,023	25,185,100	
Discounts and loans	Loans and receivables	Amortized cost	1,377,040,660	1,377,040,660	
Available-for-sale financial assets	Available-for-sale financial assets	Measured as at FVTPL	73,175,886	-	
		Measured as at fair value through other comprehensive income (FVTOCI)	-	68,264,217	
		Amortized cost	-	4,897,819	
Held-to-maturity financial assets	Held-to-maturity financial assets	Measured as at FVTPL	237,412,046	-	
		Amortized cost	-	237,405,546	
Other financial assets	Financial assets at cost	Measured as at FVTPL	4,167,009	-	
		Measured as at FVTOCI	-	7,678,042	
	Investments in debt instruments without active market	Amortized cost	64,609	-	
		Measured as at FVTOCI	-	69,301	
	Other miscellaneous financial assets	Other miscellaneous financial assets	27,015,755	27,015,755	
Refundable deposits	Loans and receivables	Amortized cost	638,048	638,048	
			$ 1,997,830,110	$ 2,001,325,473	

Financial Asset	**IAS 39 Carrying Amount as of January 1, 2018**	**Reclassifications**	**Remeasurements**	**IFRS 9 Carrying Amount as of January 1, 2018**	**Retained Earnings Effect on January 1, 2018**	**Other Equity Effect on January 1, 2018**	**Remark**
FVTPL	$ 13,552,513	$ -	$ -	$ 13,552,513	$ -	$ -	
Less: Reclassification to amortized cost (IFRS 9) (including revoked fair value options)	-	(4,452,000)	-	(4,452,000)	-	-	
Reclassification to interest receivables	-	(515,089)	-	(515,089)	-	-	
	13,552,513	(4,967,089)	-	8,585,424	-	-	
FVTOCI	-	-	-	-	-	-	
Debt instruments							
Add: Reclassification from available-for-sale (IAS 39)	-	64,740,835	(120,190)	64,620,645	(46,063)	(74,127)	
Add: Reclassification from debt investments without active market (IAS 39)	-	64,609	4,692	69,301	-	4,692	
Equity instruments							
Add: Reclassification from available-for-sale (IAS 39)	-	3,543,972	99,600	3,643,572	99,600	-	
Add: Reclassification from at cost (IAS 39)	-	4,167,009	3,511,033	7,678,042	-	3,511,033	
	-	72,516,425	3,495,135	76,011,560	53,537	3,441,598	
Amortized cost	-	-	-	-	-	-	
Add: Reclassification from available-for-sale	-	4,900,941	(3,122)	4,897,819	(3,122)	-	
Add: Reclassification from FVTPL (IAS 39) (including revoked fair value options)	-	4,452,000	-	4,452,000	-	-	
Add: Reclassification from held-to-maturity (IAS 39)	-	237,412,046	(6,500)	237,405,546	(6,500)	-	
	-	246,764,987	(9,622)	246,755,365	(9,622)	-	
	$ 13,552,513	$ 314,314,323	$ 3,485,513	$ 331,352,349	$ 43,915	$ 3,441,598	

a) Listed bank notes classified as at FVTPL under IAS 39 are classified as at amortized cost under IFRS 9, because on initial recognition, the contractual cash flows that are solely payments of principal and interest on the principal outstanding and these investments are held within a business model whose objective is to collect contractual cash flows;

b) Listed stock, emerging market stock, and unlisted stock classified as available-for-sale under IAS 39 were designated as at FVTOCI under IFRS 9 and the fair value gains or losses accumulated in other equity were transferred directly to retained earnings instead of being reclassified to profit or loss on disposal.

   Investments in unlisted stock previously measured at cost were remeasured at fair value under IFRS 9.

c) Debt investments classified as available-for-sale, held-to-maturity financial assets, debt investments without active market and at amortized cost under IAS 39 are classified as at: (1) amortized cost under IFRS 9, because on initial recognition, the contractual cash flows that are solely payments of principal and interest on the principal outstanding and these investments are held within a business model whose objective is to collect contractual cash flows; (2) FVTOCI under IFRS 9, because on initial recognition, the contractual cash flows that are solely payments of principal and interest on the principal outstanding and these investments are held within a business model whose objective is achieved both by collecting contractual cash flows and selling financial assets; (3) FVTPL under IFRS 9, because on initial recognition, the contractual cash flows are solely payments of principal and interest on the principal outstanding but the objective of the Bank's business model is not to collect contractual cash flows and neither is it achieved both by collecting contractual cash flows and selling financial assets; and (4) FVTPL under IFRS 9, because on initial recognition, the contractual cash flows are not solely payments of principal and interest on the principal outstanding.

Hedge accounting

Due to the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers, all derivative and non-derivative financial assets and financial liabilities which are designated as hedging instruments are presented as financial assets and financial liabilities for hedging starting from January 1, 2018.

2) Amendments to IAS 12 "Recognition of Deferred Tax Assets for Unrealized Losses"

   The amendments clarify that the difference between the carrying amount of the debt instrument measured at fair value and its tax base gives rise to a temporary difference, even though there are unrealized losses on that asset, irrespective of whether the Bank expects to recover the carrying amount of the debt instrument by sale or by holding it and collecting contractual cash flows.

   In addition, in determining whether to recognize a deferred tax asset, the Bank should assess a deductible temporary difference in combination with all of its other deductible temporary differences, unless the tax law restricts the utilization of losses as deduction against income of a specific type, in which case, a deductible temporary difference is assessed in combination only with other deductible temporary differences of the appropriate type. The amendments also stipulate that, when determining whether to recognize a deferred tax asset, the estimate of probable future taxable profit may include some of the Bank's assets for more than their carrying amount if there is sufficient evidence that it is probable that the Bank will achieve the higher amount, and that the estimate for future taxable profit should exclude tax deductions resulting from the reversal of deductible temporary differences.

   In assessing deferred tax asset, the Bank currently assumes that it will recover the asset at its carrying amount when estimating probable future taxable profit; the amendment will be applied retrospectively in 2018.

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC) and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed by the FSC for application starting from 2019

New IFRSs	Effective Date Announced by IASB (Note 1)
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019 (Note 2)
IFRS 16 "Leases"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019 (Note 3)
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Bank shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

1) IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

<u>Definition of a lease</u>

Upon initial application of IFRS 16, the Bank will elect to apply the guidance of IFRS 16, in determining whether contracts are, or contain, a lease, only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 will not be reassessed and will be accounted for in accordance with the transitional provisions under IFRS 16.

<u>The Bank as lessee</u>

Upon initial application of IFRS 16, the Bank will recognize right-of-use assets, or investment properties if the right-of-use assets meet the definition of investment properties, and lease liabilities for all leases on the balance sheets except for those whose payments under low-value and short-term leases will be recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Bank will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liabilities will be classified within financing activities; cash payments for the interest portion will be classified within operating activities. Currently, payments under operating lease contracts, including property interest qualified as investment properties, are recognized as expenses on a straight-line basis. Cash flows for operating leases are classified within operating activities on the statements of cash flows. Leased assets and finance lease payables are recognized for contracts classified as finance leases.

The Bank anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

For leases currently classified as finance leases under IAS 17, the carrying amount of right-of-use assets and lease liabilities on January 1, 2019 will be determined as the carrying amount of the leased assets and finance lease payables as of December 31, 2018.

The Bank expects to apply the following practical expedients:

a) The Bank will apply a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

b) The Bank will account for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

c) The Bank will exclude initial direct costs from the measurement of right-of-use assets on January 1, 2019.

d) The Bank will use hindsight, such as in determining lease terms, to measure lease liabilities.

For leases currently classified as finance leases under IAS 17, the carrying amounts of right-of-use assets and lease liabilities on January 1, 2019 will be determined as at the carrying amounts of the respective leased assets and finance lease payables as of December 31, 2018.

The Bank as lessor

Except for sublease transactions, the Bank will not make any adjustments for leases in which it is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

Anticipated impact on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	**Adjustments Arising from Initial Application**	**Adjusted Carrying Amount as of January 1, 2019**
Prepayments for leases	$ 201,486	$ (175,172)	$ 26,314
Lease assets	908	(908)	-
Accumulated depreciation - lease assets	(148)	148	-
Right-of-use assets	-	1,985,896	1,985,896
Accumulated depreciation - right-of-use assets	-	(148)	(148)
Total effect on assets	$ 202,246	$ 1,809,816	$ 2,012,062
Lease liabilities - non-current	$ -	$ 1,751,013	$ 1,751,013
Finance lease payables - non-current	656	(656)	-
Provisions - non-current	-	59,459	59,459
Total effect on liabilities	$ 656	$ 1,809,816	$ 1,810,472

Except for the above impact, as of the date the financial statements were authorized for issue, the Bank is continuously assessing the possible impact that the application of other standards and interpretations will have on the Bank's financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Bank shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Bank shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the financial statements were authorized for issue, the Bank is continuously assessing the possible impact that the application of other standards and interpretations will have on the Bank's financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Statement of Compliance

The financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks, Regulations Governing the Preparation of Financial Reports by Securities Firms, and IFRSs as endorsed and issued into effect by the FSC.

Basis of Preparation

The financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair values, and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

b. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

c. Level 3 inputs are unobservable inputs for an asset or liability.

Current/Noncurrent Assets and Liabilities

Because of its business characteristics, assets and liabilities of the Bank are classified according to their liquidity rather than classified as current or noncurrent assets or liabilities.

Foreign Currencies

In preparing the Bank's financial statements, transactions in currencies other than the Bank's functional currency (i.e. foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized directly in other comprehensive income.

For the purpose of presenting financial statements, the functional currencies of the Bank entities are translated into the presentation currency, the New Taiwan dollar as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

Investments in Subsidiaries

The Bank uses the equity method to account for its investments in subsidiaries.

A subsidiary is an entity that is controlled by the Bank. Under the equity method, an investment in a subsidiary is initially recognized at cost and adjusted thereafter to recognize the Bank's share of profit or loss and otherwise comprehensive income of the subsidiary. The Bank also recognizes the changes in the Bank's share of other equity of subsidiaries.

Property and Equipment

Property and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment loss.

Property and equipment in the course of construction are measured at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property and equipment when completed and ready for intended use.

Freehold land is not depreciated.

Depreciation of property and equipment is recognized using the straight-line method. Each significant part is depreciated separately. If the lease term is shorter than the useful lives, assets are depreciated over the lease term. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

On derecognition of an item of property and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

Investment Properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset is included in profit or loss.

Intangible Assets

a. Intangible assets acquired separately

   Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

b. Derecognition of intangible assets

   On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

Impairment of Tangible and Intangible Assets

At the end of each reporting period, the Bank reviews the carrying amounts of its tangible and intangible assets, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Bank estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the individual cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

Financial Instruments

Financial assets and financial liabilities are recognized when the bank becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities (other than financial assets and financial liabilities at FVTPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in profit or loss.

a. Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

1) Measurement categories

2018

Financial assets are classified into the following categories: financial assets at FVTPL, financial assets at amortized cost and investments in debt instruments and equity instruments at FVTOCI.

a) Financial assets at FVTPL

Financial assets are classified as at FVTPL when such a financial asset is mandatorily classified or designated as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria.

A financial asset may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 37.

b) Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, trade receivables at amortized cost, are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset, except for:

i. Purchased or originated credit impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

ii. Financial assets that have subsequently become credit impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets.

Cash equivalents include time deposits with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

c) Investments in debt instruments designated at FVTOCI

Debt instruments that meet the following conditions are subsequently measured at FVTOCI:

i. The financial asset is held within a business model whose objective is achieved by both the collecting of contractual cash flows and the selling of such financial assets; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Investments in debt instruments designated at FVTOCI are subsequently measured at fair value. Changes in the carrying amounts of these debt instruments relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and impairment losses or reversals are recognized in profit or loss. Other changes in the carrying amount of these debt instruments are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of.

d) Investments in equity instruments designated at FVTOCI

On initial recognition, the Bank may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments designated at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Bank’s right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2017

Financial assets are classified into the following categories: financial assets at FVTPL, held-to-maturity investments, available-for-sale financial assets and loans and receivables.

a) Financial assets at FVTPL

   Financial assets are classified as at FVTPL when such financial assets are either held for trading or designated as at FVTPL.

   A financial asset may be designated as at FVTPL upon initial recognition if:

   i. Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

   ii. The financial asset forms part of a group of financial assets or financial liabilities or both, which is managed and has performance evaluated on a fair value basis, in accordance with the Bank's documented risk management or investment strategy, and information about the banking is provided internally on that basis; or

   iii. The contract contains one or more embedded derivatives so that the entire hybrid (combined) contract can be designated as at FVTPL.

   Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 37.

   Investments in equity instruments under financial assets at FVTPL that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are subsequently measured at cost less any identified impairment loss at the end of each reporting period and presented as a separate line item as financial assets measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value is recognized in profit or loss.

b) Held-to-maturity investments

   Corporate bonds and foreign bonds, which have credit ratings above a specific credit rating and which the Bank has a positive intent and ability to hold to maturity, are classified as held-to-maturity investments.

   Subsequent to initial recognition, held-to-maturity investments are measured at amortized cost using the effective interest method less any impairment.

c) Available-for-sale financial assets

   Available-for-sale financial assets are non-derivatives that are either designated as available-for-sale or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL.

Available-for-sale financial assets are measured at fair value. Changes in the carrying amount of available-for-sale monetary financial assets relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on available-for-sale equity investments are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when such investments are disposed of or are determined to be impaired.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Bank's right to receive the dividends is established.

Available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity investments are measured at cost less any identified impairment loss at the end of each reporting period and are presented as a separate line item as financial assets measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value of such financial assets is recognized in other comprehensive income. Any impairment losses are recognized in profit and loss.

d) Loans and receivables

Loans and receivables (including trade receivables, cash and cash equivalents, debt investments without active market and other receivables) are measured at amortized cost using the effective interest method, less any impairment, except for short-term receivables when the effect of discounting is immaterial.

Cash equivalents include time deposits with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

2) Impairment of financial assets

<u>2018</u>

The Bank recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables) and investments in debt instruments that are measured at FVTOCI.

The Bank always recognizes lifetime expected credit losses (ECLs) for trade receivables, lease receivables and contract assets. For all other financial instruments, the Bank recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on a financial instrument has not increased significantly since initial recognition, the Bank measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Bank recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

2017

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence, as a result of one or more events that occurred after the initial recognition of such financial assets, that the estimated future cash flows of the investment have been affected.

Financial assets at amortized cost, such as loans and trade receivables, are assessed for impairment on a collective basis even if they were assessed not to be impaired individually. Objective evidence of impairment for a portfolio of receivables could include the Bank's past experience with collecting payments, an increase in the number of delayed payments in the portfolio, as well as observable changes in national or local economic conditions that correlate with defaults on receivables.

For a financial asset at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of its estimated future cash flows, discounted at the financial asset's original effective interest rate.

For a financial asset at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment (at the date on which the impairment is reversed) does not exceed what the amortized cost would have been had the impairment not been recognized.

For available-for-sale equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of available-for-sale equity securities, impairment loss previously recognized in profit or loss is not reversed through profit or loss. Any increase in fair value subsequent to impairment loss is recognized in other comprehensive income. In respect of available-for-sale debt securities, the impairment loss is subsequently reversed through profit or loss if an increase in the fair value of such an investment can be objectively related to an event occurring after the recognition of the impairment loss.

For a financial asset measured at cost, the amount of the impairment loss is measured as the difference between such an asset's carrying amount and the present value of its the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of a financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables and loans, where the carrying amount is reduced through the use of an allowance account. When trade receivables and loans are considered uncollectible, they are written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade receivables and loans that are written off against the allowance account.

3) Derecognition of financial assets

The Bank derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset’s carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. Starting from 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset’s carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in a debt instrument at FVTOCI, the difference between the asset’s carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. However, on derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset’s carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

b. Equity instruments

Debt and equity instruments issued by the Bank are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments issued by the Bank are recognized at the proceeds received, net of direct issue costs.

The repurchase of the Bank’s own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issuance or cancellation of the Bank’s own equity instruments.

c. Financial liabilities

1) Subsequent measurement

Except for the following situations, all financial liabilities are measured at amortized cost using the effective interest method:

a) Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when such financial liabilities are either held for trading or designated as at FVTPL.

Financial liabilities held for trading are stated at fair value, with any gain or loss arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest or dividend paid on the financial liability.

A financial liability may be designated as at FVTPL upon initial recognition when doing so results in more relevant information and if:

i. Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

ii. The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and has performance evaluated on a fair value basis, in accordance with the Bank's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

iii. The contract contains one or more embedded derivatives so that the entire combined contract (asset or liability) can be designated as at FVTPL.

For a financial liability designated as at FVTPL, the amount of changes in fair value attributable to changes in the credit risk of the liability is presented in other comprehensive income, and will not be subsequently reclassified to profit or loss. The remaining amount of changes in the fair value of that liability which incorporates any interest or dividends paid on such financial liability is presented in profit or loss. The gain or loss accumulated in other comprehensive income will be transferred to retained earnings when the financial liability is derecognized. If this accounting treatment related to credit risk would create or enlarge an accounting mismatch, all changes in the fair value of the liability are presented in profit or loss. Fair value is determined in the manner described in Note 37.

b) Financial guarantee contracts

2018

Financial guarantee contracts issued by the Bank, if not designated as at FVTPL, are subsequently measured at the higher of:

i. The amount of the loss allowance reflecting expected credit losses; and

ii. The amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with the revenue recognition policies.

2017

Financial guarantee contracts issued by the Bank are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of the best estimate of the obligation under the contract and the amount initially recognized less the cumulative amortization recognized.

2) Derecognition of financial liabilities

The difference between the carrying amount of a financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

d. Derivative financial instruments

The Bank enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risks, including foreign exchange forward contracts, FX swap, cross currency swap, interest rate swaps and currency option.

Derivatives are initially recognized at fair value at the date on which the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument; in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship. When the fair value of a derivative financial instrument is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instrument is negative, the derivative is recognized as a financial liability.

Before 2018, derivatives embedded in non-derivative host contracts were treated as separate derivatives when they met the definition of a derivative; their risks and characteristics were not closely related to those of the host contracts; and the contracts were not measured at FVTPL. Starting from 2018, derivatives embedded in hybrid contracts that contain financial asset hosts that is within the scope of IFRS 9 are not separated; instead, the classification is determined in accordance with the entire hybrid contract. Derivatives embedded in non-derivative host contracts that are not financial assets that is within the scope of IFRS 9 (i.e. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative; their risks and characteristics are not closely related to those of the host contracts; and the host contracts are not measured at FVTPL.

Bonds or Securities Purchased/Sold under Specific Agreements

Bonds or securities sold under repurchase agreement are recorded at sale price. Interest revenues and expenses are recorded on accrual basis.

Hedge Accounting

The Bank designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges. Hedges of foreign exchange risk on firm commitments are accounted for as fair value hedges.

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognized in profit or loss in the line item relating to the hedged item.

Before 2018, hedge accounting was discontinued prospectively when the Bank revoked the designated hedging relationship; when the hedging instrument expired or was sold, terminated, or exercised; or when the hedging instrument no longer met the criteria for hedge accounting. Starting from 2018, the Bank discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised. The fair value adjustment to the carrying amount of the hedged instrument arising from the hedged risk for which the effective interest method is used is amortized to profit or loss from the date on which the hedge accounting is discontinued. The adjustment is based on a recalculated effective interest rate at the date on which amortization begins and will be amortized fully upon maturity of the financial instrument.

Provisions

Provisions, including those arising from reserve for default losses, reserve for employee benefits and reserve for guarantees, are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Revenue Recognition

a. Dividend and interest income

   Dividend income from investments is recognized when the stockholder’s right to receive payment has been established provided that it is probable that the economic benefits will flow to the Bank and the amount of income can be measured reliably.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Bank and the amount of income can be measured reliably. Interest income is accrued on a time basis with reference to the principal outstanding and at the applicable effective interest rate.

When the loans become past due and are considered uncollectible, the principal and interest receivable are transferred to delinquent loan accounts, and the accrual of interest income is stopped. Interest income will be recognized when the delinquent interest is collected. If the repayment of loan is extended under an agreement, the related interest should be recognized as deferred revenue, classified into other liability and recognized as income when collected.

b. Service fee

Service revenue and real estate management service revenue are recognized at once after providing loans or other services. If the service revenue belongs to several significant items, it is recognized when the significant items accomplished, such as the service revenue which the lead arranger bank of syndication loan received. If the service revenue is for further loan service and of significant amount, it is allocated during the period of the service or included in the base of calculation the effective interest rate of loans and receivables.

Leasing

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

a. The Bank as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Contingent rents are recognized as income in the period in which they are incurred.

b. The Bank as lessee

Assets held under finance leases are initially recognized as assets of the Bank at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheets as a finance lease obligation.

Finance expenses implicit in lease payments for each period are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

Contingent rentals are recognized as an expense in the period in which they are incurred.

Employee Benefits

a. Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

b. Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost, and net interest cost) and net interest on the net defined benefit liability are recognized as employee benefits expense in the period they occur. Remeasurement, comprising actuarial gains and losses, and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability represents the actual deficit in the Bank's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

The Bank provides employees with high-yield savings account. The premium interest rate applies to a fixed amount of principal and the interest is paid to present employees (within employment and retirement) and retired employees. The difference between the premium rate and the market rate is classified as employee benefits.

According to the "Regulations Governing the Preparation of Financial Reports by Public Banks" Rule No. 28, the premium interest resulting from the yield between the premium rate and the general market rate shall immediately be actuarially calculated based on the FSC-recognized IAS 19 when employees retire. However, if there are authorized regulations from the government regarding the actuarial assumption parameters, the regulations shall prevail. Actuarial benefits and service cost from prior periods are recognized as profit or loss when they are incurred.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

a. Current tax

According to the Income Tax Law, an additional tax at 5% of unappropriated earnings is provided for as income tax in the year the stockholders approve to retain the earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carry forward, research and development expenditures, and personnel training expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Bank expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

c. Current and deferred tax for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Bank's accounting policies, management is required to make judgments, estimations and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Estimated Impairment of Financial Assets - 2018

The provision for impairment of trade receivables, investments in debt instruments and financial guarantee contracts is based on assumptions about risk of default and expected loss rates. The Bank uses judgment in making these assumptions and in selecting the inputs for the impairment calculation, which are based on the Bank's past history, existing market conditions as well as forward-looking estimates at the end of each reporting period. For details of the key assumptions and inputs used, see Notes 8, 9, 11 and 29. Where the actual future cash inflows are less than expected, a material impairment loss may arise.

Estimated Impairment of Trade Receivables and Loans - 2017

When there is objective evidence of impairment loss on trade receivables and loans, the Bank takes into consideration the estimation of future cash flows of such assets. The amount of the impairment loss is measured as the difference between such an asset's carrying amount and the present value of its estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the asset's original effective interest rate. Where the actual future cash flows are less than expected, a material impairment loss may arise.

6. CASH AND CASH EQUIVALENTS/DUE FROM THE CENTRAL BANK AND CALL LOANS TO BANKS

a. Cash and cash equivalents

	December 31	
	2018	2017
Cash on hand	$ 11,307,867	$ 10,579,908
Checks for clearing	18,042,831	18,097,350
Due from banks	19,261,864	44,672,316
Foreign currencies on hand	1,666,188	1,485,558
	$ 50,278,750	$ 74,835,132

b. Due from the Central Bank and call loans to banks

	December 31	
	2018	2017
Call loans to banks	$ 129,520,948	$ 97,983,126
Reserve for checking accounts	17,165,934	18,418,622
Reserve for demand accounts	42,402,505	42,558,656
Reserve for foreign deposits	482,288	438,550
Others	7,257,539	5,616,103
	$ 196,829,214	$ 165,015,057

Cash and cash equivalents are assessed for impairment using approach similar to those used for investments in debt instruments (refer to Note 10). The Bank considers its cash and cash equivalents to have low credit risk so its credit loss evaluation is on a 12-month expected credit loss basis.

7. FINANCIAL INSTRUMENTS AT FVTPL

Financial Assets at FVTPL

	December 31	
	2018	2017
Financial assets designated at FVTPL		
Interest rate-linked combination instruments	$ -	$ 5,325,880
Financial assets held for trading		
Derivative financial assets (not applying hedge accounting)		
Futures	-	182,565
Forward exchange contracts	-	220,037
Interest rate swaps	-	713,446
Cross-currency swaps	-	544,088
Currency swaps	-	1,507,886
Currency call option premiums	-	182,600

(Continued)

	December 31	
	2018	2017
Non-derivative financial assets		
Investment in bills	$ -	$ 3,026,213
Domestic listed stock	-	-
Mutual funds	-	-
Government bonds	-	1,849,798
	-	8,226,633
Financial assets mandatorily classified at FVTPL		
Derivative financial assets (not under hedge accounting)		
Futures	173,149	-
Forward exchange contracts	49,518	-
Interest rate swaps	741,343	-
Cross-currency swaps	32,867	-
Currency swaps	1,314,821	-
Currency call option premiums	24,244	-
Non-derivative financial assets		
Investment in bills	6,626,120	-
Government bonds	1,103,764	-
Corporate bonds	851,664	-
	10,917,490	-
	$ 10,917,490	$ 13,552,513

(Continued)

The par values of bonds and notes provided for transactions with repurchase agreements were $923,300 thousand and $1,176,200 thousand as of December 31, 2018 and 2017, respectively.

Financial Liabilities at FVTPL

	December 31	
	2018	2017
Financial liabilities designated at FVTPL	$ 9,130,255	$ 8,759,276
Financial liabilities held for trading		
Derivative financial liabilities (not applying hedge accounting)		
Forward contracts	65,379	49,782
Interest rate swaps	953,280	685,128
Cross-currency swaps	32,761	305,686
Currency swaps	841,567	2,325,169
Currency put option premiums	24,246	184,289
	1,917,233	3,550,054
	$ 11,047,488	$ 12,309,330

a. The unsecured U.S. dollar-denominated bank notes issued by the Bank were as follows:

1) Note B, 20-year term, US$100,000 thousand, issued at par value with no interest payment, callable 3 years after issue date with interest payment, maturity: 2034.12.18. The note was redeemed on December 19, 2017.

2) Note C, 20-year term, US$260,000 thousand, issued at par value with no interest payment, callable 5 years after issue date with interest payment, maturity: 2034.12.17.

b. The Bank designated the unsecured U.S. dollar-denominated banks notes as financial liabilities at FVTPL to reduce a measurement or recognition inconsistency.

The Bank entered into derivative contracts during the years ended December 31, 2018 and 2017 to manage exposures due to exchange rate and interest rate fluctuations. The financial risk management objective of the Bank is to minimize risks due to changes in fair value and cash flows.

The nominal principal amounts of outstanding derivative contracts as of December 31, 2018 and 2017 were as follows:

	December 31	
	2018	**2017**
Currency swaps	$ 349,448,614	$ 317,193,943
Currency options	12,774,097	43,390,297
Forward exchange contracts	17,114,455	18,480,944
Interest rate swaps	358,411,064	389,538,301
Cross-currency swaps	3,688,200	13,063,953

8. FINANCIAL ASSETS AT FVTOCI

	December 31, 2018
Investments in equity instruments at FVTOCI	
Domestic listed stock	$ 4,785,216
Domestic unquoted stock	7,138,045
	11,923,261
Investments in debt instruments at FVTOCI	
Government bonds	17,893,192
Corporate bonds	16,494,550
Bank notes	29,881,172
Bonds issued by international organizations	11,025,870
Beneficiary and asset-based securities	666,787
Investments in bills	2,505,688
	78,467,259
	$ 90,390,520

a. Refer to Note 10 for information relating to their credit risk management and impairment.

b. The par value of bonds provided for transactions with repurchase agreement was $4,380,200 thousand as of December 31, 2018.

c. Government bonds placed as deposits in courts amounted to $391,900 thousand, government bonds placed as operating deposits amounted to $330,000 thousand, government bonds placed as a reserve fund for trust compensation amounted to $170,000 thousand, and the overseas branches' bonds provided as collateral for operations were $155,720 thousand as of December 31, 2018. Refer to Note 41 for information relating to investments in debt instruments at FVTOCI pledged as security.

9. INVESTMENTS IN DEBT INSTRUMENTS AT AMORTIZED COST

	December 31, 2018
Investments in bills	$ 251,312,321
Bank notes	7,327,497
Corporate bonds	7,038,802
Government bonds	2,381,185
	$ 268,059,805

a. Refer to Note 10 for information relating to their credit risk management and impairment.

b. The overseas branches' bonds provided as collateral for operations as of December 31, 2018 were in the amount of $307,061 thousand.

c. Certificates of deposit placed as reserves for clearing at the Central Bank amounted to $36,000,000 thousand as of December 31, 2018. Certificates of deposit which were issued by the Central Bank and pledged for call loans from banks amounted to $5,300,000 thousand as of December 31, 2018.

d. Refer to Note 41 for information relating to investments in debt instruments at amortized cost pledged as security.

10. CREDIT RISK MANAGEMENT FOR INVESTMENTS IN DEBT INSTRUMENTS

Investments in debt instruments are classified as at FVTOCI and as at amortized cost.

December 31, 2018

	At FVTOCI	At Amortized Cost	Total
Gross carrying amount	$ 78,307,291	$ 268,066,420	$ 346,373,711
Less: Allowance for impairment loss	(166,765)	(6,615)	(173,380)
Amortized cost	78,140,526	$ 268,059,805	346,200,331
Adjustment to fair value	326,733		326,733
	$ 78,467,259		$ 346,527,064

The Bank only invests in debt instruments that are rated the equivalent of investment grade or higher and are assessed as having low credit impairment. The credit rating information is supplied by independent rating agencies. The Bank's exposure and the external credit ratings are continuously monitored and assessed for whether there has been a significant increase in credit risk since the last period to the reporting date.

The Bank considers the historical default rates of each credit rating supplied by external rating agencies to estimate 12-month or lifetime expected credit losses. The Bank's current credit risk grading framework comprises the following categories:

Category	Description	Basis for Recognizing Expected Credit Losses	Expected Loss Rate	Gross Carrying Amount as of December 31, 2018
Stage 1	The counterparty has a low risk of default and a strong capacity to meet contractual cash flows	12-month ECL	0%-49.40%	$ 346,231,725
Stage 2	There has been a significant increase in credit risk since initial recognition	Lifetime ECL - not credit impaired	0.28%-88.49%	-
Stage 3	There is evidence indicating that the asset is credit impaired	Lifetime ECL - credit impaired	40.51%-92.69%	141,986
Write-off	There is evidence indicating that the debtor is experiencing severe financial difficulty and the Bank has no realistic prospect of recovery	Amount is written off	100%	-
				$ 346,373,711

The allowance for impairment loss of investments in debt instruments at FVTOCI and at amortized cost as of January 1, 2018 and December 31, 2018 grouped by credit rating is reconciled as follows:

	Credit Rating			
Allowance for Impairment Loss	**Performing (12-month ECL)**	**Doubtful (Lifetime ECL - Not Credit-impaired)**	**Defaulted (Lifetime ECL - Credit-impaired)**	**Total**
Balance at January 1, 2018 per IAS 39	$ -	$ -	$ -	$ -
Adjustment on initial application of IFRS 9	38,939	27,285	137,112	203,336
Balance at January 1, 2018 per IFRS 9	38,939	27,285	137,112	203,336
Purchase investments in debt instruments	10,865	-	-	10,865
Derecognition	(16,064)	(27,285)	-	(43,349)
Change in exchange rates or others	(2,346)	-	4,874	2,528
Balance at December 31, 2018	$ 31,394	$ -	$ 141,986	$ 173,380

11. RECEIVABLES, NET

a. Details of receivables

	December 31	
	2018	2017
Accounts receivable	$ 16,321,394	$ 14,277,857
Accrued incomes	5,993	3,471
Interests receivable	5,233,727	3,549,809
Acceptances receivable	5,334,884	4,262,347
Credit cards accounts receivable	1,833,999	1,783,596
Settlement price	392,434	440,397
Accounts receivable for settlement	217,848	285,538
Other receivables	278,373	648,341
Less allowance for bad debts, receivables	(633,867)	(581,333)
	$ 28,984,785	$ 24,670,023

b. Allowance for receivables

1) Movements in the allowance for receivables

	For the Year Ended December 31, 2018					
	12-Month Expected Credit Losses	Lifetime Expected Credit Losses	Realized Credit Impairment	Loss Recognized Based on IFRS 9	Recognized Impairment Difference Based on Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-Performing Loans and Bad Debts	Total
Receivables						
Beginning balance	$ 28,086	$ 2,295	$ 25,436	$ 55,817	$ 525,516	$ 581,333
Changes from financial instruments recognized at the beginning of the period:						
Transfers to lifetime expected credit losses	(54)	78	33	57	-	57
Transfers to credit-impaired financial assets	-	-	1,972	1,972	-	1,972
Transfers to 12-months expected credit losses	233	(168)	192	257	-	257
Financial assets derecognized for the period	(26,891)	(736)	2,173	(25,454)	-	(25,454)
Purchase or originated financial assets	30,755	1,203	11,417	43,375	-	43,375
Recognized impairment difference based on the regulations of the procedures for banking institutions to evaluate assets and deal with non-performing loans and bad debts	-	-	-	-	54,991	54,991
Doubtful debts written off	-	-	(22,684)	(22,684)	-	(22,684)
Changes in exchange rates or others	17	3	-	20	-	20
Ending balance	$ 32,146	$ 2,675	$ 18,539	$ 53,360	$ 580,507	$ 633,867

2) Movements in the total carrying amount of receivables

	For the Year Ended December 31, 2018			
	12-Month Expected Credit Losses	Significant Increase in Risk Due to Lifetime Expected Credit Losses	Credit Impairment Due to Lifetime Expected Credit Losses	Total
Beginning balance	$ 25,015,385	$ 156,888	$ 79,083	$ 25,251,356
Changes from financial instruments recognized at the beginning of the period:				
Transfers to lifetime expected credit loss	(28,079)	31,671	19	3,611
Transfers to credit-impaired financial assets	6,325	(16)	18,571	24,880
Transfers to 12-month expected credit losses	(1,226,883)	(15,248)	1,011	(1,241,120)
Purchase or originated financial assets	20,207,242	81,219	18,644	20,307,105
Derecognized	(14,591,658)	(96,752)	(24,876)	(14,713,286)
Doubtful debts written off	-	-	(22,684)	(22,684)
Changes in exchange rates or others	7,847	943	-	8,790
Ending balance	$ 29,390,179	$ 158,705	$ 69,768	$ 29,618,652

Refer to Note 12 for the movements in the allowance for receivables as of the year ended December 31, 2017.

12. DISCOUNTS AND LOANS, NET

a. Details of discounts and loans

	December 31	
	2018	2017
Negotiated and discounted	$ 4,541,384	$ 5,010,733
Overdrafts	1,388,976	1,441,350
Short-term loans	356,460,660	363,295,585
Margin loans receivable	230,047	368,478
Medium-term loans	410,460,111	454,955,547
Long-term loans	558,766,868	564,200,949
Overdue loans	4,545,418	4,134,997
	1,336,393,464	1,393,407,639
Less allowance for bad debts, discounts and loans	(16,316,238)	(16,366,979)
	$ 1,320,077,226	$ 1,377,040,660

The overdue loans of which the accrual of interest income was stopped internally as of December 31, 2018 and 2017 amounted to $4,545,418 thousand and $4,134,997 thousand, respectively. The interest income on overdue loans not accrued for the years ended December 31, 2018 and 2017 was $121,363 thousand and $110,404 thousand, respectively.

The Bank did not write off any loans without a legal claims process during the years ended December 31, 2018 and 2017.

b. Allowance for discounts and loans

1) Movements in the allowance for discounts and loans

	For the Year Ended December 31, 2018					
	12-Month Expected Credit Losses	Lifetime Expected Credit Losses	Realized Credit Impairment	Loss Recognized Based on IFRS 9	Recognized Impairment Difference Based on Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing Loans and Bad Debts	Total
Loans						
Beginning balance	$ 1,757,974	$ 1,239,981	$ 5,076,651	$ 8,074,606	$ 8,292,373	$ 16,366,979
Changes from financial instruments recognized at the beginning of the period:						
Transfers to lifetime expected credit losses	(28,373)	31,712	(5,521)	(2,182)	-	(2,182)
Transfers to credit-impaired financial assets	(676)	(89,530)	89,906	(300)	-	(300)
Transfers to 12-month expected credit losses	302,535	(306,226)	(4,302)	(7,993)	-	(7,993)
Financial assets derecognized for the period	(644,929)	(199,297)	(2,754,150)	(3,598,376)	-	(3,598,376)
Purchased or originated financial assets	1,135,061	1,323,938	3,912,776	6,371,775	-	6,371,775
Recognized impairment difference based on the Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing Loans and Bad Debts	-	-	-	-	(786,393)	(786,393)
Doubtful debts written off	(665,581)	(158,990)	(1,213,175)	(2,037,746)	-	(2,037,746)
Changes in exchange rates or others	7,992	2,182	300	10,474	-	10,474
Ending balance	$ 1,864,003	$ 1,843,770	$ 5,102,485	$ 8,810,258	$ 7,505,980	$ 16,316,238

2) Movements in the total carrying amount of discounts and loans

	For the Year Ended December 31, 2018			
	12-Month Expected Credit Losses	Significant Increase in Risk Due to Lifetime Expected Credit Losses	Credit Impairment Due to Lifetime Expected Credit Losses	Total
Beginning balance	$ 1,334,668,075	$ 45,871,466	$ 12,868,098	$ 1,393,407,639
Changes from financial instruments recognized at the beginning of the period:				
Transfers to lifetime expected credit losses	(16,768,851)	16,561,897	(44,477)	(251,431)
Transfers to credit-impaired financial assets	(1,536,123)	(1,681,737)	3,216,165	(1,695)
Transfers to 12-month expected credit losses	4,134,661	(7,005,441)	(41,959)	(2,912,739)
Purchase or originated financial assets	592,430,183	24,624,899	7,286,333	624,341,415
Doubtful debts written off	(665,581)	(158,990)	(1,213,175)	(2,037,746)
Derecognized	(645,962,288)	(24,855,031)	(8,500,525)	(679,317,844)
Changes in exchange rates or others	2,912,738	251,432	1,695	3,165,865
Ending balance	$ 1,269,212,814	$ 53,608,495	$ 13,572,155	$ 1,336,393,464

	For the Year Ended December 31, 2017			
	Receivables	Discounts and Loans	Other Financial Assets	Total
Beginning balance	$ 573,031	$ 16,122,975	$ 25,937	$ 16,721,943
Recovery of written off loans	5,483	2,616,196	14,129	2,635,808
Provision for loan losses	84,997	320,358	418,114	823,469
Written off loans	(49,251)	(2,481,007)	(50,099)	(2,580,357)
Others	(32,927)	(211,543)	619	(243,851)
Ending balance	$ 581,333	$ 16,366,979	$ 408,700	$ 17,357,012

c. Details of provision for bad debts expense, commitment and guarantee for the years ended December 31, 2018 and 2017

	For the Year Ended December 31	
	2018	2017
Provision for receivable and loan (including overdue loan) losses	$ 2,237,851	$ 823,469
Provision (reversal) for loan commitment	(104,474)	-
Provision (reversal) for guarantee liability	77,746	(32,284)
Others	1,905	-
	$ 2,213,028	$ 791,185

d. Details of receivables and the impaired for loan accounts as of December 31, 2017

Receivables

Item		Total Receivables December 31, 2017
Objective evidence of impairment	Individual assessment of impairment	$ 830,674
	Combined assessment of impairment	62,617
No objective evidence of impairment	Combined assessment of impairment	24,358,065
Total		$ 25,251,356

Item		Total Allowance December 31, 2017
Objective evidence of impairment	Individual assessment of impairment	$ 369,671
	Combined assessment of impairment	33,122
No objective evidence of impairment	Combined assessment of impairment	178,540
Total		$ 581,333

Note: The amount of receivable did not include the amount of allowance for receivables and adjustment for discount (premium).

Discounts and loans

		Total Loans December 31, 2017
Objective evidence of impairment	Individual assessment of impairment	$ 9,579,673
	Combined assessment of impairment	3,487,746
No objective evidence of impairment	Combined assessment of impairment	1,380,340,220
Total		$ 1,393,407,639

Item		Total Allowance December 31, 2017
Objective evidence of impairment	Individual assessment of impairment	$ 4,077,983
	Combined assessment of impairment	743,558
No objective evidence of impairment	Combined assessment of impairment	11,545,438
Total		$ 16,366,979

Note: The amount of discounts and loans did not include the amount of allowance for discounts and loans and adjustment for discount (premium).

13. AVAILABLE-FOR-SALE FINANCIAL ASSETS - 2017

	December 31, 2017
Domestic quoted stock	$ 3,643,572
Government bonds	16,108,800
Corporate bonds	18,564,075
Bank notes	32,409,743
Bonds issued by international organizations	879,046
Investments in bills	1,570,650
	$ 73,175,886

The par values of bonds provided for transactions with repurchase agreements were $1,784,800 thousand as of December 31, 2017.

Government bonds placed as deposits in courts were $281,100 thousand as of December 31, 2017. Government bonds placed as operating deposits were all $330,000 thousand, government bonds placed as reserve fund for trust compensation were all $170,000, government bonds pledged for call loans from banks were all $5,000,000 thousand as of December 31, 2017.

Refer to Note 41 for information relating to available-for-sale financial assets pledged as security.

14. HELD-TO-MATURITY FINANCIAL ASSETS - 2017

	December 31, 2017
Investments in bills	$ 227,528,720
Bank notes	1,972,932
Corporate bonds	7,910,394
	$ 237,412,046

The overseas branches' bonds provided as collateral for operations as of December 31, 2017 amounted to $449,428 thousand.

Certificates of deposit placed as reserves for clearing at the Central Bank amounted to $36,000,000 thousand as of December 31, 2017. Certificates of deposit which were issued by the Central Bank and pledged for call loans from banks amounted to $300,000 thousand as of December 31, 2017.

Refer to Note 41 for information relating to held-to-mature financial assets pledged as security.

15. FINANCIAL ASSETS FOR HEDGING

	December 31	
	2018	2017
Financial assets for hedging		
Fair value hedges - interest rate swaps	$ 244,763	$ -
Derivative financial assets for hedging		
Fair value hedges - interest rate swaps	-	243,372
	$ 244,763	$ 243,372

The Bank used interest rate swaps to minimize its exposure to changes in the fair value of its fixed-rate borrowings by entering into fixed-to-floating interest rate swap contracts. The interest swaps and the corresponding borrowings have the same terms, and management believes that the interest rate swaps are highly effective hedging instruments. The respective, nominal principal amount of the Bank's outstanding interest rate swaps as of December 31, 2018 and 2017 was $8,200,000 thousand. The maturity period is from April 19, 2021 to September 27, 2026.

The fixed-to-floating interest swaps were designated and effective fair value hedge instruments. During the years ended December 31, 2018 and 2017, the swaps were effective in hedging the fair value exposure to interest rate movements, and as a result, the carrying amount of the fixed-rate borrowings was adjusted by $249,055 thousand and $239,657 thousand as of December 31, 2018 and 2017, respectively; these amounts were included in profit or loss at the same time that the fair value of the interest rate swap was included in profit or loss.

The information of hedging transactions is as follows:

a. Hedging type: Fair value hedging.

b. Hedging objective: To minimize the Bank's risks from changes in fair value due to fluctuating interest rates, by converting fixed-rate notes to floating-rate notes.

c. Hedging method: By signing interest rate swap contracts, which pay floating rates (interest rate rage: 0.6617%-0.6650%) and charge fixed rates (interest rate rage: 1.2900%-1.6075%).

d. Hedging effect: The results of hedging are all in the line with the effective range of hedge accounting as defined by IFRSs. The realized gain or loss from hedging tools was $116,664 thousand and $221,516 thousand for the years ended December 31, 2018 and 2017, respectively, and the realized gain or loss from fair-value hedging was a loss of $(9,398) thousand and a loss of $(164,431) thousand, accounted for as net other non-interest income or loss, for the years ended December 31, 2018 and 2017, respectively.

16. FINANCIAL ASSETS AT COST - 2017

	December 31, 2017
Domestic unquoted common stock	$ 4,167,009

Management believed that the above unlisted equity investments held by the Bank, whose fair value cannot be reliably measured due to the range of reasonable fair value estimates was so significant; therefore, they were measured at cost less impairment at the end of reporting period.

17. INVESTMENTS IN DEBT INSTRUMENTS WITHOUT ACTIVE MARKET - 2017

	December 31, 2017
Beneficiary securities and asset-based securities	$ 64,609

18. OTHER MISCELLANEOUS FINANCIAL ASSETS

	December 31	
	2018	2017
Time deposits with original maturities of more than 3 months	$ 51,700,324	$ 26,806,884
Exchange bills negotiated	10,360	3,210
Overdue receivable	380,211	465,961
Call loans to security brokers	153,675	148,400
Less: Allowance for bad debts	(422,861)	(408,700)
	$ 51,821,709	$ 27,015,755

The market rates of time deposits with original maturity more than 3 months were 2.65%-4.85% and 1.85%-5.40% for the years ended December 31, 2018 and 2017, respectively. The time deposits were classified as investments in debt instruments without active market under IAS 39. Refer to Note 3 for information relating to their reclassification and comparative information for 2017.

Refer to Note 12 for the movement of the allowance for bad debts of other financial assets.

Refer to Note 41 for information relating to other miscellaneous financial assets pledged as security.

19. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	December 31	
	2018	2017
Investments in subsidiaries		
Chang Hua Commercial Bank, Ltd.	$ 12,536,866	$ -

On December 11, 2018, the Bank changed its operation units in China by establishing its subsidiary Chang Hua Commercial Bank, Ltd. Refer to Note 45. The percentage of ownership equity and voting rights to subsidiaries as of balance sheet date were as follows:

	December 31	
	2018	2017
Chang Hua Commercial Bank, Ltd.	100%	-

20. PROPERTY AND EQUIPMENT

	Freehold Land	Buildings	Machinery Equipment	Transportation Equipment	Miscellaneous Equipment	Leasehold Improvement	Leased Assets	Construction in Progress and Prepayment for Building and Equipment	Total
Cost									
Balance at January 1, 2018	$ 14,657,121	$ 9,107,453	$ 4,668,094	$ 723,601	$ 1,448,399	$ 967,993	$ 1,007	$ 120,129	$ 31,693,797
Additions	20,339	42,502	132,115	32,118	39,035	4,698	486	221,353	492,646
Disposals	-	-	(331,330)	(31,574)	(30,377)	(5,050)	-	-	(398,331)
Reclassification and others	-	(239,035)	67,538	(5,565)	(16,182)	(46,427)	(585)	(307,364)	(547,620)
Effect of foreign currency exchange differences	-	9,283	2,327	379	1,021	2,556	-	466	16,032
Balance at December 31, 2018	$ 14,677,460	$ 8,920,203	$ 4,538,744	$ 718,959	$ 1,441,896	$ 923,770	$ 908	$ 34,584	$ 31,256,524
Accumulated depreciation and impairment									
Balance at January 1, 2018	$ -	$ 4,269,791	$ 4,069,589	$ 604,449	$ 1,291,768	$ 818,119	$ 349	$ -	$ 11,054,065
Depreciation expense	-	179,589	196,262	43,597	44,513	41,800	124	-	505,885
Disposals	-	-	(331,022)	(31,568)	(30,374)	(5,050)	-	-	(398,014)
Reclassification and others	-	(37,182)	(32,175)	(3,349)	(12,686)	(26,223)	(325)	-	(111,940)
Effect of foreign currency exchange differences	-	1,299	1,490	274	1,128	2,313	-	-	6,504
Balance at December 31, 2018	$ -	$ 4,413,497	$ 3,904,144	$ 613,403	$ 1,294,349	$ 830,959	$ 148	$ -	$ 11,056,500
Carrying amounts at December 31, 2018	$ 14,677,460	$ 4,506,706	$ 634,600	$ 105,556	$ 147,547	$ 92,811	$ 760	$ 34,584	$ 20,200,024
Cost									
Balance at January 1, 2017	$ 14,657,121	$ 9,108,129	$ 4,652,958	$ 708,565	$ 1,430,509	$ 945,920	$ 4,253	$ 53,494	$ 31,560,949
Additions	-	59,058	144,484	25,107	48,689	63,351	422	89,664	430,775
Disposals	-	(44,876)	(132,906)	(12,909)	(28,117)	(33,801)	-	-	(252,609)
Reclassification	-	1,297	8,087	3,667	196	155	(3,668)	(20,940)	(11,206)
Effect of foreign currency exchange differences	-	(16,155)	(4,529)	(829)	(2,878)	(7,632)	-	(2,089)	(34,112)
Balance at December 31, 2017	$ 14,657,121	$ 9,107,453	$ 4,668,094	$ 723,601	$ 1,448,399	$ 967,993	$ 1,007	$ 120,129	$ 31,693,797
Accumulated depreciation and impairment									
Balance at January 1, 2017	$ -	$ 4,113,645	$ 3,986,898	$ 570,966	$ 1,273,907	$ 811,544	$ 2,166	$ -	$ 10,759,126
Depreciation expense	-	179,282	216,242	44,651	47,604	44,436	222	-	532,437
Disposals	-	(22,365)	(131,159)	(12,756)	(27,627)	(33,357)	-	-	(227,264)
Reclassification	-	-	-	2,037	-	-	(2,039)	-	(2)
Effect of foreign currency exchange differences	-	(771)	(2,392)	(449)	(2,116)	(4,504)	-	-	(10,232)
Balance at December 31, 2017	$ -	$ 4,269,791	$ 4,069,589	$ 604,449	$ 1,291,768	$ 818,119	$ 349	$ -	$ 11,054,065
Carrying amounts at December 31, 2017	$ 14,657,121	$ 4,837,662	$ 598,505	$ 119,152	$ 156,631	$ 149,874	$ 658	$ 120,129	$ 20,639,732

The above items of property and equipment are depreciated on a straight-line basis over the estimated useful life of the asset:

Building	
Main buildings	20-60 years
Air-conditioning	5-10 years
Machinery equipment	4-16 years
Transportation equipment	2-10 years
Miscellaneous equipment	3-10 years
Leasehold improvement	5 years
Leased assets	9 years

21. INVESTMENT PROPERTY

	Completed Investment Property
Cost	
Balance at January 1, 2018	$ 14,096,478
Addition	1,281
Balance at December 31, 2018	$ 14,097,759
Accumulated depreciation and impairment	
Balance at January 1, 2018	$ 348,691
Depreciation expense	6,692
Balance at December 31, 2018	$ 355,383
Carrying amounts at December 31, 2018	$ 13,742,376
Cost	
Balance at January 1, 2017	$ 14,096,088
Addition	390
Balance at December 31, 2017	$ 14,096,478
Accumulated depreciation and impairment	
Balance at January 1, 2017	$ 342,107
Depreciation expense	6,584
Balance at December 31, 2017	$ 348,691
Carrying amounts at December 31, 2017	$ 13,747,787

The investment property are depreciated using the straight-line method over their estimated useful lives as follows:

Main buildings	20-60 years
Air-conditioning	5-10 years

The investment properties are measured and stated at cost in the balance sheet. For management purpose, the Bank's internal appraisers periodically measure the fair value of investment properties in accordance with the Bank's internal rules and procedures. The fair values were $26,506,226 thousand and $26,269,911 thousand as of December 31, 2018 and 2017, respectively.

The rental incomes and direct operating expenses generated by the investment property for the years ended December 31, 2018 and 2017 were as follows:

	For the Year Ended December 31	
	2018	**2017**
Rental incomes	$ 186,129	$ 185,103
Direct operating expenses	$ 103,365	$ 110,422

22. INTANGIBLE ASSETS

	Computer Software
Balance at January 1, 2018	$ 436,176
Additions	347,039
Amortization expense	(201,397)
Reclassification and others	132,665
Effect of foreign currency exchange differences	359
Balance at December 31, 2018	$ 714,842
Balance at January 1, 2017	$ 423,465
Additions	181,941
Amortization expense	(179,725)
Reclassification and others	11,206
Effect of foreign currency exchange differences	(711)
Balance at December 31, 2017	$ 436,176

The intangible asset mentioned above is amortized on a straight-line basis over the estimated useful life (3-5 years).

23. OTHER ASSETS

	December 31	
	2018	**2017**
Refundable deposits	$ 662,164	$ 638,049
Assumed collateral and residuals	23,462	23,462
Less: Accumulated impairment	(23,462)	(23,462)
Prepayments	327,441	293,649
Others	869	181
	$ 990,474	$ 931,879

24. DEPOSITS FROM THE CENTRAL BANK AND BANKS

	December 31	
	2018	2017
Deposits from the Central Bank	$ 25,835	$ 22,509
Deposits from banks	27,047,246	27,976,541
Overdrafts on banks	1,167,669	841,014
Call loans from banks	81,920,266	77,517,520
Deposits transferred from Chunghwa Post Co., Ltd.	697,163	1,794,283
	$ 110,858,179	$ 108,151,867

25. PAYABLES

	December 31	
	2018	2017
Checks issued to payees for clearing	$ 18,402,780	$ 18,412,071
Accounts payable	1,767,861	1,789,193
Accrued expenses	2,555,079	2,461,012
Accrued interests	2,547,595	2,094,269
Acceptances	6,037,874	4,339,412
Others	4,388,414	5,753,898
	$ 35,699,603	$ 34,849,855

26. DEPOSITS AND REMITTANCES

	December 31	
	2018	2017
Checking account deposits	$ 44,742,967	$ 42,033,779
Demand deposits	389,593,445	412,119,333
Time deposits	388,379,056	373,331,138
Negotiable certificates of deposit	5,670,685	6,747,936
Savings account deposits	849,749,137	835,498,391
Remittances	1,952,686	2,349,207
	$ 1,680,087,976	$ 1,672,079,784

27. BANK NOTES PAYABLE

The Bank has issued bank notes to enhance its capital adequacy ratio and raise medium to long-term operating funds. The information of the bank notes are as follows:

The Bank issued $5,000 million perpetual subordinated bank notes-99-1 on June 29, 2010.

The Bank issued $3,300 million subordinated bank notes-100-1 on March 11, 2011, divided into Financial Debentures A $2,200 million with 7-year terms and Financial Debenture B $1,100 million with 10-year terms.

The Bank issued $6,700 million subordinated bank notes-100-2 with 10-year terms on April 18, 2011.

The Bank issued $2,200 million subordinated bank notes A 103-1 with 7-year terms on April 16, 2014.

The Bank issued $5,300 million subordinated bank notes B 103-1 with 10-year terms on April 16, 2014.

The Bank issued $2,500 million subordinated bank notes C 103-1 with 10-year terms on April 16, 2014.

The Bank issued $3,000 million subordinated bank notes A 105-1 with 7-year terms on September 27, 2016.

The Bank issued $3,300 million subordinated bank notes B 105-1 with 10-year terms on September 27, 2016.

The Bank issued $1,530 million subordinated bank notes A 106-1 with 7-year terms on March 29, 2017.

The Bank issued $8,670 million subordinated bank notes B 106-1 with 10-year terms on March 29, 2017.

The Bank issued $7,000 million perpetual subordinated bank notes 107-1 on April 26, 2018.

The Bank issued $3,000 million perpetual subordinated bank notes 107-2 on November 8, 2018.

The outstanding balance and details of subordinated bank notes are as follows:

	December 31	
Bank Note, Interest Rate and Maturity Date	**2018**	**2017**
Hedged financial liabilities at fair value		
103-1 Note A, 7-year terms, interest payable annually, interest rate 1.70%, maturity date: April 16, 2021	$ 2,200,000	$ 2,200,000
103-1 Note B, 10-year terms, interest payable annually, interest rate 1.85%, maturity date: April 16, 2024	3,000,000	3,000,000
105-1 Note A, 7-year terms, interest payable annually, interest rate 1.09%, maturity date: September 27, 2023	1,000,000	1,000,000
105-1 Note B, 10-year terms, interest payable annually, interest rate 1.20%, maturity date: September 27, 2026	2,000,000	2,000,000
Valuation adjustment	249,055	239,657
	8,449,055	8,439,657
Non-hedged bank notes payable		
99-1, No maturity date, interest payable annually, interest rate from first to tenth year is 3.15%, after tenth year is 4.15%	5,000,000	5,000,000
100-1 Note A, 7-year terms, interest payable annually, interest rate 1.65%, maturity date: March 11, 2018	-	2,200,000
100-1 Note B, 10-year terms, interest payable annually, interest rate 1.72%, maturity date: March 11, 2021	1,100,000	1,100,000
100-2, 10-year terms, interest payable annually, floating rate, maturity date: April 18, 2021	6,700,000	6,700,000
103-1 Note B, 10-year terms, interest payable annually, interest rate 1.85%, maturity date: April 16, 2024	2,300,000	2,300,000

(Continued)

Bank Note, Interest Rate and Maturity Date	December 31 2018	2017
103-1 Note C, 10-year terms, interest payable annually, floating rate, maturity date: April 16, 2024	$ 2,500,000	$ 2,500,000
105-1 Note A, 7-year terms, interest payable annually, interest rate 1.09%, maturity date: September 27, 2023	2,000,000	2,000,000
105-1 Note B, 10-year terms, interest payable annually, interest rate 1.20%, maturity date: September 27, 2026	1,300,000	1,300,000
106-1 Note A, 7-year terms, interest payable annually, interest rate 1.50%, maturity date: March 29, 2024	1,530,000	1,530,000
106-1 Note B, 10-year terms, interest payable annually, interest rate 1.85%, maturity date: March 29, 2027	8,670,000	8,670,000
107-1, no maturity date, interest payable annually, interest rate 2.66%	7,000,000	-
107-2, no maturity date, interest payable annually, interest rate 2.30%	3,000,000	-
	41,100,000	33,300,000
	$ 49,549,055	$ 41,739,657

(Concluded)

The Bank engaged in derivative transactions as hedging tools for the 103-1 Note A, 103-1 Note B, 105-1 Note A and 105-1 Note B fixed interest rate bank notes to avoid fair value risks due to changes in interest rates. The interest rate swaps nominal principal was accounted as hedging derivative financial assets. (Refer to Note 15).

28. OTHER FINANCIAL LIABILITIES

	December 31 2018	2017
Principal received on structured notes	$ 3,715,307	$ 3,040,687
Appropriations for loans	671,115	621,529
Lease payable	656	384
	$ 4,387,078	$ 3,662,600

The principal received on structured notes were the time deposits which linked to currency options. The related income of structured notes were determined by the target interest rates.

29. OTHER LIABILITIES

	December 31 2018	2017
Advance receipts	$ 634,472	$ 753,160
Guarantee deposits	2,112,301	1,894,206
Deferred revenue	14,959	18,427
	$ 2,761,732	$ 2,665,793

30. RESERVE FOR LIABILITIES

	December 31	
	2018	2017
Reserve for employee benefits (Note 31)	$ 4,337,337	$ 4,254,235
Reserve for guarantee liabilities	537,233	504,600
Reserve for loan commitments	365,995	-
Others	31,912	-
	$ 5,272,477	$ 4,758,835

The effects of the balance of reserve for loan commitments and guarantee liabilities at December 31, 2017 in application of IFRS 9 were as follows:

	IAS 39	Remeasure-ments	IFRS 9
Reserve for guarantee liabilities	$ 504,600	$ -	$ 504,600
Reserve for loan commitments	$ -	$ 472,742	$ 472,742

Movements in reserve for guarantee liabilities and reserve for loans commitments.

	For the Year Ended December 31, 2018					
	12-Month Expected Credit Losses	Lifetime Expected Credit Losses	Realized Credit Impairment	Loss Recognized Based on IFRS 9	Recognized Impairment Difference Based on Regulations	Total
Balance at January 1, 2018	$ 490,854	$ 126,871	$ 427,500	$1,045,225	$ (67,883)	$ 977,342
Changes from financial instruments recognized at the beginning of the period:						
Transfers to lifetime expected credit losses	(4,338)	4,283	-	(55)	-	(55)
Transfers to credit-impaired financial assets	(73)	(6)	181	102	-	102
Transfers to 12-months expected credit losses	101,781	(102,402)	-	(621)	-	(621)
Financial instruments derecognized for the period	(456,216)	(23,559)	(390,609)	(870,384)	-	(870,384)
Purchase or originated financial instruments	321,898	20,946	4,212	347,056	-	347,056
Recognized impairment difference based on regulations	-	-	-	-	481,128	481,128
Changes in exchange rates and others	619	55	(102)	572	-	572
Balance at December 31, 2018	$ 454,525	$ 26,188	$ 41,182	$ 521,895	$ 413,245	$ 935,140

	Guarantee Liabilities
Balance at January 1, 2017	$ 538,370
Reserve	(32,284)
Written-off	(619)
Changes in exchange rate	(867)
Balance at December 31, 2017	$ 504,600

31. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Bank adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under the LPA, the Bank makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

b. Defined benefit plans

The defined benefit plan adopted by the Bank in accordance with the Labor Standards Law is operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the six months before retirement. The Bank contributes amounts equal to 10% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Bank assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Bank is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (the "Bureau"); the Bank has no right to influence the investment policy and strategy.

The amounts included in the balance sheets in respect of the Bank's defined benefit plans were as follows:

	December 31	
	2018	2017
Present value of defined benefit obligation	$ 9,864,472	$ 9,553,277
Fair value of plan assets	(6,915,260)	(6,698,414)
Deficit	2,949,212	2,854,863
Others	12,132	14,075
Net defined benefit liability	$ 2,961,344	$ 2,868,938

Movements in net defined benefit liability (asset) were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liability (Asset)
Balance at January 1, 2018	$ 9,553,277	$ 6,698,414	$ 2,854,863
Service cost			
Current service cost	248,690	-	248,690
Net interest cost	123,261	88,215	35,046
Recognized in profit or loss	371,951	88,215	283,736
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	184,002	(184,002)
Actuarial loss - changes in financial assumptions	330,529	-	330,529
Actuarial loss - experience adjustments	170,732	-	170,732
Recognized in other comprehensive income	501,261	184,002	317,259

(Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liability (Asset)
Contributions from the employer	$ -	$ 506,646	$ (506,646)
Benefits paid	(562,017)	(562,017)	-
Balance at December 31, 2018	$ 9,864,472	$ 6,915,260	$ 2,949,212
Balance at January 1, 2017	$ 9,375,700	$ 6,748,672	$ 2,627,028
Service cost			
Current service cost	253,991	-	253,991
Net interest cost	139,505	102,529	36,976
Recognized in profit or loss	393,496	102,529	290,967
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(36,790)	36,790
Actuarial loss - changes in financial assumptions	194,662	-	194,662
Actuarial loss - experience adjustments	189,873	-	189,873
Recognized in other comprehensive income	384,535	(36,790)	421,325
Contributions from the employer	-	484,457	(484,457)
Benefits paid	(600,454)	(600,454)	-
Balance at December 31, 2017	$ 9,553,277	$ 6,698,414	$ 2,854,863

(Concluded)

Through the defined benefit plans under the Labor Standards Law, the Bank is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic/and foreign/equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the government and corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2018	2017
Discount rate(s)	1.00%	1.30%
Expected rate(s) of salary increase	2.04%	2.00%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2018	**2017**
Discount rate(s)		
0.25% increase	$ (244,869)	$ (242,396)
0.25% decrease	$ 254,327	$ 251,978
Expected rate(s) of salary increase		
0.25% increase	$ 251,059	$ 249,592
0.25% decrease	$ (243,003)	$ (241,345)

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2018	**2017**
The expected contributions to the plan for the next year	$ 308,280	$ 318,000
The average duration of the defined benefit obligation	10 years	10 years

c. Plan of high-yield savings account for employee

The Bank has the obligation to pay premium interest on the high-yield savings account of its present employees and retired employees. Such obligation is recognized based on its internal guidelines in the Rules of Employee Preferential Deposit for Retired Employees. Refer to Note 33 for related expense.

1) Reconciliation of assets and liabilities at the end of the reporting period with the present value of defined benefit obligation and the fair value of plan assets was as follows:

	December 31	
	2018	**2017**
Present value of defined benefit obligation	$ 1,375,993	$ 1,385,297
Less: Fair value of defined benefit plan assets	-	-
Assets and liabilities at the end of the reporting period	$ 1,375,993	$ 1,385,297

2) Analysis of defined benefit obligation

	December 31	
	2018	**2017**
All or part of defined benefit obligation contributed	$ -	$ -
Defined benefit obligation not contributed	1,375,993	1,385,297
	$ 1,375,993	$ 1,385,297

3) Movements of the present value of defined benefit obligation

	For the Year Ended December 31	
	2018	2017
Balance at January 1	$ 1,385,297	$ 1,345,615
Interest cost	52,560	51,068
Actuarial gains and losses	215,306	262,100
Benefits paid	(277,170)	(273,486)
Balance at December 31	$ 1,375,993	$ 1,385,297

4) Movements of the fair value of plan assets

	For the Year Ended December 31	
	2018	2017
Balance at January 1	$ -	$ -
Contribution by employers	277,170	273,486
Benefits paid	(277,170)	(273,486)
Balance at December 31	$ -	$ -

5) Details of gains and losses recognized in expenses

	For the Year Ended December 31	
	2018	2017
Interest cost	$ 52,560	$ 51,068
Actuarial gains and losses	215,306	262,100
	$ 267,866	$ 313,168

6) Main actuarial assumptions

	For the Year Ended December 31	
	2018	2017
Discount rate of high-yield savings account for employee	4.00%	4.00%
Return rate of funds deposited	2.00%	2.00%
Account balance decrease rate per year	1.00%	1.00%
Probability of future high-yield savings account system change	50.00%	50.00%
Mortality rate	Based on Taiwan Life Insurance Industry Mortality Tables	Based on Taiwan Life Insurance Industry Mortality Tables
Rate provided to ordinary clients for similar deposit	1.09%-1.14%	1.30%-1.36%

32. EQUITY

a. Capital

Common stock

	December 31	
	2018	2017
Number of stock authorized (in thousands)	11,000,000	11,000,000
Stock authorized	$ 110,000,000	$ 110,000,000
Number of stock issued and fully paid (in thousands)	9,789,521	9,413,001
Stock issued	$ 97,895,207	$ 94,130,007

Fully paid common stock, which have a par value of $10, carry one vote per stock and carry a right to dividends.

As of January 1, 2017, the Bank's authorized and registered capital was $90,000,000 thousand divided into 9,000,000 thousand shares at $10 par value; the total paid-in capital was $89,647,626 thousand. In August 2017, the Bank increased its registered capital by $20,000,000 thousand. In September 2018 and August 2017, the Bank resolved capitalization of earnings and increased its paid-in capital by $3,765,200 thousand and $4,482,381 thousand. The amount of the Bank's authorized and registered capital at December 31, 2018 and 2017 were $110,000,000 thousand divided into 11,000,000 thousand shares and, also at those dates, the amounts of total paid-in capital were $97,895,207 thousand and $94,130,007 thousand divided into 9,789,521 thousand and 9,413,001 thousand outstanding shares, at $10 par value.

b. Distribution of earnings and dividend policy

Under the dividend policy as set forth in the Bank's amended Articles of Incorporation, where the Bank made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as legal reserve 30% of the remaining profit, setting aside or reversing special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Bank's board of directors as the basis for proposing distribution plan, and 30% to 100% of the basis for proposing distribution plan should be resolved in the stockholders' meeting for distribution of dividends and bonus to stockholders. For the policies on distribution of employees' compensation and remuneration of directors and supervisors after amendment, refer to Note 33, h, "employee benefits expenses".

To ensure the Bank has cash for present and future expansion plans and to raise the profitability, the Bank prefers to distribute more stock dividends, but cash dividends shall not be less than 10% of total dividends distributed. If the cash dividends are less than $0.1 per share, the Bank will not distribute any cash dividends, unless otherwise adopted in the stockholders' meeting.

Appropriation of earnings to legal reserve shall be made until the legal reserve equals the Bank's paid-in capital. Legal reserve may be used to offset deficit. If the Bank has no deficit and the legal reserve has exceeded 25% of the Bank's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1010012865, Rule No. 1010047490 and Rule No. 1030006415 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Bank.

Under Rule No. 10510001510 issued by the FSC on May 25, 2016, the Bank should appropriate 0.5%-1.0% net income as a special reserve when distributing surplus earnings for 2016, 2017 and 2018. Since 2017, the Bank should reverse an amount which is the same as the distributed surplus earnings mentioned above for the expense of employees' bridging-over arrangements and settlements caused by the development of financial technology.

The Bank cannot distribute cash dividends or purchase treasury stock if the Bank has any of the situations cited in Item 1, Section 1, Article 44 of the Banking Law.

The maximum amount of cash dividends cannot exceed 15% of the Bank's total capital if the Bank's capital surplus is less than the capital based on Section 1.

The restriction of the cash dividends stated above does not apply if the Bank's capital surplus exceeds the capital or the Bank's financial position satisfied the criteria by the authority and also the Bank appropriates the legal reserve based on the Banking Law.

The appropriations of earnings for 2017 and 2016 were approved in the stockholders' meetings on June 8, 2018 and June 16, 2017, respectively. The appropriations of earnings and dividends per share were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	2017	**2016**	**2017**	**2016**
Legal reserve	$ 3,627,932	$ 3,625,791	$ -	$ -
Special reserve	60,466	60,429	-	-
Dividends of common stock - cash	4,235,850	3,765,202	0.45	0.42
Dividends of common stock - stock	3,765,200	4,482,381	0.40	0.50

The appropriations of earnings, the bonus of employees, and the remuneration of directors and supervisors for 2018 are subject to the resolution of the stockholders' meeting to be held in June 2019.

c. Special reserve

	December 31	
	2018	**2017**
Special reserves appropriated following first-time adoption of IFRSs	$ 11,778,829	$ 11,778,829
Others	362,587	302,121
	$ 12,141,416	$ 12,080,950

33. NET INCOME

a. Net income of interest

	For the Year Ended December 31	
	2018	2017
Interest income		
Loans	$ 29,241,174	$ 27,779,438
Due from and call loans to banks	5,065,157	3,655,264
Investments in marketable securities	3,721,257	3,001,990
Others	308,225	166,223
	38,335,813	34,602,915
Interest expense		
Deposits	(11,671,019)	(9,617,848)
Due to central bank and call loans from banks	(2,561,435)	(1,585,683)
Others	(977,817)	(742,514)
	(15,210,271)	(11,946,045)
Net income of interest	$ 23,125,542	$ 22,656,870

b. Net service fee income

	For the Year Ended December 31	
	2018	2017
Service fee income		
Fees from import and export	$ 330,295	$ 338,965
Remittance fees	483,704	487,286
Loan fees	602,708	618,752
Fees from trust	844,518	827,425
Fees from trust business	304,732	260,514
Fees from insurance agency	2,132,840	2,164,726
Others (1), (2)	1,172,810	1,048,575
	5,871,607	5,746,243
Service charge		
Interbank charges	(152,717)	(144,862)
Charges from trust	(27,811)	(34,256)
Custodian charges	(104,111)	(91,775)
Charges from insurance agency	(168,505)	(185,151)
Others	(556,125)	(491,581)
	(1,009,269)	(947,625)
Net service fee income	$ 4,862,338	$ 4,798,618

1) The service fee income from electronic payment business was $3,409 thousand and $2,292 thousand for the years ended December 31, 2018 and 2017, respectively.

2) In accordance with “Regulation Governing the Organization and Administration Sinking Fund Established by Electronic Payment Institutions”, the yield income from electronic payment business was both $1 thousand for the years ended December 31, 2018 and 2017.

c. Gain (loss) on financial assets or liabilities measured at FVTPL

	For the Year Ended December 31	
	2018	**2017**
Realized gain (loss) on financial assets or liabilities measured at FVTPL		
Stock and beneficiary certificates	$ (88,595)	$ 32,845
Bonds	(20,679)	13,504
Bills	34	5
Derivative financial instruments	3,042,871	2,325,997
Net interest loss	(322,638)	(229,366)
Stock dividends and bonus	6,989	4,379
	2,617,982	2,147,364
Valuation gain (loss) on financial assets or liabilities measured at FVTPL		
Stock and beneficiary certificates	-	(18,672)
Bonds	311,073	(13,934)
Bills	229	887
Derivative financial instruments	(217,328)	227,297
	93,974	195,578
	$ 2,711,956	$ 2,342,942

d. Realized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31, 2018
Stock dividends and bonus	$ 457,351
Disposal gains	
Bonds	342,348
Disposal losses	
Beneficiary securities	(2)
Bonds	(17,809)
	$ 781,888

e. Realized gain (loss) on available-for-sale financial assets

	For the Year Ended December 31, 2017
Stock dividends and bonus	$ 129,984
Disposal gains	
Stock	119,157
Bonds	331,360
	580,501
Disposal losses	
Stock	(4,519)
Bonds	(11,516)
	(16,035)
	$ 564,466

f. Depreciation and amortization expense

	For the Year Ended December 31	
	2018	2017
Property and equipment	$ 505,885	$ 532,437
Investment property	6,692	6,584
Intangible assets and other deferred assets	201,506	179,805
	$ 714,083	$ 718,826

g. Employee benefits expenses

	For the Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 9,740,392	$ 9,524,952
Post-employment benefits		
Defined contribution plans	181,849	169,344
Defined benefit plans	283,736	290,967
High-yield savings account for employees	267,866	313,168
Other post-employment benefits	246,115	238,675
Termination benefits	11,327	70,768
	$ 10,731,285	$ 10,607,874

Salary adjustment on 2018:

1) The operation performance of the Bank and staff performance were excellent in 2017. To motivate staff morale, the Bank made annual salary adjustment in 2018 and implemented overall evaluation on April 1, 2018.

2) The salary adjustment plan contained “fixed adjustment” and “performance adjustment”, just as the adjustments in recent years. The Bank made salary adjustment by different performance to motivate outstanding compassionate rank-and-file employees.

    a) Fixed adjustment

    The monthly salary adjustment was raised from $1 thousand to $1.2 thousand for employees who belong to job levels 5 to 7 and less than 5 years seniority and who earned 4 to 6 points in 2017 performance appraisal. The monthly salary adjustment was $1 thousand for other employees.

    b) Performance adjustment

    Employees who earned 6 points in 2017 performance appraisal got a raise of 4% of monthly salary; employees who earned 5 points got a raise of 3% of monthly salary; employees who earned 4 points got a raise of 2% of monthly salary; employees who earned 3 points got a raise of 1% of monthly salary.

3) The annual salary adjustment in 2018 was implemented on April 1, 2018. The average salary increase of all employees was 3.31%. The average salary increase and the highest salary increase of employees belonging to job levels 5 to 7 were 5.25% and 7%, respectively. The salary adjustment shows the determination of the Bank to take care of its employees and implement corporate social responsibility.

Appraisal \ Year	2018	
	Job Levels 5 to 7 and Less Than 5 Years Seniority	**Other Job Levels**
6 points	1,200+4%	1,000+4%
5 points	1,200+3%	1,000+3%
4 points	1,200+2%	1,000+2%
3 points	1,000+1%	
Average salary increase	5.25%	3.38%
Average salary increase of the Bank	3.31%	

h. Employees' compensation and remuneration of directors

The Bank accrued employees' compensation and remuneration of directors at the rates of 1%-6% and no higher than 0.8%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors. The employees' compensation and remuneration of directors for 2018 will resolve by the board of directors on March 15, 2019 and the employee's compensation and remuneration of directors for 2017 having been resolved by the board of directors on March 20, 2018, respectively, were as follows:

Accrual rate

	For the Year Ended December 31	
	2018 (Expected)	**2017 (Actual)**
Employees' compensation	5.00%	5.00%
Remuneration of directors	0.40%	0.40%

Amount

	For the Year Ended December 31	
	2018 (Expected)	**2017 (Actual)**
Employees' compensation	$ 777,500	$ 749,711
Remuneration of directors	$ 62,500	$ 59,977

If there is a change in the amounts after the annual consolidated financial statements were authorized for issue, the differences are recorded as a change in the accounting estimate.

There was no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the year ended December 31, 2017.

Information on the employees' compensation and remuneration of directors resolved by the Group's board of directors in 2018 and 2017 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

34. INCOME TAX

a. Major components of tax expense recognized in profit or loss

	For the Year Ended December 31	
	2018	2017
Current income tax		
In respect of the current period	$ 1,521,334	$ 2,270,826
Income tax on unappropriated earnings	5,396	-
Deferred income tax		
In respect of the current period	1,016,330	(179,713)
Adjustments to deferred tax attributable to changes in tax rates and laws	(483,061)	-
Income tax expense recognized in profit or loss	$ 2,059,999	$ 2,091,113

A reconciliation of accounting profit and income tax expenses is as follows:

	For the Year Ended December 31	
	2018	2017
Profit before tax	$ 14,706,534	$ 14,184,219
Income tax expense calculated at the statutory rate	2,941,307	2,411,317
Nondeductible expenses in determining taxable income	102,612	835
Income tax on unappropriated earnings	5,396	-
Overseas' branch's additional income of deferred tax effect	186,078	122,990
Tax-exempt income	(940,216)	(903,142)
Non-deductible tax of overseas branches	241,614	385,320
Changes in tax rate	(483,061)	-
Adjustments for prior years' tax	6,613	(19,224)
Others	(344)	93,017
Income tax expense recognized in profit or loss	$ 2,059,999	$ 2,091,113

In 2017, the applicable corporate income tax rate used by the Bank in the ROC is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%. The applicable tax rate used by subsidiaries in China is 25%. Tax rates used by other banks operating in other jurisdictions are based on the tax laws in those jurisdictions.

As the status of the 2019 appropriation of earnings is uncertain, the potential income tax consequences of the 2018 unappropriated earnings are not reliably determinable.

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2018	**2017**
Deferred tax		
In respect of the current year:		
Exchange differences on translation	$ 20,432	$ (139,968)
Unrealized gains (losses) on valuation of available-for-sale financial assets	-	11,758
Unrealized gains of financial assets at FVTOCI	(37,624)	-
Actuarial losses on defined benefit plan	(63,452)	(71,625)
Total income tax benefit recognized in other comprehensive income	$ (80,644)	$ (199,835)

c. Current tax assets and liabilities

	For the Year Ended December 31	
	2018	**2017**
Current tax assets		
Tax refund receivable	$ 137,886	$ -
Others	151,885	135,714
	$ 289,771	$ 135,714
Current tax liabilities		
Income tax payable	$ 218,866	$ 954,609

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2018

	Beginning Balance	**Adjustments on IFRS 9**	**Recognized in Profit or Loss**	**Recognized in Other Comprehensive Income**	**Others**	**Ending Balance**
Deferred tax assets						
Temporary differences						
Doubtful debts	$ 1,944,366	$ -	$ (433,690)	$ -	$ -	$ 1,510,676
Others	1,230,684	71,226	228,567	82,573	(122,321)	1,490,729
	$ 3,175,050	$ 71,226	$ (205,123)	$ 82,573	$ (122,321)	$ 3,001,405
Deferred tax liabilities						
Land value increment tax	$ 6,156,692	$ -	$ -	$ -	$ -	$ 6,156,692
Temporary differences	863,278	-	328,146	1,929	-	1,193,353
	$ 7,019,970	$ -	$ 328,146	$ 1,929	$ -	$ 7,350,045

For the year ended December 31, 2017

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Temporary differences				
Doubtful debts	$ 1,581,916	$ 362,450	$ -	$ 1,944,366
Others	865,818	304,999	59,867	1,230,684
	$ 2,447,734	$ 667,449	$ 59,867	$ 3,175,050
Deferred tax liabilities				
Land revaluation increment tax	$ 6,156,692	$ -	$ -	$ 6,156,692
Temporary differences	515,509	487,737	(139,968)	863,278
	$ 6,672,201	$ 487,737	$ (139,968)	$ 7,019,970

e. Income tax assessments

The Bank's income tax returns through 2016 had been examined and cleared by the tax authority.

35. EARNINGS PER SHARE

The computation of earnings per share was retrospectively adjusted for the effects of adjustments resulting from bonus stock issues on September 10, 2018. The basic and diluted after-tax earnings per share of 2017 were adjusted retrospectively as follows:

Unit: NT$ Per Share

	For the Year Ended December 31, 2017	
	Before Adjusted Retrospectively	After Adjusted Retrospectively
Basic earnings per share	$ 1.28	$ 1.24
Diluted earnings per share	$ 1.28	$ 1.23

The earnings and weighted average number of common stock outstanding in the computation of earnings per share were as follows:

	For the Year Ended December 31	
	2018	2017
Net profit for the year	$ 12,646,535	$ 12,093,106

Weighted average number of common stock outstanding (in thousand stocks):

	For the Year Ended December 31	
	2018	2017
Weighted average number of common stock in computation of basic earnings per share	9,789,521	9,789,521
Effect of potentially dilutive common stock:		
Employees' compensation issued	52,535	52,039
Weighted average number of common stock used in the computation of diluted earnings per share	9,842,056	9,841,560

If the Bank offered to settle compensation or bonuses paid to employees in cash or stock, the Bank assumed the entire amount of the compensation or bonus would be settled in stock and the resulting potential stock were included in the weighted average number of stock outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential stock is included in the computation of diluted earnings per share until the number of stock to be distributed to employees is resolved in the following year.

36. OPERATING LEASE ARRANGEMENTS

a. The Bank as lessee

Operating leases relate to leases of land, houses and cars with lease terms between 3 and 10 years. All operating lease contracts over 5 years contain clauses for 5-year market rental reviews. The Bank does not have a bargain purchase option to acquire the leased land, houses and cars at the expiration of the lease periods.

As of December 31, 2018 and 2017, refundable deposits paid under operation leases amounted to $43,810 thousand and $43,272 thousand, respectively.

The future minimum lease payments of non-cancellable operating lease commitments are as follows:

	December 31	
	2018	2017
Not later than 1 year	$ 595,724	$ 594,797
Later than 1 year and not later than 5 years	1,100,820	1,275,879
Later than 5 years	255,874	362,369
	$ 1,952,418	$ 2,233,045

b. The Bank as lessor

Operating leases relate to the investment property owned by the Bank with lease terms between 5 to 10 years, with an option to extend an additional 10 years. All operating lease contracts contain market review clauses in the event that the lessee exercises its option to renew. The lessee does not have a bargain purchase option to acquire the property at the expiry of the lease period.

As of December 31, 2018 and 2017, refundable deposits received under operation leases amounted to $55,213 thousand and $55,014 thousand, respectively.

The future minimum lease payments of non-cancellable operating lease are as follows:

	December 31	
	2018	**2017**
Not later than 1 year	$ 239,809	$ 229,761
Later than 1 year and not later than 5 years	498,706	504,391
Later than 5 years	82,454	78,584
	$ 820,969	$ 812,736

37. CAPITAL RISK MANAGEMENT

a. Summary

The Bank's goals in capital management are as follows:

1) The Bank's qualified regulatory capital should meet the requirement of capital adequacy regulations, and reached the minimum capital adequacy ratio.

2) To ensure the Bank is able to meet the capital heeds, it should be evaluated periodicity and observed the variation between regulatory capital and risk assets to keep common equity ratio in the interval approved by the board of directors.

3) Related to the calculation of qualified regulatory capital and legal capital were according to the regulation of administration.

b. Capital management procedures

The Bank kept capital adequacy ratio completely to meet the requirement of the administration, and declared to the administration quarterly.

In addition, the capital management procedures for the overseas subsidiaries of the Bank were carried out according to the regulation of local administrations.

The Bank's capital adequacy performance, which was calculated based on Regulations Governing the Capital Adequacy and Capital Category of Banks, was reported to the Asset and Liability Management Committee of the Bank periodically. The regulatory capital was classified into Tier 1 Capital, other Tier 1 Capital and Tier 2 Capital.

1) Tier 1 Capital: Include Common Equity and other Tier 1 Capital

   Common Equity: Include common stock (include capital collected in advance), Capital reserves (exclude additional paid-in capital in excess of par - preferred stock), accumulated profit, reserve and adjusted equity. Deduct: Legal adjustments.

2) Other Tier 1 Capital: Include noncumulative perpetual preferred stock, noncumulative perpetual subordinated debts. Deduct: Legal adjustments.

3) Tier 2 Capital: Include cumulative perpetual preferred stock, cumulative perpetual subordinated debts, revaluation reserve, long-term subordinated debt, non-perpetual preferred stock include stock issue price 45% of unrecognized available-for-sale financial assets convertible bonds, operating reserves and allowance for doubtful accounts. Deduct: Legal adjustments.

c. Capital adequacy

Item			December 31, 2018	December 31, 2017
Self-owned capital	Common equity Tier I		$ 133,169,964	$ 128,325,492
	Other Tier I capital		8,264,615	1,853,200
	Tier II capital		50,502,460	58,525,280
	Self-owned capital		191,937,039	188,703,972
Risk-weighted assets	Credit risk	Standardized approach	1,283,755,061	1,318,331,599
		IRB	-	-
		Securitization	133,357	12,922
	Operation risk	Basic indicator approach	-	-
		Standardized approach/optional standard	57,175,125	53,616,863
		Advanced internal rating based approach	-	-
	Market price risk	Standardized approach	18,998,850	19,542,238
		Internal model approach	-	-
	Total		1,360,062,393	1,391,503,622
Capital adequacy ratio			14.11%	13.56%
Common equity Tier I to risk-weighted assets ratio			9.79%	9.22%
Tier I capital to risk-weighted assets ratio			10.40%	9.36%
Leverage ratio			6.40%	5.96%

Note 1: The ratios are calculated in accordance with the Regulations Governing the Capital Adequacy and Capital category of Banks.

Note 2: Annual financial report should include the capital adequacy ratio in current and previous period. Besides semiannual report should disclose the ratio the end of last year.

Note 3: Formula:

a. Self-owned capital = Common equity Tier I + Other Tier I capital + Tier II capital

b. Risk-weighted assets = Credit risk-weighted assets + (Operation risk capital + Market price risk capital) x 12.5

c. Capital adequacy = Self-owned capital ÷ Risk-weighted assets

d. Common equity Tier I capital to risk-weighted assets ratio = Common equity Tier I capital ÷ Risk-weighted assets

e. Tier I capital to risk-weighted assets ratio = (Common equity Tier I + Other Tier I capital) ÷ Risk-weighted assets

f. Leverage ratio = Tier I capital ÷ Adjusted average assets

38. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments that are not measured at fair value

Fair value of financial instruments not measured at fair value

December 31, 2018

	Carrying Amount	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3	Fair Value Total
Financial assets					
Financial assets at amortized cost	$ 268,059,805	$ 7,170,574	$ 260,872,765	$ -	$ 268,043,339
Financial liabilities					
Bank notes payable	49,549,055	-	8,449,055	42,173,161	50,622,216

December 31, 2017

	Carrying Amount	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3	Fair Value Total
Financial assets					
Investments in debt instruments without active market	$ 64,609	$ -	$ 69,302	$ -	$ 69,302
Held-to-maturity investments	237,412,046	3,496,314	233,983,010	-	237,479,324
Financial liabilities					
Bank notes payable	41,739,657	-	8,439,657	34,358,719	42,798,376

b. Fair value of financial instruments that are measured at fair value on a recurring basis

1) Fair value hierarchy

Fair Value Measurement of Financial Instruments	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Non-derivative financial products				
Assets				
Financial assets at FVTPL	$ 8,581,548	$ 300,526	$ 8,281,022	$ -
Financial assets mandatorily measured at FVTPL	8,581,548	300,526	8,281,022	-
Bond investments	1,955,428	300,526	1,654,902	-
Others	6,626,120	-	6,626,120	-
Financial assets at FVTOCI	90,390,520	65,468,614	17,783,861	7,138,045
Stock investments	11,923,261	4,785,216	-	7,138,045
Bond investments	75,961,571	58,177,710	17,783,861	-
Others	2,505,688	2,505,688	-	-
Liabilities				
Financial liabilities at FVTPL	9,130,255	-	9,130,255	-
Derivative financial products				
Assets				
Financial assets at FVTPL	2,335,942	173,149	2,162,793	-
Other financial assets				
Financial assets for hedging	244,763	-	244,763	-
Liabilities				
Financial liabilities at FVTPL	1,917,233	-	1,917,233	-

Fair Value Measurement of Financial Instruments	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Non-derivative financial products				
Assets				
Financial assets at FVTPL	$ 10,201,891	$ 6,207,079	$ 3,994,812	$ -
Trading assets	4,876,011	1,239,990	3,636,021	-
Bond investments	1,849,798	1,239,990	609,808	-
Others	3,026,213	-	3,026,213	-
Financial assets designated at FVTPL	5,325,880	4,967,089	358,791	-
Available-for-sale financial assets	73,175,886	45,906,930	27,268,956	-
Stock investments	3,643,572	3,643,572	-	-
Bond investments	67,961,664	40,692,708	27,268,956	-
Others	1,570,650	1,570,650	-	-
Liabilities				
Financial liabilities at FVTPL	8,759,276	-	8,759,276	-
Derivative financial products				
Assets				
Financial assets at FVTPL	3,350,622	182,565	3,168,057	-
Other financial assets				
Derivative financial assets for hedging	243,372	-	243,372	-
Liabilities				
Financial liabilities at FVTPL	3,550,054	-	3,550,054	-

There were no transfers between Levels 1 and 2 in the current and prior periods.

2) Reconciliation of Level 3 fair value measurements of financial instruments

For the year ended December 31, 2018

Financial Assets	Financial Assets at FVTOCI
	Equity Instrument
Beginning balance	$ -
IFRS 9 adjustments	7,678,043
Realized losses on other comprehensive income (unrealized gain (loss) on financial assets at FVTOCI)	(539,998)
Ending balance	$ 7,138,045

3) Definition for the hierarchy classifications of fair value measurements

a) Level 1

Level 1 inputs are quoted prices unadjusted in active markets for identical financial instruments. An active market indicates the market that is in conformity with all of the following conditions: The products in the market are identical; it is easy to find a knowledgeable and willing transaction counterparty; and price information is available to the public.

The fair values of the Bank and its subsidiaries' investments in listed stock, beneficiary certificates, on-the-run Taiwan central government bonds and derivative instruments with quoted market prices are included in Level 1.

b) Level 2

Level 2 inputs are inputs other than quoted prices with reference to an active market that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices). The fair values of the Bank's investments in off-the-run government bonds, corporate bonds, bank debentures, convertible bonds and most derivative bank debentures issued by the Bank are included in Level 2.

c) Level 3

The input parameters used are not based on observable market data. (Unobservable input parameters are those such as option pricing models using historical volatility which cannot represent the expected value of all market participants.) The fair values of the Bank's investments in derivatives and equity investments without an active market are included in Level 3.

4) Valuation techniques and assumptions applied for the purpose of measuring fair value

a) Determination of fair value

A quoted market price is used as the fair value when a financial instrument has an active market. Such market prices are provided by the Stock Exchange Corporation, Bloomberg and Reuters, which are all the foundation of fair values for listed equity securities and debt instruments with a quoted market price in an active market.

If the market quotation from the Stock Exchange Corporation, commission merchants, underwriters or pricing service institutions can be frequently and readily obtained and the price represents actual and frequent at arm's length transactions, then a financial instrument is deemed to have an active market. If the above conditions are not met, the market is deemed inactive. In general, a significant price variance between the purchase price and selling price or a significantly increasing price variance are both indicators of an inactive market.

In addition to the above financial instruments with an active market, other financial instruments at fair value are assessed by valuation techniques or by referencing counterparties with other financial instruments at fair value with similar conditions and characteristics in actual practice, including market information obtained by exercising valuation models at the balance sheet date (such as yield curves used by TPEx and Taiwan Bills Index Rate (TAIBIR) (page 02) secondary market fixing rates used by the Taiwan Depository & Clearing Corporation).

When a financial instrument has no standardized valuation and has a greater level of complexity, such as interest rate swaps, currency swaps and options, the Bank and its subsidiaries usually adopt the valuation generally accepted by market users. The inputs used for these financial instruments' valuations are usually observable information in the market.

For financial instruments with greater complexity, the fair value is assessed through the valuation model developed by valuation methods and techniques generally accepted by competitors. These kinds of valuation models are usually applicable for derivative instruments, debt instruments with no quoted market price (including debt instruments of embedded derivatives) or other debt instruments with low market liquidity. Certain inputs used in these valuation models are not observable in the market, and the Bank and its subsidiaries need to make appropriate estimates based on assumptions.

b) The types and nature of the valuation methods for financial instruments used by the Bank and its subsidiaries are as follows:

i. NTD central government bonds: The bond market rate and theoretical interest rate are price-per-hundred conversions announced by TPEx.

ii. NTD corporate bonds and bank notes: The corporate bond reference rate is announced by TPEx, and the Bank uses the appropriate credit rate and the remaining period to calculate the yield rate and convert it to price-per-hundred.

iii. NTD convertible corporate bonds: The closing prices of outright purchase/sale trading are listed on TPEx on the valuation day. If the price is not available, the price is referenced from the outright purchase/sale trading information listed on TPEx.

iv. Securitization instruments: Prices are those quoted from Bloomberg.

v. NTD short-term bills: The TAIBIR (page 02) secondary market fixing rates used by the Taiwan Depository & Clearing Corporation are discounted from future cash flows.

vi. Foreign securities: The latest prices quoted from Bloomberg, Reuters or other systems on the valuation day are used, if there is no available price or valuation, then the price used is that which is quoted from counterparties.

vii. Listed stock, call/put warrants and depositary receipts: The closing price listed on TWSE or TPEx is adopted.

viii. Unlisted stock: The fair value is referenced from related financial information or estimated using the market price and parameters of listed companies which have similar service attributes.

ix. Beneficiary certificates: Closed-end funds use the closing price in an active market as the fair value and open-end funds use the net asset value of the fund as the fair value.

x. Derivatives:

i) Call/put warrants and stock index futures: Prices quoted from an active market are deemed the fair values.

ii) Foreign currency forward contracts, currency swaps, interest rate swaps, cross currency swaps and operating deposits of transactions: Discounted future cash flows are adopted.

iii) Options: The Black-Scholes model, binomial tree model and Monte Carlo method are mainly adopted for valuation.

iv) Certain derivatives use the quoted price from counterparties.

xi. Mixing Tools: The price from the active market, deal brokers and evaluation models is used.

c) Adjustments for credit risks and the definitions are as follows:

Credit valuation adjustment (CVA) is a measurement for derivatives which are not transacted through the stock market, or for over-the-counter derivatives. CVA reflects the fair value of should a counterparty default and the possibility of not collecting the derivative's full market value.

CVA is calculated by applying the loss given default (LGD) to the exposure at default (EAD), along with the consideration of the counterparty's probability of default (PD) (assuming the condition that the Bank does not default).

c. Financial risk management objectives and policies

1) Market risk

a) The source and definition of market risk

Market risk is the uncertainty of changes in fair value of on- and off-balance-sheet financial instruments due to changes in market risk factors. Market risk factors include interest rates, exchange rates, equity security prices and commodity prices.

The major market risks of the Bank are equity securities price risks, interest rate risks, and exchange rate risks. The majority of equity securities risk includes domestic public stock, over-the-counter stock, emerging market stock, domestic stock index options and stock index futures. The main position of interest rate risk includes bonds and interest derivative instruments, such as interest rate swap. The main position of exchange rate risk includes the Bank's investments denominated in foreign currencies, such as foreign currency spots, currency futures and foreign currency options.

b) Market risk management policy

The Bank classifies the financial instruments held by the Bank as trading book and banking book, and determines the market risk as interest rate risk, exchange rate risk, and equity security price risk. The Bank establishes "Market Risk Management Regulation", "Derivative Financial Trading Process" and various financial instrument related regulations to manage the market risk of overall foreign exchange position, normal position, interest rate position of trading book and equity security position. The overall interest rate risk management of banking book belongs to Assets and Liabilities Management Committee.

The market risk management regulations are as follows:

i. Establish the market risk management process to ensure the risk would be identified, measured, monitored and reported.

ii. Measure and monitor the market risk and keep it under the risk limit and minimize unexpected loss from market risk.

iii. Follow the regulations of Basel Accord.

iv. Establish the market risk management system and economic capital allocation process.

v. Monitor the credit line management of financial instrument, sensitivity analysis, stress testing and the calculation of VaR. Report the result of market risk monitoring to Risk Management Committee periodically and Board of Director quarterly.

c) Market risk management procedures

According to “Whole Risk Management Policy”, Risk Management Department is the second line of defense against the market risk. Risk Management Department performs the market risk management, establishes related management process, and reports to the appropriate level of the management. Besides, Risk Management Department establishes independent risk management process and ensures it remains effective.

i. Identifying and measuring

The effective market risk management process begins with identifying the inherent risk of operating activities and financial instruments. The Bank reviews the risk identifying method timely when the market environment changes and makes necessary adjustment to ensure the effective operation of the market risk management process. The Bank’s risk management department identifies market risk factors and measures the market risk. The market risk factors refer to the factors which affect the interest rate, exchange rate or the fair value of equity instruments. The market risk factors include the position, profits and loss, loss from stress testing, PVO1, Delta, VaR, etc.

ii. Monitoring and reporting

The Bank controls market risk by managing risk limits. The risk management department sets various trading limits, such as position limits, stop-loss limits, and maximum potential loss. The trading limits are implemented only after they are reported to and approved by the Board of Directors.

The risk management department calculates exposures and estimated gains and losses on positions daily to make sure that the positions held and losses do not exceed the limits approved by the Board of Directors and prepares reports to the high-level management and the Board of Directors periodically for their sufficient understanding of the implementation of the market risk management and, if necessary, issuance of additional guidance.

The risk management department reports important market risk issues, such as discovery of possible loss on positions in each trading book or identification of weakness in the market risk management system, to the Risk Management Committee in order to improve the effectiveness of the market risk management.

iii. Stress testing

The stress testing is one of the important tools for risk management. It is used for verifying effects on the investment portfolio due to some extremely disadvantageous but possible stressful events and for analyzing exposure level and risk tolerance in such situations and furthermore evaluating the portfolio loss or the impact on the capital. Chang Hwa Bank performs stress testing for forecasting risk and for assessment and reinforcement of statistical models or historical data limitations.

d) Trading book market risk management

The trading book refers to the position of financial instruments held for trading or hedging. The position of financial instruments held for trading refers to the position which earns profits from actual or expected short-term price fluctuations.

i. Strategy

The Bank determines the risk limitation of the investment portfolio of trading book by evaluating trading strategy, trading category, and annual performance.

ii. Management policy and procedures

The Bank follows "Market Risk Management Rules", "Derivative Financial Trading Process" and various financial instrument related regulations as the important management rules of trading book.

iii. Valuation policy

The trading positions are valued real time or daily. The hedging derivatives are valued at least twice a month. The resources of fair value of financial instruments are categorized as: (1) those derived from quoted prices in active markets; (2) the latest price with no active market; (3) valuation with no active market.

iv. Risk measuring methods

i) The sensitivity of the interest rate changes of investment portfolio is measured by DVO1. The sensitivity of the foreign exchange derivatives is measured by the sensitivity factors (Delta, Gamma, and Vega).

ii) With regard to the Bank's Value at Risk assumptions and calculation methods, please refer to item i.

iii) The Bank performs the stress test quarterly and report the result to Risk Management Committee periodically.

e) Trading book interest rate risk management

i. Definition of interest rate risk

Interest rate risk is fair value changes in interest rate risk position held by the Bank due to interest rate changes. The risks are mainly in debt securities and interest rate derivatives.

ii. Management procedures on trading book interest rate risk

The Bank defines the trading limit of trading book and the stop-loss limit of different financial instruments by assessing the credit and the financial position of the issuers.

iii. Measuring methods

The interest rate factor sensitivity of debt securities and interest rate derivatives is measured by DVO1. With regard to the Bank's Value at Risk assumptions and calculation methods, please refer to item i.

f) Banking book interest rate risk management

i. Definition of banking book interest rate risk

The banking book interest rate risk means the unfavorable change of interest rate of non-trading-book interest rate position which changes the present value of revenues and costs or assets and liabilities and causes decrease of earnings or impairment of economic value.

ii. Management strategy on banking book interest rate risk

According to the Bank's interest rate risk management policy, the Bank has set various measurement indicators and limits on banking book interest rate risk. To pursue profits and steady growth of stockholder value without exposure to extreme loss risks, the Bank applies appropriate management strategy including on- and off-balance-sheet adjustments and maintains appropriate amounts of assets and liabilities.

iii. Banking book interest rate risk report/range of measuring system

The Bank mainly applies standard method for interest rate risk sensitivity gap analysis to measure banking book interest rate risks. The responsible department periodically measures banking book interest rate risks and reports to related departments and to the Asset and Liability Management Committee in order to adopt appropriate strategies for adjusting banking book interest rate risk combinations. Assessment information of banking book interest rate risk would be presented to the Board of Directors periodically to let the high-level management control such risks.

g) Exchange rate risk management

i. Definition of exchange rate risk

Exchange rate risk is the gain or loss resulting from exchange or translation of two different foreign currencies at different times. The Bank's exchange rate risk mainly comes from spot and forward exchange positions.

ii. Exchange rate risk management policy, procedures and measuring methods

The risk management department sets the position limit and stop-loss limit of trading book investment combinations in order to control exchange rate risk. If the losses reach the stop-loss limit, the trading department should decrease risk exposure positions so as to control losses.

The risk management department applies sensitivity analysis or Value at Risk to measure exchange rate risk and calculates stress loss of risk position held. In sensitivity analysis, Delta is applied to measure the exchange rate risk of the first order change and Gamma is applied to measure the exchange rate risk of the second order change. In addition, Vega is used to measure the first order risk of implied volatility rate. With regard to the Bank's Value at Risk assumptions and calculation methods, please refer to Item i.

h) Equity security price risk management

i. Definition of equity security price risk

Equity security price risk is the valuation effect on the position held by the Bank when the equity security price changes. The Bank's equity security price risk mainly comes from public and over-the-counter stock, index futures and options.

ii. Equity security price risk management purpose

The risk management department applies sensitivity analysis or Value at Risk to measure equity security price risk and calculates stress loss of risk position held. In sensitivity analysis, Delta, Gamma and Vega are, applied to measure the independent equity security price risk of the first order change, or market value is applied to indicate the exposure risks on positions of stock. With regard to the Bank's Value at Risk assumptions and calculation methods, please refer to Item i.

iii. Equity security price risk management procedures

The Bank sets restrictions on credit extensions with the same person, the same concerned party or the same affiliate to control the risk concentration. Risk Management Department monitors unrealized gain or loss of the holding position daily. If unrealized loss is over the stop-loss threshold, Risk Management Department would notice the department who hold the position to subject to the related regulations. The department who holds the position should report to Risk Management Committee if unrealized loss is over the stop-loss threshold but the department still holds the position.

iv. Measuring methods

The equity security price risk of Trading Book is monitored and controlled by VaR, please refer to item i.

The Bank would perform stress testing for the equity security price risk of non-trading position and report the result to Risk Management Committee.

i) Market risk measuring method

i. Value at Risk, "VaR"

The Bank uses VaR model and stress testing to evaluate the risk of trading portfolio the market risk and the maximum expected loss of positions held through assumptions of changing market situation. VaR is the statistical estimation of potential losses of existing positions arising from unfavorable market changes. VaR refers to the maximum potential loss that Chang Hwa Bank might be exposed to within the confidence interval (99%), which means there is a certain probability (1%) that the actual loss would exceed VaR. Significant loss caused by excessive market volatility could not be avoided by using VaR.

The Bank uses historical simulation method to calculate VaR. The historical simulation method is based on historical data to estimate the future cash flow and assess the market risk of financial instrument. There are more and more financial institutions using the historical simulation method. However, there are some limitations for using the method. One of the limitations is that the assumption used in the method may not reflect the real situation. Besides, the simulation result may not be representative if the historical data used are too small. The Bank would use proxy to respond to the limitations mentioned above.

According to the Bank's "Risk Management Committee Establishment Points", the risk appetite of trading book market risk, operating limits and VaR limits should be approved by the Risk Management Committee. VaR is an important internal risk control in the Bank. The VaR limits of investment portfolio are approved annually by the Risk Management Committee and reported to the Board of Directors. In addition, the daily actual VaR is monitored by the Bank's risk management department.

ii. As of December 31, 2018 and 2017, the Bank's VaR factors based on historical simulation method were as follows:

	For the Year Ended December 31, 2018			
	Average	Highest	Lowest	Ending Balance
Exchange VaR	$ 99,012	$ 134,964	$ 52,314	$ 52,314
Interest rate VaR	6,266	12,614	2,661	3,427
Equity securities VaR	4,353	10,043	-	-
Value at risk	$ 109,631	$ 157,621	$ 54,975	$ 55,741

	For the Year Ended December 31, 2017			
	Average	Highest	Lowest	Ending Balance
Exchange VaR	$ 136,930	$ 217,300	$ 79,370	$ 101,894
Interest rate VaR	17,257	42,894	5,090	7,302
Equity securities VaR	2,176	4,219	-	-
Value at risk	$ 156,363	$ 264,413	$ 84,460	$ 109,196

2) Primary foreign currencies

The significant foreign-currency financial assets and liabilities as of December 31, 2018 and 2017 were as follows:

(In Thousands of Foreign Currencies/New Taiwan Dollars)

	December 31, 2018		
	Foreign Currencies	Exchange Rate	New Taiwan Dollars
Financial assets			
Monetary items			
USD	$ 8,695,552	30.7350	$ 267,257,791
GBP	27,843	38.9000	1,083,093
AUD	1,095,013	21.6550	23,712,507
HKD	1,198,977	3.9230	4,703,587
SGD	21,017	22.4400	471,621
CAD	67,346	22.5800	1,520,673
ZAR	72,053	2.1200	152,752
JPY	49,564,070	0.2774	13,749,073
EUR	387,508	35.1800	13,632,531
RMB	13,892,214	4.4690	62,084,304
Non-monetary items			
USD	2,806	30.7350	86,242

(Continued)

	December 31, 2018		
	Foreign Currencies	Exchange Rate	New Taiwan Dollars
Financial liabilities			
Monetary items			
USD	$ 10,201,723	30.7350	$ 313,549,956
GBP	46,133	38.9000	1,794,574
AUD	1,089,360	21.6550	23,590,091
HKD	993,636	3.9230	3,898,034
CAD	80,216	22.5800	1,811,277
ZAR	1,759,369	2.1200	3,729,862
JPY	51,958,854	0.2774	14,413,386
EUR	452,188	35.1800	15,907,974
NZD	62,078	20.6300	1,280,669
RMB	12,686,266	4.4690	56,694,923
Non-monetary items			
USD	306,665	30.7350	9,425,349

(Concluded)

(In Thousands of Foreign Currencies/New Taiwan Dollars)

	December 31, 2017		
	Foreign Currencies	Exchange Rate	New Taiwan Dollars
Financial assets			
Monetary items			
USD	$ 7,722,935	29.6800	$ 229,216,711
GBP	77,177	39.9300	3,081,678
AUD	1,078,448	23.1350	24,949,894
HKD	1,676,715	3.7960	6,364,810
SGD	62,182	22.2000	1,380,440
CAD	98,652	23.6300	2,331,147
ZAR	2,541,371	2.3900	6,073,877
JPY	54,065,112	0.2633	14,235,344
EUR	397,523	35.4500	14,092,190
RMB	19,089,541	4.5490	86,838,322
Non-monetary items			
USD	182,180	29.6800	5,407,102
Financial liabilities			
Monetary items			
USD	10,074,286	29.6800	299,004,808
GBP	69,356	39.9300	2,769,385
AUD	977,697	23.1350	22,619,020
HKD	1,384,142	3.7960	5,254,203
CAD	97,024	23.6300	2,292,677
ZAR	2,671,901	2.3900	6,385,843
JPY	59,662,672	0.2633	15,709,182
EUR	419,560	35.4500	14,873,402
RMB	15,662,646	4.5490	71,249,377
Non-monetary items			
USD	303,153	29.6800	8,997,581

For the years ended December 31, 2018 and 2017, net foreign exchange gains were $745,536 thousand and losses were $(76,604) thousand, respectively. It is impractical to disclose net foreign exchange gains (losses) by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the Bank and entities under its control.

3) Credit risk

a) Credit risk source and definition

Credit risk means the possible loss due to failure of debtors or counterparties to fulfill their contractual obligations or their ability to fulfill contractual obligations is impaired. Credit risk arises from the operation, on- and off-balance-sheet items, including credit loans, derivatives transactions and securities investment, etc. Because the business becomes more complex, the credit risk is often generated with other risks that affect one another. For example, exchange rate risk also exists in foreign currency debt investment. Secured loans will be affected by the price volatility of the collateral and market liquidity risk of the collateral.

b) Credit risk management policy

i. To meet the needs of risk management, the Bank continues to enhance corporate and personal finance credit application management system and various risk management techniques and efficiency.

ii. The Bank is building a complete after-loan monitoring mechanism to efficiently identify, build automated early-warning mechanism and manage potential problematic loans, establish appropriate monitoring procedures, track the frequency and the specific responsive measures in order to achieve active management in the process of credit risk identification, measurement, monitoring and reporting.

iii. The Bank continues to develop methods of credit risk quantification models to elevate credit risk management techniques, which enable the Bank's capital requirement and expected loss to become more risk sensitive.

iv. The Bank continues to develop and implement credit risk stress testing in compliance with the requirements of the competent authority supervising risk management and improve the effectiveness of the Bank's risk management.

v. The Bank is building a knowledge base to facilitate learning and assessment. To meet the business demand, it holds risk management seminars and trainings to shape the Bank's risk management culture

The Bank's credit risk management procedures and measuring methods for major business are described as follows:

i. Credit business (including loan commitments and guarantees)

2018

i) A determined signification increase in credit risk since initial recognition.

At the end of every reporting period, the Bank evaluates the risk of default on credit assets occurring over their expected lifetime to determine whether the credit risk has increased significantly since their initial recognition.

For this credit risk evaluation, the Bank considers corroborative information (including forward-looking information) which indicates a significant increase in credit risk since initial recognition of the credit assets. The key indicators include:

- Quantitative indicators

  <u>A change in internal credit rating</u>

  The Bank classifies each type of credit asset into three categories according to credit quality, internal credit rating and external credit rating (refer to the following table). A financial instrument is determined as having a significant increase in credit risk since initial recognition if its internal credit rating is at the level of 16-18 or if the scoring of a housing loan debtor is lower than 340.

Credit Quality	Internal Credit Rating	External Credit Rating (Moody's)
Normal	1	Aaa
	2	Aa1
	3	Aa2
	4	Aa3
	5	A1
	6	A2
	7	A3
	8	Baa1
	9	Baa2
	10	Baa3
	11	Ba1
	12	Ba2
	13	Ba3
	14	B1
	15	B2
	16	B3
	17	Caa1
Non-performing	18	Caa2
	19	Caa3
	20	D
	21	D

- Qualitative indicators

  A credit account is rated as ordinary-delinquent in accordance with the Bank's "Detailed Rules for the Processing of Ordinary-delinquent Accounts".

  The result of the credit review shows that the credit application and the loan application are inconsistent.

ii) Definition of the credit-impaired financial assets

A credit account that meets one of the following conditions is classified under Stage 3 (Credit impaired):

- The debtor's payment of the principal or interest is past due for more than 3 months from the end of the credit term; or the Bank has already petitioned or withdrawn the debtor's collateral.

- The case has been agreed to be repaid in installments and is exempt from being listed as an overdue loan.

- The case was negotiated and adopted in accordance with the debt negotiation mechanism set by the Association of Banks in 2006.

- The case has been negotiated and agreed upon in accordance with “The Statute for Consumer Debt Clearance” (excluding secured debt fulfilled under the original contractual conditions).

- The case is ruled to undergo restructuring or liquidation by the court.

- The case is ruled to be restricted by the court.

- The case is declared bankrupt by the court.

- The case involves credit accounts of a debtor, excluding credit card accounts, which is partly transferred to class A and B non-performing loans (excluding the sixth item of class B: The credit account is totally guaranteed and the interest payment is not past due during the inheritance period after the death of the debtor and the collateral provider), as well as overdue loans or bad debt loans.

- The case is an enterprise account which has applied for relief from the Ministry of Economic Affairs.

- The case involves a credit account which has an internal credit rating at the level of 19-21.

- The case is a mortgage loan credit account of the Bank which has no rating score.

- The case is a credit account which is determined as Stage 3 by the internal or external auditors, or the risk management department of the Bank.

iii) Expected credit loss measurement

The Bank classifies credit assets into the following nine categories by the credit risk characteristics of the respective debtor’s industry and organization size:

<table>
<tr><th>Business</th><th>Combination</th><th>Credit Risk Characteristics</th></tr>
<tr><td rowspan="6">Corporate banking loans</td><td>Government</td><td rowspan="9">No significant increase in credit risk, significant increase in credit risk, credit impairment.</td></tr>
<tr><td>Large enterprise</td></tr>
<tr><td>Small enterprise</td></tr>
<tr><td>Legal person/group</td></tr>
<tr><td>Overseas credit account</td></tr>
<tr><td>Other groups</td></tr>
<tr><td rowspan="3">Individual banking loans</td><td>Individual-residential loan group</td></tr>
<tr><td>Individual-other groups (unsecured)</td></tr>
<tr><td>Individual-other groups (secured)</td></tr>
</table>

The Bank measures the expected credit loss as follows:

- Stage 1, no significant increase in credit risk

  The Bank measures the loss allowance for Stage 1 financial instruments at an amount equal to the 12-month ECL based on past loss experience. The ECL is the difference between the respective asset's EAD carrying amount and the present value of its estimated future cash flows, estimated at the forward-looking adjusted PD and discounted at the effective interest rate.

- Stage 2, significant increase in credit risk

  The Bank measures the loss allowance for Stage 2 financial instruments at an amount equal to the lifetime ECL. The ECL is the difference between the respective asset's EAD carrying amount and the present value of its computed outcome which is discounted at the effective interest rate. The computed outcome is the product of the unpaid principal for each year end over instruments expected lifetime, the forward-looking adjusted PD, and the LGD.

- Stage 3, credit impairment

  The Bank measures the loss allowance for Stage 3 financial instruments at an amount equal to the lifetime ECL. The ECL is the difference between the asset's EAD carrying amount and the present value of its estimated future cash flows, estimated assuming the credit impairment situation is given and discounted at effective interest rate.

The PD and EAD and LGD are used to measure the impairment loss for financial assets in the credit business:

- PD is meaning of using past credit-impaired situations to predict the probability of credit impairment in normal situation in a year. The PD for Stage 3 financial instruments is determined as 100%. The PD for Stages 1 and 2 are based on the categories and the remaining lifetime for each credit account. The credit accounts are divided into groups by remaining lifetimes. The PD of each group is determined as the PD of each credit quality stage. The Bank shall update the probability of default at least once a year.

- The EAD is the total expected exposure amount of default which includes the unsecured line of credit.

- The exposure amount of impairment-tested off-balance sheet assets (i.e. guarantees, letters of credit issued yet unused, irrevocable loan commitments issued, and revocable loan commitments issued) is converted into the equivalent exposure amount of on-balance sheet assets through a credit conversion factor (CCF). The CCF is determined according to the standardized approach of the Capital Adequacy Ratio as either 0%, 20%, 50% or 100% by referring to the respective off-balance sheet item's characteristics.

v) Forward-looking information

The Bank classifies credit assets as either corporate banking - domestic, corporate banking - overseas, corporate banking - Singapore branch or individual banking business. The forward-looking adjusted PD for each the above categories is estimated using the domestic economic growth rate, global economic growth rate, Southeast Asia economic growth rate and the domestic unemployment rate, respectively, and is adjusted based on the reasonableness of each rate's predicted trend.

Macroeconomic indicators are provided by the Bank's Research Design Division of the Product Development Department after the indicators have been announced by the relevant data source institution. The International Operations Department reviews the adequacy of the exposure amount of the Singapore branch and the Southeast Asia economic growth rate that it uses, which shall be updated at least once a year. The Department of Budget is the institution from which the domestic economic growth rate and domestic unemployment rate are sourced. The International Monetary Fund is the institution from which the global economic growth rate and the Southeast Asia economic growth rate are sourced.

The total amount of undiscounted ECL at the time of initial recognition of the credit impaired financial assets - loans which were purchased or originated is as follows:

	December 31, 2018
Loans	$ 6,371,774

2017

Levels are as follows:

i) Classification of credit assets

The Bank's credit assets are grouped into five categories. Except for normal credit assets, the remaining unsound credit assets are evaluated based on the status of the loan collateral and the length of time overdue, and grouped into "special-mentioned", "substandard", and "losses".

In order to manage problematic credit loans, the Bank has set up "Operating Points of Assets Assessment", "Assessment Operating Details of Handling Debts to Normal Borrowers", "Principle of Overdue Loans, Delinquent Loans and Doubtful Debts Handling Authority", "Regulations Governing Overdue Loans, Delinquent Loans and Doubtful Collection" and other regulations managing credit loans and collection of loans.

ii) Credit quality level

For risk management purposes, the Bank has set up internal rating models for credit risks in accordance with the nature and scale of a business.

With the use of statistical method and judgment by experts, the Bank has developed a credit rating model for clients. After taking into account client-related information, the Bank developed a corporate credit rating model and classified as 21 levels. The Bank reviews the model periodically to examine if the outcome matches reality and adjusts each parameter to optimize the result.

The Bank evaluates the credit rating of borrowers at least once a year. In addition, to ensure the estimates used are reasonable and to make sure the outcome calculated matches reality, the Bank annually conducts validity test and back-testing of the models using data on customers' actual defaults.

The Bank classifies the credit qualities of corporate loans as strong, medium, weak and non-rating.

The Bank developed a scoring model for housing loans, credit loans and credit card applications by statistical method and by the judgment of experts to measure the credit risk of consumer finance. The loan reviewer would get advice from the scoring result. The scoring result is classified in 10 percentile range. The Bank reviews semi-annually the stability of the scoring model to maintain the effectiveness semi-annually.

ii. Call loans to banks

The Bank evaluates the credit status of counterparties before deals are closed. The Bank grants different limits to counterparties based on their respective credit ratings as suggested by domestic and foreign credit rating agencies. The Bank assesses the credit limits of counterparties by level and financial status; the Bank efficiently manages counterparties' credit risks through regular and special reviews, monitoring and reporting. Additionally, in accordance with the application of IFRS 9, the Bank performs credit impairment assessments for call loans to banks, transfers the related credit losses to each of the three stages of credit impairment, and measures the related expected credit loss, so as to ensure adequate allowance for losses, in accordance with regulations.

iii. Debt instruments and derivative financial instruments

The Bank identifies and manages the credit risks from debt instruments through the use of external credit ratings of the debt instruments along with the evaluation of credit qualities of bonds, regional conditions and counterparty risks.

The other banks with which the Bank conducts derivative transactions are mostly considered investment grade. The Bank monitors the credit limits (including lending limits) by counterparties. The credits extended to counterparties who are general customers are monitored in accordance with the related contract terms and conditions and the credit limits for derivatives established in normal credit granting processes.

The Bank classifies the credit qualities of debt instruments as strong, medium, weak and non-rating.

c) Credit risk hedging or mitigation policies

i. Collateral

The Bank has a series of measures for credit granting to reduce credit risks. One of the procedures is asking for collateral from the borrowers. To secure the loans, the Bank manages and assesses the collateral following the procedures that suggest the scope of collateralization and valuation of collateral and the process of disposition. In credit contracts, the Bank stipulates the security mechanism for loans and the conditions and terms for collateral offsetting to state clearly that the Bank reserves the right to reduce granted limit, to reduce repayment period, to demand immediate settlement or to offset the debts of the borrowers with their deposits in the Bank in order to reduce the Bank's credit risks.

ii. Credit line credit risks and control over concentration of credit risks

To avoid the concentration of credit risks, the Bank has included credit limits for a single counterparty and for a single group in its credit-related guidelines. The Bank has also included credit limits for an individual (entity) and for related enterprises (group) in the guidelines for investment and regulations for risk control on equity investments. To manage the concentration risk on the assets, the Bank has set credit limits by industry, conglomerate, transactions collateralized by stock, and other categories and integrated within one system to supervise concentration of credit risk in these categories.

The table below analyzes the collateral held as security and other credit enhancements, and their financial effect in respect of the financial assets recognized in the Bank's balance sheet:

December 31, 2018

		Maximum Exposure to Credit Risk Mitigated by			
	Carrying Amount	Collateral	Master Netting Arrangement	Other Credit Enhancements	Total
Discounts and loans	$ 1,336,393,464	$ 906,102,156	$ -	$ -	$ 906,102,156
Financial assets at FVTPL	10,917,490	4,148,425	-	-	4,148,425
Investments in debt instruments at FVTOCI	78,467,259	4,184,101	-	-	4,184,101
Investments in debt instruments at amortized cost	268,059,805	1,099,404	-	-	1,099,404

The carrying amount of financial assets with maximum exposure is as follows:

	Discounts and Loans December 31, 2018			
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3 Lifetime Expected Credit Losses	Total
Credit rating				
Levels 1-15	$ 812,384,781	$ 794,433	$ 36,123	$ 813,215,337
Levels 16-18	-	50,605,075	3,166,966	53,772,041
Levels 19-21	-	-	8,286,739	8,286,739
No rating	456,828,033	2,208,988	2,082,326	461,119,347
Total carrying amount	$ 1,269,212,814	$ 53,608,496	$ 13,572,154	$ 1,336,393,464
Expected credit losses	$ 1,864,003	$ 1,843,770	$ 5,102,485	$ 8,810,258
Recognized impairment based on the Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing Loans and Bad Debts				7,505,980
				$ 16,316,238

	Guarantee Payments December 31, 2018			
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3 Lifetime Expected Credit Losses	Total
Carrying amount	$ 45,072,441	$ 643,055	$ 132,832	$ 45,848,328
Expected credit losses	114,218	4,510	29,977	148,705

	Loan Commitments			
	December 31, 2018			
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3 Lifetime Expected Credit Losses	Total
Carry amount - non-cancellable	$ 60,517,138	$ 4,316,558	$ 515	$ 64,834,211
Carry amount - cancellable	610,935,825	8,533,551	1,649,431	621,118,807
	$ 671,452,963	$ 12,850,109	$ 1,649,946	$ 685,953,018
Expected credit losses - non-cancellable	$ 76,116	$ 21,022	$ 168	$ 97,306
Expected credit losses - cancellable	253,365	41	1,383	254,789
	$ 329,481	$ 21,063	$ 1,551	$ 352,095

December 31, 2017

	Maximum Exposure to Credit Risk Mitigated by			
	Collateral	Master Netting Arrangement	Other Credit Enhancements	Total
Discounts and loans	$ 907,832,465	$ -	$ -	$ 907,832,465
Financial assets at FVTPL	1,628,170	-	-	1,628,170
Available-for-sale financial assets	3,343,666	-	-	3,343,666
Held-to-maturity financial assets	1,049,985	-	-	1,049,985

d) Maximum exposure to credit risk

The maximum credit risk exposures of various financial instruments held by the Bank are the same as per book amounts. Refer to the notes to the financial statements.

As of December 31, 2018 and 2017, the maximum exposure to credit risk (before deducting the guarantees or other credit enhancement instruments and the irrepealably maximum amount of exposure) were as follows:

Financial Instrument Type	December 31 2018	December 31 2017
Unused loan commitments (excluding credit card)	$ 64,834,210	$ 82,204,969
Credit card commitments	316,154	333,092
Unused issued letters of credit	23,320,385	24,509,270
Guarantees in guarantee business	45,848,329	40,993,464

e) Situation of credit risk concentration

Prominent concentration of credit risks occurs when transaction parties for financial instruments prominently concentrate on one party, or on a few that are in similar business lines or exhibit similar economic characteristics. The characteristics of concentration of credit risks include the nature of business activities engaged by debtors. The Bank has not engaged in transactions that involved a prominent concentration to one client or one transaction party, but has engaged in transaction parties of similar industry type or from similar region.

The Bank’s information on prominent concentration of credit risk was as follows:

Industry Type	December 31, 2018 Carrying Amount	December 31, 2018 Percentage of Item (%)
Financial and insurance	$ 58,696,339	4
Manufacturing	352,032,207	26
Wholesale and retail	118,323,110	9
Real estate and leasing	100,326,050	8
Service	39,282,290	3
Individuals	450,420,900	34
Others	217,312,568	16
	$ 1,336,393,464	

Industry Type	December 31, 2017 Carrying Amount	December 31, 2017 Percentage of Item (%)
Financial and insurance	$ 63,727,242	5
Manufacturing	346,068,730	24
Wholesale and retail	121,573,560	9
Real estate and leasing	106,791,248	8
Service	42,254,353	3
Individuals	460,827,924	33
Others	252,164,582	18
	$ 1,393,407,639	

Geographic Location	December 31, 2018 Carrying Amount	December 31, 2018 Percentage of Item (%)
Asia	$ 1,230,778,015	93
America	83,934,524	6
Europe	17,022,782	1
Others	4,658,143	-
	$ 1,336,393,464	

Geographic Location	December 31, 2017 Carrying Amount	December 31, 2017 Percentage of Item (%)
Asia	$ 1,331,401,566	96
America	45,125,881	3
Europe	15,557,266	1
Others	1,322,926	-
	$ 1,393,407,639	

Securities Type	December 31, 2018 Carrying Amount	Percentage of Item (%)
Unsecured	$ 430,291,308	32
Secured		
Properties	768,742,096	58
Others	137,360,060	10
	$ 1,336,393,464	

Securities Type	December 31, 2017 Carrying Amount	Percentage of Item (%)
Unsecured	$ 485,575,174	35
Secured		
Properties	756,683,671	54
Others	151,148,794	11
	$ 1,393,407,639	

f) Financial assets credit quality and non-performing impairment analysis

Part of financial assets held by the Bank, such as cash and cash equivalents, due from the Central Bank and call loans to banks, financial assets at FVTPL, securities investments purchased under resell agreements, deposit refunds, operating deposits, and settlement deposits are exposed to low credit risks because the counterparties have rather high credit ratings.

Besides the above, the credit quality analyses of other financial assets were as follows:

i. Credit quality analysis of loans and receivables

(In Thousands of New Taiwan Dollars)

Item	December 31, 2017										
	Neither Past Due Nor Impaired					Past Due But Not Impaired (B)	Impaired (C)	Total (A)+(B)+(C)	Provision for Impairment Losses (D)		Net (A)+(B)+(C)-(D)
	High	Medium	Weak	Non-ratings	Subtotal (A)				Objective Evidence of Impairment	Nonobjective Evidence of Impairment	
In-balance-sheet items											
Receivables	$ 7,277,403	$ 7,133,960	$ 262,378	$ 9,677,649	$ 24,351,390	$ 6,675	$ 893,291	$ 25,251,356	$ 402,793	$ 178,540	$ 24,670,023
Credit cards	-	-	-	1,767,829	1,767,829	-	27,073	1,794,902	13,470	5,132	1,776,300
Other	7,277,403	7,133,960	262,378	7,909,820	22,583,561	6,675	866,218	23,456,454	389,323	173,408	22,893,723
Discounts and loans	312,155,722	775,041,018	178,227,169	112,492,548	1,377,916,457	2,423,763	13,067,419	1,393,407,639	4,821,541	11,545,438	1,377,040,660

ii. Credit quality analysis of loans neither past due nor impaired based on credit ratings of clients

(In Thousands of New Taiwan Dollars)

Item	December 31, 2017				
	Neither Past Due Nor Impaired				
	High	Medium	Weak	Non-ratings	Total
Consumer finance	$ 79,446,798	$ 178,875,718	$ 135,582,083	$ 63,257,678	$ 457,162,277
Corporation finance	232,708,924	596,165,300	42,645,086	49,234,870	920,754,180
Total	$ 312,155,722	$ 775,041,018	$ 178,227,169	$ 112,492,548	$ 1,377,916,457

iii. Credit quality analysis of non-credit financial assets

(In Thousands of New Taiwan Dollars)

Item	December 31, 2017										
	Neither Past Due Nor Impaired					Past Due But Not Impaired (B)	Impaired (C)	Total (A)+(B)+(C)	Provision for Impairment Losses (D)		Net (A)+(B)+(C)-(D)
	High	Medium	Weak	Non-ratings	Subtotal (A)				Objective Evidence of Impairment	Nonobjective Evidence of Impairment	
Available-for-sale financial assets	$ 73,009,452	$ -	$ -	$ 136,434	$ 73,145,886	$ -	$ 150,000	$ 73,295,886	$ 120,000	$ -	$ 73,175,886
Bonds	67,825,230	-	-	136,434	67,961,664	-	-	67,961,664	-	-	67,961,664
Stock	3,613,572	-	-	-	3,613,572	-	150,000	3,763,572	120,000	-	3,643,572
Bills	1,570,650	-	-	-	1,570,650	-	-	1,570,650	-	-	1,570,650
Held-to-maturity financial assets	237,412,046	-	-	-	237,412,046	-	-	237,412,046	-	-	237,412,046
Bonds	9,883,326	-	-	-	9,883,326	-	-	9,883,326	-	-	9,883,326
Bills	227,528,720	-	-	-	227,528,720	-	-	227,528,720	-	-	227,528,720
Other financial assets	64,609	-	-	-	64,609	-	137,111 (Note)	201,720	137,111	-	64,609
Securities	64,609	-	-	-	64,609	-	137,111 (Note)	201,720	137,111	-	64,609

Note: Cost on the reclassification date.

g) Aging analysis of financial assets that are past due but not impaired

The aging analyses of financial assets that were past due but not impaired of the Bank were as follows:

(In Thousands of New Taiwan Dollars)

Item	December 31, 2017		
	Past Due Up to One Month	Past Due Over One Month	Total
Discounts and loans			
Consumer finance	$ 1,500,703	$ 504,613	$ 2,005,316
Corporation finance	355,843	62,604	418,447

4) Liquidity risk management

a) The definition of liquidity risk

Liquidity risk is the potential loss that the Bank may suffer due to inability to liquidate assets or raise enough funds in reasonable time to perform obligations when due and to meet the demands of assets growth.

b) Liquidity risk management procedures

According to the Bank's liquidity risk management policy, the Bank clearly sets various indicators and limits for liquidity risk. The responsible department should implement operation procedures for funding liquidity, monitor and prepare maturity analysis periodically to assess liquidity risk. In addition, the responsible department should also report to related departments and Asset and Liability Committee to enable them to make appropriate adjustments to meet the needs of liquidity. Related information about the liquidity risk assessment should be reported to the board of directors to let the high-level management understand the Bank's funding liquidity.

As of December 31, 2018 and 2017, the ratio of the liquidity reserve was 19.00% and 16.42%, respectively. Since the capital and working funds are deemed sufficient to meet the cash flow needs for performance of all contracted obligations, liquidity risk is not considered to be significant.

c) Maturity analysis of non-derivative financial assets and liabilities

The Bank adopted appropriate grouping methods, which are based on the nature of non-derivative financial assets and liabilities, to do maturity analysis in order to assess liquidity. The maturity analysis is presented as follows:

(In Thousands of New Taiwan Dollars)

Item	December 31, 2018					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Major maturity fund inflows						
Cash and cash equivalents	$ 29,443,416	$ -	$ -	$ -	$ -	$ 29,443,416
Due from the Central Bank and call loans to banks	39,646,647	4,129,049	4,423,093	6,255,338	28,968,211	83,422,338
Financial assets at FVTPL	7,729,884	-	-	-	-	7,729,884
Receivables	16,275,268	872,180	445,913	248,936	191,491	18,033,788
Discounts and loans	94,031,335	107,115,359	116,662,681	162,850,400	644,681,385	1,125,341,160
Investments in equity instruments designated at FVTOCI	-	-	-	-	11,923,261	11,923,261
Investments in debt instruments at FVTOCI	800,273	1,401,115	502,125	2,213,254	18,516,789	23,433,556
Investments in debt instruments at amortized cost	141,525,000	11,239,961	6,474,259	41,699,432	14,245,505	215,184,157
Other maturity funds inflow items	-	-	-	-	26,733,348	26,733,348
	329,451,823	124,757,664	128,508,071	213,267,360	745,259,990	1,541,244,908
Major maturity fund outflows						
Deposits from the Central Bank and banks	189,672	191,747	19,089	424,959	-	825.467
Due to the Central Bank and banks	5,705,000	10,000	-	-	-	5,715,000
Securities sold under repurchase agreements	714,914	1,650,586	-	-	-	2,365,500
Payables	29,361,163	2,156,063	442,880	1,424,538	807,250	34,191,894
Deposits and remittances	110,834,474	124,202,476	133,370,347	188,618,379	721,545,066	1,278,570,742
Bank notes payable	-	-	-	-	49,300,000	49,300,000
Other maturity fund outflow items	40,584	75,316	48,354	269,826	5,793,570	6,227,650
	146,845,807	128,286,188	133,880,670	190,737,702	777,445,886	1,377,196,253
Gap	$ 182,606,016	$ (3,528,524)	$ (5,372,599)	$ 22,529,658	$ (32,185,896)	$ 164,048,655

Note: The amounts listed above were the position in N.T. dollars of the Bank.

(In Thousands of New Taiwan Dollars)

Item	December 31, 2017					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Major maturity fund inflows						
Cash and cash equivalents	$ 28,912,151	$ -	$ -	$ -	$ -	$ 28,912,151
Due from the Central Bank and call loans to banks	22,398,964	4,242,332	4,522,731	6,415,219	26,437,948	64,017,194
Financial assets at FVTPL	4,433,958	-	-	-	-	4,433,958
Receivables	19,766,884	730,071	306,194	193,935	108,942	21,106,026
Discounts and loans	81,827,276	97,522,019	100,427,241	221,143,186	649,841,523	1,150,761,245
Available-for-sale financial assets	-	-	200,529	-	25,641,718	25,842,247
Held-to-maturity financial assets	135,400,000	11,299,925	1,900,000	26,056,625	22,960,156	197,616,706
Financial assets at cost	-	-	-	-	4,167,009	4,167,009
Other maturity fund inflow items	-	-	-	-	14,284,047	14,284,047
	292,739,233	113,794,347	107,356,695	253,808,965	743,441,343	1,511,140,583
Major maturity fund outflows						
Deposits from the Central Bank and banks	342,687	387,501	193,728	1,021,788	-	1,945,704
Due to the Central Bank and banks	5,000	10,000	-	-	-	15,000
Securities sold under repurchase agreements	1,055,027	1,998,018	65,491	-	-	3,118,536
Payables	29,525,996	1,982,198	369,816	1,302,936	1,232,378	34,413,324
Deposits and remittances	118,393,919	126,047,639	134,696,322	191,058,518	697,288,694	1,267,485,092
Bank notes payable	-	2,200,000	-	-	39,300,000	41,500,000
Other maturity fund outflow items	53,280	49,487	64,243	300,450	5,503,024	5,970,484
	149,375,909	132,674,843	135,389,600	193,683,692	743,324,096	1,354,448,140
Gap	$ 143,363,324	$ (18,880,496)	$ (28,032,905)	$ 60,125,273	$ 117,247	$ 156,692,443

Note: The amounts listed above were the position in N.T. dollars of the Bank.

(In Thousands of United States Dollars)

Item	December 31, 2018					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Major maturity fund inflows						
Cash and cash equivalents	$ 763,759	$ 200,022	$ -	$ -	$ -	$ 963,781
Due from the Central Bank and call loans to banks	2,175,165	821,005	66,451	146,453	3,256	3,212,330
Financial assets at FVTPL	27,710	-	-	-	-	27,710
Receivables	539,014	186,624	234,249	13,399	16,175	989,461
Discounts and loans	531,065	700,209	576,629	272,927	3,444,350	5,525,180
Investments in debt instruments at FVTOCI	7,231	11,006	5,000	72,133	1,063,024	1,158,394
Investments in debt instruments at amortized cost	7,996	-	4,083	2,991	279,875	294,945
Other maturity fund inflow items	5,000	-	-	525,000	6,904	536,904
	4,056,940	1,918,866	886,412	1,032,903	4,813,584	12,708,705
Major maturity fund outflows						
Deposits from the Central Bank and banks	809,709	74,535	10,802	1,605	85	896,736
Due to the Central Bank and banks	1,394,916	469,000	-	-	-	1,863,916
Financial liabilities at FVTPL	-	-	-	297,064	-	297,064
Securities sold under repurchase agreements	95,018	-	-	-	-	95,018
Payables	619,205	34,665	4,767	4,913	-	663,550
Deposits and remittances	2,567,083	2,330,284	1,197,706	1,246,590	2,754,919	10,096,582
Other maturity fund outflow items	60,389	1,001	552	10,946	87,633	160,521
	5,546,320	2,909,485	1,213,827	1,561,118	2,842,637	14,073,387
Gap	$ (1,489,380)	$ (990,619)	$ (327,415)	$ (528,215)	$ 1,970,947	$ (1,364,682)

Note: The amounts listed above were the position in U.S. dollars of the Bank.

(In Thousands of United States Dollars)

Item	December 31, 2017					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Major maturity fund inflows						
Cash and cash equivalents	$ 953,081	$ 230,010	$ -	$ -	$ -	$ 1,183,091
Due from the Central Bank and call loans to banks	1,632,074	1,043,514	256,031	71,400	3,934	3,006,953
Financial assets at FVTPL	194,338	-	-	-	-	194,338
Receivables	486,234	97,299	282,369	11,127	13,972	891,001
Discounts and loans	717,742	681,847	568,695	448,186	3,775,783	6,192,253
Available-for-sale financial assets	9,098	4,998	970	12,052	524,918	552,036
Held-to-maturity financial assets	-	-	-	-	17,979	17,979
Investments in debt instrument without active market	-	-	-	-	2,177	2,177
Other maturity fund inflow items	5,000	-	-	300,000	13,694	318,694
	3,997,567	2,057,668	1,108,065	842,765	4,352,457	12,358,522
Major maturity fund outflows						
Deposits from the Central Bank and banks	877,668	100,720	991	1,947	85	981,411
Due to the Central Bank and banks	1,447,290	410,000	55,000	-	-	1,912,290
Financial liabilities at FVTPL	-	-	-	-	295,124	295,124
Payables	722,271	58,958	2,434	2,679	1,049	787,391
Deposits and remittances	2,240,560	2,287,546	966,947	1,415,605	3,467,837	10,378,495
Other maturity fund outflow items	81,451	1,308	135	544	71,489	154,927
	5,369,240	2,858,532	1,025,507	1,420,775	3,835,584	14,509,638
Gap	$ (1,371,673)	$ (800,864)	$ 82,558	$ (578,010)	$ 516,873	$ (2,151,116)

Note: The amounts listed above were the position in U.S. dollars of the Bank.

d) Maturity analysis of derivative financial assets and liabilities

The derivative instruments held by the Bank, except for interest rate swaps with leveraging effects, have very little probabilities of failing to be sold with reasonable prices in the market, and thus have very low liquidity risks.

(New Taiwan Dollars and Foreign Currencies Combined In Thousands of New Taiwan Dollars)

Item	December 31, 2018					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Foreign currency derivative instruments						
Outflows	$ 130,622,908	$ 177,417,727	$ 45,739,365	$ 12,335,558	$ 619,367	$ 366,734,925
Inflows	130,934,978	177,661,565	45,998,167	12,261,809	637,758	367,494,277
Interest rate derivative instruments						
Outflows	210,160	-	1,202,820	2,465,600	3,915	3,882,495
Inflows	156,431	-	1,202,820	2,461,765	-	3,821,016
Total outflows	$ 130,833,068	$ 177,417,727	$ 46,942,185	$ 14,801,158	$ 623,282	$ 370,617,420
Total inflows	$ 131,091,409	$ 177,661,565	$ 47,200,987	$ 14,723,574	$ 637,758	$ 371,315,293

(New Taiwan Dollars and Foreign Currencies Combined In Thousands of New Taiwan Dollars)

Item	December 31, 2017					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Foreign currency derivative instruments						
Outflows	$ 120,859,728	$ 156,839,908	$ 47,570,615	$ 18,935,732	$ 199,286	$ 344,405,269
Inflows	120,598,473	156,620,802	47,629,827	19,011,186	199,674	344,059,962
Interest rate derivative instruments						
Outflows	2,406,380	1,825,320	6,532,677	2,402,640	-	13,167,017
Inflows	2,794,970	1,998,800	6,423,107	2,374,400	25,672	13,616,949
Total outflows	$ 123,266,108	$ 158,665,228	$ 54,103,292	$ 21,338,372	$ 199,286	$ 357,572,286
Total inflows	$ 123,393,443	$ 158,619,602	$ 54,052,934	$ 21,385,586	$ 225,346	$ 357,676,911

e) Maturity analysis of off-balance-sheet items

Bank's off-balance-sheet items - irrevocable loans, guarantees, and letters of credit - presented based on the residual time from the balance sheet date to the maturity date were as follows:

(In Thousands of New Taiwan Dollars)

Item	December 31, 2018					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Irrevocable loan commitments issued	$ 49,422,517	$ 877,553	$ 1,954,919	$ 1,720,678	$ 10,858,543	$ 64,834,210
Credit card commitments	40	1,182	2,455	40,898	271,579	316,154
Letters of credit issued yet unused	23,249,832	52,159	18,394	-	-	23,320,385
Guarantees	45,704,695	-	30,930	67,139	45,565	45,848,329
	$ 118,377,084	$ 930,894	$ 2,006,698	$ 1,828,715	$ 11,175,687	$ 134,319,078

(In Thousands of New Taiwan Dollars)

Item	December 31, 2017					
	0-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	Over 1 Year	Total
Irrevocable loan commitments issued	$ 59,747,283	$ 1,782,452	$ 2,911,839	$ 4,235,833	$ 13,527,562	$ 82,204,969
Credit card commitments	-	859	4,506	7,684	320,043	333,092
Letters of credit issued yet unused	24,423,176	81,313	4,781	-	-	24,509,270
Guarantees	39,061,752	278,791	201,587	802,013	649,321	40,993,464
	$ 123,232,211	$ 2,143,415	$ 3,122,713	$ 5,045,530	$ 14,496,926	$ 148,040,795

39. OTHER DISCLOSURES OF FINANCIAL INSTITUTION

a. Asset quality

Business Type			December 31, 2018 Non-performing Loans (Note a)	December 31, 2018 Loans	December 31, 2018 Non-performing Loans Ratio (Note b)	December 31, 2018 Allowance for Loan Losses	December 31, 2018 Coverage Ratio (Note c)	December 31, 2017 Non-performing Loans (Note a)	December 31, 2017 Loans	December 31, 2017 Non-performing Loans Ratio (Note b)	December 31, 2017 Allowance for Loan Losses	December 31, 2017 Coverage Ratio (Note c)
Corporate finance	Secured		$ 2,305,939	$ 462,654,187	0.50%	$ 5,469,295	237.18%	$ 2,328,578	$ 454,069,715	0.51%	$ 5,128,576	220.24%
	Unsecured		444,112	423,318,377	0.10%	4,899,868	1,103.30%	344,885	478,510,307	0.07%	5,125,583	1,486.17%
Consumer finance	Mortgage loans (Note d)		854,268	267,447,763	0.32%	4,071,946	476.66%	1,170,435	281,144,369	0.42%	4,285,924	366.18%
	Cash cards (Note h)		-	-	-	-	-	-	-	-	-	-
	Credit loans (Note e)		4,045	1,587,222	0.25%	19,711	487.29%	9,242	1,678,616	0.55%	19,140	207.10%
	Others (Note f)	Secured	699,715	180,193,394	0.39%	1,841,133	263.13%	335,580	176,589,062	0.19%	1,793,042	534.31%
		Unsecured	7,590	1,192,521	0.64%	14,285	188.21%	3,569	1,415,570	0.25%	14,714	412.27%
Total			4,315,669	1,336,393,464	0.32%	16,316,238	378.07%	4,192,289	1,393,407,639	0.30%	16,366,979	390.41%

Business Type	December 31, 2018 Non-performing Loans (Note a)	December 31, 2018 Loans	December 31, 2018 Non-performing Loans Ratio (Note b)	December 31, 2018 Allowance for Loan Losses	December 31, 2018 Coverage Ratio (Note c)	December 31, 2017 Non-performing Loans (Note a)	December 31, 2017 Loans	December 31, 2017 Non-performing Loans Ratio (Note b)	December 31, 2017 Allowance for Loan Losses	December 31, 2017 Coverage Ratio (Note c)
Credit card	$ 3,131	$ 1,789,770	0.17%	$ 20,293	648.13%	$ 3,316	$ 1,722,927	0.19%	$ 21,849	658.90%
No recourse receivable factoring (Note g)	-	14,539,752	-	145,398	-	-	13,020,691	-	130,207	-

Note a: Non-performing loans are classified in accordance with the Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Past Due/Non-performing Loans and Bad Debts issued by the MOF. Non-performing loans of credit cards are defined in the Letter issued by the Banking Bureau on July 6, 2005 (Ref. No. Jin-Guan-Yin (4) 0944000378).

Note b: Non-performing loans ratio = Non-performing loan ÷ Loans
Non-performing loans of credit card ratio = Non-performing loans of credit cards ÷ Accounts receivable

Note c: Coverage ratio of allowances for loan losses = Allowances for loan losses ÷ Non-performing loans
Coverage ratio of allowance for loan losses of credit card = Allowance for loan losses of credit card ÷ Non-performing loans of credit cards

Note d: Mortgage loans are for borrowers to build or repair buildings, allowing the borrowers, their spouses or their minor children to fully use their buildings as collateral and to mortgage their rights to financial institutions.

Note e: Credit loans are defined in the Letter issued by the Banking Bureau on December 19, 2005 (Ref. No. Jin-Guan-Yin (4) 09440010950), excluding credit loans of credit cards and cash cards.

Note f: The other consumer financial businesses are defined as secured or unsecured consumer financial businesses, excluding mortgage loans, cash cards, credit loans and credit cards.

Note g: In accordance with the Letter issued by the Banking Bureau on July 19, 2005 (Ref. No. Jin-Guan-Yin (5) 094000494) non-recourse receivable factorings are not defined as non-performing loans until compensation from factors or insurance companies are ascertained to be non-recoverable.

Note h: The Bank does not engage in cash cards business.

Item / Business Type	December 31, 2018		December 31, 2017	
	Non-performing Loans Exempted from Reporting	**Non-performing Receivables Exempted from Reporting**	**Non-performing Loans Exempted from Reporting**	**Non-performing Receivables Exempted from Reporting**
Negotiated loans transacted in accordance with the agreement and exempted from reporting as non-performing loans (Note a)	$ -	$ 1,284	$ 20	$ 1,675
Negotiated accounts receivable transacted in accordance with the agreement and exempted from reporting as non-performing receivables (Note b)	554	17,484	618	17,095
Total	554	18,768	638	18,770

Note a: Negotiated loans and accounts receivable transacted in accordance with the agreement and exempted from reporting as non-performing loans are disclosed in accordance with the Letter issued by Banking Bureau on April 25, 2006 (Ref. No. Jin-Guan-Yin (1) 09510001270).

Note b: Loans and receivables transacted in accordance with debt clearance and renewal regulation and exempted from reporting as non-performing loans or receivables are disclosed in accordance with the Letter issued by Banking Bureau on September 15, 2008 (Ref. No. Jin-Guan-Yin (1) 09700318940).

b. Concentration of credit risk

December 31, 2018			
Rank (Note a)	**Transaction Party (Note b)**	**Loans (Note c)**	**As Proportion of Net Equity (%) (Note d)**
1	A Corporation (railway transportation industry)	$ 26,066,037	16.65
2	B Group (airline industry)	24,417,805	15.60
3	C Group (steel smelting industry)	21,098,325	13.48
4	D Group (concrete manufacturing industry)	18,768,879	11.99
5	E Group (synthesis construction industry)	16,927,144	10.81
6	F Group (other computer peripheral equipment manufacturing industry)	8,906,450	5.69
7	G Group (steel manufacturing industry)	7,530,964	4.81
8	H Group (electric wire and cable manufacturing industry)	6,115,546	3.91
9	I Group (real estate development industry)	6,114,530	3.91
10	J Group (financial intermediation industry)	5,469,398	3.49

December 31, 2017			
Rank (Note a)	Transaction Party (Note b)	Loans (Note c)	As Proportion of Net Equity (%) (Note d)
1	A Corporation (railway transportation industry)	$ 26,805,909	18.49
2	C Group (steel smelting industry)	22,245,008	15.35
3	B Group (airline industry)	21,617,109	14.91
4	E Group (synthesis construction industry)	14,923,502	10.30
5	D Group (concrete manufacturing industry)	12,467,788	8.60
6	K Group (real estate development industry)	7,619,400	5.26
7	G Group (steel manufacturing industry)	7,349,275	5.07
8	F Group (other computer peripheral equipment manufacturing industry)	6,785,169	4.68
9	J Group (financial services industry)	6,571,673	4.53
10	L Group (liquid crystal panel and components manufacturing industry)	5,649,402	3.90

Note a: Sorted by the balance of loans on December 31, 2018 and 2017, excluding government or state-run business. The number of transaction party which belongs to a group business was included in the balance of group business.

Note b: Transaction party is in accordance with article 6 of the Supplementary Provisions to the Taiwan Stock Exchange Corporation Criteria for Review of Securities Listings.

Note c: Loans include import and export bill negotiations, bills discounted, overdraft, short-term loan, short-term secured loan, receivable financing, medium-term loan, medium-term secured loan, long-term loan, long-term secured loan, delinquent loans, inward remittances, factoring without recourse, acceptance, and guarantee.

Note d: The percentage of loans to equity for the period: Domestic banks should use bank equity to calculate; the Taiwan branch of foreign banks should use branch's equity to calculate.

c. Interest rate sensitivity

(In Thousands of New Taiwan Dollars; %)

Item	December 31, 2018				
	1-90 Days	91-180 Days	181 Days-1 Year	More Than 1 Year	Total
Interest-sensitive assets	$ 1,271,933,192	$ 39,554,518	$ 62,221,289	$ 97,643,050	$ 1,471,352,049
Interest-sensitive liabilities	321,021,210	833,758,818	89,052,792	47,053,818	1,290,886,638
Interest sensitivity gap	950,911,982	(794,204,300)	(26,831,503)	50,589,232	180,465,411
Net equity					134,111,383
Ratio of interest-sensitive assets to liabilities					113.98%
Ratio of interest sensitivity gap to net equity					134.56%

(In Thousands of New Taiwan Dollars; %)

Item	December 31, 2017				
	1-90 Days	91-180 Days	181 Days-1 Year	More Than 1 Year	Total
Interest-sensitive assets	$ 1,270,770,531	$ 22,489,278	$ 59,169,751	$ 104,300,232	$ 1,456,729,792
Interest-sensitive liabilities	324,508,645	812,913,896	95,924,122	38,147,580	1,271,494,243
Interest sensitivity gap	946,261,886	(790,424,618)	(36,754,371)	66,152,652	185,235,549
Net equity					116,614,787
Ratio of interest-sensitive assets to liabilities					114.57%
Ratio of interest sensitivity gap to net equity					158.84%

Note a: The amounts listed above include accounts in N.T. dollars only (i.e. excluding foreign currency) for both head office and domestic branches.

Note b: Interest-sensitive assets and liabilities are interest-earning assets and interest-bearing liabilities with income or cost affected by interest rate fluctuations.

Note c: Interest sensitivity gap = Interest-sensitive assets - Interest-sensitive liabilities

Note d: Ratio of interest-sensitive assets to interest-sensitive liabilities = $\frac{\text{Interest-sensitive assets}}{\text{Interest-sensitive liabilities}}$ (N.T. dollars only)

(In Thousands of U.S. Dollars; %)

Item	December 31, 2018				
	1-90 Days	91-180 Days	181 Days-1 Year	More Than 1 Year	Total
Interest-sensitive assets	$ 13,345,324	$ 620,067	$ 606,445	$ 748,767	$ 15,320,603
Interest-sensitive liabilities	14,383,210	1,042,284	1,022,113	111	16,447,718
Interest sensitivity gap	(1,037,886)	(422,217)	(415,668)	748,656	(1,127,115)
Net equity					530,622
Ratio of interest-sensitive assets to liabilities					93.15%
Ratio of interest sensitivity gap to net equity					(212.41%)

(In Thousands of U.S. Dollars; %)

Item	December 31, 2017				
	1-90 Days	91-180 Days	181 Days-1 Year	More Than 1 Year	Total
Interest-sensitive assets	$ 12,433,072	$ 1,238,542	$ 397,649	$ 268,126	$ 14,337,389
Interest-sensitive liabilities	14,279,118	791,260	1,024,437	20,466	16,115,281
Interest sensitivity gap	(1,846,046)	447,282	(626,788)	247,660	(1,777,892)
Net equity					544,284
Ratio of interest-sensitive assets to liabilities					88.97%
Ratio of interest sensitivity gap to net equity					(326.65%)

Note a: The amounts listed above include accounts in U.S. dollars only for domestic branches, offshore banking unit (OBU), and overseas branches, excluding contingent assets and contingent liabilities.

Note b: Interest-sensitive assets and liabilities are interest-earning assets and interest-bearing liabilities with income or cost affected by interest rate fluctuations.

Note c: Interest sensitivity gap = Interest-sensitive assets - Interest-sensitive liabilities

Note d: Ratio of interest-sensitive assets to interest-sensitive liabilities = $\frac{\text{Interest-sensitive assets}}{\text{Interest-sensitive liabilities}}$ (U.S. dollars only)

d. Profitability

Item		December 31, 2018	December 31, 2017
Return on total assets	Pretax	0.72%	0.70%
	After tax	0.62%	0.60%
Return on net equity	Pretax	9.76%	10.04%
	After tax	8.39%	8.56%
Profit margin		38.33%	39.27%

Note a: Return on total assets = $\frac{\text{Income before (after) tax}}{\text{Average assets}}$

Note b: Return on net equity = $\frac{\text{Income before (after) tax}}{\text{Average net equity}}$

Note c: Profit margin = $\frac{\text{Income after tax}}{\text{Net revenue and gains}}$

Note d: Profitability presented above is cumulative from January 1 to December 31 of 2018 and 2017, respectively.

e. Maturity analysis of assets and liabilities

(In Thousands of New Taiwan Dollars)

	Total	December 31, 2018					
		Period Remaining until Due Date and Amount Due					
		0-10 Days	11-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	More Than 1 Year
Major maturity cash inflows	$ 1,707,833,143	$ 175,844,127	$ 184,340,884	$ 217,198,302	$ 143,340,830	$ 221,038,740	$ 766,070,260
Major maturity cash outflows	2,254,038,309	118,541,883	139,349,808	330,434,420	280,008,174	435,156,088	950,547,936
Gap	(546,205,166)	57,302,244	44,991,076	(113,236,118)	(136,667,344)	(214,117,348)	(184,477,676)

(In Thousands of New Taiwan Dollars)

	Total	December 31, 2017					
		Period Remaining until Due Date and Amount Due					
		0-10 Days	11-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	More Than 1 year
Major maturity cash inflows	$ 1,670,505,136	$ 172,902,756	$ 145,384,955	$ 198,751,791	$ 128,146,773	$ 260,833,212	$ 764,485,649
Major maturity cash outflows	2,193,924,065	110,223,411	154,549,943	318,756,912	277,649,621	436,184,304	896,559,874
Gap	(523,418,929)	62,679,345	(9,164,988)	(120,005,121)	(149,502,848)	(175,351,092)	(132,074,225)

Note: The amounts listed above include accounts in N.T. dollars only (i.e. excluding foreign currency) for both head office and domestic branches.

(In Thousands of U.S. Dollars)

	Total	December 31, 2018				
		Period Remaining until Due Date and Amount Due				
		1-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	More Than 1 Year
Major maturity cash inflows	$ 22,371,236	$ 9,764,134	$ 4,338,156	$ 1,817,531	$ 1,233,708	$ 5,217,707
Major maturity cash outflows	27,471,708	10,457,265	5,130,078	2,794,196	3,737,405	5,352,764
Gap	(5,100,472)	(693,131)	(791,922)	(976,665)	(2,503,697)	(135,057)

(In Thousands of U.S. Dollars)

	Total	December 31, 2017				
		Period Remaining until Due Date and Amount Due				
		1-30 Days	31-90 Days	91-180 Days	181 Days-1 Year	More Than 1 year
Major maturity cash inflows	$ 21,776,559	$ 9,096,294	$ 4,352,376	$ 2,170,210	$ 1,387,555	$ 4,770,124
Major maturity cash outflows	26,962,227	9,264,047	4,872,188	2,799,921	3,570,464	6,455,607
Gap	(5,185,668)	(167,753)	(519,812)	(629,711)	(2,182,909)	(1,685,483)

Note: The amounts listed above include accounts in U.S. dollars for head office, domestic branches, and OBU.

f. Trust accounts

Under Article 3 of the Trust Law, the Bank can offer trust services. The items and amounts of trust accounts as of December 31, 2018 and 2017 were as follows:

	December 31	
	2018	2017
Special purpose trust accounts - domestic	$ 30,954,936	$ 28,323,313
Special purpose trust accounts - foreign	75,877,822	75,981,349
Insurance trust	10,697	1,047
Retirement and breeds trust	422,516	314,508
Umbilical-cord-blood trust	11,231,280	9,951,391
Money claim and guarantee trust	65,800	73,800
Marketable securities trust	739,231	777,551
Real estate trust	17,663,388	15,762,486
Securities under custody	134,752,976	136,459,615
Other money trust	2,006,512	1,027,807
	$ 273,725,158	$ 268,672,867

g. Disclosures on trust assets and liabilities and assets register as required by Enforcement Rules of ROC Trust Law Article 17 were as follows:

Balance Sheet of Trust

	December 31			December 31	
Trust Assets	**2018**	**2017**	**Trust Liabilities**	**2018**	**2017**
Bank deposits	$ 4,118,911	$ 3,186,400	Trust capital		
Insurance claims	65,800	73,800	Money trust	$ 119,998,578	$ 115,286,230
Financial assets			Insurance claims	65,800	73,800
Common stock	1,867,776	1,284,961	Marketable securities trust	736,286	774,802
Mutual funds	114,602,922	111,067,224	Real estate trust	17,664,125	15,781,176
Bonds	2,784,909	2,433,959	Securities under custody payable	134,752,976	136,459,615
Interest receivable	1,459	-	Withholdings	131	61
Prepayments	-	1,609	Profit and loss	337,679	413,707
Land	10,862,297	10,194,729	Unappropriated retained earnings - realized capital gain/loss	42,042	14,517
Buildings	597,410	579,169	Unappropriated retained earnings - gain on revenue/ expense investment	748,120	364,232
Construction in progress	4,070,698	3,391,401	Unappropriated retained earning	(620,579)	(495,273)
Securities under custody	134,752,976	136,459,615			
Total trust assets	$ 273,725,158	$ 268,672,867	Total trust liabilities	$ 273,725,158	$ 268,672,867

Trust Assets Register

Investments	December 31 2018	December 31 2017
Bank deposits	$ 4,118,911	$ 3,186,400
Insurance claims	65,800	73,800
Financial assets		
Common stock	1,867,776	1,284,961
Mutual funds	114,602,922	111,067,224
Bonds	2,784,909	2,433,959
Land	10,862,297	10,194,729
Buildings	597,410	579,169
Construction in progress	4,070,698	3,391,401
Others	1,459	1,609
Securities under custody	134,752,976	136,459,615
Total trust assets	$ 273,725,158	$ 268,672,867

Income Statement of Trust

Investments	For the Year Ended December 31 2018	For the Year Ended December 31 2017
Revenue		
Interest income	$ 90,198	$ 79,705
Dividends	102,913	212,997
Rental revenues	94,538	94,419
Gain on mutual funds	12,058	15,926
Foreign exchange gains	818,946	759,982
Realized capital gain - mutual funds	5,666	19,364
Realized capital gain - quoted stock	67,821	31,446
Realized capital gain - bonds	1,952	16,674
	1,194,092	1,230,513
Expense		
Maintenance	(1,614)	(5,661)
Tax expense	(2,169)	(1,554)
Others	(120)	(9,965)
Foreign exchange losses	(789,270)	(757,908)
Realized capital loss - bonds	(14,968)	(7,063)
Realized capital loss - mutual funds	(16,979)	(25,510)
Realized capital loss-quoted stock	(31,293)	(9,145)
	(856,413)	(816,806)
	$ 337,679	$ 413,707

40. RELATED-PARTY TRANSACTIONS

a. Related parties and their relationships with the Bank

Name	Relationship
Director and managers	The Bank's director and managers
Taishin Financial Holding	The Bank's corporate director
Chang Hua Commercial Bank, Ltd.	The Bank's subsidiary
Taishin International Bank	Owned by the same parent company
The Export-Import Bank	Its director is the Bank's corporate director
Land Bank	Its director is the Bank's corporate director
Taiwan Business Bank	Its director is the Bank's corporate director
Taiwan High Speed Rail Corporation	Its director is the Bank's corporate director
Yang Ming Marine Transport Corporation	Its director is representative of the Bank's corporate director
Powertec Energy Corporation	Its director is the Bank's corporate director
Ritdisplay Corporation	Its director is the Bank's corporate director
China Airlines Ltd.	Its director is the Bank's corporate director
Kaohsiung Rapid Transit Corporation	Its director is the Bank's corporate director
MasterLink Securities Corporation	Its corporate director is the Bank
Adimmune Corporation	Its supervisor is the Bank's corporate director
Others	FSC-approved IAS 24, "Related Party Disclosures" other related parties

b. Significant transactions with related parties

1) Loans

	Balance	Percentage of Loans (%)
Balance as of December 31, 2018	$ 29,126,610	2.21
Balance as of December 31, 2017	28,819,698	2.09

For the years ended December 31, 2018 and 2017, interest ranged from 0.63% to 4.70% and from 0.00% to 3.67%, and interest income was $587,044 thousand and $553,550 thousand, respectively.

	December 31, 2018					
	Ending Balance	Highest Amount	Normal Loans	Non-performing Loans	Collateral	Difference in Terms Between Related Parties and Non-related Parties
Consumer loans						
26 accounts	$ 13,404	$ 14,195	$ 13,404	$ -	Credit	None
Self-use residential mortgage loans						
198 accounts	1,170,648	1,203,602	1,170,648	-	Real estate	None
Others						
Taiwan High Speed Rail Corporation	25,739,237	26,764,830	25,739,237	-	Credit and station equipment	None
Yang Ming Marine Transport Corporation	1,140,000	2,180,000	1,140,000	-	Ship	None
Powertec Energy Corporation	628,791	628,791	628,791	-	Credit	None
Other - corporation 9 accounts (Note 1)	431,595	779,460	431,595	-	Credit and fund guarantee and real estate	None
Other - individual 5 accounts (Note 2)	2,936	2,966	2,936	-	Deposit	None

	December 31, 2017					
	Ending Balance	Highest Amount	Normal Loans	Non-performing Loans	Collateral	Difference in Terms Between Related Parties and Non-related Parties
Consumer loans						
30 accounts	$ 13,370	$ 14,083	$ 13,370	$ -	Credit	None
Self-use residential mortgage loans						
202 accounts	1,173,424	1,219,832	1,173,424	-	Real estate	None
Others						
Taiwan High Speed Rail Corporation	26,624,078	28,573,784	26,624,078	-	Credit and station equipment	None
Powertec Energy Corporation	542,972	557,972	542,972	-	Credit	None
China Airlines Ltd.	100,000	2,232,500	100,000	-	Credit	None
Ritdisplay Corporation	106,490	118,600	106,490	-	Real estate	None
Other - corporation 6 accounts (Note 1)	249,304	758,667	249,304	-	Credit and fund guarantee and real estate	None
Other - individual 9 accounts (Note 2)	10,060	10,280	10,060	-	Deposit	None

Note 1: The balance of every corporate entity is not over $1 billion.

Note 2: The balance of every single entity is not over 1% of the total ending balance.

Loans to managers for mortgage within $8,000 thousand and credit loans within $800 thousand per person all bore interests at 1.26% in December 31, 2018 and 2017. The interest rates and other terms provided to the other related parties are the same as those offered to the public.

2) Guaranteed loans

	December 31, 2018				
	Ending Balance	Highest Amount	Reserve for Guarantee Liabilities	Interest Rate (Per Annum %)	Collateral
Yang Ming Marine Transport Corporation	$ 50,000	$ 500,000	$ 5,000	0.80	None
Kaohsiung Rapid Transit Corporation	24,588	30,388	246	0.50	None
Adimmune Corporation	19,236	19,236	192	1.80	Pledged demand deposit

	December 31, 2017				
	Ending Balance	Highest Amount	Reserve for Guarantee Liabilities	Interest Rate (Per Annum %)	Collateral
Kaohsiung Rapid Transit Corporation	$ 23,400	$ 50,280	$ 234	0.50	None
Adimmune Corporation	19,236	19,246	192	1.80	Pledged demand deposit

3) Deposits

	Balance	Percentage of Loans (%)
Balance as of December 31, 2018	$ 4,185,660	0.25
Balance as of December 31, 2017	4,376,758	0.26

For the years ended December 31, 2018 and 2017, the interest rates intervals from 0.00% to 0.13% and 0.00% to 15.00%, respectively; the interest expense was $48,688 thousand and $84,552 thousand, respectively.

The interest rate for managers' deposits amounting to $480 thousand per person was 13% per annum. The part of deposit exceeding $480 thousand will earn interest calculated at the demand savings rate. The interest rates and others terms provided to the other related parties are the same as those offered to general public.

4) Call loans to banks and call loans from banks

Call loans to banks

(In Thousands of Original Currencies)

	December 31, 2018				
Name	**Department**	**Currency**	**Ending Balance**	**Interest Rate (Per Annum %)**	**Interest Income**
Land Bank	DBU	NTD	$ 1,500,000	0.18-0.19	$ 274
	OBU	USD	155,000	1.48-3.28	3,089
	OBU	RMB	60,000	1.45-3.53	78
	Singapore Branch	USD	10,000	2.79	68
	Hong Kong Branch	USD	90,000	1.62-3.32	2,239
Taiwan Business Bank	OBU	USD	10,000	1.45-3.25	816
	Hong Kong Branch	USD	20,000	1.50-3.25	714
Chang Hua	OBU	RMB	730,000	3.30-4.84	1,655
Commercial Bank, Ltd.	OBU	JPY	75,000	0.16	10

	December 31, 2017				
Name	**Department**	**Currency**	**Ending Balance**	**Interest Rate (Per Annum %)**	**Interest Income**
Land Bank	OBU	USD	$ 75,000	1.18-1.93	$ 1,097
	Hong Kong Branch	USD	100,000	0.80-2.28	1,286
Taiwan Business Bank	OBU	USD	60,000	0.70-2.00	267
	Hong Kong Branch	USD	30,000	0.71-2.28	200
	OBU	AUD	3,000	1.30-1.68	-

Call loans from banks

(In Thousands of Original Currencies)

	December 31, 2018				
Name	**Department**	**Currency**	**Ending Balance**	**Interest Rate (Per Annum %)**	**Interest Expense**
Land Bank	New York Branch	USD	$ 30,000	1.44-3.30	$ 344
	Los Angeles Branch	USD	90,000	1.44-3.30	392
	Hong Kong Branch	USD	30,000	1.44-3.20	176
Taiwan Business Bank	Singapore Branch	SGD	4,500	0.80-2.55	20
	New York Branch	USD	135,000	1.75-3.32	116
	Los Angeles Branch	USD	47,000	2.30-3.30	32

	December 31, 2017				
Name	**Department**	**Currency**	**Ending Balance**	**Interest Rate (Per Annum %)**	**Interest Expense**
Land Bank	OBU	USD	$ 30,000	0.72-1.85	$ 28
	Hong Kong Branch	USD	85,000	0.95-2.08	804

5) Due from banks and deposits from banks

Due from banks

(In Thousands of New Taiwan Dollars)

			December 31	
			2018	2017
Name	Department	Currency	Ending Balance	Ending Balance
Land Bank	DBU	NTD	$ 225	$ 44
Taiwan Business Bank	DBU	NTD	28	77
Chang Hua Commercial	DBU	USD	7,923	-
Bank, Ltd.	DBU	RMB	280,179	-

Deposits from banks

(In Thousands of Original Currencies)

			December 31	
			2018	2017
Name	Department	Currency	Ending Balance	Ending Balance
Land Bank	DBU	NTD	$ 277	$ 277
The Export-Import Bank	DBU	NTD	1,173	1,102
Taishin International Bank	New York Branch	USD	62	57
Chang Hua Commercial	Tokyo Branch	JPY	13,033	-
Bank, Ltd.	Hong Kong Branch	USD	1,403	-
	Hong Kong Branch	HKD	168	-

c. Compensation of directors and management personnel

	For the Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 112,419	$ 109,915
Post-employment benefits	13,973	10,905
	$ 127,392	$ 120,820

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

d. Other

On March 17, 2017, the Bank entered into a contract with MasterLink Securities Corporation in the amount of $250 thousand. Based on the contract, the Bank would hire MasterLink Securities Corporation as a consultant for the sales of the Bank's subordinated financial bonds.

41. PLEDGED ASSETS

The summary of the Bank's pledged assets as of December 31, 2018 and 2017 is as follows:

Pledged Assets	Description	December 31 2018	December 31 2017
Investments in debt instruments at FVTOCI	Government bonds	$ 1,047,620	$ -
Investments in debt instruments at amortized cost	Bonds and certificates of deposit	41,607,061	-
Time deposits with original maturities of more than 3 months	Time deposits	2,681,400	2,729,400
Available-for-sale financial assets	Government bonds	-	5,781,100
Held-to-maturity financial assets	Bonds and certificate of deposits	-	36,749,428
Refundable deposits	Cash	662,164	638,049

42. CONTINGENT LIABILITIES AND COMMITMENTS

a. In addition to those mentioned in Note 7, the Bank had the following contingent liabilities and commitments as of December 31, 2018 and 2017:

	December 31 2018	December 31 2017
Trust liabilities	$ 273,725,158	$ 268,672,867
Unused loan commitments (excluding credit cards)	64,834,210	82,204,969
Credit card commitments	316,154	333,092
Unused issued letters of credit	23,320,385	24,509,270
Guarantees issued in guarantee business	45,848,329	40,993,464
Repayment notes and times deposit held for custody	14,756,665	12,860,366
Liabilities on joint loans	719,181	771,194

The unrecognized commitments for the acquisition of equipment and intangible assets, as well as the commitments for construction, lease engagement, appointment and security as of December 31, 2018 were $285,754 thousand, $64,769 thousand, $53,111 thousand, $17,210 thousand and $135,330 thousand, respectively.

b. TDK Corporation filed a legal proceeding against the Bank for damages compensation in the amount of $45,794 thousand. On April 19, 2017, the Taiwan Superior Court passed a verdict partially in favor of and partially against the Bank, and the Bank shall compensate the damages in the amount of $11,448 thousand. The Bank is currently appealing with the Taiwan Superior Court.

43. DISCLOSURES UNDER STATUTORY REQUIREMENTS

a. Material transactions

No.	Item	Explanation
1	Accumulated purchases and sales balance of specific investees' marketable security over NT$300 million or 10% of outstanding capital for the year ended December 31, 2018	None
2	Acquisition of fixed assets over NT$300 million or 10% of outstanding capital for the year ended December 31, 2018	None
3	Disposal of fixed assets over NT$300 million or 10% of outstanding capital for the year ended December 31, 2018	None
4	Discount on fees income from related parties over NT$5 million	None
5	Receivables from related parties over NT$300 million or 10% of outstanding capital as of December 31, 2018	None
6	Sale of NPL	None
7	Securitized instruments and related assets which are in accordance with the Statute for Financial Assets Securitization and the Statute for Real Estate Securitization	None
8	Other significant transactions which may affect decisions of the users of the financial statements	None

b. Information on the Bank's Investees

No.	Item	Explanation
1	Investees' names, locations, etc.	Table 1
2	Capital lending to another party	None
3	Endorsement for another party	None
4	Marketable securities held as of December 31, 2018	None
5	Accumulated purchases and sales balance of specific marketable security over NT$300 million or 10% of outstanding capital for the year ended December 31, 2018	None
6	Acquisition of property, plant and equipment over NT$300 million or 10% of outstanding capital for the year ended December 31, 2018	None
7	Disposal of property, plant and equipment over NT$300 million or 10% of outstanding capital for the year ended December 31, 2018	None
8	Receivables from related parties over NT$300 million or 10% of outstanding capital as of December 31, 2018	None
9	Derivative instrument	None
10	Discount on fees income from related parties over NT$5 million	None
11	Sale of NPL by subsidiary	None
12	Other significant transactions which may affect decisions of the users of the financial statements	None

c. Investment in mainland China: Table 2

44. INFORMATION ON INVESTEES

Investees' Names (Note a)	Investees' Location	Principal Business Activities	Ownership Interest (%) at Ending Balance	Investment Book Value	Recognized Investment Income (Loss) of Current Period	Sum of Ownership (Note a)			
						Current Stock	Imputed Stock (Note b)	Stock	Ownership Interest (%)
Chang Hua Commercial Bank, Ltd	China	Banking	100.00	$ 12,536,866	$ 394,394	$ 1,211,728,836	-	1,211,728,836	100.00
MasterLink Securities Corporation	Taipei City	Financial holdings company	0.52	569,121	-	63,447,125	-	63,447,125	0.52
Asia Pacific Broadband Telecom Co.	Taipei City	Type I & type II telecommunications business	0.35	103,500	-	15,000,000	-	15,000,000	0.35
Taiwan High Speed Rail Corporation	Taipei City	High speed rail road	0.79	1,359,475	-	44,500,000	-	44,500,000	0.79
Taiwan Stock Exchange Co.	Taipei City	Securities brokerage, margin lending, and underwriting financial products	3.00	1,538,902	-	20,818,473	-	20,818,473	3.00
Taiwan Sugar Co.	Tainan City	Manufacture correlative products of sugar and crop	0.41	1,170,444	-	23,246,159	-	23,246,159	0.41
Taiwan Power Co.	Taipei City	Generate electric power, power distribution, and cable assemble	0.71	1,841,024	-	235,726,532	-	235,726,532	0.71
Taipei Foreign Exchange Inc.	Taipei City	Exchange trading, DEPOS, and Swap	3.53	29,939	-	700,000	-	700,000	3.53
Lieu-An Service Co., Ltd.	Taipei City	ATM purchase, rental, and repair or maintenance	5.00	1,692	-	125,000	-	125,000	5.00
CDIB & Partners Investment Holding Co.	Taipei City	Investment	4.95	554,040	-	54,000,000	-	54,000,000	4.95
Nomura Asset Management Taiwan Ltd.	Taipei City	Securities investment trust	4.09	51,290	-	1,413,725	-	1,413,725	4.09
Financial Information Service Co., Ltd.	Taipei City	Type II telecommunications business	1.19	124,471	-	6,229,800	-	6,229,800	1.19
Taiwan Futures Exchange	Taipei City	Futures exchange	1.00	239,009	-	3,340,910	-	3,340,910	1.00
Taiwan Assets Management Co., Ltd.	Taipei City	Acquisition of delinquent loans, evaluation, auction, and management	11.35	1,476,000	-	120,000,000	-	120,000,000	11.35
Taiwan Financial Asset Service Co.	Taipei City	Auction assets of the recognition of an impartial third party	2.94	48,250	-	5,000,000	-	5,000,000	2.94
Financial Evolution Co., Ltd.	Taipei City	Financial information systems development	4.12	8,647	-	905,475	-	905,475	4.12
Taiwan Depository & Clearing Corporation	Taipei City	Provide book-entry of securities transactions	0.08	18,623	-	307,306	-	307,306	0.08
Sunlight Assets Management Co., Ltd.	Taipei City	Acquisition of delinquent loans, evaluation, auction, and management	0.70	474	-	41,768	-	41,768	0.70
Taiwan Mobile Payment Corporation	Taipei City	Electronic Information provider	3.00	10,890	-	1,800,000	-	1,800,000	3.00
Taiwan Urban Regeneration & Financial Service Co., Ltd.	Taipei City	Urban Regeneration	5.00	24,350		2,500,000		2,500,000	5.00
Tai Yu Products Corporation	Taichung City	Frozen agricultural products	4.77	Notec	-	5,748,382	-	5,748,382	4.77
Chi-Yi Construction Management Company	New Taipei City	Residential development and lease	1.47	Notec	-	556,965	-	556,965	1.47

Note a: The investees' voting shares, and imputed stock were owned by the Bank and related parties.

Note b: Imputed stock are considered if equity securities such as convertible bonds, warrants, etc., or derivative contracts such as stock options, are converted.

Note c: The Bank had recognized the loss on investment in Tai Yu Products Corporation and Chi-Yi Construction Management Company.

45. OTHER DISCLOSURES

The subsidiary of the Bank obtained a business license on September 10, 2018 and registered as "Chang Hua Commercial Bank, Ltd." The original branch/sub-branch and newly established Nanjing Branch successfully re-acquired the business license of the Chang Hua Commercial Bank, Ltd. of the branch/sub-branch under the mainland corporate bank. The subsidiary opened on December 11, 2018. The working capital was RMB2,500 million, which was transferred from Kunshan, Dongguan and Fuzhou Branch.

46. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on the types of services provided.

a. Segment revenue and results

	For the Year Ended December 31, 2018						
	Loans	Deposits and Remittances	Financial Instruments and Investments	Wealth Management	Oversea Branch	Others	Total
Net income of interest	$ 13,332,450	$ 6,201,283	$ 117,742	$ -	$ 3,473,999	$ 68	$ 23,125,542
Net service fee income	1,393,265	243,175	(28,760)	3,086,223	168,435	-	4,862,338
Net income on financial instrument	-	-	5,124,822	-	(404,136)	-	4,720,686
Others	148,232	-	(111)	4	(90,216)	229,621	287,530
Net revenue and gains	14,873,947	6,444,458	5,213,693	3,086,227	3,148,082	229,689	32,996,096
Bad debts expense, commitment and guarantee liability provision	(1,462,791)	-	37	-	(750,274)	-	(2,213,028)
Operating expenses	-	-	-	-	-	-	(16,076,534)
Income before income tax	$ 13,411,156	$ 6,444,458	$ 5,213,730	$ 3,086,227	$ 2,397,808	$ 229,689	$ 14,706,534

	For the Year Ended December 31, 2017						
	Loans	Deposits and Remittances	Financial Instruments and Investments	Wealth Management	Oversea Branch	Others	Total
Net income of interest	$ 13,360,330	$ 5,082,117	$ 808,337	$ -	$ 3,410,882	($ 4,796)	$ 22,656,870
Net service fee income	1,463,307	201,665	(34,511)	2,906,165	261,992	-	4,798,618
Net income on financial instrument	-	-	3,055,975	-	67,981	-	3,123,956
Others	10,484	-	2,845	(344)	4,380	199,910	217,275
Net revenue and gains	14,834,121	5,283,782	3,832,646	2,905,821	3,745,235	195,114	30,796,719
Bad debts expense and guarantee liability provision	(14,930)	-	-	-	(776,255)	-	(791,185)
Operating expenses	-	-	-	-	-	-	(15,821,315)
Income before income tax	$ 14,819,191	$ 5,283,782	$ 3,832,646	$ 2,905,821	$ 2,968,980	$ 195,114	$ 14,184,219

The revenue and results on the segment information reported does not include inter-segment revenue for the years ended December 31, 2018 and 2017.

This was the measure reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance.

b. Segment total assets and liabilities

	December 31, 2018						
	Loans	Deposits and Remittances	Financial Instruments and Investments	Overseas Branches	Others	Adjustments	Total
Assets	$ 1,237,462,200	$ -	$ 711,859,108	$ 167,780,951	$ 94,714,265	$ (142,736,504)	$ 2,069,080,020
Liabilities	$ 2,612,375	$ 1,642,094,011	$ 200,817,962	$ 159,441,424	$ 50,289,121	$ (142,736,504)	$ 1,912,518,389

	December 31, 2017						
	Loans	Deposits and Remittances	Financial Instruments and Investments	Overseas Branches	Others	Adjustments	Total
Assets	$ 1,274,604,082	$ -	$ 625,178,439	$ 190,521,528	$ 77,852,165	$ (131,897,814)	$ 2,036,258,400
Liabilities	$ 3,909,438	$ 1,623,962,111	$ 176,135,254	$ 171,553,983	$ 47,647,864	$ (131,897,814)	$ 1,891,310,836

TABLE 1

CHANG HWA COMMERCIAL BANK, LTD.

INFORMATION ON INVESTEES' NAMES, LOCATIONS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Except for Percentage and Shares)

Investor	Investees' Names	Investees' Location	Line of Business	Original Investment Amount		As of December 31,2018			Net Income (Loss) of Current Period	Recognized Income (Loss) of Current Period	Note
				End of Year 2018	End of Year 2017	Stock	Ownership Interest (%)	Book Value			
Chang Hwa Bank	Chang Hua Commercial Bank, Ltd.	China	Banking	$ 12,117,288	$ -	Note	100	$ 12,536,866	$ 394,394	$ 394,394	

Note: Department of organization.

CHANG HWA COMMERCIAL BANK, LTD.

INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1.

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Accumulated Outflow of Investment from Taiwan as of January 1, 2018	Investment Flows		Accumulated Outflow of Investment from Taiwan as of December 31, 2018	Net Income (Loss) of the Investee (Note 2)	% of Direct or Indirect Investment	Investment Gain (Loss)	Carrying Amount as of December 31, 2018	Accumulated Repatriation of Investment Income as of December 31, 2018	Note
					Outflow	Inflow							
Chang Hua Commercial Bank, Ltd.	Banking	$ 12,117,288 (US$ 399,558)	Note 1.c.	$ 12,117,288 (US$ 399,558)	$ -	$ -	$ 12,117,288 (US$ 399,558)	$ 394,394	100	$ 394,394	$ 12,536,866	$ -	

2.

Accumulated Outward Remittance for Investment in Mainland China December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Note 3)
$ 12,117,288 (US$ 399,558)	$ 12,372,787 (US$ 410,928)	$ 23,484,245

Note 1: The three methods of investment are as follows:

a. Direct investment in mainland China.
b. Investment in mainland China through reinvestment in existing enterprise in a third area.
c. Others.

Note 2: Equity in the profit (loss):

a. If the entity is still in the preparation stage and there is no equity in profit (loss), the condition should be noted.

b. The basis of recognizing equity in profit (loss) is categorized in the following three types and each entity should be noted according to its condition.

1) Financial statements audited (reviewed) by international accounting firms that cooperate with the accounting firms in the ROC.
2) Financial statements audited (reviewed) by the Taiwan-based parent company's CPA.
3) Others.

Note 3: In accordance with the "Bank, Financial Holding Corporation and Related Party Invest China Business Rules" announced by the FSC, the accumulated outflow of operating funds and investment from the following parties may not exceed 15% of net assets while they applied:

a. Banks in Taiwan (or subsidiaries in a third area) which establish branches, establish/acquire subsidiaries or acquire stock or capital contributions from local stockholders in mainland China.
b. The subsidiaries whose issued stock with voting rights or more than 50% of capital held by banks in Taiwan that have investments in mainland China.

CHANG HWA COMMERCIAL BANK, LTD.

THE CONTENTS OF STATEMENTS OF MAJOR ACCOUNTING ITEMS

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Item	Maturity	Shares	Amounts	Rate (%)	Cost	Fair Value Price	Fair Value Amounts
Investment in bills							
Commercial papers	January 7, 2019 - April 25, 2019	-	$ 6,630,700	0.41-0.75	$ 6,626,372		$ 6,626,120
Government bonds							
105-8 Note A	June 24, 2021	-	800,000	0.5	797,558		797,555
Others		-	305,200		305,328		306,209
			1,105,200		1,102,886		1,103,764
Corporate bonds		-	860,580		860,580		851,664
Derivative financial instruments							
Futures		-	-		173,149		173,149
Forward exchange contracts		-	-		-		49,518
Interest rate swaps		-	-		-		741,343
Cross currency swaps		-	-		-		32,867
Currency swaps		-	-		-		1,314,821
Currency call option premiums		-	-		43,321		24,244
			-		216,470		2,335,942
			$ 8,596,480		$ 8,806,308		$ 10,917,490

Note: The part of financial assets at FVTPL were provided for transaction with repurchase agreements.

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Item	Maturity	Shares (Thousand)	Par Value	Rate (%)	Cost	Valuation Adjustment	Fair Value Price	Fair Value Amount	Guarantee or Pledge
Domestic quoted stock		217,325	$ 2,173,250		$ 4,378,989	$ 406,226		$ 4,785,216	
Domestic other stock		482,460	4,824,600		3,896,634	3,241,412		7,138,045	
			6,997,850		8,275,623	3,647,638		11,923,261	
Government bonds									
101-9 Note A	September 24, 2022	-	4,800,000	1.125	4,796,100	84,027		4,880,127	Deposits in courts amounted to $129,800 thousand and reserve fund to trust compensation amounted to $120,000 thousand
Others		-	12,843,240		12,956,979	56,086		13,013,065	Deposits in courts amounted to $262,100 thousand, operating deposits amounted to $330,000 thousand and reserve fund to trust compensation amounted to $50,000 thousand
			17,643,240		17,753,079	140,113		17,893,192	
Corporate bonds			16,644,786		16,598,677	(104,127)		16,494,550	
Bank notes			29,917,504		29,855,172	26,000		29,881,172	
Short-term notes			2,510,310		2,509,591	(3,903)		2,505,688	
Bond issued by international organizations		-	11,120,271		10,927,267	98,603		11,025,870	
Beneficiary and asset - based securities			660,769		663,504	3,283		666,787	
			$ 85,494,730		$ 86,582,913	$ 3,807,607		$ 90,390,520	

Note: The part of financial assets at FVOCI were provided to transaction with repurchase agreements.

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF INVESTMENT IN DEBT INSTRUMENTS AT AMORTIZED COST
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Item	Maturity	Amount	Rate	Unamortized Premium (Discount)	Cost	Accumulated Impairment	Book Value	Guarantee or Pledge
Investments in bills								
Central Bank certificates deposit	December 31, 2018 - December 17, 2020	$ 249,745,000	0.20%-0.77%	$ -	$ 249,745,000	$ -	$ 249,745,000	Placed at the Central Bank amounted to $36,000,000 thousand and pledged for call loans from banks amounted to $53,000,000 thousand
Others		1,570,800		(3,479)	1,567,321	-	1,567,321	
		251,315,800		(3,479)	251,312,321	-	251,312,321	
Government bonds		2,250,000		131,185	2,381,185	-	2,381,185	The oversea branches provided as collateral for operation were in the amount of $462,781 thousand
Bank notes		7,332,348		(1,138)	7,331,210	(3,713)	7,327,497	
Corporate bonds		7,042,178		(475)	7,041,703	(2,901)	7,038,802	
		$ 267,940,326		$ 126,093	$ 268,066,419	$ (6,614)	$ 268,059,805	

Notes: The investment gain or loss was calculated on the basis of the investee's audited financial statements for the same reporting periods as the Company and the proportion of the Company's ownership.

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee	Balance at January 1, 2018		Additions		Decrease		Balance at December 31, 2018			Market Value or Net Equity		Valuation	Guarantee
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	%	Amount	Price	Amount	Basis	or Pledge
Equity method													
Chang Hwa Commercial Bank, Ltd.	-	$ -	1,268,562	$ 12,685,623	-	$ (148,757)	1,268,562	100.00	$ 12,536,866	9.97	$ 12,646,964	Equity method	N

STATEMENT 5

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF OTHER MISCELLANEOUS FINANCIAL ASSETS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Time deposits for more than three months	$ 51,700,324
Other financial assets	121,385
	$ 51,821,709

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF SECURITIES SOLD UNDER REPURCHASE AGREEMENTS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Par Value	Amount
Notes with repurchase agreements		
Issuer - Synnex Technology International Corporation	$ 370,100	$ 370,000
Issuer - Chinese Petroleum Corporation	300,000	299,000
Others	253,200	252,708
	923,300	921,708
Bonds with repurchase agreements		
Government bonds		
103-15 Note A	1,306,700	1,443,792
Asian Development Bank	1,229,400	1,192,033
Nordic Investment Bank	1,229,400	1,156,545
Intl Bk Recon & Develop	614,700	571,812
	4,380,200	4,364,182
	$ 5,303,500	$ 5,285,890

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF FOREIGN EXCHANGE GAINS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Spot	$ 745,536

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF OTHER NON-INTEREST INCOME
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Lease income	$ 186,129
Net profit for hedging products	107,265
Securities brokerage income	71,324
Other miscellaneous income	110,753
	$ 475,471

STATEMENT 9

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF EMPLOYEE BENEFITS EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

	Employee Benefits Expense	Net Non-interest Income	Total	Note
Payroll expenses	$ 8,667,394	$ 191,534	$ 8,858,928	
Labor and health insurance expenses	529,932	-	529,932	
Pension expenses	979,567	-	979,567	
Director compensation	77,360	-	77,360	
Other employee benefits expenses	477,032	-	477,033	
	$ 10,731,285	$ 191,534	$ 10,922,820	

Note:

a. The Bank had 6,565 and 6,601 employees on 2018 and 2017, respectively, both including 9 non-employee directors.

b. The average employee benefits expenses were $1,654,280 on 2018.

c. The average employee payroll expenses were $1,351,270 on 2018.

STATEMENT 10

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF DEPRECIATION AND AMORTIZATION EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Depreciation and amortization expenses	
Depreciation expenses	$ 512,577
Amortization expenses	201,506
	$ 714,083

STATEMENT 11

CHANG HWA COMMERCIAL BANK, LTD.

STATEMENT OF OTHER GENERAL AND ADMINISTRATIVE EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Other general and administrative expenses	
Rental expenses	$ 859,420
Utility expenses	129,983
Post and telecommunication expenses	193,948
Repair and warranty expenses	189,754
Insurance expenses	448,086
Professional service fees	227,647
Tax	1,814,539
Others	767,789
	$ 4,631,166