Stock Code:5868

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese)

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Consolidated Financial Statements

With Independent Auditors' Report For the Years Ended December 31, 2018 and 2017

Address: No.120, Sec. 1, Chungching South Road., Taipei, Taiwan, R.O.C.

Telephone: (02)2349-3456

The independent auditors' report and the accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and consolidated financial statements, the Chinese version shall prevail.

Table of contents

	Contents	Page
1. Cov	er Page	1
2. Tabl	e of Contents	2
3. Rep	resentation Letter	3
4. Inde	pendent Auditors' Report	4
5. Con	solidated Balance Sheets	5
6. Con	solidated Statements of Comprehensive Income	6
7. Con	solidated Statements of Changes in Equity	7
8. Con	solidated Statements of Cash Flows	8
9. Note	es to the Consolidated Financial Statements	
(1)	Organization and Business Scope	9~10
(2)	Financial statements authorization date and authorization process	10
(3)	New Standards, Amendments and Interpretations Adopted	10~22
(4)	Summary of Significant Accounting Policies	22~58
(5)	Significant Accounting Assumptions and Judgments, and Major Sources of Estimation Uncertainty	59~63
(6)	Explanation of Significant Accounts	$63 \sim 118$
(7)	The Fair Value Information of Financial Instruments	118~126
(8)	Financial Risk Management	126~232
(9)	Capital Management	232~234
(10)	Related-party Transactions	235~249
(11)	Pledged Assets	250~251
(12)	Commitments and Contingencies	$251 \sim 254$
(13)	Profitability	254~256
(14)	Losses Due to Major Disasters	256
(15)	Specific Inherent Risks in Operating as Futures Dealer	256
(16)	Other	256~276
(17)	Other Disclosures	
	(a) Information on Significant Transactions	277
	(b) Information on Investees	277~278
	(c) Information on Investment in Mainland China	278~280
(18)	Segment Information	281~282

LETTER OF DECLARATION

The entities that are required to be included in the combined financial statements of Taiwan Financial Holding Co., Ltd. as of and for the year ended December 31, 2018 under the Criteria Governing the Preparation of Affiliation Reports, Consolidated Business Reports, and Consolidated Financial Statements of Affiliated Enterprises are the same as those included in the consolidated financial statements prepared in conformity with International Financial Reporting Standards No. 10 endorsed by the Financial Supervisory Commission, "Consolidated and Separate Financial Statements." In addition, the information required to be disclosed in the combined financial statements is included in the consolidated financial statements. Consequently, Taiwan Financial Holding Co., Ltd. and its Subsidiaries do not prepare a separate set of combined financial statements.

Truthfully yours,

TAIWAN FINANCIAL HOLDING CO., LTD.

By

Joseph Jye-Cherng Lyu
Chairman

April 1, 2019

Independent Auditors' Report

To the Board of Directors of Taiwan Financial Holding Co., Ltd.:

Opinion

We have audited the consolidated financial statements of Taiwan Financial Holding Co., Ltd. ("the Company") and its subsidiaries ("the Company and subsidiaries"), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, the consolidated statements of comprehensive income, changes in equity and cash flows for the years ended December 31, 2018 and 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the report of other auditors (please refer to Other Matter paragraph), the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company and subsidiaries as at December 31, 2018 and 2017, and its consolidated operations and cash flows for the years then ended in accordance with the "Regulations Governing the Praparation of Financial Reports of Financial Holding Companies" and with the International Financial Reporting Standards ("IFRSs"), International Financial Reporting interpretations ("IFRICS"), and the Standing Interpretations Committee ("SICs") as well as related guidelines endorsed by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

We conducted our audit in accordance with the "Regulations Governing Auditing and Certification of Financial Statements of Financial Institutions by Certified Public Accountants" and the 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 Consolidated Financial Statements section of our report. We are independent of Taiwan Financial Holding Co., Ltd. in accordance with the Certified Public Accountants Code of Professional Ethics in Republic of China ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained, inclusive of the report from other auditors, is sufficient and appropriate to provide a basis of our opinion.

Emphasis of Matter

In accordance with the Audit Act and other governmental regulations of Taiwan, the financial statements of the Company and subsidiaries are required to be examined and certified by the Ministry of Audit (the "MoA"). The financial statements of the Company and subsidiaries as of, and for year ended December 31, 2017 were restated to reflect the adjustments made by the MoA. For further information, please see Note 16(b).

Other Matter

As stated in Note 6(1), we have not audited the financial statements of Hua Nan Financial Holdings Co., Ltd. and Tai Yi Real Estate Co., Ltd. The Company and subsidiaries recognized its investments in Hua Nan Financial Holdings Co., Ltd. and Tai Yi Real Estate Co., Ltd. under equity method amounting to \$43,681,863 thousand and \$41,193,676 thousand respectively, constituting 0.81% and 0.78% of the consolidated total assets as of December 31, 2018 and 2017, respectively; and its shares of investment profits in associates accounted for using equity method amounting to \$3,669,837 thousand and \$3,021,338 thousand, respectively, constituting 7.22% and 4.13% of the related consolidated net revenue for the year ended December 31, 2018 and 2017, respectively. Those financial statements were audited by other auditors, whose reports have been furnished to us, and our review, insofar as it relates to the amounts included for those companies, is based solely on the reports of the other auditors.

Key Audit Matters

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

1. The valuation of financial instruments

Please refer to Note 4(f) "Financial instrument" for related accounting policy, Note 5(a) "The valuation of financial instruments" for the uncertainty of the assumptions and estimations, and Note 7 "The fair value and fair value hierarchy of the financial instruments" for details of the valuation of financial instruments.

Description of key audit matters

Of the financial instruments measured at fair value through profit and loss and other comprehensive income held by the Company and subsidiaries, fair value of the financial instruments, other than those that the fair value can be observed in an open market, shall be calculated via models. The parameters of modeling inputs often involved the exercise of judgment and may have significant impact on the results. The financial assets and liabilities measured at fair value held by the Bank as of December 31, 2018 are material to the Company and subsidiaries. Therefore, the valuation of financial instruments has been identified as a key audit matter in our audit.

How the matter was addressed in our audit

Our principal audit procedures included (i) testing the controls over the investment cycle and related financial reporting process, including initial recognition, subsequent measurement and disclosure; (ii) sampling to test whether the fair values of the financial instruments measured at fair value with an active market are appropriate; (iii) sampling to test whether the fair value of the financial instruments measured at fair value without an active market are appropriate by re-calculating and obtaining the quoted price from counter parties or independent third parties, as well as appointing our valuation specialists to assess the reasonableness of the models and parameters the Company used when deemed necessary; (iv) assessing whether the fair value information is disclosed in accordance with the International Financial Reporting Standards.

2. The assessment of impairment of financial assets

Please refer to Note 4(p) "Impairment of assets" for related accounting policy, Note 5(b) "The evaluation of financial assets impairments" for the uncertainty of accounting assumptions and estimations, and Note 6(a) "Cash and Cash Equivalents", Note 6(b) "Placement with Central Bank and Call Loans to Banks", Note 6(d) "Financial assets measured at fair value through other comprehensive income", Note 6(f) "Bills and Bonds Purchased under Resell Agreements", Note 6(g) "Receivables, net", Note 6(h) "Discounts and loans, net", Note 6(k) "Financial assets measured at amortized cost" and Note 6(m) "Other financial assets, net" for details of the valuation of financial assets impairments.

Description of key audit matters

When assessing whether there is any indication that the financial assets other than measured at fair value through profit or loss may be impaired, the Company and subsidiaries rely on management for considering all kinds of observable data and using the expected credit loss model, including probability of default, loss of default, exposure at default and prospective economic factors, to calculate the impairment loss. The calculation process is complicated and involves the exercise of judgment. Furthermore, the financial assets that require impairment testing as of December 31, 2018 are material to the Company and subsidiaries. Therefore, the assessment of impairment of financial assets has been identified as a key audit matter in our audit.

How the matter was addressed in our audit

Our principal audit procedures included (i) inspecting the internal guidelines of impairment assessment, understanding the Company's and subsidiaries' procedures of the assessment of impairment of financial assets, and testing related internal control procedures; (ii) performing analytical procedures; (iii) assessing the reasonableness of the Company's and subsidiaries' assessment of impairment of financial assets and, if necessary, acquiring assistance from internal specialists; (iv) verifying the accuracy of loan loss provision based on "Regulations Governing the Procedures for Enterprises Engaging in Insurance to Evaluate Assets and Deal with Non performing/Non accrual Loans"; (v) assessing whether the impairment of financial assets is presented and disclosed fairly.

3. The assessment of insurance liability

Please refer to Note 4(t) "Insurance liability" for related accounting polices, Note 5(c) "Insurance liability and reserve of insurance policy with financial instrument nature" for the uncertainty of accounting estimation and assumptions, and Note 6(z) "Insurance contract and financial products with discretionary participation feature" for the details of the assessment of insurance liability.

Description of key audit matters

The major business activity of Bank Taiwan Life Insurance Co., Ltd.(BTLI) is to provide life insurance. To strengthen its financial structure and the capability of fulfilling future obligation, BTLI is required to set aside various statutory reserves calculated based on each product's characteristic and its undue risk in accordance with the Insurance Act and "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves". The evaluation of the adequacy of insurance liabilities involved the assumptions of morbidity rate, expense rate, discount rate, default rate, future cash flows, etc., which all rely on the judgment and experiences of the management and may cause a significant impact on the recognition of insurance liability. Therefore, the assessment of the insurance liability has been identified as a key audit matter in our audit.

How the matter was addressed in our audit

Our principal audit procedures included (i) testing the internal process of the provision of statutory reserves; (ii) inspecting the related minutes of BTLI's Board of Directors and the committee of asset-liability management; (iii) obtaining BTLI's s liability adequacy test report prepared by a third party and assessing the qualification of the actuaries; (iv) appointing KPMG's actuaries to re-assess the reasonableness of significant assumptions and the conformity of the regulations; (v) assessing whether the disclosures of the reserves of BTLI are in compliance with the relevant accounting standards and guidelines.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the "Budget Law", "Account Settlement Law", "Uniform Regulations on Accounting Systems for Banks Governed by the Ministry of Finance", the "Regulations Governing the Praparation of Financial Reports of Financial Holding Companies" and with the IFRSs, IASs, IFRICs, and SICs as well as related guidelines endorsed by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's and subsidiaries' 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 Company and subsidiaries or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company's and subsidiaries' financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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 the 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 consolidated 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 consolidated 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 Company'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 Company'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 consolidated 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 Company to cease to continue as a going concern.
- 5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the group financial statements. We are responsible for the direction, supervision and performance of the group audit.

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.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated 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 Feng-Hui Lee and Lin Wu.

KPMG

Taipei, Taiwan (Republic of China) April 1, 2019

Notes to Readers

The accompanying consolidated financial statements are intended only to present the consolidated statement of financial position, financial performance and its cash flows in accordance with the 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 consolidated financial statements are those generally accepted and applied in the Republic of China.

The auditors' report and the accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language auditors' report and consolidated financial statements, the Chinese version shall prevail.

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese) TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Consolidated Balance Sheets

December 31, 2018 and 2017

		December 31, 20		December 31, 2				December 31, 2		December 31, 2	
11000	Assets Cash and Cash Equivalents (note 6(a), (h), 7, 8 and 10)	*** Amount *** 172,687,920	3	Amount 176,530,390	% 3	21000	Liabilities and Equity	Amount	<u>%</u>	Amount	
11500	Placement with Central Bank and Call Loans to Banks (note 6(b), (h), 7, 8,	535,130,849	10	675,504,410		21000 22000	Deposits of Central Bank and Other Banks (note 6(s), 7 and 10) Financial Liabilities Measured at Fair Value through Profit or Loss (note 6	\$ 221,756,139 (t) 50,652,530	4	219,021,384 34,926,949	
11200	10 and 11)	223,120,019	10	073,501,110	15	22000	and 7)	(1) 30,032,330	1	34,920,949	1
12000	Financial Assets Measured at Fair Value through Profit or Loss (note 6(c), 7	7, 270,621,265	5	238,326,530	5	22300	Hedging Derivative Financial Liabilities (note 6(e) and 7)	12,973	-	60,480	-
	8 and 10)					22500	Bills and Bonds Sold under Repurchase Agreements (note 6(f), 7 and 8)	26,562,911	-	36,703,085	1
12100	Available-for-Sale Financial Assets, net (note 6(i), 7, 8, 10 and 11)	-	-	1,167,534,338	23	22600	Commercial Paper Payables, net (note 6(u) and 7)	289,886	-	1,189,859	-
12150	Financial Assets Measured at Fair Value through Other Comprehensive Income (note 6(d), (r), 7, 8, 10 and 11)	1,127,802,007	21	-	-	23000	Payables (note 6(v), 7 and 10)	49,164,205	1	60,080,535	
12200	Debt Investments Measured at Amortized Cost (note 6(k), (r), 7, 8 and 11)	428,844,261	8	-	-	23200	Current Income Tax Liabilities	360,175	-	958,241	
12300	Hedging Derivative Financial Assets (note 6(e), 7 and 8)	41,693	_	22,759	-	23500	Deposits and Remittances (note 6(w), 7 and 10)	4,021,597,436	76	3,931,372,672	75
12500	Bills and Bonds Purchased under Resell Agreements (note 6(f), 7 and 8)	9,632,135	_	15,496,693	-	24000	Financial Bonds Payable (note $6(x)$ and 7)	24,998,566	-	24,998,316	-
13000	Receivables, net (note 6(g), (h), 7, 8 and 10)	66,216,316	1	67,968,973	1	24600	Provision (note 6(aa), (ab), (ac) and (ad))	661,967,616	12	650,473,144	12
13200	Current Income Tax Assets	1,868,145	_	3,830,971	_	25500	Other Financial Liabilities (note 6(z))	689,870	-	854,756	-
13500	Loans and Discounts, net (note 6(h), 7, 8 and 10)	2,540,643,384	48	2,278,418,007	43	29300	Deferred Tax Liabilities	18,327,849	-	18,488,415	-
13700	Reinsurance Assets, net	12,426		10,125	_	29500	Other Liabilities (note 6(ae))	8,315,166		9,014,032	
14500	Held-to-Maturity Financial Assets, net (note 6(j), 7, 8 and 11)	-	_	372,608,694	7		Total liabilities	5,084,695,322	94	4,988,141,868	95
15000	Investments under Equity Method, net (note 6(1))	44,695,410	1	42,510,031	1		Equity attributable to owners of parent (note 6(ag)):				
15500	Other Financial Assets, net (note 6(g), (h), (m), (r), 7, 8 and 10)	51,706,208	1	102,850,759	2	31101	Capital Stock	90,000,000	2	90,000,000	2
18000	Investments Property, net (note $6(n)$)	22,599,025	_	22,668,062	_	31500	Capital Surplus	111,385,226	2	111,385,226	2
18500	Property and Equipment, net (note 6(o), (r) and 11)	98,206,850	2	98,315,342	2		Retained earnings:				
19000	Intangible Assets (note 6(p))	814,874	-	733,720	_	32001	Legal Reserve	7,419,683	-	6,793,230	-
19300	Deferred Tax Assets		_	2,657,994		32003	Special Reserve	45,115,479	1	41,358,797	1
19500	Other Assets (note 6(q) and 11)	14,710,472	-	8,364,968	_	32011	Unappropriated Retained Earnings	12,075,787		12,125,133	<u> </u>
19300	Other Assets (note o(q) and 11)	14,/10,4/2	-	8,304,308	-			64,610,949	1	60,277,160	1
						32500	Other Equity	39,184,174	1	24,548,512	-
							Total equity	305,180,349	6	286,210,898	5
·	Total assets	\$ <u>5,389,875,671</u>	<u>100</u>	5,274,352,766	<u>100</u>		Total liabilities and equity	\$ <u>5,389,875,671</u>	<u>100</u>	5,274,352,766	<u>100</u>

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese) TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income

For the years ended December 31, 2018 and 2017

(Expressed in Thousands of New Taiwan Dollars, Except for Earnings Per Common Share)

		2018		2017		Change
		Amount	%	Amount	%	
	Revenue and income:					
41000	Interest income (note 6(ah) and 10)	\$ 74,006,744	146	68,764,807	93	8
51000	Less:Interest expense (note 6(ah))	38,250,221	<u>75</u>	33,659,218	46	14
	Net income (loss) of interest (note 6(ah))	35,756,523	71	35,105,589	47	2
	Non-interest income, net					
49800	Service fees, net (note 6(ai) and 10)	4,321,686	8	4,123,535	6	5
49825	Gain on real estate investment, net (note $6(n)$)	101,093	-	83,170	-	22
49890	Share of profit (loss) of associates and joint ventures accounted for using equity method (note 6(l))	3,361,751	7	3,072,644	4	9
49810	Premiums gain (loss) (note 6(ar))	1,877,061	4	1,983,720	3	(5)
49820	Gain on financial assets or liabilities measured at fair value through profit or loss (note 6(c) and (aj))	(11,909,252)	(23)	37,166,577	51	(132)
49830	Realized gain on available-for-sale financial assets (note 6(i), (ak) and 10)	-	-	4,494,381	6	(100)
49835	Realized gains from financial assets measured at fair value through other comprehensive income (note 6(al) and 10)	3,288,163	6	-	-	-
49840	Realized gain (loss) on held-to-maturity financial assets (note 6(j))	-	-	486,380	1	(100)
49850	Net gains (losses) from derecognition of financial assets measured at amortized cost (note 6(k))	356,362	1	_	_	-
49870	Foreign exchange gain (loss)	10,844,082	21	(13,724,465)	(19)	179
49880	Impairment loss of assets (note $6(r)$)	(88,565)	_	(1,913)	-	(4,530)
49898	Profits (losses) reclassified to other comprehensive income using overlay approach (note 6(c))	1,620,030	3	_	_	-
	Net other non-interest income (loss)					
49943	Sales income (note 6(q) and (am))	366,662	1	455,670	1	(20)
48100	Subsidized income from government(note 6(am))	8,892,009	17	10,452,705	14	(15)
49999	Other miscellaneous income (note 6(am))	1,707,533	3	537,983	1	217
58090	Excess interest expenses (note 6(g) and (am))	(9,640,527)	(19)	(11,084,380)	(15)	13
	Net Revenue	50,854,611	100	73,151,596	100	(30)
58100	Bad debt expense and reserve for guarantees (note 6(h))	(7,297,710)	(14)	(1,680,984)	(2)	334
58300	Provisions for policyholder's reserve premium	(12,014,671)	(24)	(42,788,426)	(58)	(72)
	Expenses:					()
58501	Employee benefits expenses (note 6(an) and 10)	(13,575,334)	(27)	(12,967,617)	(18)	5
58503	Depreciation and amortization expenses (note 6(ao))	(1,043,995)	(2)	(1,156,523)	(2)	(10)
58599	Other general and administrative expenses (note 6(ap))	(7,437,177)	(15)	(7,305,618)	(10)	2
	Total Expenses	(22,056,506)	(44)	(21,429,758)	(30)	3
	Net income before income tax	9,485,724	18	7,252,428	10	31
61003	Income Tax Expenses (note 6(af))	(266,406)	(1)	113,943	-	(334)
01005	Net income	9,219,318	17	7,366,371	10	25
	Other comprehensive income:	<u></u>		7,300,371		
69560	Items that may not be reclassified subsequently to profit or loss					
69561	Gains (losses) on remeasurements of defined benefit plans	(1,072,950)	(2)	(1,006,449)	(1)	(7)
69565 69567	Change in fair value of financial liability attributable to change in credit risk of liability Gains (losses) from investments in equity instruments measured at fair value through other compehensive income	239,502 4,375,114	- 9	(49,185)	-	587
69563	Share of other comprehensive income of associates and joint ventures accounted for using equity method,	4,5/5,114	7	-	-	-
0,000	components of other comprehensive income that will not be reclassified to profit or loss	(136,651)	-	(105,446)	-	(30)
69569	Income tax related to components of other comprehensive income that will not be reclassified to profit or loss	(16.220)		4.010		(422)
	(note 6 (af)) Subtotal of items not to be reclassified to profit or loss	(16,330) 3,388,685	- 7	4,918 (1,156,162)	$\frac{-}{(1)}$	(432) 393
69570	Items that may be reclassified subsequently to profit or loss	<u> </u>		(1,130,102)	(1)	373
69571	Exchange differences on translation	576,186	1	(1,442,846)	(2)	140
69572	Unrealized gains (losses) on valuation of available-for-sale financial assets	-	-	8,842,550	12	(100)
69587	(Impairment losses) and reserve from investments in debt instruments measured at fair value through other comprehensive income	(569,427)	(1)	-	_	-
69575	Share of other comprehensive income of associates and joint ventures accounted for using equity method,		. ,			
60 .	components of other comprehensive income that will be reclassified to profit or loss	(208,703)	-	231,936	-	(190)
69590 69579	Other comprehensive income on reclassification under the overlay approach	(1,620,030)	(3)	-	-	-
U7J / 7	Income tax related to components of other comprehensive income that will be reclassified to profit or loss (note 6 (af))	235,998		(105,338)		324
	Subtotal of items that may be subsequently reclassified to profit or loss	(1,585,976)	(3)	7,526,302	10	(121)
69500	Other comprehensive income	1,802,709	4	6,370,140	9	(72)
	Total comprehensive income (loss), net of tax for the year	\$ <u>11,022,027</u>	<u>21</u>	13,736,511	<u>19</u>	(20)
	Basic earnings per share (In dollars) (note 6(aq))	\$	1.02		0.82	

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese) TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Changes in Equity

For the years ended December 31, 2018 and 2017

							Equity attributable t	o owners of parent							
							Total other equity interest								
- -	Share capital Common stock	Capital surplus	Legal reserve	Retained of	arnings Undistributed earnings	Total	Exchange differences on translation of foreign operations	Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income	Unrealized gains (losses) on available for sale financial assets	Gains (losses) on effective portion of cash flow hedges	Change in fair value of financial liability attributable to change in credit risk of liability	Gains (losses) on financial instruments for hedging	Other comprehensive income reclassified by applying overlay approach	Total	Total equity
Balance at January 1, 2017	90,000,000	111,385,217	5,392,503	32,983,414	15,636,705	54,012,622	530,488		16,527,296	8,197	10,558			17,076,539	272,474,378
Appropriation and distribution of retained earnings:															
Legal reserve appropriated	-	-	1,400,727	-	(1,400,727)	-	-	-	-	-	-	-	-	-	-
Special reserve appropriated	-	-	-	8,404,363	(8,404,363)	-	-	-	-	-	-	-	-	-	-
Reversal of special reserve	-	-	-	(28,980)	28,980	-	-	-	-	-	-	-	-	-	-
Changes in equity of associates and joint ventures accounted for using equity method	-	9	-	-	-	-	-	-	-	-	-	-	-	-	9
Net income for the period	-	-	-	-	7,366,371	7,366,371	-	-	-	-	-	-	-	-	7,366,371
Other comprehensive income					(1,101,833)	(1,101,833)	(1,871,218)		9,401,725	(4,206)	(54,328)		·	7,471,973	6,370,140
Total comprehensive income					6,264,538	6,264,538	(1,871,218)		9,401,725	(4,206)	(54,328)		. <u> </u>	7,471,973	13,736,511
Balance at December 31, 2017	90,000,000	111,385,226	6,793,230	41,358,797	12,125,133	60,277,160	(1,340,730)	-	25,929,021	3,991	(43,770)	-	-	24,548,512	286,210,898
Effects of retrospective application					(3,403,808)	(3,403,808)	(2,787)	38,114,593	(25,929,021)	(3,991)		3,991	(829,780)	11,353,005	7,949,197
Equity at beginning of period after adjustments	90,000,000	111,385,226	6,793,230	41,358,797	8,721,325	56,873,352	(1,343,517)	38,114,593			(43,770)	3,991	(829,780)	35,901,517	294,160,095
Appropriation and distribution of retained earnings:															
Legal reserve appropriated	-	-	626,453	-	(626,453)	-	-	-	-	-	-	-	-	-	-
Special reserve appropriated	-	-	-	3,758,723	(3,758,723)	-	-	-	-	-	-	-	-	-	-
Reversal of special reserve	-	-	-	(2,041)	2,041	-	-	-	-	-	-	-	-	-	-
Net income for the period	-	-	-	-	9,219,318	9,219,318	-	-	-	-	-	-	-	-	9,219,318
Other comprehensive income					(1,212,690)	(1,212,690)	684,435	3,580,017			236,682	202	(1,485,937)	3,015,399	1,802,709
Total comprehensive income					8,006,628	8,006,628	684,435	3,580,017			236,682	202	(1,485,937)	3,015,399	11,022,027
Disposal of investments in equity instruments measured at fair value through other comprehensive	-	-	-	-	(267,258)	(267,258)	-	267,258	-	-	-	-	-	267,258	-
income															
Changes in special reserve					(1,773)	(1,773)							·		(1,773)
Balance at December 31, 2018	90,000,000	111,385,226	7,419,683	45,115,479	12,075,787	64,610,949	(659,082)	41,961,868			192,912	4,193	(2,315,717)	39,184,174	305,180,349

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese) TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

For the years ended December 31, 2018 and 2017

	2018	2017
ash flows from (used in) operating activities:	Φ 0.405.704	7.252.426
Income before income tax	\$ 9,485,724	7,252,428
Adjustments:		
Adjustments to reconcile profit (loss):	870 724	901 922
Depreciation expenses	870,724	891,833
Amortization expenses	291,345	375,103
Allowance on bad debts	7,304,564	1,453,834
Interest expense	38,250,221	33,659,218
Interest income	(74,006,744)	(68,764,80)
Dividend income	(9,043,459)	(8,578,412
Net change in provisions for guarantee reserves	(6,854)	227,150
Net change in other reserves	13,287,138	40,841,60
Net sales (loss) gain	(59)	5
Share of profit of associates and joint ventures accounted for using equity method	(3,361,751)	(3,072,64
Loss on disposal of property and equipment	62,805	162,82
Gain on disposal of investments	(356,362)	(486,38
Impairment loss on financial assets	6,973	-
Impairment loss on non-financial assets	<u>81,592</u>	1,91
Subtotal of income of non-cash activities	(26,619,867)	(3,288,70
Changes in operating assets and liabilities:		
Changes in operating assets:		
Decrease (increase) in due from the central bank and call loans to banks	27,816,799	(32,604,79
Decrease (increase) in financial assets for hedging and measured at fair value through profit or loss	2,356,707	(15,838,47
Iecrease in financial assets measured at fair value through other comprehensive income	(51,700,368)	-
Increase in investments in debt instruments measured at amortized cost	(19,652,880)	-
Increase in available-for-sale financial assets	-	(88,872,49
Increase in financial assets for hedging	(18,934)	(1,53
Decrease (increase) in securities purchased under agreements to resell	510,359	(602,25
Decrease in receivables and current tax assets	6,604,154	2,214,37
Increase in discounts and loans	(269,606,882)	(12,056,20
Increase in held-to-maturity financial assets	-	(5,602,12
Decrease in other financial assets	2,655,374	15,544,42
(Increase) decrease in other assets	(73,144)	4,454,98
Subtotal of changes in operating assets	(301,108,815)	(133,364,10
Changes in operating liabilities:		
Increase (decrease) in due to the central bank and banks	2,734,755	(8,575,43
Increase in financial liabilities for hedging and measured at fair value through profit or loss	15,725,581	27,256,65
Decrease in financial liabilities for hedging	(47,507)	(83,71
(Decrease) increase in securities sold under repurchase agreement	(10,140,174)	23,866,94
(Decrease) increase in payable and current tax liabilities	(12,572,351)	385,55
Increase in deposits	90,224,764	65,391,22
(Decrease) increase in provisions for employee benefits	(1,196,696)	1,034,54
Increase (decrease) in other liabilities	286,758	(344,99
Subtotal of changes in operating liabilities	85,015,130	108,930,79
Subtotal of all adjustments	(242,713,552)	(27,722,00
Cash outflow generated from operations	(233,227,828)	(20,469,58
Interest received	74,006,744	68,764,80
Dividends received	4,224,650	9,110,59
Interest paid	(36,594,173)	(32,456,81
Income taxes refund (paid)	13,551	(1,084,07
Net Cash flows used in operating activities	(191,577,056)	23,864,93

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese) TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

For the years ended December 31, 2018 and 2017

		2018	2017
Cash flows from (used in) investing activities:			
Acquisition of investment properties	\$	-	(442,040)
Acquisition of property and equipment		(834,127)	(634,488)
Increase in refundable deposits		(6,279,229)	(3,820,580)
Acquisition of intangible assets		(372,445)	(284,816)
Increase in other financial assets			(1,000)
Net cash flows used in investing activities		(7,485,801)	(5,182,924)
Cash flows from (used in) financing activities:			
Decrease in short-term loans		-	(300,000)
Increase in commercial papers issued		-	30,000
Decrease in commercial papers payable		(900,000)	-
Increase in guarantee deposits received		-	2,062,530
Decrease in guarantee deposits received		(985,624)	-
Increase in other financial liabilities		-	92,654
Decrease in other financial liabilities	_	(164,886)	
Net cash flows from financing activities	_	(2,050,510)	1,885,184
Effect of exchange rate changes on cash and cash equivalents		285,995	(1,871,962)
Net decrease in cash and cash equivalents		(200,827,372)	18,695,236
Cash and cash equivalents at beginning of period	_	1,118,266,205	1,099,585,550
Cash and cash equivalents at end of period	\$	917,438,833	1,118,280,786
Composition of cash and cash equivalents:			
Cash and cash equivalents reported in the statement of financial position	\$	172,687,920	176,530,390
Due from the central bank and call loans to banks qualifying for cash and cash equivalents under the definition of IAS 7		162,126,076	274,645,417
Securities purchased under resell agreements qualifying for cash and cash equivalents under the definition of IAS 7	_	582,624,837	667,104,979
Cash and cash equivalents at end of period	\$ _	917,438,833	1,118,280,786

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese) TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

For the years ended December 31, 2018 and 2017

(Expressed in Thousands of New Taiwan Dollars, Unless Otherwise Specified)

(1) Organization and Business Scope

(a) Taiwan Financial Holdings

On January 1, 2008, Taiwan Financial Holding Co., Ltd. (the Company) was incorporated in accordance with the Act of Taiwan Financial Holding Co., Ltd. and has three investee companies: "Bank of Taiwan" (BOT), "BankTaiwan Life Insurance Co., Ltd." (BTLI) and "BankTaiwan Securities Co., Ltd." (BTS). Taiwan Financial Holdings became a public company on November 17, 2009.

The Company engages mainly in investing and managing investee companies. The investing business complies with the Financial Holding Company Act.

(b) Subsidiaries' activities

Bank of Taiwan (BOT) was established on May 20, 1946. BOT became a legal entity in 1985 in accordance with the Banking Act of the Republic of China, and transformed into a corporate entity since July 1, 2003. BOT became a public company on September 16, 2004.

BOT merged with the Central Trust of China effective on July 1, 2007. The Central Trust of China was the dissolved company, and BOT was the surviving company. BOT is primarily involved in:

- (i) all commercial banking operations allowed under the Banking Law;
- (ii) foreign exchange operations allowed under the Foreign Regulation Act;
- (iii) operations of offshore banking unit allowed under the Offshore Banking Act;
- (iv) savings and trust operations;
- (v) overseas branch operations authorized by the respective foreign governments; and
- (vi) other operations authorized by the central competent authority in charge.

The assets of BOT have continuously increased through revaluations of its legal and special reserve over the period since the Government provided the capital for the establishment of BOT. After the currency revolution in June 1949, the Government approved \$5 million as the Bank's capital in May 1950; \$100 million in May 1954; \$300 million in August 1963; \$600 million in September 1967; \$1 billion in May 1973; \$2 billion in September 1977; \$4 billion in September 1980; \$8 billion in November 1982; \$12 billion in May 1990; \$16 billion in April 1992; \$22 billion in December 1994; \$32 billion in August 1998; \$48 billion in September 2002; \$53 billion in July 2007; \$45 billion in January 2008; \$70 billion in November 2010 and \$95 billion in October 2014.

BOT invested \$20 million dollars to set up a subsidiary, BankTaiwan Insurance Brokers, which was approved on January 23, 2013 and officially set up on February 6, 2013. The subsidiary mainly engages in life insurance and property insurance brokerage.

Notes to the Consolidated Financial Statements

BankTaiwan Life Insurance Co., Ltd. (BTLI) was the life insurance department of BOT and was separated from BOT on January 2, 2008, with net assets \$5 billion yield by BOT as its owner's equity. BTLI has increased its capital by \$2 billion, \$4 billion, \$6 billion, \$5.5 billion and \$10 billion on June 30, 2009, June 30, 2010, June 28, 2013, September 30, 2015 and June 29, 2018, respectively. BTLI's capital is currently \$32.5 billion. BTLI became a public company on November 18, 2013. Its main businesses are life insurance and related businesses.

BankTaiwan Securities, Co., Ltd. (BTS) was the securities department of BOT and separated from BOT on January 2, 2008, with net assets \$3 billion yielded by BOT as its owner's equity.

BTS became a public company on October 21, 2013. BTS's main businesses include the following: 1. Securities trading brokerage. 2. Providing margin purchases and short sales for securities transactions. 3. Securities dealing and underwriting. 4. Operating as futures introducing brokers.

(2) Financial statements authorization date and authorization process:

The consolidated financial statements were approved by the temporary Audit Committee as well as temporary Board of Directors on April 1, 2019 and then published.

(3) New Standards, Amendments and Interpretations Adopted:

(a) The impact of the International Financial Reporting Standards ("IFRSs") endorsed by the Financial Supervisory Commission, R.O.C. ("FSC") which have already been adopted.

The following new standards, interpretations and amendments have been endorsed by the FSC and are effective for annual periods beginning on or after January 1, 2018.

New, Revised or Amended Standards and Interpretations	Effective date per IASB
Amendment to IFRS 2 "Clarifications of Classification and Measurement of Share-based Payment Transactions"	January 1, 2018
Amendments to IFRS 4 "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts"	January 1, 2018
IFRS 9 "Financial Instruments"	January 1, 2018
IFRS 15 "Revenue from Contracts with Customers"	January 1, 2018
Amendment to IAS 7 "Statement of Cash Flows -Disclosure Initiative"	January 1, 2017
Amendment to IAS 12 "Income Taxes- Recognition of Deferred Tax Assets for Unrealized Losses"	January 1, 2017
Amendments to IAS 40 "Transfers of Investment Property"	January 1, 2018
Annual Improvements to IFRS Standards 2014–2016 Cycle:	
Amendments to IFRS 12	January 1, 2017
Amendments to IFRS 1 and Amendments to IAS 28	January 1, 2018
IFRIC 22 "Foreign Currency Transactions and Advance Consideration"	January 1, 2018

Notes to the Consolidated Financial Statements

Except for the following items, the Company and subsidiaries believe that the adoption of the above IFRSs would not have any material impact on its consolidated financial statements. The extent and impact of signification changes are as follows:

(i) IFRS 9 "Financial Instruments"

IFRS 9 replaces IAS 39 "Financial Instruments: Recognition and Measurement" which contains classification and measurement of financial instruments, impairment and hedge accounting.

The detail of new significant accounting policies and the nature and effect of the changes to previous accounting policies are set out below:

1) Classification of financial assets and financial liabilities

IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. The standard eliminates the previous IAS 39 categories of available for sale, measured at cost, debt investments without active market and held to maturity. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification. Please refer to note 4 (p) for how the Company and subsidiaries classify and measure financial assets and account for related gains and losses under IFRS 9.

The adoption of IFRS 9 did not have any significant impact on accounting policies financial liabilities.

2) Impairment of financial assets

IFRS 9 replaces the 'incurred loss' model in IAS 39 with the 'expected credit loss' (ECL) model. The new impairment model applies to financial assets measured at amortized cost, FVOCI, except for investments in equity instruments, lease receivables, contract assets, loan commitments, and to financial guarantee contracts. Under IFRS 9, credit losses are recognized earlier than they are under IAS 39. Please refer to note 4 (f) for details.

3) Hedge accounting

When initially applying IFRS 9, the Company and subsidiaries may choose as its accounting policy to continue to apply the hedge accounting requirements of IAS 39 instead of the requirements in IFRS 9. The Company and subsidiaries have chosen to continue the application of the hedge accounting requirements of IAS 39.

Notes to the Consolidated Financial Statements

4) Transition

The adoption of IFRS 9 have been applied retrospectively, except as described below,

- Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of IFRS 9 are recognized in retained earnings and reserves as on January 1, 2018. Accordingly, the information presented for 2017 does not generally reflect the requirements of IFRS 9 and therefore is not comparable to the information presented for 2018 under IFRS 9.
- The following assessments have been made on the basis of the facts and circumstances that existed at the date of initial application.
 - The determination of the business model within which a financial asset is held.
 - The designation and revocation of previous designations of certain financial assets and financial liabilities as measured at FVTPL.
 - The designation of certain investments in equity instruments not held for trading as at FVOCI.
- · All hedging relationships designated under IAS 39 on December 31 2017 met the criteria for hedge accounting under IFRS 9 on January 1, 2018, and are therefore, regarded as continuing hedging relationships.

5) Classification of financial assets on the date of initial application of IFRS 9

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

	IAS39		IFRS9	
		Carrying		Carrying
	Measurement categories	Amount	Measurement categories	Amount
Financial Assets				
Cash and equivalents	Amortized cost	176,530,390	Amortized cost (note 1)	176,515,809
Placement with central bank and call loans to banks	Amortized cost	675,504,410	Amortized cost (note 1)	675,485,344
Financial assets measured at fair value through profit or loss	Fair value through profit or loss	238,326,530	Fair value through profit or loss	238,326,530
Hedging derivative financial assets	Fair value through profit or loss	22,759	Fair value through profit or loss	22,759
Discounts and loans net	Amortized cost	2,278,418,007	Amortized cost (note 2)	2,278,443,955
Available for sale financial assets (Bond instrument)	Fair value through other comprehensive income	14,605,552	Fair value through profit or loss (note 3)	14,605,552
Available for sale financial assets (Equity instrument)	Fair value through other comprehensive income	10,072,576	Fair value through profit or loss (note 3)	10,072,576
Available for sale financial assets (Equity instrument)	Fair value through other comprehensive income	61,721,100	Fair value through other comprehensive income	61,721,100
Available for sale financial assets (Bond instrument)	Fair value through other comprehensive income	1,077,355,493	Fair value through other comprehensive income	1,077,355,493

Notes to the Consolidated Financial Statements

	IAS39		IFRS9			
	Measurement categories	Carrying Amount	Measurement categories	Carrying Amount		
Available for sale financial assets (Bond instrument)	Fair value through profit or loss	3,779,617	Amortized cost (note 4)	3,864,277		
Held to maturity financial assets	Amortized cost	372,608,694	Amortized cost (note 5)	372,479,261		
Bond investments without active market	Amortized cost	14,644,697	Fair value through other comprehensive income (note 6)	14,595,705		
		4,293,518	Fair value through profit or loss (note 7)	3,942,429		
		21,048,456	Amortized cost (note 8)	21,043,169		
Financial assets measured at cost	Financial assets measured at cost	13,049	Fair value through profit or loss (note 9)	206,925		
	Financial assets measured at cost	8,572,728	Fair value through other comprehensive income (note 9)	15,981,226		
Bonds purchased under resell agreements	Amortized cost	15,496,693	Amortized cost	15,496,693		
Receivables net	Amortized cost	67,968,973	Amortized cost (note 2)	67,960,832		
Other financial assets (Short-term advances, remittances purchased, overdue receivables, call loan to brokers, and restricted deposits)	Amortized cost	54,266,377	Amortized cost (note 10)	54,269,234		
Other assets (Guarantee deposits paid)	Amortized cost	866,137	Amortized cost	866,137		
Investment accounted for using equity method	Recognized equity of investees based on proportion of investment	42,510,031	Recognized equity of investees based on proportion of investment (note 11)	43,067,450		
ovision						
Insurance liabilities	Provisions	334,393,675	Provisions (note 12)	334,224,194		
Guarantee reserve	Financial guarantee contracts	1,298,033	Financial guarantee contracts (note 13)	1,312,483		
Loan commitments reserve	Loan commitments	-	Loan commitments (note 13)	10,421		
Reserve for government employees insurance	Reserve for government employees insurance	295,055,660	Reserve for government employees insurance (note 14)	295,007,942		

Note 1: Placement with banks (included in cash and cash equivalents), and placement with central bank and call loans to banks are measured at amortized cost under IAS 39. The Company and subsidiaries consider that these financial assets are held within a business model whose objective is achieved by collecting contractual cash flows, and will hold these financial assets for the same purpose in future. Therefore, the Company and subsidiaries choose to continue to adopt the same classification and measurement approach under IFRS 9, as well as the increases of \$14,581 thousand and \$19,066 thousand in the allowance for impairment, respectively, were recognized in opening retained earnings on January 1, 2018, upon transition to IFRS 9.

Note 2: Under IAS 39, loans and discounts, receivables are measured at amortized cost. The Company and subsidiaries consider that these financial assets are held within a business model whose objective is achieved by collecting contractual cash flows, and will hold these financial assets for the same purpose in future. Therefore, the Company and subsidiaries choose to continue to adopt the same classification and measurement approach under IFRS 9, as well as the decrease of \$25,948 thousand and increase of \$8,141 thousand in the allowance for impairment, respectively, were recognized in opening retained earnings on January 1, 2018 upon transition to IFRS 9.

Notes to the Consolidated Financial Statements

- Note 3: Under IAS 39, the Company and subsidiaries assess that the equity and debt investments are held within a business model whose objective is achieved by both collecting dividends and interests, but also probably by selling securities to meet liquidity requirements in daily operation. Therefore, these investments are classified as held-to-maturity. The Company and subsidiaries then assess these equity investments are held within a business model whose objective is achieved by selling financial assets. Besides, the contractual cash flows on specific dates of the debt investments do not consist solely of payments of principal and interest on the principal amount outstanding. Therefore, these assets have been classified as financial assets measured at fair value through profit or loss under IFRS 9, then decreased opening retained earnings \$3,603,320 thousand and increased \$3,603,320 thousand in other equity upon transition to IFRS 9 on January 1, 2018.
- Note 4: These debt investments are categorized as available-for-sale under IAS 39. The Company and subsidiaries then assess these debt investments are held within a business model whose objective is achieved by collecting contractual cash flows, and will hold these financial assets for the same purpose in future. Therefore, as permitted by IFRS 9, the Company and subsidiaries have designated these assets at the date of initial application as measured at amortized cost. A reversal of \$87,033 thousand loss on valuation and an increase of allowance for impairment of \$2,373 thousand were recognized in opening retained earnings and other equity, respectively, upon transition to IFRS 9 on January 1, 2018.
- Note 5: These debt investments are categorized as held-to-maturity under IAS 39. The Company and subsidiaries intend to hold the assets to maturity to collect contractual cash flows and these cash flows consist solely of payments of principal and interest on the principal amount outstanding. Therefore, as permitted by IFRS 9, the Company and subsidiaries have reclassified these assets as financial assets measured at amortized cost. An increase of \$129,433 thousand in the allowance for impairment was recognized in opening retained earnings on January 1, 2018 upon transition to IFRS 9.
- Note 6: These debt investments are categorized as debt investment without an active market under IAS 39. The Comany and subsidiaries assess that the equity and debt investments are held within a business model whose objective is achieved by collecting interests, and also probably by selling securities to meet liquidity requirements in daily operation. Because the contractual cash flows of these assets consist solely of payments of principal and interest on the principal amount outstanding. Therefore, as permitted by IFRS 9, the Company and subsidiaries have designated these financial assets at the date of initial application as measured at fair value through comprehensive income. An increase of \$43,241 thousand loss on valuation and an increase of \$5,751 thousand in the allowance for impairment were recognized in opening retained earnings and other equity, respectively, upon transition to IFRS 9 on January 1, 2018.

Notes to the Consolidated Financial Statements

- Note 7: Debt investments that were previously classified as held to maturity and debt investment without an active market are now designated as at fair through profit or loss, for these assets do not meet the requirement the contractual cash flows consist solely of payments of principal and interest on the principal amount outstanding. A decrease of \$351,089 thousand in the fair value was recognized in other equity on January 1,2018, upon transition to IFRS 9.
- Note 8: Debt investments that were previously classified as held debt investments without an active market are now classified as amortized cost. The Company and subsidiaries intend to hold the assets to maturity to collect contractual cash flows, and these cash flows consist solely of payments of principal and interest on the principal amount outstanding. An increase of \$5,287 thousand in the allowance for impairment was recognized in opening retained earnings on January 1, 2018, upon transition to IFRS 9.
- Note 9: The Company and subsidiaries neither intend to sell these equity investments in near future nor to hold for long-term. As permitted by IFRS 9, the Company and subsidiaries have designated these investments at the date of initial application as measured at fair value through profit or loss, or measured at fair value through comprehensive income. Therefore, an increase of \$7,602,374 thousand in book value of assets, an increase of \$7,393,498 thousand in other equity, and an increase of \$208,876 thousand in opening retained earnings on January 1, 2018 upon transition to IFRS 9. (Including a reversal of \$15,000 thousand in the allowance for impairment under IAS 39.)
- Note 10: These financial assets were measured at amortized cost under IAS 39. The Company and subsidiaries assess that these financial assets are held within a business model whose objective is achieved by collecting contractual cash flows, and will hold these financial assets for the same purpose in future. Therefore, the Company and subsidiaries choose to continue to adopt the same classification and measurement approach under IFRS 9, as well as an decrease of \$2,857 thousand in the allowance for impairment was recognized in opening retained earnings on January 1, 2018, upon transition to IFRS 9.
- Note11: Based on the proportion of shareholding, the Company and subsidiaries recognized equity effects from investee's initial application of IFRS 9, resulting in a decrease of \$464,859 thousand in opening retained earnings and an increase of \$1,022,278 in other equity on January 1, 2018, respectively.
- Note 12: In accordance with Ruling No. 10600122191 issued by the Ministry of Finance, the Company and subsidiaries adjust the effects of retrospective application related to participating policy business, resulting in a decrease of \$169,481 thousand in insurance liabilities.

Notes to the Consolidated Financial Statements

- Note 13: Guarantee reserve and loan commitments reserve were recognized under IAS 39 and IAS 37. The Company and subsidiaries reassess them on the initial application of IFRS 9 according to IFRS 9 and IAS 37, then increases of \$14,450 thousand and \$10,421 thousand in the allowance for impairment were recognized respectively in opening retained earnings on January 1, 2018, upon transition to IFRS 9.
- Note 14: Since the profit or loss of government employees' insurance department has nothing to do with the Company and subsidiaries, the Company and subsidiaries assess the effects of adopting IFRS 9 on the financial position of Government Employees and School Insurance on the adoption date of IFRS 9. An increase of \$47,718 thousand was recognized in opening retained earnings upon transition to IFRS 9 on January 1, 2018.

The following table reconciles the carrying amounts of financial assets under IAS 39 to the carrying amounts under IFRS 9 upon transition to IFRS 9 on 1 January, 2018.

	2017.12.31 IAS 39 Carrying Amount	Reclassifications	Remeasurements	2018.1.1 IFRS 9 Carrying Amount	2018.1.1 Retained earnings	2018.1.1 Other equity	Note
Financial assets							
Financial assets measured at fair value through profit or loss (including Hedging derivative financial assets)	\$ 238,349,289	-	-		-	-	
Additions:							
From available for sale (IAS39)	-	28,281,448	(3,603,320)		(3,124,176)	-	Note
From financial assets measured at cost (IAS 39)	-	13,049	193,876		193,876	-	
From amortized cost (IAS 39)-required	-	4,293,518	(351,089)		-	(277,230)	Note
reclassification							
Total change of FVTPL	\$ 238,349,289	32,588,015	(3,760,533)	267,176,771	(2,930,300)	(277,230)	Note
Financial assets measured at fair value through other comprehensive income							
Additions – debt instruments:							
From available for sale (IAS 39)	\$ 1,077,355,493	-	-		(74,659)	74,659	
From amortized cost (IAS 39)(Bond investments without active market)	-	14,644,697	(48,992)		(5,751)	(43,241)	
Additions - equity instruments:							
From available for sale (IAS 39)	61,721,100	-	-		-	-	
Available for sale (IAS39)to FVTPL (IFRS9) -required reclassification according to classification conditions	-	8,572,728	7,408,498		15,000	7,393,498	
Subtraction:							
Available for sale (IAS39)to FVTPL (IFRS9) -required reclassification according to classification conditions	24,678,128	(28,281,448)	3,603,320		-	3,096,008	Note
Available for sale (IAS 39)to amortized	3,779,617	(3,866,650)	87,033		-	87,033	
cost(IFRS 9)							
Total changes of FVOCI	\$ <u>1,167,534,338</u>	(8,930,673)	11,049,859	1,169,653,524	(65,410)	10,607,957	

Notes to the Consolidated Financial Statements

	2017.12.31 IAS 39 Carrying			2018.1.1 IFRS 9 Carrying	2018.1.1 Retained	2018.1.1 Other	
Financial assets measured at Amortized cost	Amount	Reclassifications	Remeasurements	Amount	earnings	equity	Note
Additions:	6 272 (09 (04		(120, 422)		(120.722)		N
From amortized cost (IAS 39)(Held to maturity)	\$ 372,608,694	-	(129,433)		(120,733)	-	Note
From amortized cost (IAS 39)(Cash and cash equivalent)	176,530,390	-	(14,581)		(14,581)	-	
From amortized cost (IAS 39)(Placement with central bank and call loans to banks)	675,504,410	-	(19,066)		(19,066)	-	
From amortized cost (IAS 39)(Discounts and loans net)	2,278,418,007	-	25,948		25,948	-	
From amortized cost (IAS 39)(Other financial assets-net)	54,266,377	-	2,857		2,857	-	
From amortized cost (IAS 39) (Other assets (Guarantee deposits paid))	866,137	-	-		-	-	
From amortized cost (IAS 39) (Bond investments without active market)	21,048,456	-	(5,287)		(4,985)	-	Note
From amortized cost (IAS 39)(Receivables net)	67,968,973	-	(8,141)		(8,065)	-	Note
From amortized cost (IAS 39)(Bills and purchased under resell agreements)	15,496,693	-	-		-	-	
From available for sale (IAS 39)	-	3,866,650	(2,373)		(2,373)	-	
Subtraction:							
To FVTPL (IFRS 9)	4,293,518	(4,293,518)	-		-	-	
To FVOCI (IFRS 9)	14,644,697	(14,644,697)			<u> </u>	-	
Total changes of amortized cost	\$ 3,681,646,352	(15,071,565)	(150,076)	3,666,424,711	(140,998)		
Investment accounted for using equity method net							
Balance of financial assets at January 1, 2018. Gross amount for reclassifications and remeasurements.	\$ 42,510,031	-	557,419	43,067,450	(464,859)	1,022,278	
Provision							
Insurance liabilities	\$ 334,393,675	-	(169,481)		169,481	-	
Guarantee reserve	1,298,033	-	14,450		(14,450)	-	
Reserve for government employees insurance	295,055,660	-	(47,718)		47,718	-	
Additions:							
Loan commitments reserve	_		10,421		(10,421)	-	
Balance of provision at January 1, 2018. Gross amount for reclassifications and remeasurements.	\$ 630,747,368		(192,328)	630,555,040	192,328		

Note 1: The difference between amounts of remeasurements and effects of retained earnings and other equity is tax effects. (An increase of \$83,581 thousand in the deferred tax assets and \$28,812 thousand in the tax liabilities, respectively.)

Note 2: The difference between amounts of adjustments for retained earning and effects of retrospective application on consolidated statements of changes in equity is tax effects. (An increase of \$5,431 thousand in the deferred tax assets.)

Notes to the Consolidated Financial Statements

The following table reconciles the loss allowance from the "incurred loss" model under IAS39 to the "expected credit loss" model under IFRS9 on January 1, 2018.

	Loss allowance under IAS39 and provision under IAS37	Reclassification	Remeasurement	Loss allowance under IFRS9
Loans and receivables (IAS39)/ FVTPL (IFRS9)				
Cash and cash equivalent - Placement with banks	\$ -	-	14,581	14,581
Placement with central bank and call loans to banks	58,446	-	19,066	77,512
Receivables	145,691	-	8,141	153,832
Discounts and loans	33,102,921	-	(25,948)	33,076,973
Other financial assets (Short-term advances, remittances purchased, overdue receivables, call loan to brokers, and restricted deposits)	111,435	-	(2,857)	108,578
	33,418,493		12,983	33,431,476
Available-for-sale financial instruments (IAS 39)/ Financial assets measured at fair value through other comprehensive income (IFRS 9)				
Available-for-sale financial assets	-	-	74,659	74,659
Available-for-sale financial assets (IAS 39)/ Financial assets measured at amortized cost (IFRS 9)				
Available-for-sale financial assets	-	-	2,373	2,373
Held to maturity (IAS 39)/ Financial assets measured at amortized cost (IFRS 9)				
Held to maturity financial assets	-	-	129,433	129,433
Debt investments without active market (IAS39)/ Financial assets measured at fair value through other comprehensive income (IFRS 9)				
Bonds investments without active market	=	-	5,751	5,751
Debt investments without active market (IAS39)/Financial assets measured at amortized cost (IFRS9)				
Bonds investments without active market	-	-	5,287	5,287
Financial assets measured at cost (IAS39)/ Financial assets measured at fair value through profit or loss (IFRS 9)				
Equity investments measured at cost	49	-	(49)	-
Financial assets measured at cost (IAS 39)/ Financial assets measured at fair value through other comprehensive income (IFRS 9)				
Equity investments measured at cost	15,000		(15,000)	
Total	15,049		202,454	217,503
Loan commitments and guarantee				
Insurance liabilities	-	-	(169,481)	(169,481)
Loan (loan commitments)	-	-	4,444	4,444
Credit cards (loan commitments)	-	-	5,948	5,948
Call loans to banks (loan commitments)	-	-	29	29
Guarantee receivables	886,782	-	14,470	901,252
Letter of credit receivables	411,251		(20)	411,231
	1,298,033		(144,610)	1,153,423
Total carrying amounts	\$ 34,731,575		70,827	34,802,402

Notes to the Consolidated Financial Statements

(b) The impact of IFRS endorsed by FSC but not yet effective

The following new standards, interpretations and amendments have been endorsed by the FSC and are effective for annual periods beginning on or after January 1, 2019 in accordance with Ruling No. 1070324857 issued by the FSC on July 17, 2018:

New, Revised or Amended Standards and Interpretations	Effective date per IASB
IFRS 16 "Leases"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019
Amendments to IFRS 9 "Prepayment features with negative compensation"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019
Amendments to IAS 28 "Long-term interests in associates and joint ventures"	January 1, 2019
Annual Improvements to IFRS Standards 2015–2017 Cycle	January 1, 2019

Except for the following items, the Company and subsidiaries believe that the adoption of the above IFRSs would not have any material impact on its consolidated financial statements. The extent and impact of signification changes are as follows:

(i) IFRS 16"Leases"

IFRS 16 replaces the existing leases guidance, including IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases – Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

IFRS 16 introduces a single and an on-balance sheet lease accounting model for lessees. A lessee recognizes a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. In addition, the nature of expenses related to those leases will now be changed since IFRS 16 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities. There are recognition exemptions for short-term leases and leases of low-value items. The lessor accounting remains similar to the current standard – i.e. the lessors will continue to classify leases as finance or operating leases.

1) Determining whether an arrangement contains a lease

The Company and subsidiaries have an arrangement that was not in the legal form of a lease, for which it concluded that the arrangement contains a lease of equipment under IFRIC 4. On transition to IFRS 16, the Company and subsidiaries can choose to apply either of the following:

- · IFRS 16 definition of a lease to all its contracts; or
- · a practical expedient that does not need any reassessment whether a contract is, or contains, a lease.

Notes to the Consolidated Financial Statements

The Company and subsidiaries plan to apply the practical expedient to grandfather the definition of a lease upon transition. This means that it will apply IFRS 16 to all contracts entered into before January 1, 2019 and identified as leases in accordance with IAS 17 and IFRIC 4.

2) Transition

As a lessee, the Company and subsidiaries can apply the standard using either of the following:

- · retrospective approach; or
- · modified retrospective approach with optional practical expedients.

The lessee applies the election consistently to all of its leases.

On January 1, 2019, the Company and subsidiaries plan to initially apply IFRS 16 using the modified retrospective approach. Therefore, the cumulative effect of adopting IFRS 16 will be recognized as an adjustment to the opening balance of retained earnings at January 1, 2019, with no restatement of comparative information.

When applying the modified retrospective approach to leases previously classified as operating leases under IAS 17, the lessee can elect, on a lease-by-lease basis, whether to apply a number of practical expedients on transition. The Company and subsidiaries choose to elect the following practical expedients:

- apply a single discount rate to a portfolio of leases with similar characteristics.
- apply the exemption not to recognize the right-of-use assets and liabilities to leases with a lease term that ends within 12 months at the date of initial application.
- exclude the initial direct costs from measuring the right-of-use assets at the date of initial application.
- · use hindsight when determining the lease term if the contract contains options to extend or terminate the lease.
- 3) So far, the most significant impact identified is that the Company and subsidiaries will have to recognize the new assets and liabilities for the operating leases of its offices, warehouses, and factory facilities. The Company and subsidiaries estimated that the lease liabilities to increase by \$1,578,836 thousand, adding prepaid rent \$128,628 thousand, the right of use assets increase \$1,707,464 thousand on January 1, 2019. No significant impact is expected for the Company's and subsidiaries' finance leases. Besides, The Company and subsidiaries do not expect the adoption of IFRS 16 to have any impact on its ability to comply with the revised maximum leverage threshold loan covenant. Also, the Company and subsidiaries are not required to make any adjustments for leases where the Company and subsidiaries are the intermediate lessor in a sub-lease.

The actual impacts of adopting the standards may change depending on the economic conditions and events which may occur in the future.

Notes to the Consolidated Financial Statements

(c) The impact of IFRS issued by IASB but not yet endorsed by the FSC

As of the date, the following IFRSs that have been issued by the International Accounting Standards Board (IASB), but have yet to be endorsed by the FSC:

New, Revised or Amended Standards and Interpretations	Effective date per IASB
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets Between an Investor and Its Associate or Joint Venture"	Effective date 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

Those which may be relevant to the Group are set out below:

Issuance / Release Dates	Standards or Interpretations	Content of amendment	
May 18, 2016	IFRS 17 "Insurance Contracts"	The new standard of accounting for insurance contracts contain recognition, measurement, presentation and disclosure of insurance contracts issued, and the main amendments are as follows:	
		· Recognition: the beginning of the coverage period of the Company and subsidiaries of contracts, the date when	

- coverage period of the Company and subsidiaries of contracts, the date when the first payment from a policyholder in the Company and subsidiaries become due and when the Company and subsidiaries become onerous shall recognize a group of insurance contracts it issues from the earliest.
- · Measurement: on initial recognition, an entity shall measure a group of insurance contracts at the total of the fulfilment cash flows and the contractual service margin. For subsequent measurement, the entity shall estimate the cash flows, discount rates and the adjustment for non-financial risk.
- Presentation and disclosure: the presentation of insurance revenue is based on the provision of service pattern and investment components excluded from insurance revenue.

Notes to the Consolidated Financial Statements

Issuance / Release Dates	Standards or Interpretations	Content of amendment
October 22, 2018	Amendments to IFRS 3 "Definition of a Business"	The IASB has issued narrow-scope amendments to IFRS 3 to improve the definition of a business. The amendments will help companies determine whether an acquisition made is of a business or a group of assets.
		The amended definition emphasizes that the output of a business is to provide goods and services to customers, whereas the previous definition focused on returns in the form of dividends, lower costs or other economic benefits to investors and others. In addition to amending the wording of the definition, the IASB has provided supplementary guidance.
October 31, 2018	Amendments to IAS 1 and IAS 8 "Definition of Material"	The amendments clarify the definition of material and how it should be applied by including in the definition guidance that until now has featured elsewhere in IFRS Standards. In addition, the explanations accompanying the definition have been improved. Finally, the amendments ensure that the definition of material is consistent across all IFRS Standards.

The Company and subsidiaries is evaluating the impact on its consolidated financial position and consolidated financial performance upon the initial adoption of the abovementioned standards or interpretations. The results thereof will be disclosed when the Company and subsidiaries completes its evaluation.

(4) Summary of Significant Accounting Policies:

The adopted significant accounting policies are summarized as follows. Except for those with interpretations, the following policies have been applied consistently to all reporting periods of these consolidated financial statements.

(a) Statement of compliance

The consolidated financial statements are prepared in conformity with relevant government regulatory. The Company and subsidiaries set up their accounting policies and prepare the financial statements according to the Regulations Governing the Preparation of Financial Reports by Financial Holding Companies, and the International Financial Reporting Standards, International Accounting Standards and, IFRIC Interpretations, and SIC Interpretations endorsed by the Financial Supervisory Committee, ROC.

Notes to the Consolidated Financial Statements

The Company and subsidiaries are government-owned enterprises, so its accounting practices mainly follow the Budget Law, Budget Settlement Law and Uniform Regulations on Accounting Systems for Banks Governed by the Ministry of Finance (the MoF). The annual financial statements are examined by the Ministry of Audit (the MoA) to ensure that the Company and are subsidiaries comply with the budget approved by the Legislative Yuan, the parliament of ROC Taiwan. The financial statements become final only after such an endorsement by the MoA.

The financial statements of 2017 was certified by the MoA, and the opening balances of retained earnings of 2018 are the same as those certified in the closing balances of 2017. Please refer to Note 16(b) for the government audit adjustments.

(b) Basis of preparation

(i) Basis of Measurement

These consolidated financial statements are prepared on a historical cost basis, except for the following items.

- 1) Financial instruments measured at fair value through profit or loss (including derivative financial instruments)
- 2) Financial assets measured at fair value through other comprehensive income (applicable from January 1, 2018);
- 3) Available for sale financial assets measured at fair value (applicable before January 1, 2018);
- 4) Derivative financial instruments designated as hedges which are measured at fair value
- 5) The defined benefit assets which is the net amount of the pension fund less the present value of the defined benefit obligation.
- 6) Some property, equipment and investments property of which the revaluation value is used are deemed as cost on revaluation date in accordance with the ROC GAAP;
- 7) Reinsurance assets, insurance liabilities and foreign exchange volatility reserve which are accounted in accordance with the "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves."
- (ii) Preparing the financial statements in accordance with IFRSs requires not only the use of some critical accounting estimates in the application of the Company's accounting policies but also the management's judgment on significant assumptions and estimates of the financial statements. Please refer to note 5 for further information.
- (iii) The consolidated financial statements are composed of the consolidated balance sheet, the consolidated statement of comprehensive income, the consolidated statement of changes in equity, the consolidated statement of cash flow and the related notes.

Notes to the Consolidated Financial Statements

(iv) Functional currency and presentation currency

The functional currency of each entity of the Company and subsidiaries are based on the primary economic environment in which the entity operates. These consolidated financial statements are presented in New Taiwan dollars, which also the functional currency of the Company and subsidiaries. All financial information represented in New Taiwan dollars has been rounded to the nearest thousand.

(c) Basis of consolidation

(i) Principle of preparation of the consolidated financial statements

The consolidated financial statements comprise the Company and subsidiaries. The financial statements of its subsidiary are included in the consolidated financial statements from the date that control commences until the date that control ceases. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if the non-controlling interests to have a deficit balance.

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions are eliminated in preparing the consolidated financial statements.

(ii) List of subsidiaries in the consolidated financial statements

			Shareholdings	
Name of Investor	Name of Subsidiary	Principal activities	December 31, 2018	December 31, 2017
The Company	Bank of Taiwan (BOT)	Banking	100 %	100 %
The Company	BankTaiwan Life Insurance (BTLI)	Life Insurance	100 %	100 %
The Company	BankTaiwan Securities (BTS)	Broker	100 %	100 %
Bank of Taiwan	BankTaiwan Insurance Brokers (BTIB)	Life and Property insurance broker	100 %	100 %

(d) Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of the Company and subsidiaries at the exchange rates of the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies of the reporting date are retranslated to the functional currency at the exchange rate of that date. The foreign currency gain or loss on monetary items is the difference between the amortized cost in the functional currency at the beginning of the year adjusted for the effective interest and payments during the year, and the amortized cost in foreign currency translated at the exchange rate at the end of the year.

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate of the date that the fair value was determined. Non-monetary items in a foreign currency that are measured based on historical cost are translated using the exchange rate at the date of translation.

Notes to the Consolidated Financial Statements

Foreign currency differences arising on retranslation are recognized in profit or loss, except for the following differences which are recognized in other comprehensive income arising on the retranslation:

- 1) available-for-sale equity investment;
- 2) a financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is effective; or
- 3) qualifying cash flow hedges to the extent the hedge is effective.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to the Company's and subsidiaries' functional currency at the exchange rates of the reporting date. The income and expenses of foreign operations, excluding foreign operations in hyperinflationary economies, are translated to the Company's and subsidiaries' functional currency at average rate. Foreign currency differences are recognized in other comprehensive income, and presented in the foreign currency translation reserve (translation reserve) in equity.

However, if the foreign operation is a non-wholly owned subsidiary, then the relevant proportion of the translation difference is allocated to non-controlling interests. When a foreign operation is disposed of such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. When the Company and subsidiaries dispose of any part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative amount is reattributed to non-controlling interest. When the Company and subsidiaries dispose of only part of investment in an associate of joint venture that includes a foreign operation while retaining significant or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planed nor likely in the foreseeable future, foreign currency gains and losses arising from such items are considered to form part of a net investment in the foreign operation and are recognized in other comprehensive income, and presented in the translation reserve in equity.

(e) Cash and cash equivalents

For consolidated balance sheets, Cash and cash equivalents include cash on hand, due from banks, demand deposits and highly liquid investments that are readily convertible into known amount of cash and which are subject to insignificant risk of change in value. The aforementioned time deposits which are held for short-term cash commitment rather than investment or other purposes are recognized as cash equivalents.

For consolidated statement of cash flows, cash and cash equivalents refer to cash and cash equivalents presented in consolidated statement of balance sheet, deposit in the central bank, call loans to banks, and investments which are in accordance with the definition of cash and cash equivalents in the International Accounting Standards 7 accepted by FSC.

Notes to the Consolidated Financial Statements

(f) Financial instruments

Financial assets and financial liabilities are initially recognized when the Company and subsidiaries become a party to the contractual rights or obligations of the instruments.

(i) Financial assets (applicable from January 1, 2018)

Financial assets are classified into the following categories: measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL).

The Company and subsidiaries shall reclassify all affected financial assets only when it changes its business model for managing its financial assets.

1) Financial assets measured at amortized cost (including cash and cash equivalent, placement with central bank and call loans to banks, discounts and loans, receivables, other financial assets and margins or security deposits)

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A financial asset measured at amortized cost is initially recognized at fair value, plus any directly attributable transaction costs. These assets are subsequently measured at amortized cost using the effective interest method, less impairment losses. Interest income, foreign exchange gains and losses, and impairment loss, are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

Credit maturing less than one year is called short-term loan; credit maturing more than one year but less than seven years is called medium-term loan; credit maturing more than seven years is called long-term loan. Loans against insurance policy is policy loan, and advance payment for insurance premium according to insurance contract is premium loan. Loans with collateral, pledged assets and qualified guarantees to secure credit are secured loans. Non-performing loans refer to those loans for which interests and principal payments has been in arrears for three months or more, and those loans which the principal or interest has not yet been in arrears for more than three months, but with regards to which the creditor has sought payment from primary/subordinate debtors or has disposed of collateral. All non-performing loans shall be transferred to non-accrual loans within six months after the end of the payment period expect for the loans repaid in installments by agreements. Interest shall not be accrued to non-performing loans that are transferred to non-accrual loans account. However, loan collection shall continue as per the terms of the relevant agreement, and accrued interest shall continue to be posted to the interest column of the non-accrual loans account for each borrower, or a notation of such shall be made.

Notes to the Consolidated Financial Statements

The write-off of non-performing loans and non-accrual loans of BOT shall be discussed by the related committee, reviewed by the general manager and approved by a resolution passed by the board of directors or the board of managing directors and the audit committee shall be notified of the write-off. The board of directors shall be notified if the write-off case is passed by the board of the managing directors. Collections after write-off shall be reversed from the allowance for bad debt.

2) Financial assets measured at fair value through other comprehensive income (FVOCI)

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- · its 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.

On initial recognition of an equity investment that is not held for trading, the Company and subsidiaries may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an instrument by instrument basis.

A financial asset measured at FVOCI is initially recognized at fair value, plus any directly attributable transaction costs. These assets are subsequently measured at fair value:

- a) Debt investments: Interest income calculated using the effective interest method, foreign exchange gains and losses, and impairment losses, deriving from debt investments are recognized in profit or loss. Before derecognition, other net gains and losses of financial assets measured at FVOCI are recognized in OCI. On derecognition, gains and losses accumulated in OCI of debt investments are reclassified to profit or loss. Gains and losses accumulated in OCI of debt investments are treated according to IFRS 9 when the debt investments are reclassified.
- b) Equity investments: Subsequently changes of fair value are recognized in OCI, including foreign exchange gains and losses. On derecognition, gains and losses accumulated in OCI of equity investments are reclassified to retain earnings instead of profit or loss. Dividend income derived from equity investments is recognized in profit or loss, except the dividend obviously represents the recovery of investment cost.

Notes to the Consolidated Financial Statements

3) Financial assets at fair value through profit or loss (FVTPL)

All financial assets not classified as amortized cost or FVOCI described as above are measured at FVTPL, including derivative financial assets and accounts receivables (except for those presented as accounts receivables but measured at FVTPL). On initial recognition, the Company and subsidiaries may irrevocably designate a financial asset, which meets the requirements to be measured at amortized cost or at FVOCI, as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

A financial asset measured at FVTPL is initially recognized at fair value, plus any directly attributable transaction costs. These assets are subsequently measured at fair value, which take into account any dividend and interest income, are recognized in profit or loss.

- 4) Financial liabilities measured at fair value through profit or loss
 - a) With one of the following conditions:
 - i) Financial liabilities held for trading:
 - 1. It is incurred principally for the purpose of repurchasing it in the near term.
 - 2. On initial recognition it is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking.
 - 3. It is a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).
 - ii) Financial liabilities designated as fair value through profit or loss
 - b) Financial liabilities measured at fair value through profit or loss should measured at fair value. But the amount of changes in the fair value of financial liabilities designated as at fair value through profit or loss that is attributable to changes in the credit risk of that liability shall be recognized initially in other comprehensive income, except for the recognition in profit or loss, in order to avoid accounting mismatch. Moreover, the changes in the fair value of loan commitments and financial guarantee contracts shall also be recognized in profit or loss.
- 5) Other financial liabilities
 - a) The financial liabilities not belong to the financial liabilities at fair value through profit or loss shall be measured at fair value, plus, direct attributable transaction costs upon initial recognition.
 - b) The financial liabilities not belong to the financial liabilities at fair value through profit or loss shall be subsequently measured at amortized cost using effective interest method. Through derecognition and amortization, gains and losses shall be recognized in profit or loss.

Notes to the Consolidated Financial Statements

6) Business model assessment

The Company and subsidiaries make an assessment of the objective of the business model in which a financial asset is held at portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;
- · how the performance of the portfolio is evaluated and reported to the Company's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, and are consistent with the Company and subsidiaries' continuing recognition of the assets.

7) Assessment whether contractual cash flows are solely payments of principal and interest For the purposes of this assessment, 'principal' is defined as the fair value of the financial assets on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Company and subsidiaries consider the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Company and subsidiaries consider:

- · contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- · prepayment and extension features; and
- terms that limit the Company's and subsidiaries' claim to cash flows from specified assets (e.g. non recourse features)

Notes to the Consolidated Financial Statements

8) Derecognition of financial assets

Financial assets are derecognized when the contractual rights to the cash flows from the assets expire, or when the Company and subsidiaries transfer substantially all the risks and rewards of ownership of the financial assets.

On derecognition of a debt instrument in its entirety, the Company and subsidiaries recognize the difference between its carrying amount and the sum of the consideration received or receivable and any cumulative gain or loss that had been recognized in other comprehensive income and presented in "other equity – unrealized gains or losses on fair value through other comprehensive income", in profit or loss.

On derecognition of a debt instrument other than in its entirety, the Company and subsidiaries allocate the previous carrying amount of the financial asset between the part that continues to recognize under continuing involvement, and the part that is derecognized on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part derecognized and the sum of the consideration received for the part derecognized and any cumulative gain or loss allocated to it that had been recognized in other comprehensive income is recognized in profit or loss. A cumulative gain or loss that had been recognized in other comprehensive income is allocated between the part that continues to be recognized and the part that is derecognized on the basis of the relative fair values of those parts.

9) Overlay approach

The subsidiary, BTLI, has applied IFRS 9 since 2018. To reduce the impact caused by different effective dates of IFRS 9 and the forthcoming IFRS 17, the Company and subsidiaries simultaneously adopted overlay approach under IFRS 4 to present profit or loss of designated financial assets.

(ii) Derivative financial instruments and hedge accounting (policy applicable from January 1, 2018)

The Company and subsidiaries hold derivative financial instruments to hedge its foreign currency and interest rate exposures. Derivatives are initially measured at fair value. Any attributable transaction costs thereof are recognized in profit or loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized in profit or loss and are included in the line item of non operating income and expenses in the statement of comprehensive income. When a derivative is designated as, and effective for, a hedging instrument, its timing of recognition in profit or loss is determined based on the nature of the hedging relationship. When the fair value of a derivative instrument is positive, it is classified as a financial asset, whereas when the fair value is negative, it is classified as a financial liability.

Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the non financial asset's host contract are not closely related to the embedded derivatives and the host contract is not measured at FVTPL.

The Company and subsidiaries choose to continue to apply the hedge accounting requirements of IAS 39.

Notes to the Consolidated Financial Statements

(iii) Financial asset (applicable before January 1, 2018)

The Company and subsidiaries classify financial assets into the following categories: financial assets at fair value through profit or loss, loans and receivables, available-for-sale financial assets, held-to-maturity financial assets, financial assets at cost and debt investment without active market.

1) Financial assets at fair value through profit or loss

A financial asset is classified in this category if it is classified as held for trading or is designated as such on initial recognition. Financial assets are classified as held for trading if they are acquired principally for the purpose of selling in the short term. The Company and subsidiaries designate financial assets, other than ones classified as held for trading, as at fair value through profit or loss at initial recognition under one of the following situations:

- a) Designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;
- b) Performance of the financial asset is evaluated on a fair value basis;
- c) A hybrid instrument contains one or more embedded derivatives.

Financial assets in this category are measured at fair value at initial recognition. Attributable transaction costs are recognized in profit or loss as incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein, which take into account any dividend and interest income, are recognized in profit or loss, and are included in statement of comprehensive income statement.

2) Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale or are not classified in any of the other categories of financial assets. Available-for-sale financial assets are recognized initially at fair value, plus, any directly attributable transaction cost. Subsequent to initial recognition, they are measured at fair value, and changes therein, other than impairment losses, interest income calculated using the effective interest method, dividend income, and foreign currency differences on available-for-sale debt instruments, are recognized in other comprehensive income and presented in the fair value reserve in equity. When an investment is derecognized, the gain or loss accumulated in equity is reclassified to profit or loss, and is included in other income and statement of comprehensive income. A regular way purchase or sale of financial assets shall be recognized and derecognized, as applicable, using trade date accounting.

Dividend income is recognized in profit or loss on the date that the Company's and subsidiaries' rights to receive payment are established, which in the case of quoted securities is normally the ex-dividend date. Such dividend income is included in statement of comprehensive income.

Interest income from investment in bond security is recognized in profit or loss, and it is included in statement of comprehensive income.

Notes to the Consolidated Financial Statements

3) Held to maturity financial assets

Financial assets which the Company and subsidiaries have the positive intent and the ability to hold debt securities to maturity, such financial assets are classified as held-to-maturity. Held to maturity financial assets are recognized initially at fair value, plus, any directly attributable transaction costs. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method, less, any impairment losses. A regular way purchase or sale of financial assets shall be recognized and derecognized, as applicable, using trade date accounting.

Interest income is recognized in profit or loss, and it is included in statement of comprehensive income.

4) Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables comprise accounts receivable and other receivables. Such assets are recognized initially at fair value, plus, any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest method, less, any impairment losses other than insignificant interest on short-term receivables. A regular way purchase or sale of financial assets shall be recognized and derecognized, as applicable, using trade date accounting.

Interests are presented under interest revenue in statement of comprehensive income.

Credit maturing less than one year is called short-term loan; credit maturing more than one year but less than seven years is called medium-term loan; credit maturing more than seven years is called long-term loan. Loans with collateral, pledged assets and qualified guarantees to secure credit are secured loans. Non-performing loans refer to those loans for which interests and principal payments has been in arrears for three months or more, and those loans which the principal or interest has not yet been in arrears for more than three months, but with regards to which the creditor has sought payment from primary/subordinate debtors or has disposed of collateral. All non-performing loans shall be transferred to non-accrual loans within six months after the end of the payment period expect for the loans repaid in installments by agreements. Interest shall not be accrued to non-performing loans that are transferred to non-accrual loans account. However, loan collection shall continue as per the terms of the relevant agreement, and accrued interest shall continue to be posted to the interest column of the non-accrual loans account for each borrower, or a notation of such shall be made.

The write-off of non-performing loans and non-accrual loans of the subsidiary, BOT, shall be discussed by the related committee, reviewed by the general manager and approved by a resolution passed by the board of directors or the board of managing directors and the audit committee shall be notified of the write-off. The Board of Directors shall be notified if the write-off case is passed by the board of the managing directors. Collections after write-off shall be reversed from the allowance for bad debt.

Notes to the Consolidated Financial Statements

5) Financial assets at cost

Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, and derivatives those are linked to and must be settled by delivery of such unquoted equity instruments, are measured at cost.

6) Debts investment without active market

Debt investments without active market are the non-derivative instruments that have fixed or decidable price. Such assets are recognized initially at fair value, plus, any directly attributable transaction costs. Subsequent to initial recognition, debts investment without active market are measured at amortized cost using the effective interest method.

7) The derecognition of financial assets

The derecognition of a financial asset takes place if either the contractual rights to the cash flows associated with the financial instrument expire or almost all the risks and rewards have been transferred to another party.

On derecognition of a financial asset, the difference between its carrying amount and the sum of (1) the consideration received or receivable and (2) any cumulative gain or loss that had been recognized directly in equity (other equity- unrealized gain or loss on available-for-sale financial assets) is to be recognized in profit or loss in the consolidated statement of comprehensive income.

8) Reclassification of financial assets

According to IAS 39, the Company and subsidiaries are only permitted to reclassify their financial assets, classified as held for trading, out of the fair value though profit or loss category in the rare circumstances prescribed in paragraph 50B. Moreover, as stated in paragraph 50C, if the Company and subsidiaries reclassify a financial asset out of the fair value through profit or loss category in accordance with paragraph 50B, the financial asset shall be reclassified at its fair value on the date of reclassification. Any gains or losses already recognized in profit or loss shall not be reversed. The fair value of the financial asset on the date of reclassification becomes its new cost or amortized cost, as applicable.

(iv) Derivative financial instruments and hedge accounting (policy applicable before January 1, 2018)

- · When the derivate is related to the unquoted security whose fair value cannot be measured at reliably without undue cost or effort, the derivate is measured at cost minus impairment loss, and is categorized as financial asset measured at cost. Financial liabilities are measured at cost, and are categorized as financial liabilities measured at cost.
- · When the risk and characteristics of the embedded derivate are not closely related to those of the host contract and the host contract is not carried at fair value through profit or loss, the derivate is treated as a separate derivative.

Notes to the Consolidated Financial Statements

The Company and subsidiaries document at inception the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategies for undertaking various hedge transactions. The Company and subsidiaries also document its assessments, both at hedge inception and on an ongoing basis, of whether the hedging instruments that are used in hedging transactions are highly effective in offsetting changes in fair values of hedged items.

Both of the fair value changes in hedging instruments which are designated for value hedge and in conformity with the fair value hedging definition and the fair value changes in hedged assets or liabilities with respect to the hedged risk are immediately recognized in the account related to the hedged item in the consolidated statement of comprehensive income.

Hedge accounting must be discontinued prospectively if the Company and subsidiaries revoke the hedge designation or if the hedge instrument expires or is sold, terminated or exercised or if the hedge no longer meets the hedge accounting criteria.

Where hedge accounting is discontinued, adjustments to the carrying amount of a hedge financial asset for which the effective interest rate is used are amortized to profit or loss. The adjustment is based on a recalculated effective interest rate at the date amortization begins.

(v) Financial liability and equity instrument

1) The classification of liabilities and equity

The liability and equity instrument issued by the Company and subsidiaries are classified as financial liability and equity based on the substance of the agreement and the definition of financial liability and equity instrument.

Equity instrument refers to any contract that evidences a residual interest in the assets of the Company and subsidiaries after deducting all of its liabilities.

If an instrument classified as a liability is reclassified as equity, the difference between the carrying amount before the reclassification and the measurement after reclassification should not be reported as profit or loss.

2) Financial liabilities at fair value through profit or loss

This type of financial liabilities refer to the held for trading financial liabilities or the financial liabilities designated as fair value through profit or loss.

The held for trading financial liabilities are acquired or incur principally for the purpose of selling or repurchasing in a short term. Other than held for trading financial liabilities, those financial liabilities will be designated upon initial recognition as at fair value through profit or loss when one of the following situations takes place:

- a) Eliminate or significantly reduce the measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.
- b) The performance of the financial liabilities is evaluated on a fair value basis.

Notes to the Consolidated Financial Statements

c) Hybrid instrument contains embedded derivative.

These liabilities are recognized initially at fair value with transaction costs taken directly to income statement, and are subsequently re-measured at fair value. Gains and losses from changes in the fair value of such liabilities (including interest expenses) are reported in the account of profit or loss of financial assets and liabilities at fair value through profit or loss in the consolidated statement of comprehensive income. The amount of changes in the fair value of financial liabilities designated as at fair value through profit or loss that is attributable to changes in the credit risk of that liability shall be recognized initially in other comprehensive income, except for the recognition in profit or loss, in order to avoid accounting mismatch. Moreover, the changes in the fair value of loan commitments and financial guarantee contracts shall also be recognized in profit or loss.

The Company and subsidiaries issue financial guarantee contract and loan commitment and designate them as measured at fair value through profit or loss. Its profit or loss is presented in the account of profit or loss of financial assets and liabilities at fair value through profit or loss in the consolidated statement of comprehensive income.

3) Other financial liabilities

The financial liabilities not belong to the financial liabilities at fair value through profit or loss (including long-term, short-term loans, payables and other payables) shall be measured at fair value, plus, direct attributable transaction costs upon initial recognition, and they are subsequently measured at amortized cost using effective interest method. The un-capitalized interest expenses are presented as interest expense in profit/loss in the consolidated statement of comprehensive income.

4) The derecognition of financial liabilities

The derecognition of a financial liability takes place when the contractual obligations associated with the financial instrument are performed, cancelled or expired.

On derecognition of a financial liability, the difference between its carrying amount and the amount of the consideration paid or payable (including any transferred non-cash assets or assumed liabilities) is to be recognized in profit or loss in the consolidated statement of comprehensive income.

5) Offsetting the financial assets and financial liabilities

Offsetting is required when, and only when, the Company and subsidiaries currently have a legally enforceable right to set off the recognized amounts; and intend either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

6) Financial guarantee contract

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due, in accordance with the terms of a contract between the holder and debtor.

Notes to the Consolidated Financial Statements

When the Company and subsidiaries issue and not designate the financial guarantee contract as measured at fair value through profit and loss, it shall be assessed at fair value, less, the directly attributable transaction costs initially. After initial recognition, an issuer of such a contract shall measure it at the higher of:

- a) the amount determined in accordance with IAS 37 "Provision, Contingent Liabilities and Contingent Assets"; and
- b) the amount initially recognized, less, when appropriate, cumulative amortization recognized in accordance with revenue accounting policy.

(g) Pecuniary and securities financing and refinancing

Pecuniary finance represents loans extended to securities investors for the purchase of securities and is accounted as receivables from pecuniary finance. Such loans are secured by the securities purchased by the investors. These securities are not reflected in the financial statements of the subsidiary, BTS. The investors may redeem the collateral securities upon repayment of the loans.

Securities finance represents securities lent to investors and is affected by lending to securities investors securities in custody that are received from pecuniary finance or borrowed from securities finance companies when necessary. Such securities finance is not reflected in the financial statements of the subsidiary, BTS. The investors' deposits for borrowing securities are held by the subsidiary, BTS, as collateral and recorded under securities finance margin deposits received. In addition, investors are required to deposit the proceeds from sales of borrowed securities. Such deposits are accounted for as payables for securities financing.

Pecuniary refinancing represents loans from securities finance companies when the subsidiary, BTS, lacks sufficient funds to perform pecuniary financing. These loans are recorded as refinance borrowings.

Securities refinancing represents securities borrowed from securities finance companies when the subsidiary, BTS, does not have sufficient securities to perform securities financing. For securities refinancing, the subsidiary, BTS, pays margin deposits to securities finance companies. These margin deposits are recorded as refinance margin deposits. The subsidiary, BTS, also provides securities investors' proceeds from selling borrowed securities to securities finance companies as collateral and records them under receivables from securities refinance.

(h) Repo and reverse repo transactions involving bill and bond investment or debt

Repo and reverse repo bond transactions are the sale or purchase of a bond coupled with an agreement to repurchase or resell the same or substantially identical bond at a stated price. Such transactions are treated as collateral for financing transactions and not as the sale or purchase of trading securities. When conducting such transactions, the actual attained amount are recognized as "Bills and Bonds Sold under Repurchase Agreement", and the actual lend amount are recognized as "Bills and Bonds Purchased under Resell Agreement".

The related interest revenue or expenses are calculated by agreed interest rates.

Notes to the Consolidated Financial Statements

(i) Investments in associates

Associate refers to an entity in which the Company and subsidiaries have hold 20% of the voting power or less than 20% of the voting power but have significant influence. If the Company and subsidiaries have rights on the finance and operating policy decisions but not control or joint control these decisions, it is presumed that the company and subsidiaries have significant influence.

The Company and subsidiaries use equity method for investments in associates. Under the equity method, an equity investment is initially recorded at cost. In the subsequent period, the carrying amount of the investments is adjusted by the share of the profit or loss of the associate and the distributions received. Besides, the Company and subsidiaries recognize the changes according to the holding shares.

If the Company and subsidiaries dispose the investment and loss significant influence, the residual investments shall be remeasured at fair value of the disposal date. The difference between the fair value of the residual investment, plus, the disposal price and the carrying amount of the investment at that date is recognized in income statement. The related other comprehensive income is reclassified as profit or loss.

The associate issues additional share capital, but the Company and subsidiaries do not participate in the share issue on a pro-rata basis. It will lead to change in holding, but the Company and subsidiaries still have significant influence. As a result, the Company and subsidiaries shall adjust the APIC and investments in equity method accounts according to the changes in net assets of the associate.

Unrealized profits resulting from the transactions between the Company and subsidiaries and an associate are eliminated to the extent of the Company's and subsidiaries' interest in the associate. Unrealized losses on transactions with associates are eliminated in the same way, except to the extent that the underlying asset is impaired.

When the Company's and subsidiaries' share of losses exceeds its interest in associates, the carrying amount of the investment, including any long-term interests that form part thereof, is reduced to zero, and the recognition of further losses is discontinued except to the extent that the Company and subsidiaries have an obligation or has made payments on behalf of the investee.

(j) Investment property

Investment property is the property held either to earn rental income or for capital appreciation or for both, but not for sale in the ordinary course of business, for use in the production or supply of goods or services, or for administrative purposes. Investment property is measured at cost including costs and expenses are directly attributed to the acquisition of the investment property on initial recognition and subsequently. The depreciation is computed along with the depreciable amount. The method, the useful life and the residual amount are the same with those of property and equipment. Cost includes expenditure that is directly attributable to the acquisition of the investment property.

When the use of a property changes such that it is reclassified as property and equipment, the carrying amount at the date of reclassification becomes its cost for subsequent accounting.

Notes to the Consolidated Financial Statements

(k) Property, plant and equipment

(i) Recognition and measurement

Items of property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditure that is directly attributed to the acquisition of the asset. The cost of a self-constructed asset comprises material, labor, any cost directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, and any borrowing cost that is eligible for capitalization. Cost also includes transfers from equity of any gain or loss on qualifying cash flow hedges of foreign currency purchases of property and equipment. The cost of the software is capitalized as part of the property and equipment if the purchase of the software is necessary for the property and equipment to be capable of operating.

Each part of an item of property and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately, unless the useful life and the depreciation method of a significant part of an item of property and equipment are the same as the useful life and depreciation method of another significant part of that same item.

The gain or loss arising from the derecognition of an item of property and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item, and it shall be recognized as other gains and losses.

(ii) Reclassification to investment property

When there is a change in use, the Company and subsidiaries treat the owner-occupied property as investment property; the property shall be reclassified to investment property at carrying amount from then on.

(iii) Subsequent cost

Subsequent expenditure is capitalized only when it is probable that the future economic benefits associated with the expenditure will flow to the Company and subsidiaries. The carrying amount of those parts that are replaced is derecognized. Ongoing repairs and maintenance are expensed as incurred.

(iv) Depreciation

The depreciable amount of an asset is determined after deducting its residual amount, and it shall be allocated on straight-line basis over its useful life. Items of property, plant and equipment with the same useful life may be grouped in determining the depreciation charge. The remainder of the items may be depreciated separately. The depreciation charge for each period shall be recognized in profit or loss.

Notes to the Consolidated Financial Statements

The depreciable amount of a leased asset is allocated to each accounting period during the period of expected use on a systematic basis consistent with the depreciation policy the lessee adopts for depreciable assets that are owned. If there is reasonably certainty that the lessee will obtain ownership by the end of the lease term, the period of expected use is the useful life of the asset; otherwise, the asset is depreciated over the shorter of the lease term and its useful life.

Land has an unlimited useful life and therefore is not depreciated.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

Buildings	8 to 55 years
Machinery and equipment	2 to 20 years
Transportation equipment	2 to 15 years
Miscellaneous equipment	2 to 25 years
Leasehold improvements	5 years

(1) Reinsurance assets

To limit the potential damage of the exposure events, the insurance subsidiaries follows Insurance Act to process reinsurance contract. Even the reinsurer not perform obligation, the insurance subsidiaries can not reject to fulfill the contract obligation for the insured.

The insurance subsidiaries have the following rights over reinsurer: ceded unearned premium reserve, ceded claim reserve, claims recoverable from reinsurers, and due from reinsurers and ceding companies, net. The method used for estimating claims recoverable from reinsurers should be the same as the method used for estimating the claim reserve liabilities.

The Company should not offset reinsurance assets against the related insurance liabilities, or income or expense from reinsurance contracts against the expense or income from the related insurance contracts.

If there is evidence, as a result of an event that occurred after initial recognition of the reinsurance asset, that the insurance subsidiary may not receive all amounts regulated under the terms of the contract, and that event has a measurable amounts in terms of the influence of the event, the insurance subsidiary shall recognize the difference between the recoverable amount and the carrying amount of the previously stated right as impairment loss.

In addition, in determining the classification of a reinsurance contract, insurance subsidiary considers whether a significant insurance risk should be transferred to the reinsurer. If there is no significant risk that are being transferred, the contract shall be recognized and measured in accordance with deposit accounting and the consideration received or paid for reinsurance contracts shall be treated as a financial liability or a financial asset, rather than as revenue or expense.

Notes to the Consolidated Financial Statements

If a reinsurance contract on the ceded date or balance sheet date is deemed unqualified ceded reinsurance under the "Regulation Governing Insurance Enterprises Engaging in Operating Reinsurance and Other Risk Spreading Mechanisms", the Company utilizes "The Provision of Unqualified Reinsurance Reserve" to evaluate the effect of unqualified reinsurance in supervision reports, and the results are disclosed in its financial statements. The Company has no unqualified reinsurance so far.

(m) Insurance contract

The insurance subsidiary classifies a contract as an insurance contract is when the insurance subsidiary accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder. The insurance risks refer to the risks that policyholder transfer to the contract issuer excluding financial risks. Financial risks refer to the risk resulting from possible changes in specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index or other variable in the future. If the previously stated variables are non-financial variables, then the variables do not belong to any specific side of the contract. Insurance contract may possibly transfer part of the financial risks.

The insurance subsidiary identifies the significant insurance risk if, and only if, an insured event could cause an insurer to pay significant additional benefits in any scenario but excluding the situation of lack of commercial substance. A contract that qualified as an "insurance contract" remains an "insurance contract" until all rights and obligations are extinguished or expired. The insurance contract of which the significant insurance risks are not transferred are classified as insurance contract with financial instrument features. However, if an insurance contract with financial instrument features transfers significant insurance risk to the insurance subsidiary in subsequent periods, it will be reclassified as "insurance contract".

Insurance contracts and insurance contracts with financial instrument features can be further divided into 2 categories, which are insurance with discretionary participation feature or without discretionary participation feature.

A discretionary participation feature is a contractual right to receive both the guaranteed benefits and also the additional benefits:

- (i) that are likely to be a significant portion of the total contractual benefits;
- (ii) whose amount or timing of distribution of additional benefit is contractually at the discretion of the company; and
- (iii) the additional benefit are contractually based on:
 - 1) the performance of a specified pool of the contracts or a specified type contract;
 - 2) the rate of return of a specific asset portfolio, or
 - 3) the profit or loss of the company, fund or other entity that issues the contract.

Notes to the Consolidated Financial Statements

If the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract, it is required to be separated from the host contract and the value embedded derivate shall be measured at fair value through profit or loss, and the change shall be recognized as current gains or losses. If the embedded derivate is itself an insurance contract or in the case of an insurer need not separate it and is able to measure it at fair value through profit or loss, the company does not need to separate the embedded derivate and the insurance contract in terms of recognition.

(n) Lease

(i) Operating Lease

A lease is classified as operating lease if it retains substantially all the risks and rewards of ownership. No matter the Company and subsidiaries are lessors or lessees, the rent is calculated over the lease term on a straight-line basis and recorded as rental incomes or rental expenses respectively.

(ii) Financial Lease

- 1) The Company and subsidiaries are lessors. The assets under financial lease will be recognized as lease payment receivables by the net investment value. The original cost which is cause by the operating lease agreement is included in the net lease investment. Lease investment is recognized as financial lease because of it has a steady rate of return, apportioning into each lease period.
- 2) The Company and subsidiaries are lessees. They capitalize the lower of the fair value of the leased asset and the present value of the minimum lease payments. Lease payments made are allocated as a reduction of the obligation and interest expenses. Interest expenses are calculated by the opening balance of lease obligation using the interest rate implicit in the lease or the lessee's incremental borrowing rate of interest and recognized in the income statement. The attained property, plant and equipment are measured at cost.

(o) Intangible assets

(i) Computer Software

The Company and subsidiaries measure the computer software at cost less accumulated amortization and accumulated loss.

(ii) Subsequent Expenditure

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognized in profit or loss as incurred.

Notes to the Consolidated Financial Statements

(iii) Amortization

The depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill and intangible assets with all indefinite useful life, from the date that they are available for use. The estimated useful lives for the current and comparative periods are as follows:

Computer software

5 years

The residual value, amortization period, and amortization method for an intangible asset with a finite useful life shall be reviewed at least annually at each fiscal year-end. Any change shall be accounted for as changes in accounting estimates.

Intangible asset is derecognized when disposed or expected that the usage or disposal will not generate economic benefit in the future. The resulted gain or loss is recognized in the income statement.

(p) Impairment of assets

(i) Impairment of financial assets

1) Applicable from January 1, 2018

The Company and subsidiaries recognize loss allowances for expected credit losses on financial assets measured at amortized cost (including cash and cash equivalents, placement with central bank and call loans to banks, amortized costs, discounts and loans, receivables, loans, margins or security deposits, and other financial assets) and debt investments measured at fair value through other comprehensive income.

At each reporting date, the Company and subsidiaries assess whether the credit risk of a financial asset has increased significantly since initial recognition. If the credit risk has increased significantly since initial recognition or the financial assets are credit impaired, the Company and subsidiaries should measure loss allowance for financial assets at an amount equal to lifetime ECL at each reporting date; if the credit risk has not increased significantly since initial recognition, the Company and subsidiaries measure loss allowance for financial assets as 12 month ECL at reporting date.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12 month ECLs are the portion of ECLs that result from default events that are possible within the 12 month after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Company and subsidiaries are exposed to credit risk.

Notes to the Consolidated Financial Statements

ECLs are a probability weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e the difference between the cash flows due to the Company and subsidiaries in accordance with the contract and the cash flows that the Company and subsidiaries expect to receive). ECLs are discounted at the effective interest rate of the financial asset.

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is recognized in other comprehensive income instead of reducing the carrying amount of the asset. The Company and subsidiaries recognize the amount of expected credit losses (or reversal) in profit or loss, as an impairment gain or loss.

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Company and subsidiaries determine that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's and subsidiaries' procedures for recovery of amounts due.

The Company and subsidiaries evaluate the categories and recognizes allowance for doubtful accounts according to the higher of the Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Past Due/Non Performing Loans and the Regulation of Evaluating the Impairment Loss of Loans and Receivables. A bank shall classify credit assets on and off balance sheet. Normal credit assets shall be classified as "Category One." The remaining unsound credit assets shall be evaluated based on the status of the loan collaterals and the length of time overdue. Assets that require special mention shall be classified as "Category Two," assets that are substandard shall be classified as "Category Three," assets that are doubtful shall be classified as "Category Four," and assets for which there is loss shall be classified as "Category Five."

In accordance with aforementioned rules, the minimum loan loss provision and guarantee reserve shall be the sum of 1% of the outstanding balance of Category One credit asset's claim (excluding assets that represent claims against the central and local government in Taiwan), 2% of the balance of Category Two credit assets, 10% of the balance of Category Three credit assets, 50% of the balance of Category Four credit assets, and the full balance of Category Five credit assets.

An impairment loss in respect of a financial asset measured at cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows, discounted at the current market rate of return for a similar financial asset. Such impairment loss is not reversible in subsequent periods.

To improve domestic banks' control and affordability of credit risk exposure in order to mortgage on land and loans to institutions in Mainland Area, FSC issued the letters No. 10300329440 and 10410001840 to require the banks that have business activities in Mainland Area to maintain a loan loss coverage ratio of at least 1.5%.

Notes to the Consolidated Financial Statements

According to the "Guidelines for Handling Assessment of Assets, Loans Overdue, Receivable on Demand and Bad Debts by Insurance Enterprises", the amount of the allowance for bad debts cannot be lower than the amount as follow:

- a) the sum of 0.5% of the first category (other than insurance loans, premium loans and loans to ROC government), 2% of the second category, 10% of the third category, 50% of the forth category and 100% of the fifth category.
- b) 1% of the sum of all credit loans, less, insurance loans, premium loans and loans to ROC government.
- c) the total unsecured portions of nonperforming loans and non accrual receivables.

In accordance with the "Accounting Guidelines for The Delinquent Debt Legal Right Urges to Accept The Payment and The Delinquent Debt Processing" issued by the Directorate General of Budget, Accounting and Statistics, Executive Yuan, the Company will write off the loans and credit when those are authorized and are in conformity with the regulations.

2) Applicable before January 1, 2018

The financial assets with are not measured at fair value through profit or loss shall be assessed for impairment at each reporting date. A financial asset is impaired if, and only if, there is an objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset that can be estimated reliably.

Objective evidence that financial assets are impaired includes default r delinquency by a debtor, restructuring of an amount due to BOT on terms that the Company and its subsidiary would not consider otherwise indications that a debtor or issuers, economic conditions that correlate with defaults, or the disappearance of an active market for a security. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is accounted for as objective evidence of impairment.

Impairment losses and recoveries are recognized in profit or loss, and they are included in statement of comprehensive income.

Impairment losses on available-for-sale financial assets are recognized by reclassifying the losses accumulated in the fair value reserve in equity to profit or loss.

Impairment losses recognized on available-for-sale equity security are not reversed through profit or loss. Any subsequent recovery in the fair value of an impaired available-for-sale equity security is recognized in other comprehensive income, and accumulated in other equity. If, in a subsequent period, the fair value of an impaired available-for-sale debt security increases and the increase can be related objectively to an event occurring after the impairment loss was recognized, then the impairment loss is reversed, with the amount of the reversal recognized in profit or loss.

Notes to the Consolidated Financial Statements

If, in a subsequent period, the fair value of an impaired available-for-sale debt security increases and the increase can be related objectively to an event occurring after the impairment loss was recognized, then the impairment loss is reversed, with the amount of the reversal recognized, in profit or loss.

If, in a subsequent period, the amount of the impairment loss of a financial asset measured at amortized cost decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the decrease in impairment loss is reversed through profit or loss to the extent that the carrying value of the asset does not exceed its amortized cost before impairment was recognized at the reversal date.

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate.

All individually significant receivables are assessed for specific impairment. Receivables that are not individually significant are collectively assessed for impairment by grouping together assets with similar risk characteristics. In assassin collective impairment, the Bank and its subsidiary uses historical trends of the probability of default, the timing of recoveries, and the amount of loss incurred, adjusted for management's judgment as to whether current economic and credit conditions are such that the actual losses are likely to be greater or lesser than those suggested by historical trends.

An impairment loss in respect of a financial asset is deducted from the carrying amount, except for trade receivables, for which an impairment loss is reflected in an allowance account against the receivables. When it is determined a receivable is uncollectible, it is written off from the allowance account. Any subsequent recovery of receivable written off is recorded in the allowance account. Changes in the amount of the allowance account are recognized in profit or loss.

The Company and subsidiaries evaluate the categories and recognizes allowance for doubtful accounts according to the higher of the Regulations of the Procedures for Banking Institutions to Evaluate Assets and Deal with Past Due/Non Performing Loans and the Regulation of Evaluating the Impairment Loss of Loans and Receivables. A bank shall classify credit assets on and off balance sheet. Normal credit assets shall be classified as "Category One." The remaining unsound credit assets shall be evaluated based on the status of the loan collaterals and the length of time overdue. Assets that require special mention shall be classified as "Category Two," assets that are substandard shall be classified as "Category Three," assets that are doubtful shall be classified as "Category Four," and assets for which there is loss shall be classified as "Category Five."

In accordance with aforementioned rules, the minimum loan loss provision and guarantee reserve shall be the sum of 1% of the outstanding balance of Category One credit asset's claim (excluding assets that represent claims against the central and local government in Taiwan), 2% of the balance of Category Two credit assets, 10% of the balance of Category Three credit assets, 50% of the balance of Category Four credit assets, and the full balance of Category Five credit assets.

Notes to the Consolidated Financial Statements

An impairment loss in respect of a financial asset measured at cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows, discounted at the current market rate of return for a similar financial asset. Such impairment loss is not reversible in subsequent periods.

To improve domestic banks' control and affordability of credit risk exposure in order to mortgage on land and loans to institutions in Mainland Area, FSC issued the letters No. 10300329440 and 10410001840 to require the banks that have business activities in Mainland Area to maintain a loan loss coverage ratio of at least 1.5%.

According to the "Guidelines for Handling Assessment of Assets, Loans Overdue, Receivable on Demand and Bad Debts by Insurance Enterprises", the amount of the allowance for bad debts cannot be lower than the amount as follow:

- a) the sum of 0.5% of the first category (other than insurance loans, premium loans and loans to ROC government), 2% of the second category, 10% of the third category, 50% of the forth category and 100% of the fifth category.
- b) 1% of the sum of all credit loans, less, insurance loans, premium loans and loans to ROC government.
- c) the total unsecured portions of nonperforming loans and non accrual receivables.

In accordance with the "Accounting Guidelines for The Delinquent Debt Legal Right Urges to Accept The Payment and The Delinquent Debt Processing" issued by the Directorate-General of Budget, Accounting and Statistics, Executive Yuan, the Company will write off the loans and credit when those are authorized and are in conformity with the regulations.

(ii) Impairment loss of non financial assets

For non financial assets except for the deferred tax asset and asset caused by the employee benefit, the Company and subsidiaries shall assess at the end of each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Company and subsidiaries shall estimate the recoverable amount of the asset. If it is not possible to estimate the recoverable amount of the asset individually, they shall determine the recoverable amount of the cash generating unit to which the asset belongs.

The recoverable amount of an asset or a cash generating unit is the higher of its fair value less costs of disposal and its value in use. If the recoverable amount is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss which shall be recognized immediately in profit or loss.

The Company and subsidiaries assess at the end of each reporting date whether there is any indication that an impairment loss recognized in prior years for an asset other than goodwill may no longer exist or may have decreased. If any such indication exists, the entity shall estimate the recoverable amount of that asset.

Notes to the Consolidated Financial Statements

An impairment loss recognized in prior periods for an asset other than goodwill shall be reverse if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount. The carrying amount of the asset shall be increased to its recoverable amount, but the increased carrying amount of an asset or an cash generating unit other than goodwill attributable to a reversal of the impairment loss shall not exceed the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset or the cash generating unit in prior years.

Notwithstanding whether indicators exist, recoverability of goodwill and intangible assets with indefinite useful lives or those not yet in use are required to be tested at least annually. Impairment loss is recognized if the recoverable amount is less than the carrying amount.

For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash generating units, or groups of cash generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units or group of units.

If the carrying amount of the cash generating units exceeds the recoverable amount of the unit, the entity shall recognize the impairment loss, and the impairment loss shall be allocated to reduce the carrying amount of each asset in the unit.

Reversal of an impairment loss for goodwill is prohibited.

(q) Provision

- (i) The Company and subsidiaries must recognize a provision if, and only if:
 - 1) There is a legal or constructive present obligation as a result of a past event, and
 - 2) Payment is probable, and
 - 3) The amount can be reliably estimated.
- (ii) The amount recognized as a provision should be the best estimate of the expenditure required to settle the present obligation at the balance sheet date. In reaching its best estimate, the Company and subsidiaries shall take into account the risks, uncertainties that surround the underlying events and the time value of the currency.
- (iii) The Company and subsidiaries evaluate the provision at every end of the reporting date, and adjust the carrying amount according to the best estimation.

(r) Other reserves

Provision for civil servants', teachers' and labor's insurance: The bank subsidiary recognizes the surplus of the insurance as provision and withdraws when there is a deficit according to the "Civil Servant and Teacher Insurance Act" and "Guidelines for Management and Employment of Public Servants and Teachers Insurance Reserve".

Notes to the Consolidated Financial Statements

(s) Separate account – insurance instrument assets

The insurance subsidiary is engaged in selling investment linked products. The payment of premiums (net of administrative expense) is recorded in a separate account which shall only be used in a way agreed by the proposer. The assets of separate accounts are valued at market price on the valuation date, and the insurance subsidiary follows the related rules and financial accounting standards in the IFRS to determine the net asset value.

In accordance with the "Regulations Governing the Preparation of Financial Reports by Insurance Companies", the assets and liabilities are recorded as "Assets on insurance product, separated account" and "Liabilities on insurance product, separated account", no matter it is caused by a insurance contract or the insurance contract with financial instrument feature. The revenue and expenses in accordance with the definition of IFRS No.4 (including insurance products, separated account with discretionary participating features) are recorded as "Income on insurance product, separated account" and "Disbursements on insurance product, separated account", respectively.

(t) Insurance liability

Reserves for insurance contracts are provided in accordance with the "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves" and are also certified by an appointed actuary approved by the Financial Supervisory Commission, Executive Yuan, R.O.C. (FSC). Except the reserves for short-term group insurance, the reserve basis shall be based on the greater amount of actual premium income or the premium income as calculated under the Tai Tsai Pao No. 852367814 and other reserve basis listed below:

In addition, partial insurance contracts contain a discretionary participation feature as well as a guaranteed element; the insurance subsidiary classifies the whole contract as a liability rather than recording them separately.

(i) Unearned premium reserve

The unearned premium reserve should be provided based on the unexpired risk for the in force policies with an insurance term of less than one year, the accident insurance with an insurance term of more than one year, and the investment linked insurance and universal insurance agreed to collecting fees periodically based on the calculation in accordance with one year term insurance cost method.

(ii) Claims Reserve:

1) Claim reserves for businesses with less than one year insurance term and for accident insurance with more than one year insurance term shall be provided as follows:

Claim reserves provided for health and life insurance which became effective after January 1, 2010, and accident insurance are set aside using the loss development triangle method based on the previous claim experience. The reserves are respectively provided for "Reported but Not Paid Claims" and "Not Reported and Not Paid". For "Reported but Not Paid Claims", a reserve has been provided on a per policy claim report basis for each type of insurance.

Notes to the Consolidated Financial Statements

2) Claim reserves provided for "Reported but Not Paid claims" derived from investment-linked insurance, universal insurance, and life insurance, health insurance, and annuity insurance with insurance terms more than one year are determined in accordance with actual information on a per-policy-claim-report basis and are respectively set aside for each type of insurance.

(iii) Policy reserve

The provision for policy reserves is based on mortality tables and prescribed interest rates approved by the FSC and calculated based on the modified reserve method in accordance with the Article 12 of the "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves" and other regulations and approved calculation instructions filed with the FSC.

Since 2003, if the dividends of in-force policies are calculated in accordance with Tai Tsai Pao No. 800484251, then the reduction in dividends resulting from the offsetting of mortality margin and interest loss should be provided as long-term policy reserve.

Starting from 2012, the insurance subsidiary should provide the provision of policy reserve for in-force policies to comply with Jin Guan Pao Tsai No. 10102500530 on January 19, 2012. Calculated based on the terms of the "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves," the recovery of the special catastrophe reserve should be provided as policy reserve of life insurance-reversed catastrophe reserve. However, to comply with Jin Guan Pao Tsai No. 10202124790 on November 21, 2013, the insurance subsidiary no longer has to provide the new reserve since 2013.

Starting from 2012, in accordance with the Jin Guan Pao Tsai No. 10102500530 on January 19, 2012 and Article 11 of Value-added and Non-value-added Business Tax Act, a liability reserve based on 3% of sales is provided for purposes of writing off overdue loans or providing allowance for bad debts when the percentage of overdue loans is lower than 1%.

(iv) Special reserve

- 1) For retained business with an insurance period of one year or less, the insurance subsidiary shall set aside the following catastrophe reserve and special risk volatility reserve in accordance with the following provisions:
 - a) Special catastrophe reserve:
 - i) a special catastrophe reserve shall be set aside at the reserve ratio prescribed by the competent authority.
 - ii) upon the occurrence of a catastrophic event, actual retained losses in excess of NT\$(67,296) million may be withdrawn from special catastrophe reserve and shall be reported to the competent authority for recordation.
 - iii) a special catastrophe reserve that has been set aside for more than 15 years can be released based on the evaluation by actuary and calculation methodology approved by the competent authority.

Notes to the Consolidated Financial Statements

- b) Special risk-volatility reserve:
 - i) For each type of insurance, when the balance of actual losses minus the amount reversed from a special catastrophe reserve is lower than expected losses, a special risk-volatility reserve shall be provided at 15 percent of the difference.
 - ii) When the balance of actual losses minus the amount reversed from a special catastrophe reserve is greater than expected losses, the amount in excess of expected losses may be reversed from the special risk-volatility reserve previously provided. If the reserve for special risk-volatility reserve for a particular type of insurance is insufficient to cover losses, the losses may be reversed from the special risk-volatility reserve previously provided for another type of insurance and shall be reported to the competent authority.
 - iii) When cumulative provisions for the special risk-volatility reserve exceed 30 percent of the amount of retained earned premiums for the current year, that portion in excess shall be released and treated as income.

Special reserves shall be set aside every year while the newly provided special reserves (net of taxes determined in accordance with IAS 12 – "Income Taxes") shall be recognized as special reserve under shareholders' equity each year. Also, the withdrawal or the released amount of special reserve (net of taxes determined in accordance with IAS 12 – "Income Taxes") based on the above-mentioned regulations shall offset with special reserves of Special surplus recorded under shareholders' equity.

In addition, according to the Tai Tsai Pao No.0910074195, the insurance subsidiary should provide the special reserve for the withdrawal amount of special risk-volatility reserve (net of taxes), and should be authorized by the competent authority before distributing or using those reserve for other purpose.

- 2) According to the Tai Tsai Pao No.0910712459, BTLI should recognize the special reserves for the participating insurance policy and write off the reserves when the bonuses are declared.
- 3) According to the Jin Guan Pao Shou No.10302125060, if the result of the insurance profit testing is negative, BTLI should recognize the special reserves according to the related operating principles.

(v) Premium deficiency reserve

For life insurance, health insurance, or annuities with an insurance term over one year, and polices issued after January 1, 2001, a deficiency reserve is provided when the actual premium written is less than the premium on the policy reserve prescribed by the competent authority.

In addition, the Company shall evaluate expected future claims and expenses for in-force contracts with contract term less than one year and for accident insurance contracts with terms over one year, and if the amount exceeds unearned premium reserve and expected future premium income, a premium deficiency reserve should be provided for the difference.

Notes to the Consolidated Financial Statements

(vi) Liability adequacy reserve

BTLI shall assess at the end of each reporting period whether its recognized insurance liabilities recognized by BTLI are adequate are adequate, using current estimates of future cash flows under its insurance contracts. BTLI's liability adequacy test is based on all insurance contracts that BTLI issues and adheres to Actuarial Practice Guidance of IFRS 4 "Contracts Classification and Liability Adequacy Test" and its related regulations issued by The Actuarial Institute of the Republic of China. The test is conducted on each balance sheet date by comparing the net carrying amount of its insurance liabilities less related acquisition costs and intangible assets and current estimates of future cash flows under its insurance contracts. If the assessment shows that the net carrying amount is inadequate in the light of the estimated future cash flows, the entire deficiency shall be recognized in loss as liability adequacy reserve.

Policy reserve and premium deficiency reserve are discounted using the pre-decided rate, liability adequacy reserve are discounted using the best-estimate for the return on investment, based on current information. However, unearned premium reserve, claim reserve and special reserve are not discounted.

(u) Reserve for foreign exchange valuation

In accordance with "Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises", starting on March 1, 2012, BTLI should set up a reserve for foreign exchange valuation under liabilities for their foreign investments. In addition, BTLI transfers some of the special reserve to the reserve for foreign exchange valuation as the opening balance. The maximum amount may not exceed half of the special reserve for significant incidents and the special reserve for risk volatility of various insurance types recorded under the liabilities as of December 31, 2011.

The accumulated limit, provision, and offsetting of the reserve are as follows:

- (i) Limit of provision: the total amount of its foreign investment assets in the current month times the exposure ratio times 0.05% equals the provision. If any, the foreign exchange gain from the non hedged foreign currency assets times 50% equals the additional provision.
- (ii) Limit of offsetting: If any, the foreign exchange loss from the non-hedged foreign currency assets times 50% equals the reverse amount of this reserve. The balance of this reserve at the end of each month shall not be less than the 20% of the accumulated balance of this reserve last year.
- (iii) If the current balance of the reserve decreased to 20% (the lower limit) of that of the prior year end and last for more than 3 months, the ratio of setting aside non-hedging foreign assets profit shall increase to 70% until the balance bounces back third as high as the lower limit.
- (iv) The definitions of the amount of "overseas investment", "exposure ratio", "non-hedge asset dominated in foreign currency", and "hedging cost" are in accordance with Article 2 and 3 of the "Regulation Governing the Setting Aside of Various Reverses by Insurance Enterprise".

Notes to the Consolidated Financial Statements

- (v) BTLI shall provide the same amount as the reduction of hedging cost attributable to the application of this rule as special earnings reserve each year. If BTLI does not have enough retained earnings for the reserve in the current year, BTLI shall compensate for the insufficient amount in the following year when it has earnings. The amounts provided as the special earnings reserve shall only be used to increase the capital or to offset the accumulated deficit in the subsequent periods.
- (vi) If there are earnings after tax in the current year, 10% of the earnings amount should be provided as special earnings reserves. However, BTLI may not provide such reserves if the regulatory authority approves.

(v) Future trader's equity

The future trader's equity is the future's margin and premium from future traders, plus, the daily market value of the future. It is allowed to offset accounts, if, and only if, they belong to the same client and same type. If the margin account is a debit balance, then a margin call is made and the account owner must replenish the margin account.

(w) Revenue and operating expense recognition

Revenue is measured based on the consideration to which the Company and subsidiaries expect to be entitled in exchange for transferring goods or services to a customer. The Company and subsidiaries recognize revenue when it satisfies a performance obligation by transferring control of a good or a service to a customer.

(i) Applicable from January 1, 2018

1) Subsidiary, BOT:

- a) Revenue is the gross inflow of economic benefits during the period arising in the course of the ordinary operating activities of an entity when those inflows result in increases in equity, other than increase relating to contributions from equity participants.
- b) The amount of revenue arising on a transaction is usually determined by agreement between the entity and the buyer or user of the asset. It is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts and volume rebates allowed by the entity. Revenue shall be recognized when all of the following criteria have been satisfied:
 - i) the seller has transferred to the buyer the significant risks and rewards of ownership.
 - ii) it is probable that the economic benefits associated with the transaction will flow to the seller
 - iii) the costs incurred or to be incurred in respect of the transaction can be measured reliably,

Notes to the Consolidated Financial Statements

- iv) the seller retains neither continuing managerial involvement to degree usually associated with ownership nor effective control over the goods sold, and
- v) the amount of revenue can be measured reliably.
- c) Except for the financial assets and liabilities at fair value through profit and loss, the interest revenue and interest expense caused by the interest-bearing financial assets or liabilities are calculated by effective interest method. For loans and receivables, the Company and subsidiaries shall consider the materiality principle to decide to measure the interest by agreed interest rate or effective interest rate.

d) Service fee income

- i) The service fee income arising from offering loan service or other services shall be recognized in the accounting period in which the services are rendered.
- ii) The service fee or expense arising from the loan service shall be amortized in the service period or taken into account for calculating the effective interest of loans and receivables in accordance with the materiality principle.
- e) Dividend revenue: it shall be recognized if and only if the Company and subsidiaries have right to receive the dividend revenue.
- f) According to the "Civil Servant and Teacher Insurance Act", if GESSI experiences a loss, the loss before May 31, 1999, would be covered by the Ministry of Finance; and the loss after that date would be covered by an adjustment of the insurance premium.
- g) Revenue and expense that relate to the same transaction or other event are recognized simultaneously; this process is commonly referred to as the matching of revenue and expense.

2) Subsidiary, BTLI:

a) Premium revenue recognition and policy acquisition costs

First-year and renewal premiums of insurance contract and financial instruments with discretionary participation features are respectively recognized as income when premiums are received and the policies are approved or due. Acquisition costs, including commissions and other costs related to acquiring new business, are recognized as expenses as incurred.

Premiums collected from the financial instruments without discretionary participation features under insurance product, separated account shall be recognized as premium income to the extent of insurance component. The remaining, after being subtracted by other revenues, including upfront fee or investment management service fee income, shall be fully recognized as "Liabilities on insurance product, separated account" on the balance sheet.

Notes to the Consolidated Financial Statements

Investment management service fee income is recognized as revenue when received. However, under the circumstance that the Company is obligated to provide future services for the service fee received (such as up-front fee) the revenue recognition shall be deferred as "unearned revenue liability" until the services are provided and amortized using the straight-line method over the passage of service period as "fee income." Furthermore, the incremental transaction cost paid due to investment management services provided for these insurance contracts (including commission fee and overriding) shall be deferred to match its corresponding unearned revenue liability as "deferred acquisition cost" and amortized using the straight-line method over the passage of service period as other operating costs.

In accordance with the recognition and calculation principles provided in the "Life Insurance Industry Accounting System Guidance," the Company determines whether to recognize the unearned revenue liability and the deferred acquisition cost based on the design of the insurance products and the comparison of service revenue received and service cost incurred.

b) Interest revenue

The interest revenue derived from bank deposit, loans, and bonds investments are accounted on an accrual basis. For the over-due receivables, the interest will not be recognized as revenue until they are received.

c) Lease income

Lease income from operating lease is recognized in profit or loss on a straight basis over lease term. Incentives granted to the lessee to enter into the operating lease are spread over the lease term on a straight-line basis so that the lease income received is reduced accordingly.

3) The Subsidiary, BTS

- a) Brokerage commissions, profit or loss from the sale of securities, and the relevant charges are recognized on the trade date.
- b) Interest income or expenses of margin loans, securities financing and refinancing and bonds purchased under agreement to resell and sold under agreement to repurchase are recognized during the transaction periods on an accrual basis.
- c) Consulting revenue and underwriting business revenue and expense are recognized according to agreements on an accrual basis.
- d) While offering future exchange supporting business, the future commission revenues received from futures commission merchants are recognized during transaction period on accrual basis.
- e) The disposal profit and loss of equity investments measured through fair value are recognized on transaction date.

Notes to the Consolidated Financial Statements

- f) Profit or loss of future: The future margin is recognized at cost. Futures are measured through market price method every day. The valuation and disposal profit or loss shall be recognized in the income statement. The related brokerage fees shall be recognized at the trading date.
- g) The profit or loss of options: The margin is recorded at cost. Options are evaluated using market price method every month before they are exercised. The valuation profit or loss and the disposal profit or loss shall be recognized in the income statement.
- h) Interest revenue is calculated using the effective interest rate method.

(ii) Applicable before January 1, 2018

Except the following policies applicable before January 1, 2018, other policies remain unchanged from January 1, 2018.

- 1) Revenue is only recognized to the extent that it is highly probable that economic benefits will flow to the Company and subsidiaries and the amount of revenue be measured reliably.
- 2) Revenue from services rendered is recognized in profit or loss in proportion to the stage of completion of the transaction at the reporting date.

(x) Employee benefit

(i) Short-term employee benefit

The payroll, annual bonus, paid annual leave, interest expense arising from preferential interest rate and non-monetary benefit are recognized in the accounting year in which the services are rendered by employees.

(ii) Pension

1) Employee pension:

The grant of employees' pension compromise: a) the contributions made by the Bank at the rate from 4% to 8.5% of the employee's monthly wage (depending on the employee's 'salary point' and service period before the Labor Standards Act was applied) and the contributions made by the employee at the rate of 3% of his or her monthly wage under Article 9 and Article 8, respectively, of the aforementioned regulations. (The Bank ceased to continue the contributions mentioned above after the Labor Standards Act was applied.) The Bank also contributed 3% of the total amount of the wages as reserve. ;b) the contributions calculated based on the employee's monthly wage and service period (after May 1, 1997) in accordance with Article 41.1 and the related regulations set forth in the Labor Standards Act. All the contributions are made to the fund managed by the Pension Supervision Committee for future payments.

Notes to the Consolidated Financial Statements

2) Labor pension:

Labor Pension is a defined contribution pension plan. The grant of labors' pension is conducted under the Bank's Work Rules before the Labor Standards Act was applied. Under the Article 73 of the Rules, the service period before and after May 1, 1997 is accumulated in accordance with the Rules and the Labor Standard Act, respectively. The contributions calculated at a certain rate under Labor Pension are made to a designated Labor Retirement Reserve Account for future payments. In addition, the Bank is required to allocate 6% of each employee's monthly wages to the labor pension personal account at the Bureau of the Labor Insurance in accordance with the provisions of the Labor Pension Act, effective July 1, 2005.

- 3) For defined contribution plan, the employer has no further legal or constructive obligation to pay further contributions in accordance with the Labor Pension Act.
- 4) For the definite benefit plan, the independent actuary uses the projected unit credit method to calculate the present value of the defined benefit obligation and the current service cost. The present value of the defined benefit obligation is the projected future cash flow discounted by the market yields at the end of the reporting period on the bonds that have maturity dates approximating the terms of the obligation and that are denominated in the same currency in which the benefits are expected to be paid. The actuarial gains and losses are recognized in the other comprehensive income when they occur. Prior period servicing costs should recognize in profit or loss immediately. The prior period's service costs which are due to the modification of retirement plan are currently recognized as personnel expenses in profit or loss.
- 5) The oversea branches of the bank subsidiary follow the foreign government's regulations.

(iii) Preferential interest deposits

- 1) The Company and subsidiaries provide their employees the preferential interest deposits, including that for current employees and retired employees. The difference between the preferential interest rate and the market rate are the employee benefit.
- 2) In accordance with the Regulations Governing the Preparation of Financial Reports by the Financial Holding Companies, if the preferential interest rate for retired employees exceeds the market rate, the Company and subsidiaries shall calculate the excess interest using the actuarial method by adopting the IAS 19 when the employees retire. However, the actuarial assumptions shall follow the government's related regulations. For the preferential interest deposits paid for current employees, the Company and subsidiaries shall calculate the interest monthly on accrual basis. The different amount of the preferential interest rate and market interest rate is recognized under the preferential interest account in the comprehensive Income statement.
- As from July 1, 2018, the Company and subsidiaries terminate the preferential interest deposits for retired employees, in accordance with the rule Tai Tsai Ku No.10700624450 issued by the Ministry of Finance.

Notes to the Consolidated Financial Statements

(iv) Civil servant and teacher insurance excess annuity benefit plans

According to the "Civil Servant and Teacher Insurance Act" (the CSTI Act) that took effect on May 29, 2015 and Tui Yi Zi No. 10440257582 issued by the Ministry of Finance, BTLI's employees who are not qualified for preferential interest deposits are entitled to receive annuity when retiring or getting laid off if they meet the requirements prescribed in Article 16 and 18 of the CSTI Act. The sum of the monthly payments from this annuity and the total amount of the defined benefit plan shall not exceed 80% of twice the amount of the employee's salary at the time of retirement. Moreover, if the payment rate of the annuity is lower than the basic rate of annuity (0.75%), the annuity will be calculated using the latter rate. However, if the payment rate is higher than the upper limit (1.3%), the annuity is calculated based on 1.3%. BTLI is responsible for the portion of the annuity payments that exceeds 0.75% and the calculation is reviewed by the insurance carrier (Department of Government Employees' Insurance, Bank of Taiwan) on a monthly basis in accordance with the CSTI Act.

(v) Other employee's retirement benefits

- 1) Include three Chinese festival gifts, survivors benefit, and special benefits to retired employees who were paid pension in early times.
- 2) It belongs to the definite benefit plan, and the independent actuary uses the projected unit credit method to calculate the present value of the defined benefit obligation and the current service cost. The present value of the defined benefit obligation is the projected future cash flow discounted by the market yields at the end of the reporting period on the bonds that have maturity dates approximating the terms of the obligation and that are denominated in the same currency in which the benefits are expected to be paid. The actuarial gains and losses are recognized in the other comprehensive income when they occur.

(y) Income tax

Income tax expenses include both current taxes and deferred taxes. Except for expenses related to business combinations or recognized directly in equity or other comprehensive income, all current and deferred taxes shall be recognized in profit or loss.

(i) Current income tax

Current taxes include tax payables and tax deduction receivables on taxable gains (losses) for the year calculated using the statutory tax rate on the reporting date or the actual legislative tax rate, as well as tax adjustments related to prior years.

Notes to the Consolidated Financial Statements

(ii) Deferred Tax

When measuring the deferred tax asset and deferred tax liability, the Company and subsidiaries shall use the enacted tax rate for the periods in which deferred tax asset or deferred tax liability are expected to be settled or realized. Due to the temporary difference between the carrying amount of the asset or liability in the consolidated financial report and the tax basis, the deferred income tax is recognized. The main temporary differences are resulted from the valuation of part financial instruments (including derivatives), pension and the reserves of other retirement benefits. If the temporary differences are arising from goodwill or original recognition of other assets and liabilities (excluding the merger) and the transaction does not affect the taxable income and the accounting income, it will not be recognized as deferred tax asset or deferred tax liabilities.

The deferred tax liability shall be recognized for all taxable temporary differences. But the deferred tax asset can only be recognized when there is enough taxable income for deductable temporary differences.

The temporary difference related to the investments in subsidiaries, branches and associates shall be recognized as deferred income liability. If the parent company can control the time to reverse the temporary difference and the temporary difference will probably not be reversed in the foreseeable future, the temporary difference is not recognized.

(z) Earnings per share

Basic earnings per share: The earnings per share is computed by dividing the net income or loss by the weighted average number of common stocks outstanding over the reporting term.

(aa) Operating segments

An operating segment is a component of the Company and subsidiaries that engage in business activities that can generate revenues and expenses (including the revenues and expenses arising from inter-company transactions). The segments' operating results are reviewed regularly by the Company's and subsidiaries' chief operating officer in order to decide the resource allocation and assess the segments' performance. Each segment has separate financial information.

(ab) Due from Representative Organization

According to Military Insurance Act, the BTLI engages in the military insurance business and the related transactions are recorded in due from representative organization based on military insurance accounting requirement. Charges from military insurance business are recorded as fee income, and the agent fee from other institutions on behalf of the company to collect premiums and to release of benefit payments are recorded as expenses. Moreover, funding for military insurance is kept by BTLI, and the interest is paid and recorded as interest expense.

However, according to the amendment of Military Insurance Act and the official letters issued by Ministry of National Defense on March 19, 2018, the military reserve which was kept by the BTLI is now returned to Ministry of National Defense and is transmitted to military insurance reserve account on April 2, 2018.

Notes to the Consolidated Financial Statements

(5) Significant Accounting Assumptions and Judgments, and Major Sources of Estimation Uncertainty:

The preparation of the financial statements, in conformity with the Regulations Governing the Preparation of Financial Reports by Financial Holding Companies, and the International Financial Reporting Standards, the International Accounting Standards and IFRS interpretation endorsed by the Financial Supervisory Commission R.O.C. ("FSC"), requires management to make judgments, estimates and assumptions that affect the application of the accounting policies and the reported amount of assets, liabilities, income and expenses. Actual results may differ from these estimates.

The management continued to monitor the accounting assumptions, estimates and judgments. It recognized the changes in the accounting estimates during the period and the impact of the changes in the accounting estimates in the next period.

Determination of the book value of the assets and the liabilities were influenced by the accounting estimations and judgments that have the most significant effects on the amounts recognized in the consolidated financial statements. Actual results may significantly differ from the followings due to the changes in accounting assumptions and judgments.

(a) The fair value valuation of non active market or non quoted financial instruments

The fair value of non active market or non quoted financial instruments is determined using valuation techniques. Such fair value is based on observable data of similar financial instruments or valuation model. If there are no observable market parameters, the fair value of financial instruments is evaluated based on appropriate assumptions. If fair value is determined by the valuation model, the model is calibrated to ensure that all output data and the results reflect the actual market price. This valuation model use only observable data as much as possible. But for credit risk (both our own and the contracting parties credit risk), the managements shall estimate the relation and the variation.

(b) The evaluation of financial assets impairments

(i) Applicable from January 1, 2018

The financial asset impairments of the Company and subsidiaries (including guarantees and loan commitiments off balance sheet), measuring the loss allowance at an amount equal to 12 month expected credit losses or lifetime expected credit losses, are determined by whether the credit risk of the financial instruments have increased significantly since initial recognition. In order to measure expected credit losses, the Company and subsidiaries consider the probability of default ("PD") of financial asset, issuer or counterparty, and include loss given default ("LGD") multiplied by exposure at default ("EAD"). Meanwhile, it also considers the impact of the time value of money to calculate the expected credit losses for 12 month and lifetime, respectively. At every reporting date the historical experience, current market situation and forward looking estimates, etc. are considered by the Company and subsidiaries to determine the adopted assumptions and parameters when calculating impairment.

Notes to the Consolidated Financial Statements

(ii) Applicable before January 1, 2018

1) Available for sale securities

The Company and subsidiaries are required to assess whether there is any objective evidence of impairment. The objective evidence includes a significant or prolonged decline in its fair value, a significant financial difficulty of an issuer or debtor, default, indications that a debtor or issuer will enter bankruptcy or financial reorganization and so on.

2) Financial assets carried at amortized cost

If any such evidence exists, the insurance subsidiary is required to determine whether an impairment loss should be recognized. The aforementioned evidence is usually as below:

- a) Significant financial difficulty of the issuer/obligor.
- b) Default or breach of contract such as a default or delinquency in interest or principal payments.
- c) Granting of a concession by the lender.
- d) Bankruptcy or financial reorganization of the borrower.
- e) Disappearance of an active market for the assets concerned.
- f) Adverse effects of changes in technological, market, economic or legal environment, in which the issuer operates.
- g) Significant or prolonged decline in the fair value of an investment in the equity instrument.

The management uses estimates based on historical loss experience for assets with credit risk characteristics and objective evidence of impairment similar to those in the portfolio when estimating expected future cash flows. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly in order to decrease the difference between estimated loss and actual loss.

The inherent risks of the impairment evaluation for any financial assets include the following.

- a) The actual result in the market may differ from the expectation,
- b) The event and the condition may change in the future and differ from the original estimations and assumptions, or
- c) The Company and subsidiaries may decide to sell its related assets due to the changes in condition in the future.

Notes to the Consolidated Financial Statements

(c) Insurance liability and reserve of insurance policy with financial instrument nature

BTLI measures insurance liabilities based on the "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves."

Reserves for life insurance are accrued using the lock in interest rate assumptions at issue for reserves provision instead of the current market rate.

Unearned premium reserves are calculated by each insurance unexpired risk. The methods of reserve provision are determined by actuaries about each insurance characteristic.

Claims reserve is estimated based on the loss of accrued triangle method. The major assumptions are loss development factors and expected claims rate; hence, it results in ultimate claims costs. The loss development factors and expected loss rates are based on BTLI's historical claims experiences, and it also considers expense rates, claims management and other corporation's policy adjustments.

Liability Adequacy Test is estimated based on "Code of Conduct of Actuarial Practice Under the Statements of Financial Accounting Standards No 40 — Contracts Classification and Liability Adequacy Test" announced by the Actuarial Institute of the Republic of China. BTLI evaluates liability adequacy test using future insurance benefits, premiums, related fees and other reasonable estimates for the current estimates of future cash flows under its insurance contracts. Please refer note 6(z) for further information.

During the assessment process of liabilities, the use of professional judgment will affect the financial statements regarding the net change in claim liability, insurance contract reserves net change with the nature of financial, and the recognized amounts of the aforementioned.

(d) Impairment loss on credit assets

BOT and BTLI review loan portfolios to assess impairment periodically. In determining whether an impairment loss should be recorded in the income statement, BOT and BTLI make judgments as to whether there is any observable data indicating a measurable decrease in the estimated future cash flows from a portfolio of loans before the decrease can be identified with an individual loan in that portfolio. This evidence may include observable data indicating that there has been an adverse change in the payment status of borrowers (e.g. payment delinquency or default), or economic conditions that correlate with defaults on assets. The management uses estimates based on historical loss experience for assets with credit risk characteristics and objective evidence of impairment similar to those in the portfolio when estimating expected future cash flows. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly in order to decrease the difference between estimated loss and actual loss.

For the valuation of impairment loss of loans and discounts, please see note 6(g).

Notes to the Consolidated Financial Statements

(e) Fair value of investment property

In addition to the aforementioned policies which may have a material impact on the amounts recognized by the Company and subsidiaries, there are other accounting policies that also involved significant judgment.

(i) Income tax

The Company and subsidiaries need to pay income tax for various countries. When estimating the globe income tax, the Company and subsidiaries rely on significant accounting estimations. Determine the final tax amount need to go through numerous transactions and calculations. The additional recognition of income tax liability which is related to the tax issue is based on deliberate evaluation of the affection by the issue. The difference between the amount of original estimation and the final amount will affect current income tax and deferred tax.

(ii) Payments to defined contribution retirement benefit plans

The present value of retirement benefit obligation is based on several actuarial assumptions (including the decisions made by Financial Supervisory Commission, R.O.C.). Any changes on these assumptions will influence the fair value of the retirement benefit obligations. One of the assumptions used to determine net pension cost (income) is the discount rate. The Company and subsidiaries determined the appropriate discount rate at the end of each year, and used the rate to calculate the present value of future cash flows on estimated payment of retirement benefit obligation. To determine the appropriate discount rate, the Company and subsidiaries should consider the followings: (1) interest rate of high quality corporate bonds or government bonds, (2) the currency used for the corporate bonds or government bonds should be inconsistent with the currency used for retirement benefit payments, (3) and the maturity period should be inconsistent with related pension liability periods.

(iii) Classification of insurance policy and significant risk transfer test

BTLI is required to recognize insurance risks, other risks and other elements of the issued insurance policies, and determine whether the elements of these contracts can be split and separately calculated and whether the results will affect the classification of insurance contracts.

In addition, BTLI shall determine whether the insurance transfer insurance risk exists and contains a nature of business, as well as whether the transfer of insurance risk is materially significant. BTLI also makes a significant insurance risk transfer test and the judgments of the test results will affect the classification of insurance contracts.

Identification and separation of the insurance contracts elements and the classification of the insurance contracts will affect BTLI's revenue recognition, liabilities measurements and presentation of the financial statements.

Notes to the Consolidated Financial Statements

(iv) Reinsurance reserves

Reinsurance reserve assets include ceded unearned premium reserve, ceded Claims reserve, ceded Premium deficiency reserve and ceded Liability adequacy reserve. They shall be estimated according to the "Regulations Governing Insurance Enterprises for Setting Aside Various Reserves" and the "Directions Concerning Compliance with Application of Reinsurance Business" with Over One Year by Life Insurance Enterprises which Recognize Receded Liability Reserves at the Balance Sheet".

The actuary uses the actuarial principles and related assumptions to estimate the reinsurance reserves. The actuarial assumptions include the characteristics of insurances, the historical claims, the loss development factors, the expected claim rate and the estimated future cash flow. The actuary's professional judgments will affect the recognized amount of the net change of insurance liabilities and reinsurance reserves.

(6) Explanation of Significant Accounts:

(a) Cash and Cash Equivalents

	December 31,		December 31,
		2018	2017
Cash on hand	\$	12,838,229	12,522,363
Foreign currency on hand		12,744,005	12,051,213
Bank deposits		6,801,426	18,159,139
Notes and checks for clearing		9,914,126	9,980,049
Placement with banks		130,389,598	123,789,489
Cash equivalents		21,504	28,137
Less: Allowance for bad debts – placement with banks		(20,968)	
Total	\$	172,687,920	176,530,390

The balance of cash and cash equivalents presented in the statements of cash flows were as follows:

	Ι	December 31, 2018	December 31, 2017
Cash and cash equivalents in consolidated balance sheets	\$	172,687,920	176,530,390
Placement with Central Bank of R.O.C. and other banks that meet the definition of cash and cash equivalents under the definition of IAS 7		162,126,076	274,645,417
Investments qualifying cash and cash equivalents under the definition of IAS 7	_	582,624,837	667,104,979
Total	\$ _	917,438,833	1,118,280,786

The Company and subsidiaries assess the loss allowance for cash and cash equivalents by using the expected credit loss model. Due to the low credit risk of cash and cash equivalents, loss allowance is recognized based on 12 month expected credit loss.

Notes to the Consolidated Financial Statements

The reconciliation of the balance of cash and cash equivalents between December 31, 2018 and 2017 was as follows:

	January 1, 2018
Cash and cash equivalents classified as financial assets carried at cost under IAS 39	\$ 176,530,390
Effects of retrospective application due to adoption of IFRS 9	(14,581)
Cash and cash equivalents classified as financial assets carried at cost under IFRS 9	176,515,809
Placement with Central Bank of R.O.C. and other banks that meet the definition of cash and cash equivalents under the definition of IAS 7	274,645,417
Investments qualifying cash and cash equivalents under the definition of IAS 7	667,104,979
Total	\$ <u>1,118,266,205</u>

(b) Placement with Central Bank and Call Loans to Banks

	D	ecember 31, 2018	December 31, 2017
Call loans to banks	\$	130,191,705	248,949,224
Less: allowance for doubtful accounts—call loans to banks		(55,833)	(58,446)
Deposit reserve – account A and account B		108,000,510	96,973,952
Deposit reserve – foreign – currency deposits		720,060	675,337
Deposits in Central Bank—oversea branches		2,779,045	2,436,464
Deposits in Central Bank		293,495,362	326,527,879
Total	\$	535,130,849	675,504,410

- (i) According to the Central Bank of the Republic of China Act and the Banking Act, the deposit reserves are determined monthly at prescribed rates based on the average balances of customers' New Taiwan Dollar denominated deposits. The account B deposit reserve is subject to withdrawal restrictions, but reserve for account A and foreign currency denominated deposit may be withdrawn anytime and are non interest earning.
- (ii) Additionally, as of December 31, 2018 and 2017, 60% of the reserve deposits collected by the subsidiary, BOT, on behalf of a government institution amounting to \$4,295,362 thousand and \$4,015,405 thousand, respectively, were deposited in the Central Bank and their use is restricted according to the regulations.

Notes to the Consolidated Financial Statements

- (c) Financial Assets Measured at Fair Value through Profit or Loss
 - (i) Financial assets measured at fair value through profit or loss were as follows:

		December 31, 2018	December 31, 2017
Financial assets designated at fair value through profit or loss	\$	15,556,919	16,419,807
Add: Valuation adjustment	_	(91,199)	196,998
Subtotal	_	15,465,720	16,616,805
Financial assets mandatorily measured at fair value through profit or loss		239,736,393	
Add: Valuation adjustment	_	15,419,152	
Subtotal		255,155,545	
Financial assets held for trading			182,672,185
Add: Valuation adjustment			39,037,540
Subtotal	_		221,709,725
Total	\$_	270,621,265	238,326,530

(ii) Details of Financial assets designated at fair value through profit or loss were as follows:

	De	ecember 31, 2018	December 31, 2017
Government bonds, corporate bonds, financial bonds and others	\$	15,556,919	16,419,807
Add: Valuation adjustment		(91,199)	196,998
Total	\$	15,465,720	16,616,805

Notes to the Consolidated Financial Statements

(iii) Details of Financial assets mandatorily measured at fair value through profit or loss were as follows:

	December 31, 2018
Commercial papers	\$ 38,969,252
Stocks and beneficiary certificates	171,275,762
Corporate bonds	946,597
Convertible bonds	3,969,775
Financial bonds	5,941,500
Negotiable certificates of deposits	15,502,549
Foreign bonds	3,061,372
Foreign exchange call options	1,843
Bond futures margin	408
Currency futures	5,611
Commodity futures margin	61,724
Add: Valuation adjustment—Non derivative financial instruments	8,886,161
Valuation adjustment – Swaps	5,964,877
Valuation adjustment – Interest rate swaps	384,341
Valuation adjustment — Forward foreign exchange	157,825
Valuation adjustment – Asset swaps (note)	25,483
Valuation adjustment — Foreign exchange call options	537
Valuation adjustment - Commodity futures	(72)
margin	
Total	\$ <u>255,155,545</u>

Note: The fix rate of financial bonds issued by BOT converted interest rate swaps of floating interest rate.

Notes to the Consolidated Financial Statements

(iv) Details of financial assets held for trading were as follows:

	D	ecember 31, 2017
Commercial papers	\$	26,396,634
Stocks and beneficiary certificates		143,241,137
Corporate and financial bonds		224,925
Foreign government bonds		221,284
Foreign exchange call options		637,973
Structured time deposits		19,675
Value of asset swap IRS contracts		1,682
Negotiable certificates of deposits		240
Asset swap options		11,900,498
Currency futures margin		28,137
Add: Valuation adjustment - Non derivative financial instruments		30,766,106
Valuation adjustment—Cross currency swaps		127,700
Valuation adjustment — Swaps		7,267,905
Valuation adjustment—Interest rate swaps		270,152
Valuation adjustment – Forward foreign exchange		412,637
Valuation adjustment – Fixed rate commercial papers		21
Valuation adjustment – Asset swaps (note)		190,179
Valuation adjustment – Foreign exchange call options		3,763
Valuation adjustment - Value of asset swap IRS contracts		(1,075)
Valuation adjustment — Asset swap		152
Total	\$ _	221,709,725

Note: The fix rate of financial bonds issued by BOT converted interest rate swaps of floating interest rate.

Notes to the Consolidated Financial Statements

(v) Details of unexpired derivative financial instruments (Notional principal amount) were as follows:

	D	ecember 31, 2018	December 31, 2017		
Foreign exchange call options	\$	378,906	2,024,129		
Swaps		740,244,839	481,168,404		
Interest rate swaps		19,032,894	19,386,069		
Forward foreign exchange		26,611,032	37,639,781		
Fixed rate commercial paper		-	500,000		
Asset swaps		4,702,455	26,890,080		
Cross currency swaps		-	1,344,220		
Value of asset swap IRS contract		-	28,000		
Asset swap options		-	4,000		
Commodity futures		4,207			
Total	\$	790,974,333	568,984,683		

- (vi) For details of the valuation of the financial assets measured at fair value through profit or loss, please see note 7, "The Fair Value and Fair Value Hierarchy of the Financial Instruments".
- (vii) Profit and loss on investments, please refer to note 6(aj).
- (viii) As of December 31, 2018, the Company's and subsidiaries' financial assets at fair value through profit or loss neither served as a guarantee or collateral, nor were they pledged.
- (ix) The financial assets related to the investing activities of the issued insurance contracts to which BTLI designates to apply the overlay approach are listed as follows:

	December 31, 2018		
Financial assets at fair value through profit or loss:		_	
TSEC and TPEX stocks	\$	9,591,574	
Exchange Traded Funds		4,045,091	
Beneficiary certificates		2,500,259	
Real estate securitization		1,483,897	
Foreign stocks		694,263	
Foreign exchange traded funds		5,229,266	
Foreign mutual funds		856,168	
Financial bonds		6,115,685	
Foreign bonds		2,541,346	
	\$_	33,057,549	

Notes to the Consolidated Financial Statements

The amount reclassified between profit or loss and other comprehensive income of these designated financial assets applying the overlay approach is as follows:

	2018
Losses reported in profit or loss for applying IFRS 9	\$ (258,950)
Less: gains reported in profit or loss if applied IAS 39	 1,361,080
Losses on reclassification under the overlay approach	\$ (1,620,030)

Due to the overlay approach adjustments, gains (losses) on financial assets at fair value through profit or loss decrease from \$(7,402,150) thousand to \$(5,782,120) thousand.

Dagamban 21

(d) Financial Assets at Fair Value through Other Comprehensive Income

	D	ecember 31, 2018
Debt instruments measured at fair value through other comprehensive income:		
Negotiable certificates deposits	\$	852,920,000
Government bonds		57,276,878
Financial bonds		10,270,982
Corporate bonds		41,919,570
Financial asset securitization beneficiary certificates		500,000
Foreign government bonds, corporate bonds, financial bonds, and NCDs		80,415,018
Add: Valuation adjustment		731,930
Subtotal		1,044,034,378
Equity instruments measured at fair value through other comprehensive income:		
TSEC and TPEX stocks		43,115,063
Add: Valuation adjustment		40,652,566
Subtotal		83,767,629
Total	\$	1,127,802,007

(i) Debt investments at fair value through other comprehensive income

The Company and subsidiaries have assessed that the securities shown above are held within a business model whose objective is achieved by both collecting the contractual cash flows and selling securities; therefore, they have been classified as debt investments at fair value through other comprehensive income on January 1, 2018.

Notes to the Consolidated Financial Statements

(ii) Equity investments at fair value through other comprehensive income

The Company and subsidiaries designated the investments shown above as equity securities as at fair value through other comprehensive income because these equity securities represent those investments that the Company and subsidiaries intend to hold for long term for strategic purposes.

- 1) As of December 31, 2018, the dividends of \$3,318,374 thousand, related to equity investments at fair value through other comprehensive income held on December 31, 2018, were recognized. In addition, the dividends of \$5,253 thousand, related to the investments derecognized was recognized in 2018.
- 2) As of December 31, 2018, the Company and subsidiaries sold its equity instruments measured at fair value through other comprehensive income as a result of adjustment in investment position and portfolio management. The equity instruments sold had a fair value of \$1,592,311 thousand and the Company and subsidiaries realized a loss of \$256,163 thousand, which was already included in other comprehensive income. The loss has been transferred to retained earnings.
- (iii) Profit and loss on investments, please refer to 6(al).
- (iv) As of December 31, 2018, the Company and subsidiaries' financial assets at fair value through other comprehensive income were used as collateral, please refer to 11.
- (e) Hedging Derivative Financial Instruments

The content of hedging asset is as follows:

	December 31, 2018	December 31, 2017	
Fair value hedges:			
Interest rate swap	\$41,693	22,759	
The content of hedging liability is as follows:			
	December 31, 2018	December 31, 2017	
Fair value hedges:			
Interest rate swap	\$ <u>12,973</u>	60,480	

Notes to the Consolidated Financial Statements

In order to decrease the fair value volatility caused by changes of market interest rate, the Company and subsidiaries use interest rate swaps and asset swaps for dome debt investments with fixed interest rate. In doing so, the risk exposure position will calculated by floating interest rate and the interest rate risk will be hedge.

	Hedging	Hedging Investments Fair Value				
Hedged Item	Designated Hedging Instruments	Dec	ember 31, 2018	December 31, 2017		
USD financial bonds	interest rate swap	\$	32,993	7,775		
USD corporate debts	"		3,954	6,035		
USD government debts	"		(8,227)	(51,531)		

The net gain(loss) of above hedging instruments in 2018 and 2017 are \$29,480 thousand and \$(6,819) thousand, respectively. The net gains and losses of hedged items embedded in hedging instrument in 2018 and 2017 are \$(67,296) thousand and \$(81,317) thousand, respectively.

(f) Bills and Bonds Purchased / Sold under Resell (Repurchase) Agreements

The details of bonds and bills purchased / sold under resell (repurchase) agreements were as follows:

	December 31, 2018		December 31, 2017	
Bills and bonds purchased under resell agreements:		_		
Negotiable certificates of deposit	\$	5,183,607	6,614,225	
Commercial paper		3,966,052	7,889,633	
Government bonds		232,000	340,976	
Corporate bonds		250,476	651,859	
Total	\$	9,632,135	15,496,693	
	De	ecember 31, 2018	December 31, 2017	
Bills and bonds sold under repurchase agreements:				
Commercial papers	\$	29,975	49,936	
Government bonds		6,840,195	17,473,146	
Corporate bonds		3,425,574	3,931,721	
Financial bonds		15,615,526	14,920,187	
Supranational bonds		291,230	-	
Foreign government bonds		333,911	328,095	
Convertible Corporate bonds		26,500		
Total	\$	26,562,911	36,703,085	

Notes to the Consolidated Financial Statements

(g) Receivables, net

	Ι	December 31, 2018	December 31, 2017
Accounts receivable	\$	1,349,564	1,121,307
Long-term receivables – payment on behalf of the government		16,097,415	16,694,448
Accrued incomes		847,418	669,677
Interests receivable		16,357,530	13,969,544
Premiums receivable		138,389	143,394
Notes receivable and acceptance notes receivable		2,930,100	2,769,787
Accounts receivable factoring without recourse		13,232,575	11,462,524
Margin loans receivable		2,522,262	3,702,380
Accounts receivable for settlement		1,823,393	3,121,019
Accounts receivable — others		4,672	-
Others—settlement prices		494,281	-
Others – replenishment of national treasury		6,299,347	12,058,261
Others—undelivered spot exchange		44	2,283
Other—ATM temporary receipts, payments and interbank difference		1,739,188	1,816,568
Others—FX Swaps		406,437	89,200
Others-pending settlement		1,306,065	-
Others	_	836,002	494,272
Subtotal		66,384,682	68,114,664
Less: allowance for doubtful accounts	_	168,366	145,691
Total	\$ _	66,216,316	67,968,973

In accordance with Executive Yuan Tai-79-JEN-Cheng-SZU-tsu No. 14525, and regulations of Retired Civil Servants Lump-sum Retirement Payment and Old-age Benefits and Preferential Interest Deposits which excess preferential interest expenses recognized as Excess interest expenses of Non-interest income, net were \$7,265,162 thousand and \$8,174,483 thousand in 2018 and 2017, respectively, due to executing the government premium savings policy.

As of the year ended December 31, 2018 and 2017, the subsidiary, BOT, had paid the following premium savings interest expenses on behalf the government:

	Do	ecember 31, 2018	December 31, 2017
Long-term receivables	\$	16,097,415	16,694,448
Short-term advances (booked under other financial assets,		43,617,208	48,928,992
net)			
Total	\$	59,714,623	65,623,440

(h) Loans and Discounts, net

	Γ	December 31, 2018	December 31, 2017
Discounts and export / import bills negotiations	\$	3,576,638	3,970,292
Short-term loans and overdrafts		708,661,577	466,463,871
Short-term secured loans and secured overdrafts		73,236,408	76,825,361
Life insurance loans		5,892,446	5,723,066
Accounts receivable financing		241,732	166,450
Accounts receivable secured financing		8,757	7,338
Medium-term loans		490,677,869	474,555,063
Medium-term secured loans		236,955,232	240,933,371
Long-term loans		158,795,092	166,879,651
Long-term secured loans		897,796,378	871,048,709
Non-performing loans		4,244,436	4,947,756
Subtotal		2,580,086,565	2,311,520,928
Less: allowance for doubtful accounts		39,443,181	33,102,921
Total	\$	2,540,643,384	2,278,418,007

The movements of allowance for doubtful accounts of loans and receivables were as follows:

	2018	2017
Loans:		_
Beginning balance	\$ 33,102,921	32,885,593
Adjustment for retrospective application	(25,948)	-
Allowance for doubtful accounts	7,402,125	1,492,854
Write-off	(2,116,120)	(2,491,515)
Recovery from written-off	995,114	1,369,560
Effects of exchange rate changes and others	 85,089	(153,571)
Ending balance	\$ 39,443,181	33,102,921

Notes to the Consolidated Financial Statements

2018	2017
\$ 315,572	311,462
38,921	-
(77,233)	(39,020)
(11,491)	(14,866)
10,541	59,305
 (121)	(1,309)
\$ 276,189	315,572
\$ 39,719,370	33,418,493
\$ \$\$	\$ 315,572 38,921 (77,233) (11,491) 10,541 (121) \$ 276,189

Details of allowance for doubtful accounts were as follows:

	December 31, 2018	December 31, 2017	
Placement with banks	\$ 20,968	-	
Call loans to bank	55,833	58,446	
Receivables	168,366	145,691	
Loans and discounts	39,443,181	33,102,921	
Other financial assets	31,022	111,435	
Total	\$39,719,370	33,418,493	

Details of bad debt expense and provisions for guarantee liabilities were as follows:

	 2018	2017
Bad debts	\$ 7,324,892	1,453,834
Provisions for guarantee liabilities	(6,854)	227,150
Provision for loan commitment liabilities	5,182	-
Provision for other liabilities	 (25,510)	
Total	\$ 7,297,710	1,680,984

As of December 31, 2018 and 2017, the amounts of loans and receivables on which the interests stopped to accrue were \$4,226,046 thousand and \$5,005,039 thousand, respectively, which were booked under loans and discounts - non-performing loans and other financial assets-overdue receivables. As of December 31, 2018 and 2017, the estimation of non-accrued interests were \$248,693 thousand and \$287,035 thousand, respectively.

For the date as above, the subsidiary, BOT, did not write off any loan without legal proceedings having been initiated.

Notes to the Consolidated Financial Statements

(i) Available-for-Sale Financial Assets, net

	December 31, 2017
Negotiable certificates of deposit	\$ 932,539,967
Government bonds	41,318,500
Financial bonds	12,882,340
Corporate bonds	35,895,888
Financial asset securitization investments	5,502,710
TSEC and OTC stocks and certificates	47,485,085
Real estate securitization	831,735
Exchange traded funds	1,278,230
Foreign bonds	56,723,065
Foreign exchange traded funds	6,460,512
Foreign stocks	718,670
Add: Adjustment valuation	25,897,636
Total	\$ <u>1,167,534,338</u>

- (i) Please see note 7 "The Fair Value and Fair Value Hierarchy of the Financial Instruments", for valuation of available-for-sale financial assets.
- (ii) Please see note 6(ak) for realized gain (loss) on available-for-sale financial assets.

(j) Held-to maturity Financial Assets, net

	December 31, 2017
Domestic:	
Financial bonds	\$ 35,685,882
Corporate bonds	21,676,421
Negotiable certificates of deposits	1,402,431
Commercial papers	15,973,499
Government bonds	97,565,298
	\$ 172,303,531
Foreign:	
Bonds	198,722,373
Negotiable certificates of deposits	409,410
Treasury bills	1,173,380
	200,305,163
Total	\$372,608,694

Notes to the Consolidated Financial Statements

BTLI recognizes impairment loss for the held to maturity financial assets having an objective evidence of impairment. As of December 31, 2017, no impairment loss was recognized.

BTLI disposed its held-to-maturity financial assets due to the changes of military insurance regulations and the future cash demand of Ministry of National Defense. The amounts of disposals and the gains (losses) on disposals of the held-to-maturity financial assets were as follows:

	2017
Carrying amount	\$ 16,215,457
Gains (losses) on disposal	486,380

The amount of disposals of held-to-maturity financial assets was 7.46% of ending balance as of December 31, 2017.

(k) Financial Assets Measured at Amortized Cost

	D	ecember 31, 2018
Negotiable certificates deposits	\$	11,204,833
Commercial papers		30,205,065
Government bonds		91,052,088
Foreign government bonds, corporate bonds, financial bonds, and NCDs		202,409,699
Financial bonds		31,515,443
Corporate bonds		62,598,893
		428,986,021
Less: Accumulated impairment		(141,760)
	\$	428,844,261

The Company and subsidiaries have assessed that these financial assets are held to maturity to collect contractual cash flows, which consist solely of payments of principal and interest on principal amount outstanding. Therefore, these investments were classified as financial assets measured at amortized cost on January 1, 2018.

- (i) During 2018, the Company and subsidiaries sold bonds which were not frequently sold or whose amounts were not significant, no matter individual or aggregate, and the gain or loss arising from the disposal of bonds equaled to \$356,362 thousand.
- (ii) As of December 31, 2018, the Company's and subsidiaries' financial assets measured at amortized cost were not used as collateral, please refer to 11.

Notes to the Consolidated Financial Statements

(1) Investments under Equity Method, net

	December 31, 2018		December 31, 2017	
	Percentage of Ownership		Percentage of Ownership	
	(%)	Amount	(%)	Amount
Hua Nan Financial Holdings Co., Ltd.	25.07 \$	43,660,779	25.07	41,173,108
Tang Eng Iron Works Co., Ltd.	21.37	1,013,547	21.37	1,316,355
Tai Yi Real Estate Management Co., Ltd.	30.00	21,084	30.00	20,568
Total	\$_	44,695,410		42,510,031

(i) The Company and subsidiaries use equity method for investments in associates and the other comprehensive income:

	 2018	2017
Hua Nan Financial Holdings Co., Ltd.	\$ (350,631)	145,513
Tang Eng Iron Works Co., Ltd.	 5,277	(19,023)
Total	\$ (345,354)	126,490

(ii) The Company and subsidiaries use equity method for investments in associates, and Investment gains and losses recognized in the following table:

	2018	2017
Hua Nan Financial Holdings Co., Ltd.	\$ 3,665,778	3,017,402
Tang Eng Iron Works Co., Ltd.	(308,086)	51,306
Tai Yi Real Estate Management Co., Ltd.	 4,059	3,936
Total	\$ 3,361,751	3,072,644

(iii) Individually significant associate(s)

The Company and subsidiaries acquisited Hua Nan Financial Holdings Company 25.07% shares, which had maturity effection, using equity method for accounted, other informations as following:

	The relations	Business place/	The prop ownership i voting	nterest and
Aassociates Company	between the Combined company	registration country	December 31, 2018	December 31, 2017
Hua Nan Financial Holdings Co., Ltd.	Followed the FHC to investment, such as banking, finance bills industry	Taiwan	25.07 %	25.07 %

Notes to the Consolidated Financial Statements

The Company and subsidiaries have major affiliates of the listed or OTC companies, its fair value is as follows:

	December 31, 2018		December 31, 2017
Hua Nan Financial Holdings Co., Ltd.	\$	50,652,508	44,523,291

1) Summarized of Financial Information

Hua Nan Financial Holding Co., Ltd.

	December 31, 2018	December 31, 2017
Total Assets \$	2,684,206,863	2,573,419,750
Total Liabilities	(2,510,049,280)	(2,409,185,587)
Net Assets \$	174,157,583	164,234,163
The Company holding shares \$	43,660,779	41,173,108
	2018	2017
Net income \$	14,621,435	12,015,568
other comprehensive income	(1,398,581)	599,718
Total comprehensive income	13,222,854	12,615,286
The Company holding shares		
Investment income \$	3,665,778	3,017,402
Other comprehensive income	(350,631)	145,513

- 2) There are no significant restrictions on the ability of Hua Nan Financial Holding Co., Ltd. to transfer funds to its investors by distributing dividends, repaying loans or advances.
- 3) The summarized financial information of Hua Nan Financial Holding Co., Ltd. has been adjusted to align the accounting results with those of the Bank accounted for using the equity method.
- 4) Hua Nan Financial Holdings Co., Ltd.'s financial statements is audited by other auditors. The related investment gains is \$3,665,778 thousand and \$3,017,402 thousand in 2018 and 2017, respectively.
- (iv) Maturity associate enterprise
 - 1) Summarized of Financial Information- The Company and subsidiaries holding shares

	December 31,	December 31,
	2018	2017
Total investment in book value	\$ <u>1,034,631</u>	1,336,923

Notes to the Consolidated Financial Statements

	2018	2017	
Investment income	\$ (304,027)	55,242	
Other comprehensive income	 5,277	(19,023)	
Total comprehensive income	\$ (298,750)	36,219	

2) Some invested company were accounted for using the equity method and have not audited by auditors. The related investment loss is \$4,059 thousand and \$3,936 thousand in 2018 and 2017, respectively.

(v) Collateral

No investment in associates was used as collateral of December 31, 2018.

(m) Other Financial Assets, net

	D	ecember 31, 2018	December 31, 2017
Short-term advances	\$	45,937,904	52,291,020
Less: allowance for doubtful accounts — short-term advances		(26,843)	(29,710)
Debt investments without quoted price in active markets		-	39,986,671
Financial assets carried at cost		-	8,600,826
Less: cumulative impairment—financial assets carried at cost		-	(15,049)
Remittances purchased		1,485	7,171
Less: allowance for doubtful accounts – remittances purchased		(15)	(71)
Overdue receivables		4,783	81,703
Less: allowance for doubtful accounts – overdue receivables		(4,156)	(81,654)
Separate account insurance product assets		11,026	11,934
Time deposits over three months		5,655,000	1,890,400
Others		127,043	107,518
Less: Cumulative impairment — others		(11)	-
Less: allowance for doubtful accounts - others		(8)	
Total	\$	51,706,208	102,850,759

- (i) Please see note 7, "The Fair Value and Fair Value Hierarchy of the Financial Instruments", for details of the valuation of debt investments without quoted price in non-active markets for December 31, 2017.
- (ii) Concerning for the payment of excess interest for the government, booked under "short term payment" for December 31, 2018 and 2017, please refer to note 6(g) for further information.

(n) Investment Property

(i) The movement of investment property were as follows:

	Land and improvements		Buildings	Total	
Cost or deemed cost:					
and equipment	\$				
Balance at December 31, 2018 (equal to the balance at January 1, 2018)	\$	20,191,503	2,886,409	23,077,912	
Balance at January 1, 2017	\$	20,018,888	2,542,934	22,561,822	
Additions		154,223	287,817	442,040	
Reclassification from property and equipment		18,392	55,658	74,050	
Balance at December 31, 2017	\$	20,191,503	2,886,409	23,077,912	
Depreciation:					
Balance at January 1, 2018	\$	-	409,850	409,850	
Depreciation	_		69,037	69,037	
Balance at December 31, 2018	\$	<u> </u>	478,887	478,887	
Balance at January 1, 2017	\$	-	330,575	330,575	
Depreciation		-	63,935	63,935	
Reclassification from property and equipment	_		15,340	15,340	
Balance at December 31, 2017	\$		409,850	409,850	
Carrying amounts:					
December 31, 2018	\$	20,191,503	2,407,522	22,599,025	
January 1, 2017	\$	20,018,888	2,212,359	22,231,247	
December 31, 2017	\$	20,191,503	2,476,559	22,668,062	

(ii) The fair values of the investment properties of the Company and subsidiaries were as follows:

	December 31, 2018	December 31, 2017
Fair value of investment properties	\$23,405,263	23,818,130

Notes to the Consolidated Financial Statements

The fair value of investment properties (as measured or disclosed in the financial statements) was based on a valuation by a qualified independent appraiser who has recent valuation experience in the location and category of the investment property being valued. The inputs of levels of fair value hierarchy in determining the fair value is classified to Level 3.

1) The Bank of Taiwan

The following table shows the valuation technique used in measuring the fair value of investment property, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Inter relationship between key unobservable inputs and fair value measurement
The management evaluate and measure the effect of using techniques of comparison approach or Land development analysis approach. After evaluating, the bank make judgment about the assessment that is using to align the market participants.	 The rate of return Overall capital interest rate 	The estimated fair value would increase (decrease) if: • the rate of return were lower (higher); or • the overall capital interest rate were lower (higher).

The investment property was subsequently measured at cost, and the fair value was tested according to real estate impairment testing working guidelines on each financial reporting date. After evaluating, BOT did not recognized impairment loss during 2018 and 2017.

2) The Bank Taiwan life insurance

The fair value of investment property (as measured or disclosed in the financial statements) is based on a valuation by an independent appraiser who holds a recognized and relevant professional qualification and has recent experience in the location and category of the investment property being valued. The range of yields applied to the net annual rentals to determine fair value of property for which current prices in an active market are unavailable was as follows:

	December 31,	December 31,
	2018	2017
Capitalization of earning percentage	1.16%~3.37%	0.84%~3.39%

(iii) Detail of operating lease of the Company and subsidiaries were as follows:

Location	Location 2		
Rental revenue	\$	251,962	226,990
Direct operating cost of the investment property for the period (comprise maintenance fee)		(150,869)	(143,820)
Net profit of investment property	\$	101,093	83,170

(iv) As of December 31, 2018 and 2017, the Company's and subsidiaries' investment property neither served as a guarantee or collateral, nor they were pledged.

(o) Property and Equipment, net

Changes in the cost, depreciation, and impairment of the properties and equipments of the Company and subsidiaries for the year ended 2018 and 2017 were as follows:

		Land and Land	P21-E	Machinery and	Transportatio	Miscellaneous	Leasehold	Construction in progress and prepayment	T-4-1
Cost:	ını	provements	Buildings	equipment	n equipment	equipment	improvements	for equipment	Total
Balance at January 1, 2018	\$	87,402,203	15,590,228	5,791,393	1,081,548	1,016,332	838,125	725,393	112,445,222
Additions		-	5,168	366,517	93,202	31,373	32,252	305,615	834,127
Disposals		(19,776)	(31,271)	(218,674)	(61,877)	(47,137)	(18,660)	-	(397,395)
Reclassification		-	163,060	93,639	5,827	3,660	19,847	(287,386)	(1,353)
Effect of change in exchange rates	_	<u> </u>	-	407	272	871	2,763		4,313
Balance at December 31, 2018	\$ _	87,382,427	15,727,185	6,033,282	1,118,972	1,005,099	874,327	743,622	112,884,914
Balance at January 1, 2017	\$	87,556,608	15,581,844	6,667,089	1,089,638	1,022,691	828,370	623,982	113,370,222
Additions		-	3,815	251,385	36,144	28,679	2,425	312,040	634,488
Disposals		(136,013)	(29,515)	(1,220,071)	(43,993)	(33,147)	(216)	-	(1,462,955)
Reclassification		(18,392)	34,084	97,633	931	426	16,997	(210,629)	(78,950)
Effect of change in exchange rates	_		-	(4,643)	(1,172)	(2,317)	(9,451)		(17,583)
Balance at December 31, 2017 Accumulated depreciation:	s_	87,402,203	15,590,228	5,791,393	1,081,548	1,016,332	838,125	725,393	112,445,222
Balance at January 1, 2018	\$	14,966	7,259,931	4,340,037	885,206	836,908	744,982	-	14,082,030
Depreciation		-	306,344	391,659	40,591	30,074	33,019	-	801,687
Disposal		-	(27,680)	(195,126)	(60,264)	(42,651)	(8,869)	-	(334,590)
Effect of change in exchange rates	_		-	353	85	739	2,891		4,068
Balance at December 31, 2018	s _	14,966	7,538,595	4,536,923	865,618	825,070	772,023		14,553,195
Balance at January 1, 2017	\$	14,785	7,003,112	5,121,920	886,670	836,212	717,811	-	14,580,510
Depreciation		181	301,613	417,773	41,946	32,437	33,948	-	827,898
Disposal		-	(29,454)	(1,197,816)	(42,705)	(29,937)	(216)	-	(1,300,128)
Reclassification		-	(15,340)	-	-	-	-	-	(15,340)
Effect of change in exchange rates	_	<u> </u>	-	(1,840)	(705)	(1,804)	(6,561)		(10,910)
Balance at December 31, 2017	s_	14,966	7,259,931	4,340,037	885,206	836,908	744,982		14,082,030

Notes to the Consolidated Financial Statements

Accumulated impairment:		Land and Land provements	Buildings	Machinery and equipment	Transportation equipment	Miscellaneous equipment	Leasehold improvements	Construction in progress and prepayment for equipment	Total
Balance at January 1, 2018	\$	47,850	-	-	-	-	-	-	47,850
Impairment loss	_	77,019							77,019
Balance at December 31, 2018	s	124,869							124,869
Balance at January 1, 2017	\$	45,937	-	-	-	-	-	-	45,937
Impairment loss	_	1,913	-						1,913
Balance at December 31, 2017	\$	47,850							47,850
Carrying amounts:									
December 31, 2018	\$	87,242,592	8,188,590	1,496,359	253,354	180,029	102,304	743,622	98,206,850
January 1, 2017	\$	87,495,886	8,578,732	1,545,169	202,968	186,479	110,559	623,982	98,743,775
December 31, 2017	<u>s</u>	87,339,387	8,330,297	1,451,356	196,342	179,424	93,143	725,393	98,315,342

The Company and subsidiaries have conducted a few revaluations of land and buildings for many times over these years, and the latest was in December, 2011. As of December 31, 2018 and 2017, the total revaluation increments for land were \$81,590,877 thousand and \$81,983,111 thousand. The total revaluation increments for Buildings were both \$142,852 thousand.

Based on the assessment in December, 2018, the carrying amount of the lands which have indicators of impairment was determined to be \$247,713 thousand higher than its recoverable amount of \$170,694 thousand, and an impairment loss amounted to \$77,019 thousand was recognized. In 2017, the carrying amount of the lands which have indicator of impairment was determined to be \$135,241 thousand lower than its recoverable amount of \$133,328 thousand. Therefore, the amount of \$1,913 thousand, which was initially recognized as impairment, has been reversed.

The recoverable amount was determined by using the fair value, less, cost of disposal or recent government assessed land value. The fair value is based on the market price of comparable properties within the same location. The cost of disposal is the land value increment tax payable. The inputs of levels of fair value hierarchy in determining the fair value is classified to Level 3.

As of December 31, 2018, the Company's and subsidiaries' property and equipment neither served as a guarantee or collateral, nor were they pledged, please refer to note 51.

(p) Intangible Assets

Changes in the costs, amortization, and impairment loss of intangible assets of the Company and subsidiaries for the year ended 2018 and 2017 were as follows:

	Computer software
Costs:	
Balance at January 1, 2018	\$ 3,576,360
Additions	 372,444
Balance at December 31, 2018	\$ 3,948,804
Balance at January 1, 2017	\$ 3,291,544
Additions	 284,816
Balance at December 31, 2017	\$ 3,576,360

Notes to the Consolidated Financial Statements

	(Computer software	
Amortization and Impairment loss:			
Balance at January 1, 2018	\$	2,842,640	
Amortization for the year		291,290	
Balance at December 31, 2018	\$	3,133,930	
Balance at January 1, 2017	\$	2,467,596	
Amortization for the year		375,044	
Balance at December 31, 2017	\$	2,842,640	
Carrying value:			
Balance at December 31, 2018	\$	814,874	
Balance at January 1, 2017	\$	823,948	
Balance at December 31, 2017	\$	733,720	
Other Assets			
	De	ecember 31, 2018	December 31, 2017
Foreclosed collaterals and residuals taken over, net	\$	1,080,460	1,084,739
Advance payments		4,864,052	4,713,186
Operating guarantee deposits and settlement funds		141,830	118,277
Refundable deposits		7,145,366	866,137
Temporary payments and suspense accounts		748,195	767,366
Inventories		701,832	812,975
Others		28,737	2,288
Total	\$	14,710,472	8,364,968
(i) Foreclosed collaterals and residuals taken over, net			
	De	ecember 31, 2018	December 31, 2017
Foreclosed collaterals and residuals taken over	<u>\$</u>	1,080,460	1,084,739

(q)

(ii) Advance payment

	De	cember 31, 2018	December 31, 2017
Prepaid expenses	\$	418,169	314,213
Prepaid interests		12,745	17,596
Business tax paid		-	662
Business tax carry forward		686	511
Other prepayment — Interbank Fund Transfer Special Accounts		4,300,622	4,301,227
Other prepayment — other		131,830	78,977
Total	\$	4,864,052	4,713,186

(iii) Inventories

	December 31, 2018		December 31, 2017	
Inventories	\$	701,832	813,034	
Less: allowance for inventory valuation			(59)	
Total	\$	701,832	812,975	

The effects on the cost of goods sold derived from the inventory write-off or reversal for the year ended 2018 and 2017 were as follows:

	20	018	2017
Sale gain (loss)	\$	59	(59)

(r) Impairment

For the year ended 2018 and 2017, the movements of the accumulated impairment were as follows:

	 2018	2017
Beginning balance	\$ 62,899	60,986
Adjustment for retrospective application due to IFRS 9	202,464	-
Impairment loss recognized for the current period	168,214	1,913
Reversal of impairment loss for the current period	(79,649)	-
Effect of change in exchange rates and others	 (3,745)	
Ending balance	\$ 350,183	62,899

Details of accumulated impairment were as follows:

(s)

		2018	2017
Financial assets measured at amortized cost	\$	141,760	-
Other financial assets		11	15,049
Property and equipment		124,869	47,850
Financial assets at fair value through other comprehensive income		83,543	-
Ending balance	\$	350,183	62,899
Deposits of Central Bank and other banks			
	Dec	ember 31,	December 31,

	D	ecember 31, 2018	December 31, 2017
Deposits from Central Bank	\$	11,798,337	11,251,965
Deposits from banks—others		48,026,208	48,206,734
Postal deposits transferred		77,090	690,413
Bank overdrafts		1,559,942	2,271,023
Call loans from bank		160,294,562	156,601,249
Total	\$_	221,756,139	219,021,384

- (t) Financial Liabilities Measured at Fair Value through Profit or Loss
 - (i) Details of financial liabilities measured at fair value through profit or loss were as follows:

	Do	ecember 31, 2018	December 31, 2017
Financial liabilities held for trading	\$	2,893	26,694
Add: Valuation adjustment		4,794,327	8,576,470
Subtotal		4,797,220	8,603,164
Financial liabilities designated at fair value through profit or loss		46,102,500	26,118,400
Add: Valuation adjustment		(247,190)	205,385
Subtotal		45,855,310	26,323,785
Total	\$	50,652,530	34,926,949

(ii) For valuation of financial liabilities measured at fair value through profit or loss, please refer to note 7 "The Fair Value and Fair Value Hierarchy of the Financial Instruments".

(iii) Financial liabilities held for trading

	Dec	ember 31, 2018	December 31, 2017	
Foreign exchange options premium	\$	2,893	24,558	
Asset swaps options		-	2,136	
Add: Valuation adjustment				
Foreign exchange options premium		(508)	(944)	
Swaps		3,990,088	7,910,688	
Cross currency swaps		-	140,211	
Interest rate swaps		295,412	237,780	
Forward foreign exchanges		134,427	207,220	
Asset swaps		374,908	82,351	
Asset swaps options			(836)	
Total	\$	4,797,220	8,603,164	

(iv) The details of the financial liabilities designated at fair value through profit or loss were as follows:

	D	ecember 31, 2018	December 31, 2017
Financial bonds	\$	46,102,500	26,118,400
Add: Valuation adjustment		(247,190)	205,385
Total	\$	45,855,310	26,323,785

The details of the financial bonds were as follow:

		Co	onditions				Bond	
Name of bond	Beginning date	Maturity date	Coupon rate	Face value	Туре		Amo	ount
			. "			Do	ecember 31, 2018	December 31, 2017
2017-1 Senior unsecured financial bonds-A	2017/04/07	2047/04/07	0 %	USD \$500 million	Senior unsecured financial bond	\$	15,367,500	14,840,000
2017-1 Senior unsecured financial bonds-B	2017/04/07	2047/04/07	0 %	USD \$380 million	Senior unsecured financial bond		11,679,300	11,278,400
2018-1 Senior unsecured financial bonds-A	2018/02/26	2048/02/26	0 %	USD \$150 million	Senior unsecured financial bond		4,610,250	-
2018-1 Senior unsecured financial bonds-B	2018/02/26	2048/02/26	0 %	USD \$470 million	Senior unsecured financial bond		14,445,450	-
				Valuation adjustment		_	(247,190)	205,385
						\$_	45,855,310	26,323,785

Notes to the Consolidated Financial Statements

For the bonds issued in 2017, the call option may be exercised 2 years for bond A, and 3 years for bond B, after the issuing date. If the call options are not exercised prior to the bonds maturity date, BOT will pay the principal and interests accrued in full upon maturity. For the bonds issued in 2018, the call option may be exercised 2 years for bond A, and 5 years for bond B, after the issuing date. If the call options are not exercised prior to the bonds maturity date, BOT will pay the principal and interests accrued in full upon maturity.

(v) Unexpired derivative financial instruments (stated at notional amount)

	December 31, 2018	December 31, 2017
Foreign exchange options premium	\$ 371,765	2,031,573
Swaps	559,887,222	750,320,420
Cross currency swaps	-	3,125,020
Interest rate swaps	15,310,983	12,033,783
Forward foreign exchanges	11,423,307	15,228,472
Asset swaps	46,498,490	801,360
Asset swaps options		29,000
Total	\$ <u>633,491,767</u>	783,569,628

(u) Commercial paper payable, net

Details of the short-term notes payable of the Company and subsidiaries were as follow

	December 31, 2018			
	Guarantee or acceptance institution	Range of interest rates	Amount	
Commercial paper payable	International Bills Finance Corporation	0.498%~0.838%	\$ 40,000	
	China Bills Finance	0.658%~0.808%	250,000	
	Bank			
			290,000	
Less: discount			(114)	
Total			\$ <u>289,886</u>	

Notes to the Consolidated Financial Statements

		December 31, 2017	
	Guarantee or acceptance institution	Range of interest rates	Amount
Commercial paper payable	International Bills Finance Corporation	0.478%~0.808% \$	790,000
	Taishin International Bank	0.478%~0.818%	400,000
			1,190,000
Less: discount		_	(141)
Total		\$	1,189,859

The Company and subsidiaries have no assets which were served as a guarantee or collateral, nor they were pledged for the short-term notes payable.

(v) Payables

	D	ecember 31, 2018	December 31, 2017
Accounts payable	\$	10,579,796	10,476,616
Collection payable		1,093,940	1,030,550
Accrued expense		3,013,578	2,861,093
Other tax payable		466,514	470,193
Accrued interests		14,426,124	12,770,102
Banker's acceptance payable		2,918,255	2,719,831
Payables to representative organizations		586,198	14,289,466
Construction payable		3,004	9,794
Commission payable		103,998	106,284
Other payables — undelivered spot exchange		834	192
Other payables – collection bills		977,184	744,435
Other payables – payments awaiting transfer		7,806,182	7,161,698
Other payables –ATM temporary receipts, payments and inter branch difference		2,220,329	1,931,229
Other payables – foreign exchange awaiting transfer		721,384	408,084
Other payables – amounts awaiting settlement		180,579	595,888
Other payables – settlement accounts payable		2,241,220	2,732,655
Other payables – cost of settlement		-	235,974
Other payables – overdue accounts		191,135	188,049
Other payables – check deposit		103,026	115,216
Other payables – collections		11,986	20,897
Other payables — others		953,001	851,090
Total	\$_	49,164,205	60,080,535
			(C +: 1)

(Continued)

Notes to the Consolidated Financial Statements

(w) Deposits and Remittances

	December 31, 2018	December 31, 2017
Check deposits	\$ 35,255,756	35,437,592
Government deposits	283,267,747	272,339,999
Demand deposits	370,095,014	395,448,975
Time deposits	746,703,592	677,595,393
Remittances	736,124	764,098
Savings account deposits:		
Demand savings deposits	983,561,781	836,924,067
Staff accounts	24,562,808	25,216,326
Club saving deposits	690,497	804,229
Non-drawing time savings deposits	402,536,104	392,680,420
Interest withdrawal on principal deposited	808,083,173	833,272,930
Preferential Interest deposits	366,104,840	460,888,643
Total	\$ <u>4,021,597,436</u>	3,931,372,672

(x) Financial Bonds Payable

		Condi	tion	Bond		
Name of bond	Beginning date	Maturity date	Interest rate	Туре	Amou	ınt
					December 31, 2018	December 31, 2017
2013-1 TWD subordinated unsecured financial bond	2013/12/2	2023/12/2	BOT's listed annual interest rate of time deposits, plus, 0.15%	Subordinated unsecured financial bond	\$ 16,000,000	16,000,000
2014-1 TWD subordinated unsecured financial bonds-A	2014/6/25	2024/6/25	TAIBOR 3M plus 0.3%.	Subordinated unsecured financial bond	5,500,000	5,500,000
2014-1 TWD subordinated unsecured financial bonds-B	2014/6/27	2024/6/27	1.70%	Subordinated unsecured financial bond	2,000,000	2,000,000
2014-1 TWD subordinated unsecured financial bonds-C	2014/6/27	2024/6/27	BOT's listed annual interest rate of time deposits, plus, 0.15%.	Subordinated unsecured financial bond	1,500,000	1,500,000
			Unamortized discount		(1,434)	(1,684)
			amount			
					\$ <u>24,998,566</u>	24,998,316

Notes to the Consolidated Financial Statements

(y) Borrowings

As of December 31, 2018 and 2017, the credit loan and guarantee loan were both 0 thousand, and the short term borrowings which were not utilized by the Company's subsidiary, BankTaiwan Securities, were 17,461,025 thousand, and 15,593,600 thousand, respectively.

D 1	2.1	2010
Decemb	0r 4 l	711 I X
1766611117	U 31	. 2010

Bank	Nature	Total amount	Interest rate
Hua Nan Bank	Short-term loans	1,000,000	Itemized bargaining
	Overdrafts	-	0.30 %
	Guaranteed loans	-	0.50 %
Taiwan Cooperative Bank	Short-term loans	5,000,000	Itemized bargaining
	Guaranteed loans	-	0.40 %
Chinatrust Commercial Bank	Short-term loans	1,000,000	Itemized bargaining
	Overdrafts	-	0.18 %
First Bank	Short-term loans	2,000,000	Itemized bargaining
	Overdrafts		0.30 %
	Guaranteed loans		0.50 %

December 31, 2017

Bank	Nature	Total amount	Interest rate
Hua Nan Bank	Short-term loans	1,000,000	Itemized bargaining
	Overdrafts	-	0.30 %
	Guaranteed loans	-	0.50 %
	Guaranteed loans	-	0.40 %
Chinatrust Commercial Bank	Short-term loans	600,000	Itemized bargaining
	Overdrafts	400,000	0.18 %
Taiwan Cooperative Bank	Short-term loans	1,000,000	Itemized bargaining
	Overdrafts	6,000,000	0.40 %

(z) Other Financial Liabilities

	Dec	2018	December 31, 2017
Appropriated loan funds	\$	26,825	41,430
Liability of insurance product-separate account		11,026	11,934
Principal from structured products		652,019	801,392
Total	\$	689,870	<u>854,756</u>

(aa) Provision

	D	ecember 31, 2018	December 31, 2017
Reserve for unearned premiums	\$	372,090	378,648
Claims reserve		85,306	94,403
Liability reserve		341,234,973	329,797,142
Special reserve		48,415	147,645
Reserve for premium deficiency		3,087,105	3,975,837
Foreign exchange volatility reserve		1,214,234	279,465
Employee benefit obligations		18,249,613	19,446,311
Guarantee reserve		894,392	1,298,033
Reserve for government employees insurance		296,379,792	295,055,660
Others		386,084	-
Loan commitments reserve		15,612	
Total	\$	661,967,616	650,473,144

(ab) Insurance contract and financial products with discretionary participation feature

Information on insurance contract and financial product with the discretionary participation feature of the subsidiary, BTLI, as of December 31, 2018 and 2017 were as follows:

(i) Details of reserve for unearned premium:

	December 31, 2018			
		Insurance Contract	Financial products with discretionary participation feature	Total
Personal life insurance	\$	13,779	43	13,822
Personal injury insurance		65,280	-	65,280
Personal health insurance		122,063	-	122,063
Group insurance		170,877	-	170,877
Investment-linked insurance		48		48
Total		372,047	43	372,090
Deduction of reserve for unearned premium outward:				
Personal life insurance	\$	1,138	-	1,138
Personal injury insurance		3,525	-	3,525
Group insurance		4,796	-	4,796
Investment-linked insurance	_			
Total		9,459		9,459
Net	\$_	362,588	43	362,631

(Continued)

		D	ecember 31, 2017	
		Insurance Contract	Financial products with discretionary participation feature	Total
Personal life insurance	\$	15,200	504	15,704
Personal injury insurance		62,504	-	62,504
Personal health insurance		120,806	-	120,806
Group insurance		179,587	-	179,587
Investment-linked insurance	_	47		47
Total	_	378,144	504	378,648
Deduction of reserve for unearned premium outward:				
Personal life insurance	\$	948	13	961
Personal injury insurance		3,920	-	3,920
Group insurance		5,013	-	5,013
Investment-linked insurance	_	1		1
Total	_	9,882	13	9,895
Net	\$_	368,262	491	368,753

The reconciliations of reserve for unearned premium were listed below:

			2018	
		Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2018	\$	378,144	504	378,648
Provision		360,923	43	360,966
Reclaim		(366,997)	(504)	(367,501)
Other	_	(23)		(23)
Balance at December 31, 2018	_	372,047	43	372,090
Deduction of reserve for unearned premium outward				
Balance at January 1, 2018, net		9,882	13	9,895
Provision		9,459	-	9,459
Reclaim	_	(9,882)	(13)	(9,895)
Balance at December 31, 2018	_	9,459		9,459
Balance at December 31, 2018, net	\$ _	362,588	43	362,631

			2017	
		Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2017	\$	392,695	1,249	393,944
Provision		369,537	504	370,041
Reclaim		(384,069)	(1,249)	(385,318)
Other	_	(19)		(19)
Balance at December 31, 2017	_	378,144	504	378,648
Deduction of reserve for unearned premium outward				
Balance at January 1, 2017, net		11,282	33	11,315
Provision		9,882	13	9,895
Reclaim	_	(11,282)	(33)	(11,315)
Balance at December 31, 2017	_	9,882	13	9,895
Balance at December 31, 2017, net	\$ _	368,262	491	368,753

(ii) Details of claims reserve:

	December 31, 2018			
		Insurance Contract	Financial products with discretionary participation feature	Total
Personal life Insurance		_		
Reported but not paid	\$	9,827	5,490	15,317
Not reported and not paid		952	8	960
Personal injury insurance				
Reported but not paid		261	-	261
Not reported and not paid		13,519	-	13,519
Personal health insurance				
Reported but not paid		3,740	-	3,740
Not reported and not paid		19,883	-	19,883
Group insurance				
Reported but not paid		1,363	-	1,363
Not reported and not paid	_	30,263		30,263
Total	_	79,808	5,498	85,306

		D	December 31, 2018	
		Insurance Contract	Financial products with discretionary participation feature	Total
Deduction of claims reserve- outward:				
Personal life Insurance	\$	161	2	163
Personal injury insurance		600	-	600
Personal health insurance		53	-	53
Group insurance	_	131		131
Total	_	945		947
Net	\$ _	78,863	<u> 5,496</u>	84,359
		D	December 31, 2017	
		Insurance Contract	Financial products with discretionary participation feature	Total
Personal life Insurance				1000
Reported but not paid	\$	7,246	4,265	11,511
Not reported and not paid		2,980	144	3,124
Personal injury insurance				
Reported but not paid		248	-	248
Not reported and not paid		11,403	-	11,403
Personal health insurance				
Reported but not paid		6,764	-	6,764
Not reported and not paid		19,350	-	19,350
Group insurance				
Reported but not paid		1,447	-	1,447
Not reported and not paid	_	40,556		40,556
Total	_	89,994	4,409	94,403
Deduction of claims reserve- outward:				
Personal life Insurance	\$	-	6	6
Personal injury insurance		60	-	60
Personal health insurance		23	-	23
Group insurance	_	141		141
Total	_	224	6	230
Net	\$_	89,770	4,403	94,173

The reconciliations of claims reserve were listed below:

	_	Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2018	\$	89,994	4,409	94,403
Provision	•	353,683	11,242	364,925
Recovery		(363,869)	(10,153)	(374,022)
Balance at December 31, 2018	_	79,808	5,498	85,306
Deduction of claims reserve- outward	_			
Balance at January 1, 2018, net		224	6	230
Provision		13,370	14	13,384
Recovery	_	(12,649)	(18)	(12,667)
Balance at December 31, 2018, net	_	945	2	947
Closing balance	\$_	78,863	5,496	84,359
		Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2017	\$	Insurance Contract 89,987	Financial products with discretionary	Total91,070
Balance at January 1, 2017 Provision	\$	Contract	Financial products with discretionary participation feature	
•	\$	Contract 89,987	Financial products with discretionary participation feature	91,070
Provision	\$	Contract 89,987 345,488	Financial products with discretionary participation feature 1,083 24,269	91,070 369,757
Provision Recovery	\$	Contract 89,987 345,488 (345,481)	Financial products with discretionary participation feature 1,083 24,269 (20,943)	91,070 369,757 (366,424)
Provision Recovery Balance at December 31, 2017 Deduction of claims reserve-	\$ 	Contract 89,987 345,488 (345,481)	Financial products with discretionary participation feature 1,083 24,269 (20,943)	91,070 369,757 (366,424)
Provision Recovery Balance at December 31, 2017 Deduction of claims reserve- outward	\$	89,987 345,488 (345,481) 89,994	Financial products with discretionary participation feature 1,083 24,269 (20,943) 4,409	91,070 369,757 (366,424) 94,403
Provision Recovery Balance at December 31, 2017 Deduction of claims reserve- outward Balance at January 1, 2017, net Provision Recovery	\$	Contract 89,987 345,488 (345,481) 89,994 3,890	Financial products with discretionary participation feature 1,083 24,269 (20,943) 4,409	91,070 369,757 (366,424) 94,403
Provision Recovery Balance at December 31, 2017 Deduction of claims reserve- outward Balance at January 1, 2017, net Provision	\$	89,987 345,488 (345,481) 89,994 3,890 2,265	Financial products with discretionary participation feature 1,083 24,269 (20,943) 4,409	91,070 369,757 (366,424) 94,403 3,927 2,321

(iii) Details of liability reserve:

	_	Insurance Contract	Financial products with discretionary participation feature	Total
Life insurance	\$	287,109,285	15,744	287,125,029
Health insurance	Ψ	8,157,573	-	8,157,573
Annuity insurance		48,432	44,595,870	44,644,302
Reclaim of reserve for major accidents		2,428	-	2,428
Strengthen increasing reserve		1,160,000	-	1,160,000
Reserve for life insurance – reduce sales tax (the accumulated unwritten-off allocation of 3% of sales)		145,641	-	145,641
Total	\$_	296,623,359	44,611,614	341,234,973
		D	December 31, 2017	
		Insurance Contract	Financial products with discretionary participation feature	Total
Life insurance	\$	266,002,628	10,935,298	276,937,926
Health insurance		7,312,089	-	7,312,089
Annuity insurance		47,981	44,191,077	44,239,058
Reclaim of reserve for major accidents		2,428	-	2,428
Strengthen increasing reserve		1,160,000	-	1,160,000
Reserve for life insurance – reduce sales tax (the accumulated unwritten-off allocation of 3% of sales)	_	145,641		145,641
Total	\$_	274,670,767	55,126,375	329,797,142

The reconciliation of the above mentioned changes in liability reserve is listed below:

			2018	
		Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2018	\$	274,670,767	55,126,375	329,797,142
Provision		53,465,309	2,510,343	55,975,652
Reclaim		(32,313,363)	(13,005,480)	(45,318,843)
Gain from cancellation of insurance		(90,026)	(19,624)	(109,650)
Effect of changes in exchange rates		804,027	-	804,027
Others		86,645		86,645
Balance at December 31, 2018	\$_	296,623,359	44,611,614	341,234,973
			2017	
		Insurance	Financial products with discretionary participation	
	_	Contract	<u>feature</u>	Total
Balance at January 1, 2017	\$	242,026,775	75,949,565	317,976,340
Provision		48,956,351	3,374,681	52,331,032
Reclaim		(14,313,356)	(24,176,461)	(38,489,817)
Gain from cancellation of insurance		(65,824)	(21,410)	(87,234)
Effect of changes in exchange rates	-	(1,933,179)	<u>-</u>	(1,933,179)
Balance at December 31, 2017	\$ _	274,670,767	<u>55,126,375</u>	329,797,142
Details of special reserve:				
		D	ecember 31, 2018	
	<u></u>	Insurance Contract	Financial products with discretionary participation feature	Total 49 415
Provision for dividend policy	\$ _	48,415	- =	48,415
		Insurance	Financial products with discretionary participation	T
Provision for dividend policy	\$	Contract 147,645	<u>feature</u> _	Total 147,645
110 vision for dividend poney	Ψ=	177,073		177,043
				(Continued)

(iv)

The movements of special reserve were listed below:

		Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2018	\$	147,645	-	147,645
Provision of dividend policy		70,507	-	70,507
Recovery of dividend policy		(256)	-	(256)
Others	_	(169,481)		(169,481)
Balance at December 31, 2018	\$ _	48,415		48,415
		Insurance Contract	Financial products with discretionary participation feature	Total
Balance at January 1, 2017	\$	227,341	-	227,341
Provision of dividend policy		(56,527)	-	(56,527)
Recovery of dividend policy	_	(23,169)		(23,169)
Balance at December 31, 2017	\$ _	147,645		147,645
Reserve for premium deficiency:		D	ecember 31, 2018	

(v)

	 December 31, 2018		
	Insurance	Financial products with discretionary participation	
	Contract	feature	Total
Personal life insurance	\$ 3,053,722		3,053,722
Personal health insurance	 33,383		33,383
Total	\$ 3,087,105		3,087,105

		D	ecember 31, 2017	
		Insurance Contract	Financial products with discretionary participation feature	Total
Personal life insurance	\$	3,958,577	-	3,958,577
Personal health insurance		17,260		17,260
Total	\$_	3,975,837	-	3,975,837
The reconciliations of reserve for pro-	emi	um deficiency we	re listed as below:	
			2018	
		Insurance	Financial products with discretionary participation	
		Contract	feature	Total
Balance at January 1, 2018	\$	3,975,837	-	3,975,837
Provision		252,127	-	252,127
Reclaim		(1,143,330)	-	(1,143,330)
Effect of changes in exchange rates	_	2,471		2,471
Balance at December 31, 2018	\$ _	3,087,105		3,087,105
			2017	
		Insurance	Financial products with discretionary participation	
		Contract	feature	Total
Balance at January 1, 2017	\$	4,930,707	-	4,930,707
Provision		140,562	-	140,562
Reclaim		(1,088,806)	-	(1,088,806)
Effect of changes in exchange rates	_	(6,626)		(6,626)
Balance at December 31, 2017	\$_	3,975,837		3,975,837

Notes to the Consolidated Financial Statements

- (vi) Details of provision for liability adequacy:
 - 1) Information on provision for liability adequacy of the subsidiary, BTLI, as of December 31, 2018 and 2017 was as follows:

	D	ecember 31, 2018	December 31, 2017
Liability reserve	\$	341,136,306	329,692,901
Reserve for unearned premium		184,261	182,152
Special reserve		48,415	147,645
Reserve for premium deficiency	_	3,087,105	3,975,837
Book value of insurance liability	\$	344,456,087	333,998,535
Estimate of present cash flow	\$ <u></u>	322,578,940	288,658,617

There is no concern of provision for liability adequacy since the subsidiary, BTLI, had no deficiency on net value between book value of insurance liability and estimate of present cash flow.

2) As of December 31, 2018 and 2017, the short-term insurance of liability adequacy reserve of the Company is summarized as follows:

	Dec	ember 31, 2018	December 31, 2017
Claim and reserve within a year	\$	83,258	90,725
Less: Premium not received within a year		1,251	1,602
Subtotal	\$	82,007	89,123
Unearned premium reserve	\$	187,829	196,495
Liability adequacy reserve	\$	-	

The amount of claim and reserve within a year, deducted by the current unpaid premium, were lower than the amount of unearned premium reserve; and therefore, the liability adequacy was sufficient.

Inward reinsurance: Starting 2015, the Central Reinsurance Corporation ceased to continue to transfer its reinsurance business to BTLI due to its reinsurance policy adjustment. It is not required to conduct a liability adequacy test for inward reinsurance.

3) The liability adequacy test methods used by the subsidiary, BTLI, were listed below:

	December 31, 2018	December 31, 2017
Test Method	Long term insurance: gross premium evaluation method: Short term insurance (including inward reinsurance): loss evaluation method	Long term insurance: gross premium evaluation method: Short term insurance (including inward reinsurance): loss evaluation method
Group	Test long and short term insurance separately	Test long and short term insurance separately
Significant assumption	Based on the newest composed of asset on the time of evaluating and the level of risk free interest rate, discount rates are calculated using the best estimated scenario investment return based on actuary report of 2017 (with steady state assumption for discount rates after 30 year).	Based on the newest composed of asset on the time of evaluating and the level of risk free interest rate, discount rates are calculated using the best estimated scenario investment return based on actuary report of 2016 (with steady state assumption for discount rates after 30 year).

(ac) Foreign exchange volatility reserve

(i) Hedging strategy and risk exposure:

The Company's subsidiary, BTLI, has hedged its foreign exchanges by considering the market situation and the hedging cost.

As of December 31, 2018 and 2017, the primary foreign exchange exposures were USD assets, amounting \$64,428,390 thousand and \$49,463,266 thousand, respectively.

(ii) The movements in foreign exchange volatility reserve were as follows:

	2018		2017
Balance as at 1 January	\$	279,465	425,059
Current provision:			
Compulsory provision		351,253	238,515
Additional provision	_	1,274,408	398,624
Subtotal	_	1,625,661	637,139
Current write-off		(690,892)	(782,733)
Balance as at 31 December	\$	1,214,234	279,465

(iii) Comparisons table shows the effects on profit/loss, liability, equity and earnings per share due to not applying this rule was as follow:

Items		Amount not applied	Amount applied	Changes
Liability and equity				
December 31, 2018				
Reserve for foreign exchavaluation	inge \$	-	1,214,234	(1,214,234)
Equity		306,151,736	305,180,349	971,387
December 31, 2017				
Reserve for foreign exchavaluation	inge	-	279,465	(279,465)
Equity		286,442,854	286,210,898	231,956
Items		Amount not applied	Amount applied	Changes
Income (loss) after tax and earnings (loss) per share 2018				
Income (loss) after tax	\$	9,967,133	9,219,318	747,815
Earnings (loss) per share		1.11	1.02	0.09
2017				
Income (loss) after tax		7,245,528	7,366,371	(120,843)
Earnings (loss) per share		0.81	0.82	(0.01)
(ad) Employee benefit obligations				
			December 31, 2018	December 31, 2017
Recognized in Consolidated Bala	nce Sheet:		_	
 Defined benefit plans 			\$ 11,781,898	10,997,470
-Employees preferential interes	est deposits		6,387,449	8,382,550
—Three Chinese festival bonus	3		5,168	7,227
-Civil servant and teacher inst	urance exces		75,098	59,064
Total			\$ <u>18,249,613</u>	19,446,311

Notes to the Consolidated Financial Statements

1) The reconciliation of the defined benefit obligations at present value and plan assets at fair value are as follows:

			December 31, 2018	December 31, 2017
	Present value of the defined benefit obligations	\$	26,650,001	27,285,692
	Less: fair value of the plan assets	_	(8,400,388)	(7,839,381)
	Net defined benefit obligations	\$_	18,249,613	19,446,311
2)	The movements in present value of the defined b	enef	it obligations	
			2018	2017
	Defined benefit obligation at January 1	\$	27,285,692	26,038,735
	Current service costs		1,287,675	1,301,857
	Remeasurements of the defined benefit plans in other comprehensive income			
	 Actuarial gains and losses in demographic changes in assumptions 		901,813	233,860
	-3 percent increase in salary		-	516,683
	-Experience adjustments		217,645	274,982
	 Changes in actuarial gains and losses in financial assumptions 		26,333	10,680
	Past service cost		1,443,374	2,004,037
	Benefit payments		(4,512,531)	(3,095,142)
	Defined benefit obligation at December 31	\$_	26,650,001	27,285,692
3)	The movements of fair value of defined benefit p	lan a	assets	
		_	2018	2017
	Fair value of plan assets at January 1	\$	7,839,381	7,627,136
	Interest revenue		88,907	108,004
	Remeasurements of defined benefit plans in other comprehensive income			
	-Return on plan assets		46,092	(19,601)
	Contribution made by the Bank		-	56,995
	Contribution made by the plan participant		1,119,168	916,178
	Benefit payments	_	(693,160)	(849,331)
	Fair value of plan assets at December 31	\$ _	8,400,388	7,839,381

Notes to the Consolidated Financial Statements

4) Expense recognized in profit or loss

	2018	2017
Current service cost	\$ 772,202	723,926
Net interest of the defined benefit obligations	426,566	470,964
Past service cost	1,443,374	2,004,037
Remeasurements of defined benefit plans in other comprehensive income	 15,169	44,773
Total	\$ 2,657,311	3,243,700

5) Re-measurement of net defined benefit liability (asset) recognized in other comprehensive income

The Company's and subsidiaries' re-measurement of the net defined benefit liability (asset) recognized in other comprehensive income for the years ended December 31, 2018 and 2017 was as follows:

	2018	2017
Accumulated amount at January 1	\$ 3,573,240	2,566,791
Recognized during the period	 1,072,950	1,006,449
Accumulated amount at December 31	\$ 4,646,190	3,573,240

6) Actuarial assumptions

	December 31, 2018	December 31, 2017
Discount rate	1.00%~4.00%	1.10%~4.00%
Future of salary increases	0.50%~2.00%	0.50%~2.00%
Assets expected rate of return	1.00%~1.10%	1.10%
	December 31, 2018	December 31, 2017
Discount rate	· · · · · · · · · · · · · · · · · · ·	
Discount rate Future of salary increases	2018	2017

The estimated future mortality rate used to calculate of the defined benefit plan of the Company and subsidiaries are based on the fifth round of the Taiwan Life Experience Life Table.

The Company and subsidiaries expect to pay the benefits amounting to \$972,321 within one year.

7) Sensitivity analysis

The followings could impact the present value of the defined benefit obligations as of December 31, 2018 and 2017 if the actuarial assumptions change as follows:

	Impact on the defined benefit obligation					
	Actuarial assumption changes (%)		Actuarial assumption increase	Actuarial assumption decrease		
December 31, 2018						
Discount rate	0.25%	\$	25,921,928	27,363,138		
Salary increase rate	0.50%		21,331,293	19,328,897		
December 31, 2017						
Discount rate	0.25%		26,343,485	27,785,494		
Salary increase rate	0.50%		19,876,819	17,968,450		

The aforementioned sentivitiy analysis is used to analyze what the impact could have been when one variable changes while all other variables remain constant. In practice, however, this hypothesis may not exist as changes in variables could be correlated. The projected unit benefit method is also used to calculate the changes in the present value of the defined benefit obligations when the Bank conducts its sentivitiy analysis.

There were no changes in the method and assumptions used in the preparation of sensitivity analysis for 2017 and 2018.

(ae) Other Liabilities

	De	2018	December 31, 2017
Advance collections	\$	2,578,926	2,297,040
Guarantee deposits received		3,990,817	4,976,441
Temporary receipt awaiting suspense accounts		467,579	367,635
Other liabilities to be settled		8,239	8,239
Compensation arising from land revaluation		1,264,803	1,264,803
Collections for underwriting stock value		4,802	99,874
Total	\$	8,315,166	9,014,032

(af) Income Tax Expenses

(i) Income tax expenses (benefit)

The income tax expenses for 2018 and 2017 were as follows:

		2018	2017
Current income tax expense	\$	(1,136,974)	(1,164,641)
Adjustment for prior periods		28,813	-
Deferred tax expenses (benefit)		841,755	1,278,584
Income tax expenses (benefit)	\$	(266,406)	113,943

Income tax (expenses) benefits recognized directly in other comprehensive income were as follows:

	2018	2017
Exchange differences on translation of foreign operations	\$ (193)	851
Unrealized loss on available for sale financial assets	-	(106,189)
Unrealized gains (losses) on debt instruments measured at fair value through other comprehensive income	71,262	-
Unrealized valuation gains (losses) on equity instruments measured at fair value through other comprehensive income	(11,434)	-
Other comprehensive profits (losses) reclassified using overlay approach	164,929	-
Actuarial gain (loss) on defined benefit plans	(4,896)	4,918
Other items that will not be reclassified to profit or loss	444	-
	\$ 220,112	(100,420)

Reconciliations of income tax expense (benefit) and profit before tax for 2018 and 2017 were as follows:

	2018	2017
Profit before tax	\$ 9,485,724	7,252,428
Income tax based on domestic tax rate	 (1,897,145)	(1,232,913)
Income tax expense of overseas branches	(357,969)	(539,148)
Changes in deferred tax assets and liabilities	(173,794)	(61,871)
Tax-exempt income	1,811,854	1,147,816
Others	 350,648	800,059
Total	\$ (266,406)	113,943

(ii) Deferred Tax Assets and Liabilities

1) Unrecognized deferred tax assets

Unrecognized deferred tax assets are as follows:

	December 31,	December 31,
	2018	2017
Deductible temporary difference	\$ 5,819,532	4,685,497

2) Recognized deferred tax assets and liabilities

Changes in deferred tax assets and liabilities for 2018 and 2017 were as follows:

Deferred Tax Assets:

Balance at January 1, 2018		Defined Benefit Plans 139,476	Fair Value Gains 295,072	Unrealized Gain or Loss on Foreign Exchange 2,218,933	Other 4,512	
Adjustment for retrospective application		-	9,722	(15,220)	-	(5,498)
Recognized in profit or loss		2,877	89,893	(692,487)	1,313,044	713,327
Recognized in other comprehensive income	_	-	255,791	(193)	21,011	276,609
Balance at December 31, 2018	\$_	142,353	650,478	1,511,033	1,338,567	3,642,431
Balance at January 1, 2017	\$	136,076	657,516	502,160	1,439,358	2,735,110
Recognized in profit or loss		3,400	(256,634)	1,715,922	5,204	1,467,892
Recognized in other comprehensive income		-	(105,810)	852	-	(104,958)
Turns to income tax refund receivable	-				(1,440,050)	(1,440,050)
Balance at December 31, 2017	\$ _	139,476	<u>295,072</u>	2,218,934	4,512	2,657,994

Deferred Tax Liabilities:

	_	efined	Land value increment tax	Fair value gains	Other	Total
Balance at January 1, 2018	\$	5,798	18,200,128	282,489	-	18,488,415
Adjustment for retrospective application		-	47,295	(136,374)	-	(89,079)
Recognized in profit or loss		724	(3,214)	(125,938)	-	(128,428)
Recognized in other comprehensive		4,897	-	51,166	878	56,941
income						
Balance at December 31, 2018	\$	11,419	18,244,209	71,343	878	18,327,849
Balance at January 1, 2017	\$	10,699	18,226,204	66,197	94,902	18,398,002
Recognized in profit or loss		17	(26,076)	215,913	(94,902)	94,952
Recognized in other comprehensive		(4,918)	-	379	-	(4,539)
income						
Balance at December 31, 2017	\$	5,798	18,200,128	282,489		18,488,415
						(C 1: 1

(Continued)

Notes to the Consolidated Financial Statements

(ag) Equity

(i) Capital stock

On 1 January 2008 TFH was established by the Bank of Taiwan in a share swap, the capital from share exchange were 9,000,000 thousand shares, and capital stock had a par value of \$10. As of December 31, 2018 and 2017, the Company's authorized capital and issued capital were \$90,000,000 thousands.

(ii) Capital surplus

		2018	2017
Changes in equity of associates and joint ventures accounted for using equity method	\$	9	9
Equity premium		111,385,217	111,385,217
Total	\$_	111,385,226	111,385,226

According to the ROC Company Act prior to the new amendment on January 4, 2012, capital surplus can only be used to increase share capital by using the realized capital surplus after making god the deficit. Capital surplus cannot be used for distribution of cash dividends. According to the new amendment of the ROC Company Act, the Company can declare dividend with capital surplus when which without loss and resolution by the shareholders. The aforementioned realized capital surplus includes the income derived from the issuance of new shares at a premium and the income from endowment received by the Company. The share capital capitalized in any one year may not exceed a certain percentage for the Company's increasing share capital under the Regulations Governing the Offering and Issuance of Securities by Securities Issuers. The Company may only increase its capital reserve out of the share capital from cash premium on capital stock once a year. The additional capital reserve from the share capital may not be increased during the same fiscal year as the additional share capital form cash premium on capital stock.

(iii) Legal reserve

In accordance with the Company Act prior to the new amendment on January 4, 2012, the Company shall set aside 10 percent of the net income after tax as legal reserve until such legal reserve amounts have reach the authorized capital. The legal reserve can only be used to make good the deficit but not use to distribute any cash dividends. According to the amendment of the ROC Company Act, the distribution of the legal reserve by issuing new shares or by cash is allowed only with the approval granted through the shareholder's meeting when the Company does not have any deficit, and only the portion of legal reserve which exceeds 25 percent of the paid-in capital may be distributed.

Notes to the Consolidated Financial Statements

(iv) Appropriation of earnings

The articles of incorporation of the Company and subsidiaries stipulate that net income should be distributed in the following order:

- 1) to settle all outstanding tax payable;
- 2) to offset prior years losses;
- 3) to appropriate 10% as legal reserve;
- 4) special reserve

to appropriate 40~60% as special reserve; to appropriate 20~40% as special reserve; In accordance with the Order No. 1010012865 issued by the FSC on April 6, 2012, for any unrealized revaluation gains and cumulative translation adjustments (gains) recorded in the shareholders equity which the Company and subsidiaries elect to transfer to retained earnings by application of the exemption under IFRSs No. 1, the Company and subsidiaries shall set aside an equal amount of special reserve. When the Company and subsidiaries subsequently use, dispose of, or reclassify the relevant assets, it may be reversed to distributable earnings a proportional amount of the special reserve originally set aside.

5) to appropriate dividends

The remaining balance would be appropriated, combining accumulated retained earnings, in accordance with related laws and regulations.

According to the Company's policy, before the legal reserve balance amounts to the authorized capital, cash dividend distributions cannot exceed 15% of the authorized capital.

6) According to the budget approved by the Executive Yuan and the Legislative Yuan, the Company will not distribute its 2018 and 2017 surplus as dividend to the Ministry of Finance.

Notes to the Consolidated Financial Statements

(v) Other equity(net of tax)

	Exchange differences on translation of foreign operations	Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income	Unrealized gains (losses) on available for sale financial assets	Gains (losses) on effective portion of cash flow hedges	Change in fair value of financial liability attributable to change in credit risk of liability	Gains (losses) on financial Instruments for hedging	Other Comprehensive income reclassified by applying overlay approach	Total
Balance at January 1, 2018	\$ (1,340,730)	-	25,929,021	3,991	(43,770)	-	-	24,548,512
Effects of retrospective application	(2,787)	38,114,593	(25,929,021)	(3,991)		3,991	(829,780)	11,353,005
Equity at beginning of period after adjustments	(1,343,517)	38,114,593	-	-	(43,770)	3,991	(829,780)	35,901,517
Exchange differences on translation of foreign operations	684,435	-	-	-	-	-	-	684,435
Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income	-	3,580,017	-	-	-	-	-	3,580,017
Gains (losses) of associates and joint ventures accounted for using equity method on financial Instruments for hedging	-	-	-	-	-	202	-	202
Change in fair value of financial liability attributable to change in credit risk of liability	-	-	-	-	236,682	-	-	236,682
Other Comprehensive income reclassified by applying overlay approach	-	-	-	-	-	-	(1,485,937)	(1,485,937)
Disposal of investments in equity instruments measured at fair value through other comprehensive income	-	267,258	-		-	-		267,258
Balance at December 31, 2018	\$(659,082)	41,961,868			192,912	4,193	(2,315,717)	39,184,174

Notes to the Consolidated Financial Statements

	nange differences on nslation of foreign operations	Unrealized gains (losses) on available for sale financial assets	Gains (losses) on effective portion of cash flow hedges	Change in fair value of financial liability attributable to change in credit risk of liability	Total
Balance at January 1, 2017	\$ 530,488	16,527,296	8,197	10,558	17,076,539
Exchange differences on translation of foreign operations	(1,871,218)	-	-	-	(1,871,218)
Unrealized gains (losses) on available for sale financial assets	-	9,401,725	-	-	9,401,725
Gains (losses) of associates and joint ventures accounted for using equity method on financial Instruments for hedging	-	-	(4,206)	-	(4,206)
Change in fair value of financial liability attributable to change in credit risk of liability	-	-	-	(54,328)	(54,328)
Balance at December 31, 2017	\$ (1,340,730)	25,929,021	3,991	(43,770)	24,548,512

(ah) Net interest income

			2018	2017
	Interest income:			
	Loans and discounts	\$	40,439,521	38,830,625
	Placement with Central Bank and call loans to banks		10,196,756	8,707,277
	Securities investment		22,041,817	20,209,991
	Credit cards		25,191	26,392
	Bonds purchased under resell agreements		51,453	30,806
	Others		1,252,006	959,716
	Subtotal		74,006,744	68,764,807
	Interest expense:			
	Deposits from customers		33,812,107	30,337,130
	Deposits of Central Banks and other banks		3,758,265	2,750,030
	Bonds sold under repurchased agreements		288,784	120,042
	Financial bonds		304,470	304,369
	Structured deposits		22,686	17,242
	Others		63,909	130,405
	Subtotal		38,250,221	33,659,218
	Total	\$	35,756,523	35,105,589
(ai)	Service fees, net			
			2018	2017
	Service fees revenue:			
	Bank business	\$	5,345,491	5,249,741
	Insurance business		108,571	111,407
	Securities business		496,400	434,321
	Subtotal		5,950,462	5,795,469
	Service fees expense:			
	Bank business		659,034	642,329
	Insurance business		935,769	1,003,176
	Securities business		33,973	26,429
	Subtotal		1,628,776	1,671,934
	Total	\$	4,321,686	4,123,535

The Company and subsidiaries provide custody, trust, investment management and advisory services to third parties, therefore, the Company's and subsidiaries' plan, manage and make trading decisions about these financial instruments. Trust funds or portfolios, entrusted with management and application, prepare financial statements for internal management purposes and will not include in the financial statements of the Company and subsidiaries.

Notes to the Consolidated Financial Statements

(aj) Gain (loss) on financial assets or liabilities measured at fair value through profit or loss

		2018	2017
Gain (loss) on financial assets or liabilities measured at fair value through profit or loss:			
Dividend income	\$	5,725,087	4,616,813
Net interest income		(924,891)	(48,285)
Net gain on disposal	_	1,365,123	12,255,776
		6,165,319	16,824,304
Gain (loss) on financial assets or liabilities measured at fair value through profit or loss—valuation:			
Net gain on valuation		(18,074,571)	20,342,273
Total	\$_	(11,909,252)	37,166,577
(ak) Realized gain (loss) on available-for-sale financial assets			
		2017	
Dividend income	\$	3,725,030	
Gain (loss) on disposal	_	769,351	
Total	\$_	4,494,381	
(al) Realized gains (losses) on financial assets measured at f	air va	alue through other	r comprehensive

(al) Realized gains (losses) on financial assets measured at fair value through other comprehensive income

	2018
Dividend income	\$ 3,318,373
Gain (loss) on disposal	 (30,210)
	\$ 3,288,163

(am) Other non-interest income (expenses)

	 2018	2017
Sales revenue, net	\$ 366,662	455,670
Subsidized income from government	8,892,009	10,452,705
Others	1,707,533	537,983
Excess preferential interest expenses	 (9,640,527)	(11,084,380)
Total	\$ 1,325,677	361,978

Note: According to Government Employees and School Insurance Act, if GESSI experiences a loss, the loss before May 30, 1999, would be covered by the Ministry of Finance; and the loss after that date would be covered by an adjustment of the insurance premium. Please refer to note 16(c) for the supplementary information for government employees' insurance department of BOT.

(an) Employee benefits expenses

			2010	2015
	Salaries	\$	2018 11,773,193	2017 11,233,950
	Labor and health insurances	Ф		
	Pensions		570,738	553,741
			927,182	893,076
	Others		304,221	286,850
	Total	\$	13,575,334	12,967,617
(ao)	Depreciation and amortization expenses			
			2018	2017
	Depreciation expenses	\$	752,650	781,420
	Amortization expenses		291,345	375,103
	Total	\$	1,043,995	1,156,523
(ap)	Other general and administrative expenses			
			2018	2017
	Taxes	\$	3,135,649	3,208,503
	Rental expenses		827,574	713,706
	Insurance expenses		985,260	963,731
	Postage and phone / fax expenses		277,100	258,554
	Utilities		201,105	201,155
	Supplies expense		175,090	167,545
	Repair and maintenance expenses		428,598	427,888
	Marketing expenses		424,681	421,636
	Professional service fees		474,187	464,169
	Others		507,933	478,731
	Total	\$	7,437,177	7,305,618

(aq) Earnings per Share

The consolidated basic earnings per share are calculated by dividing the net income by the number of shares outstanding. The net income in 2018 and 2017 are \$9,219,318 thousand and \$7,366,371 thousand, respectively. The weighted average outstanding shares are 9,000,000 thousand.

The Company's basic earnings per share were calculated as follows:

	2018	2017
Consolidated net income	\$	7,366,371
Weighted average outstanding shares	9,000,	9,000,000
Basic earnings per share (In dollars)	\$1	.02 0.82

(ar) Insurance income, net

			2018	
	(T government employees' insurance lepartment	BTLI	Total
Premium income	\$	24,863,334	46,059,435	70,922,769
Amortized reinsurance claims payment		-	44,600	44,600
Income on insurance product- separated account		<u>-</u>	(302)	(302)
Insurance business income		24,863,334	46,103,733	70,967,067
Reinsurance expense		-	111,820	111,820
Direct business expenses		-	665	665
Insurance claims payment		23,242,767	45,610,696	68,853,463
Disbursement toward industry stability		-	124,360	124,360
Disbursement on insurance product separated account		-	(302)	(302)
Insurance business expenses		23,242,767	45,847,239	69,090,006
Net income from insurance business	\$	1,620,567	256,494	1,877,061
			2017	
	(T government employees' insurance		
	Ċ	lepartment	BTLI	Total
Premium income	\$	23,478,165	42,555,588	66,033,753
Amortized reinsurance claims payment		-	35,824	35,824
Income on insurance product- separated account		<u>-</u>	1,503	1,503
Insurance business income		23,478,165	42,592,915	66,071,080
Reinsurance expense		-	102,088	102,088
Direct business expenses		-	719	719
Insurance claims payment		24,923,675	38,953,506	63,877,181
Disbursement toward industry stability		-	105,869	105,869
Disbursement on insurance product		-	1,503	1,503
separated account				
Insurance business expenses		24,923,675	39,163,685	64,087,360
Net income from insurance business	\$	(1,445,510)	3,429,230	1,983,720

The retained earned premium and retained benefits and claims paid were as follow:

(i) Retained earned premiums

	Direct written premium Less: Reinsurance premium ceded Net change in unearned premium reserve	- \$	Insurance Contract 44,500,076 111,820 (5,674) 106,146	Financial products with discretionary participation feature 1,559,359 - (448)	Total 46,059,435 111,820 (6,122) 105,698
	Retained earned premium	\$ _	44,393,930	1,559,807	45,953,737
			Insurance Contract	Financial products with discretionary participation feature	Total
	Direct written premium	\$_	40,357,410	2,198,178	42,555,588
	Less: Reinsurance premium ceded		102,061	27	102,088
	Net change in unearned premium reserve	_	(13,151)	(725)	(13,876)
		_	88,910	(698)	88,212
	Retained earned premium	\$ _	40,268,500	2,198,876	42,467,376
(ii)	Retained benefits and claims paid	_	Insurance	2018 Financial products with discretionary participation	
			Contract	feature	Total
	Claims payment incurred	\$	32,607,265	13,003,374	45,610,639
	Reinsurance claims	_	58		58
	Insurance claims payment		32,607,323	13,003,374	45,610,697
	Less: Claims payment recovered from reinsures	_	44,600	-	44,600
	Retained benefits and claims paid			13,003,374	45,566,097

		2017 Financial products with discretionary Insurance participation Contract feature T						
Claims payment incurred	\$	14,779,553	24,173,895	38,953,448				
Reinsurance claims	_	58		58				
Insurance claims payment		14,779,611	24,173,895	38,953,506				
Less: Claims payment recovered		35,824	-	35,824				
from reinsures	_							
Retained benefits and claims paid	\$_	14,743,787	24,173,895	38,917,682				

(7) The Fair Value Information of Financial Instruments:

- (a) The methods and assumptions used to estimate the fair value of financial instruments are as follows.
 - (i) For certain financial instruments, the Company and subsidiaries consider their carrying amounts measured at amortized cost to be a reasonable approximation of fair value. These financial instruments include cash and cash equivalents, placement with Central Bank and call loans to banks, bills and bonds purchased under resell agreements, notes receivables and other receivables, other financial liabilities (other than financial assets carried at cost and debt investments without quote price in an active market), margin loans and stock loans, deposits of central bank and other banks, commercial paper payables, bills and bonds sold under repurchase agreements, payables, deposits, other borrowings and other financial liabilities.
 - (ii) For financial instruments measured at fair value through profit or loss, financial assets at fair value through other comprehensive income (available for sale financial assets), held-to-maturity financial assets and hedging derivative financial assets, the fair value is based on quoted market price in an active market. If a quoted market price is not available, the fair value is determined based on valuation technique or quoted price from other financial institution.
 - (iii) For loans and discounts, negotiations, factoring receivables, credit card receivables, acceptance receivables, and overdue, the fair value is the balance of adjustment unamortized discount or premium and accumulated impairment loss.
 - (iv) Debt investments without quoted price in an active market use the valuation model or quoted price form financial institution as reference.
 - (v) Other financial assets- financial assets carried at cost are composed of unlisted stocks without quoted price in an active market; hence the Company and subsidiaries measure them at cost.
 - (vi) Deposits and Remittances: The Company and subsidiaies consider the bank industries characteristic to decide the fair value. The deposits with market interest rate are almost those due within one year and their carrying amount are reasonable basis for estimating the fair value. The long-term deposits with fixed interest rate are measured using the discounted present value of expected future cash flow. Because the term to maturity is less than three years, it's reasonable using the carrying amount to estimate the fair value.

Notes to the Consolidated Financial Statements

- (vii) Financial Bonds Payable: It refers to the convertible corporate bonds and financial bonds issued by the Company and subsidiaries. Their coupon rates are almost equal to the market interest rate, so it is reasonable to using the discounted present values of expected future cash flow to estimate their fair values. The present values are almost equal to the carrying amounts.
- (viii) The fair value of the financial instruments is the attainable or payable amount if the contract is terminated at the reporting date. The fair value includes the unrealized gain (loss) of unexpired contracts. The derivatives are measured using the quoted price from financial institutions or valuation model.
- (b) The fair value hierarchy of financial instruments

The Three-level Definition

(i) Level 1

Inputs are quoted prices of same financial instruments in an active market. An active market indicates the market that is in conformity with all the following conditions: (i) the products in the market are identical; (ii) it is easy to find a willing party; (iii) the price information is attainable for the public. The equity investments, beneficiary certificates, certain Taiwan government bonds, and derivatives with quoted prices in an active market are classified as level 1.

(ii) Level 2

Inputs are those that are observable for asset or liability, either directly (i.e. prices) or indirectly (i.e. derived from prices), other than quoted prices included within Level 1. The non popular government bonds, corporate bonds, financial bonds, convertible bonds, most of the derivatives, and financial bonds issued by the Bank and its subsidiary are classified as level 2.

(iii) Level 3

Inputs are not based on observable market data (unobservable inputs parameters), i.e., historical volatility which cannot represent an expected value of all the market participators but is used as a model for the calculation of options. Certain derivatives and equity investments without a non-active market belong to level 3.

(c) Fair value measurement

(i) The fair value hierarchy

The following tables present for each of the fair value hierarchy levels of the Company's and subsidiaries' assets and liabilities that are measured at fair value on a recurring basis.

	December 31, 2018			
Financial instruments measured at			-	
fair value	<u>Total</u>	Level 1	Level 2	Level 3
Non derivative financial instruments				
Assets:				
Financial assets measured at fair value through profit or loss	\$ 264,018,689	180,988,901	82,815,080	214,708
Designated at fair value through profit or loss	15,465,720		15,465,720	
Bond investments	15,465,720	-	15,465,720	-
Mandatorily measured at fair value through profit or loss	248,552,969	180,988,901	67,349,360	214,708
Stock investments	96,321,702	96,106,994	-	214,708
Bond investments	68,248,845	899,485	67,349,360	-
Others	83,982,422	83,982,422	-	-
Financial assets at fair value through other comprehensive income	1,127,802,007	927,595,171	183,571,226	16,635,610
Stock investments	83,767,629	67,132,019	-	16,635,610
Bond investments	1,044,034,378	860,463,152	183,571,226	-
Liabilities:				
Financial liabilities designated at fair value through profit or loss	45,855,310	-	45,855,310	-
Designated at fair value through profit or loss	45,855,310	-	45,855,310	-
Derivative financial instruments				
Assets:				
Financial assets measured at fair value through profit or loss	\$ 6,602,576	67,669	6,534,907	-
Hedging Derivative Financial liabilities	41,693	-	41,693	-
Liabilities:				
Financial liabilities measured at fair value through profit or loss	4,797,220	-	4,797,220	-
Hedging Derivative Financial liabilities	12,973	-	12,973	-

	December 31, 2017			
Financial instruments measured	Total	Level 1	Level 2	Level 3
at fair value				
Non derivative financial instruments				
Assets:				
Financial assets measured at fair value through profit or loss	\$ 231,417,694	174,994,332	56,423,362	
Financial assets held for trading	214,800,889	174,994,332	39,806,557	
Stock investments	94,813,513	93,400,413	1,413,100	-
Bond investments	1,110,122	1,014,147	95,975	-
Others	118,877,254	80,579,772	38,297,482	-
Designated at fair value through profit or loss	16,616,805	-	16,616,805	-
Available for sale financial assets	1,167,534,338	92,141,476	1,075,392,862	
Stock investments	71,793,531	71,793,531	-	-
Bond investments	1,081,309,765	5,916,903	1,075,392,862	-
Others	14,431,042	14,431,042	-	-
Liabilities:				
Financial liabilities designated at fair value through profit or loss	26,323,785	-	26,323,785	-
Designated at fair value through profit or loss	26,323,785	-	26,323,785	-
Derivative financial instruments				
Assets:				
Financial assets measured at fair value through profit or loss	6,908,836	-	6,908,836	-
Hedging Derivative Financial Assets	22,759	-	22,759	-
Liabilities:				
Financial liabilities measured at fair value through profit or loss	8,603,164	-	8,603,164	-
Hedging Derivative Financial liabilities	60,480	-	60,480	-

(ii) Valuation techniques

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In addition, fair value measurement assumes that the transaction takes place in the principal (or most advantageous) market in which an orderly transaction would take place for the asset or liability, and assumes market participants would use the assumptions about pricing the asset or liability, and assumes market participants make decisions based on their own best interests.

Financial instruments are recognized initially at fair values. In many case, they usually refers to transaction price. Subsequent to initial recognition, they are also measured at fair value except for those that are measured at amortized cost. The best evidence of fair value is the quoted price in an active market. If a financial instrument do not have a quoted market price in an active market, BOT uses the valuation techniques or refers to the quoted prices set by Bloomberg, Reuters or the Counterparties to determine the fair value.

Notes to the Consolidated Financial Statements

The fair value of financial instruments is based on the quoted prices in an open market. These include trading prices of equity instruments listed on a major stock exchange or of the government bonds in an over the counter ("OTC") market.

When a quoted price of a financial instrument is timely available in a stock exchange or an OTC market or from brokers, underwriter, industry associations, pricing service organizations and the authorities and the price is often used in a arm's length transaction, the financial instrument is considered having a quoted price in an active market. If the above criteria are not met, the market is considered inactive. In general, a large or significantly increasing bid-ask spread and very low transaction volume indicate that the market where the financial instrument is trade is not active.

Other than those traded in an active market, the fair value of all other financial instruments is determined by using a valuation model or referring to the quoted price of the counterparty. The Company and subsidiaries refer to the present values, the discounted cash flow or the values calculated under other valuation methods of financial instruments with similar terms and characteristics, including the one calculated by a model which uses the available market data at the financial statement day as inputs. (i.e. the applicable yield curve of bonds traded in the Taipei exchange and average prices of commercial papers quoted on Reuters)

When measuring a financial instrument which no specific techniques can be applied to but do not create challenge in valuation, such as bonds traded in an inactive market, interest rate swap, FX swaps and options, the Company and subsidiaries adopt the valuation methods which are widely used and accepted by other market participants. The parameters used are usually the observable market data or information.

For complex financial instruments, the Company and subsidiaries not only refers to the valuation methods which are widely used and accepted by other banks but also develops its own valuation models to determine the fair value. These valuation models are usually applied to the valuation of derivatives, debt instruments with embedded derivatives, or securitization products. The parameters used in such models are usually not observable in a market, and therefore, BOT has to make proper estimates based on assumptions and judgments.

(iii) Fair value adjustment

1) Limitations of valuation models and inputs

Outputs of valuation models are approximate values and valuation techniques may not be able to reflect critical factors of all the financial and non financial instruments. As such, additional parameters shall be incorporated into the fair value measurement, such as modeling risk and liquidity risk, when necessary. The management of the Company and subsidiaries believe that the adjustments made to the fair value of financial and non financial instruments are appropriate and necessary since they are performed in accordance with the Company's and subsidiaries' policies governing the fair value of valuation models and related internal controls. All the information and parameters are based on current market conditions and thoroughly reviewed by the Company and subsidiaries.

Notes to the Consolidated Financial Statements

2) Credit risk valuation adjustment

Credit risk valuation adjustment consists of credit valuation adjustments and debit valuation adjustments to the derivatives traded in an OTC market instead of a stock exchange market. The definitions are as follows:

- a) Credit value adjustments (CVA): adjust the valuation on transactions that occurs outside the exchange market, which refers to OTC derivative contracts, to reflect the possibility of the counter parties' delayed payment and default into fair value.
- b) Debit value adjustments (DVA): adjust the valuation on transactions that occurs outside the exchange market, which refers to OTC derivative contracts, to reflect the possibility of the Company's and subsidiaries' delayed payment and default into fair value.

The key inputs of the measurement of credit risk and the quality of the Company's and subsidiaries' counterparties are the probability of default (PD), loss given default (LGD) and exposure at default (EAD).

CVAs are calculated by considering counterparty's probability of default (PD) under the condition that the Bank is not in default, Loss give default (LGD) and Exposure at default (EAD). On the contrary, DVAs are calculated by considering the Bank's PD under the condition that the counterparty is not in default, LGD and EAD.

The Company and subsidiaries refers to the counterparty's default rate graded by Moody's, experiences of John Gregory (scholar), and foreign financial institutions, to determine the PD at 60%. The Company and subsidiaries may also use other alternative PD assumptions if data availability is limited. Moreover, the Company and subsidiaries also take the credit risk valuation adjustments into consideration when calculating fair value by referring to the Mark to Market values of derivatives traded in the OTC markets to reflect the counterparty's credit risk and the Company's and subsidiaries' creditworthiness.

(iv) Reconciliation of Level 3 fair values

Reconciliation of Level 3 fair values in 2018:

		value through ofit or loss	through other comprehensive income	
	ma meas val pro (Unq	a derivative andatorily sured at fair ue through offit or loss uoted equity struments)	Unquoted equity	Total
Opening balance, January 1, 2018	\$	206,925	15,981,226	16,188,151
Total gains and losses recognized:				
In profit or loss		7,783	-	7,783
In other comprehensive income		-	810,291	810,291
Purchased		-	35,643	35,643
Derecognized or repaid			(191,550)	(191,550)
Ending Balance, December 31, 2018	\$	214,708	16,635,610	16,850,318

Fair value

(v) The process of fair value measurements in Level 3

Referring to IFRS 13, the Trading Department should inform the Risk Management Department regarding the related valuation methods before any financial instruments categorized in Level 3 are bought or sold. The valuation result of such financial instruments is quarterly reported to Asset and Liability Management Committee.

(vi) The sensitivity analysis for the financial assets measured at fair value classified to the Level 3.

The Company and subsidiaries consider the valuation techniques used by the Company and subsidiaries for fair value measurements in Level 3 reasonable. However, any changes in one or more of the parameters or assumptions may lead to a different result.

The favorable and unfavorable effects represent the changes in fair value, and the fair value are based on a variety of unobservable inputs calculated using a valuation technique. There are no such effects as of December 31, 2018 and 2017. The analysis only reflects the effects of changes in a single input, and it does not include the inter relationships with another input.

(vii) The sensitivity analysis for the financial assets measured at fair value classified to the Level 3.

the Company's and subsidiaries' financial instruments that use Level 3 inputs to measure fair value include "financial assets measured at fair value through profit or loss – equity investments" and "fair value through other comprehensive income – equity investments".

Inter-relationship

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

Quantified information of significant unobservable inputs was as follows:

Item Financial liabilities	Valuation technique Comparable	Significant unobservable inputs P/E ratio	between significant unobservable inputs and fair value measurement The estimated fair
measured at fair value through profit or loss and Financial assets at fair value through other comprehensive income – Contingent consideration	company method (Market approach)	 P/B ratio EV/Operating revenue EV/EBITDA EV/Total assets Liquidity discount rate 	value would increase (decrease) if: the P/E ratio, P/B ratio, EV/Operating revenue, EV/EBITDA and EV/Total assets were higher (lower); the liquidity discount rate were lower (higher).

(d) Hierarchy information of financial instruments not measured at fair value

(i) Fair value information

In addition to the following items, the Company's and subsidiaries' financial instruments that are not measured at fair value include cash and cash equivalents, due from the central bank and call loans to banks, securities purchased under resell agreements, receivables, other financial assets, discounts and loans, deposit from and due to the central bank and banks, securities sold under repurchase agreements, commercial papers issued, payables, deposits, other borrowings and other financial liabilities. Since their book value is a reasonable approximation to fair value, there is no fair value disclosure.

Item	Book value	Fair value
December 31, 2018		
Financial assets:		
Financial assets measured at amortized cost	428,844,261	414,525,358
December 31, 2017		
Financial assets:		
Held-to-maturity financial assets	372,608,694	371,881,614
Other financial assets - investments in debt instrument without active market	39,986,671	40,146,678

(ii) Fair value hierarchy

	December 31, 2018			
Assets and liabilities item	Total	Quoted prices in active markets for identical asset (Level1)	Significant other observable inputs (Level2)	Significant observable inputs (Level3)
Financial Assets:				
Financial assets measured at amortized cost	\$414,525,358	129,351,195	285,174,163	-
		December	31, 2017	
		Quoted prices in	,	
		active markets for identical asset	Significant other observable inputs	Significant observable inputs
Assets and liabilities item	Total	(Level1)	(Level2)	(Level3)
Financial Assets:				
Held-to-maturity financial assets	\$371,881,614	107,618,774	264,262,840	-
Other financial assets - investments in debt instrument without active market	40,146,678	1,391,991	38,754,687	-

(8) Financial Risk Management:

- (a) Risk management structure
 - (i) The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework.
 - (ii) The Board has established the Risk Management Committee, which is responsible for developing and monitoring the risk management policies of the Company and subsidiaries to reduce risk exposure. The committee reports regularly to the Board of Directors on its activities.
 - (iii) Risk management department is an independent organization responsible for monitoring the Company's and subsidiaries' risk management practices, keeping track of the progress of the execution of revolutions made by the Board or the Committee and submitting the risk reports to the Board and the Committee regularly. If a significant risk exposure is identified, the Department shall take necessary action and report them to the Board and the Committee.

Notes to the Consolidated Financial Statements

- (iv) The Board of each subsidiary is the highest organization to make decisions on major company issues. Their respective risk management committees and risk management departments are charged with monitoring risks.
- (v) Each subsidiary is responsible for identify, evaluate, and control the risks of new products or business, set up related risk management guideline, and monitor the risk management to ensure the risk control of the company.
- (vi) The risk management departments of the Company and subsidiaries should periodically report the risk control situation to the Board of Directors and Risk management committee to enable the Committee to assess the risk involved in the Company's business and how they are controlled and monitored by the management.

(b) Risk management strategies

The various risks resulted from the business no matter on/off the financial statements should be managed in order to optimize compliance and enhance the operating and development. Except for regulations requested by the competent authority, the Company and subsidiaries also set related risk management regulations as a guideline to ensure the risk control of various risks.

(i) The subsidiary, BOT

1) Overview

The Bank and its subsidiary's activities have exposed to various risks from financial instruments, which include credit risk, market risk, operational risk, interest rate risk, liquidity risk, national risk, legal risk and so forth. The principle of risk management is as follow:

- a) Monitor the BIS Capital Adequacy Ratio in response to operation scale, credit risk, market risk, operational risk and the operating trades in the future.
- b) Establish a systematic risk measure and control mechanism to measure, monitor and control every risk.
- c) Manage every business risk considering the risk capacity, capital reserve, nature of debts and performance.
- d) Establish a valuation method for the quality and classification of assets, control the intensity of exposure and significant exposure, check periodically and recognize allowance for loss.
- e) Establish information system protection mechanism and emergency plan for bank operation, transactions, and information. Build an independent and effective risk management mechanism and strengthen the risk management of business through appropriate policies, procedures, and systems.

Notes to the Consolidated Financial Statements

2) Risk management structure

The risk management structure of BOT is composed of the Board of Directors, risk management committee, risk management department and every operational unit.

- a) The Board of Director is the final decision maker for risk management and is responsible for the result of risk. The Board of Director should decide the entire risk management policies in view of operational strategies and business environment to monitor the risk management mechanism which understand the risk status and maintain the appropriate Capital Adequacy Ratio in response to all risk.
- b) Risk management committee under the Board of Directors is responsible for executing risk management policies and coordinating interdepartmental management of risk.
- c) Risk management department is responsible for monitoring, tracing the execution status of risk management policies and submitting reports to the Board of Directors or risk management committee. If a significant risk exposure is discovered, the risk management department has to make appropriate procedures and report them to the Board of Directors.
- d) Every department should identify, evaluate, and control the risks of new products or business, set related risk management regulations as a guideline, and monitor the risk management to ensure the risk control of entire company.
- e) All operational units shall comply with the regulations for risk management.

3) Credit Risk

a) Causes and definition of credit risk

Credit risk is the risk of financial loss to BOT if a borrower, issuer or a counterparty to a financial instrument fails to meet its contractual obligations principally due to their credit deterioration or other factors (i.e. disputes between a loanee and its counterparty), including:

- i) Credit risk from a borrower/issuer refers to the risk that BOT may suffer from financial losses when the borrower/issuer is not able to meet its contractual obligations due to default, bankruptcy or liquidation.
- ii) Credit risk form counterparties refers to the risk that BOT may suffer from financial losses when the counterparty is not able to settle the contracts or execute its repayments.
- iii) Credit risk form underlying assets refers to the risk that BOT may suffer from financial losses when the credit quality of the underlying assets linked by the financial instruments turns vulnerable, which leads to an increase of risk premium or a downgrade of credit rating.

Notes to the Consolidated Financial Statements

Credit risk is derived both from on and off balance sheet items. On balance sheet items include loans, placement with banks, call loans to banks, acceptance bills, debt instruments, derivatives, etc. Off balance sheet items include guarantees, acceptances, letter of credits, loan commitments, etc.

b) Identification and measurement of credit risk

To ensure the credit risk is in a tolerable range, BOT sets the credit risk management policies which identified that the credit risk includes all the transactions and business related to the assets, liabilities and off balance sheet items. Before executing present or new businesses, BOT shall identify the credit risk, understand the risk exposure through appropriate evaluation and assess the possibilities of default.

Except that the local financial supervisory institutions have their own regulations, the overseas business units of the BOT shall conduct the credit ability of the loans and discounts, and recognized impairment in accordance with the "Operational Manual of Evaluating the Impairment of Loans and Receivables". The followings are the detailed information of how major businesses of BOT measures and manages credit risk.

i) Credit business (including loan commitments and financial guarantees)

1. Credit assets categories and post-loan management

BOT has established the "Operational Manual of Evaluating the Impairment of Loans and Receivables" and has classified the credit assets into five categories. Except for the normal credit assets that are classified at the first category, the other bad credit rating assets are classified as the second category requiring attention, the third category collectable, the fourth category hard to collect, and the fifth category impossible to collect by assessing the collaterals and overdue days. In order to reinforce the post loan management, BOT set the "Credit Review and Follow up Evaluations Provision", the "Review of the Credit Conducted by Managers Provision" and "Warning Mechanism Provision" and evaluate and monitor the quality of credit assets regularly. Also, the BOT audits credit cases by sampling according to the ratings of the cases and checks significant credit cases periodically, to enhance the management of abnormal credit, and to achieve the purpose of warning and interim monitor.

Notes to the Consolidated Financial Statements

2. Internal credit rating

When conducting credit review, BOT will obtain necessary collateral to mitigate risk arising from financial loss due to the environment, economic changes, risk factors of business development strategies and policies. In order to balances the credit risk and earnings target, they strengthen the market competitiveness of products strive for customer identification and broaden the business. The following are the credit process of corporate finance and consumer finance.

a. Corporate Finance

BOT sets up the terms and interest rate based on a borrowers' credit ratings, including the ones from external credit rating agencies and BOT's internal scorecards. The clients are classified into two types based on the scorecards, the large scale enterprise and the medium to small scale enterprise. Then BOT allocates the clients into 13 ratings according to their enterprise scale, financial and business status, business management and industry characteristic.

b. Consumer Finance

BOT uses the credit application scorecard and behavior scorecard, both of them have seven grades for the purpose of credit risk evaluation and differential pricing. Unsecured consumer loans are graded based on seven scoring items and are classified into the seventh rating. BOT will reject those below the lowest scores; the others are reviewed in accordance with related provisions.

ii) Due from banks and call loans to banks

BOT will assess the counterparty's creditworthiness, and refer to external ratings provided by domestic and international credit rating agencies, to set up different credit risk limits before any transactions are carried out.

iii) Investment in debt instruments and derivative financial instruments

BOT identifies and manages credit risk of debt instruments by reviewing the external ratings, creditworthiness of bonds, and geographic region of its counterparties.

Most of the BOT's derivative contracts with its counterparties are financial institutions with good credit ratings. For those financial institutions whose ratings are not available, the BOT reviews the transactions individually. All the counterparties, including non-financial institutions, are managed based on their lines of credit (including loans at call).

Notes to the Consolidated Financial Statements

- c) Measurement of credit risk
 - i) Categories for credit risk quality

BOT internally categorizes the credit risk into four levels, which are low risk, moderate risk, high risk and impaired risk. The definition of each level is as follows:

- 1. Low risk: The issuers or the counterparties are rated as robust or above to fulfill their obligation of the contracts. Even under various negative news or disadvantageous economic conditions, the companies are capable of dealing with the situations.
- 2. Moderate risk: The possibility that the issuers or counterparties fulfill their obligation is remote. Operating performance and disadvantageous economic conditions will lower their ability and willingness to fulfill their obligation.
- 3. High risk: The possibility that the issuers or counterparties fulfill their obligation is remote and mainly relies on the business environment. Negative news or disadvantageous economic conditions will lower their ability and willingness to fulfill their obligation.
- 4. Impaired risk: the counterparties or the target did not perform its obligation according to the contracts, and the potential estimated loss of the Company has reached the standard of impairment.
- ii) Determination on the credit risk that has increased significantly since initial recognition

BOT determines whether the credit risk of financial instruments applying the impairment requirements in IFRS 9 increased significantly since the initial recognition on each reporting date. For this assessment, BOT considers the reasonable and supportable information (including forward looking information) which shows that the credit risk has increased significantly since initial recognition. The main considerations.

Notes to the Consolidated Financial Statements

1. Credit business (including loan commitments and financial deposit)

BOT's credit business scoring model and risk degree were as follows:

Risk degree	Corporate Finance IRB scoring model	Consumer Finance IRB application/ behavioral scoring model (including credit cards, excluding student loans)	Student Loans behavioral scoring model
	1	1	1
Low	2	2	
	3	3	2
	4]	
	5	4	3
	6	5	4
Moderate	7		5
	8	6	
	9		6
	10		
	11		7
High	12	7	8
	13]	9
			10

a. Loans and Discounts and credit related receivables

BOT will determine if the credit risk of loans and discounts or financing receivables has increased significantly since initial recognition, when the financial instrument applying the impairment requirements in IFRS 9 meets the following conditions at each reporting date:

- The borrower's internal or external rating has significantly dropped;
- The borrower's contract payment has been overdue for more than one month but still within 3 months (there are additional 45 days for a borrower who does not have a credit account in BOT);
- The borrower's internal credit level is assessed as Poor under post loan review or alert.

Notes to the Consolidated Financial Statements

b. Credit Cards

BOT will determine if the credit risk of credit card loans has increased significantly since initial recognition when the credit card loans applying the following conditions: The borrower has not used revolving credit facility, but whose internal rating has dropped more than 3 levels, or the borrower has used revolving credit facility without overdue, or overdue within 3 months, or non-conforming assets excluding assets previously determined as credit risk has increased significantly or credit impairment.

2. Debt investments and placement with central bank and call loans to banks

BOT follows the table below to determine whether that the credit risk of debt investments or placement with central bank and call loans to banks have increased significantly since initial recognition at each reporting date:

	STAGE 1 (credit risk has not significantly increased)	STAGE 2 (credit risk has significantly increased)	STAGE 3 (credit has been impaired)
1.	The credit rating of a counterparty is higher than Moody's A3, S&P's A, Fitch's A or Taiwan Ratings' twA at the reporting date. (Note)		
2.	The credit rating of a counterparty falling between Moody's A3 and Baa3 or equivalent drops within 4 levels during the period of the transaction date and each reporting date.	Not assessed as Stage 1, but the credit of counterparty is not actually impaired.	Not assessed as Stage 1, but the credit of counterparty has been impaired.
3.	The credit rating of a counterparty lower than Moody's Baa3 or equivalent drops 1 level during the period of the transaction date and each reporting date.		

Note: If the credit risk of the credit assets is low, BOT may consider that the credit risk of debt investments and placement with central bank and call loans to banks has not significantly increased since initial recognition.

Notes to the Consolidated Financial Statements

iii) Definitions for default and credit impairment of financial assets

BOT uses the same definitions for default and credit impairment of financial assets. If one or more of the following conditions are met, the Branch determine that the financial assets have been defaulted and credit impaired:

- 1. Credit business (including loan commitments and financial deposit)
 - a. Loans and discounts and credit related receivables
 - i. Quantitative indicators
 - The borrower's principals or interests have been overdue than 3 months.
 - · The borrower's internal rating is assessed as the lowest.

ii. Qualitative indicators

If there is evidence that the borrower will be unable to pay the contract, or show that the borrower has significant financial difficulties, such as:

- The borrower has requested to postpone the repayment of principles and interests;
- The borrower's internal credit level is assessed as "Terrible" under post loan review or alert;
- · The borrower's internal credit level is assessed as "Dangerous" under post loan review or alert;
- · The borrower is reported by BOT due to significant and unfavorable events;
- · The borrower is under debt negotiation.

b. Credit card business

The loan which borrower's payment has been overdue more than 3 months, or is reclassified as non-accrual loans, or was credit-impaired before, or which borrower is dead.

Notes to the Consolidated Financial Statements

- 2. Debt investments and placement with central bank and call loans to banks
 - a. If there is evidence showing that the borrower will be unable to repay the principal or interests, or that the borrower has significant financial difficulties, such as:
 - The issuer has breached the contract, such as a default or delinquency in interest or principal payments;
 - · The issuer reorganizes its debt, such as a slash on the interest rate or principals, an exchange of debts, subordination of debt repayment or a postpone in maturity date;
 - · The issuer has filed a bankruptcy; or
 - · The issuer's rating is optional default or default.
 - b. A combination of individual and independent events may lead to an impairment on financial assets.

If the aforementioned definition of breach of contract and credit impairment applies to all financial assets held by BOT no longer meets the definition of default and credit impairment for a period of time, it is deemed to return to the state of compliance and is no longer considered defaulted and credit impaired.

The aforementioned definition of breach of contract and credit impairment, and is consistent with the definition used for the purpose of internal credit risk management for financial assets, and is also applied to the relevant impairment assessment model.

iv) Write off policy

If there is no realistic prospect of recovery for the financial assets (either partially or in full), BOT will write off part or full of the financial assets. The indications of financial assets which have no realistic prospect of recovery include:

- 1. The loan cannot be recovered in full or in part because the issuers or debtors have dissolved, gone into hiding, reached a settlement, declared bankruptcy, or for other reasons.
- 2. The collateral and property of the primary/subordinate debtors or issuers have been appraised at a very low value or become insufficient to repay the loan after the subtraction of senior mortgages; or the execution cost approaches or possibly exceeds the amount that BOT might collect from the debtors where there is no financial benefit in execution.

Notes to the Consolidated Financial Statements

- 3. The primary/subordinate debtor or an issuer's collateral has failed to sell at successive auctions where the price of such collateral has been successively lowered, and there is no financial benefit to be derived from the BOT's taking possession of such collateral.
- 4. More than two years have elapsed since the maturity date of the non performing loans or non accrual loans, and the efforts of collection have failed.

v) Amendments of contractual cash flows of financial assets

The contractual cash flows of loans and discounts may be amended due to the borrower's financial difficulties or in order to increase the recovery rate. An amendment may involve an extension of contract period, a change in the timing of repayments or in the interest rate, which may lead to a derecognition of current financial assets and a re-recognition of the financial assets at fair value, in accordance with BOT's policy (Please see note 4(f)).

If the amendments do not lead to a de-recognition, BOT will determine the credit of financial assets have been impaired and will assess expected credit loss accordingly since debt negotiation or extension is one of the conditions that define whether financial assets are credit-impaired or not.

BOT assesses the possibility of default of the amend financial assets by considering the condition of repayments after the amendment and several related behavior indexes, and re-evaluate whether the amendment has improved or restore the client's ability to make the required loan payments. According to the BOT's policy, a borrower cannot be reverted to Stage 1 until the borrower can continuously repay the new contractual amounts for a certain period and shows good payment behaviors.

BOT will periodically review changes of credit risk after amendments in accordance with related policy.

vi) Expected credit loss measurement

1. Adopted methods and assumptions

For BOT, if the financial assets are of low credit risk or no significant increase in credit risk, the 12 month expected credit losses will be recognized. If the financial assets are significantly increased in credit risk or the credits have been impaired, the expected credit losses for a lifetime will be recognized.

In order to measure expected credit losses, BOT adopts Probability of default ("PD"), and include Loss given default ("LGD") and Exposure at default ("EAD"), and consider the impact of the time value of money, to calculate the expected credit losses for 12 months and for a lifetime, respectively.

Notes to the Consolidated Financial Statements

Default probability is how likely the issuer or the counterparty breaches the contract, and the loss given default is the rate of loss due to default by the issuer or the counterparty. The default probability and loss given default used by BOT, related impairment assessments are based on international credit rating agencies (S&P and Moody's), regularly publish information on default rate and loss given default, or internal historical information and calculate based on current observable data and forward looking general economic information (such as gross domestic production) after adjusting historical data.

The Exposure at default is measured by amortized cost of financial asset

The estimation techniques or material assumptions made by BOT to assess expected credit losses have no significant changes during the year.

2. Forward looking information considerations

BOT takes forward looking information into account when judging whether the credit risk of a debt instrument has increased significantly since its initial recognition, and when the expected credit loss is measured.

a. Credit business (including loan commitments and financial deposit)

BOT takes forward looking information into account when the expected credit loss is measured by considering Monitoring Indicator released by National Development Council as prediction for the future economic status. The indicator includes important macroeconomic variables reflected economic activities and degree of prosperity, and is used to measure the pulse of economy. BOT adjusts PD in coming year based on signals of Monitor Indicator and average historical probability of default, in order to make expected credit loss reflect forward looking information.

The overall monitoring indicator BOT used to measure expected credit losses flashed "yellow-blue" in 2018. The indicator reflected that the prediction of economy from balanced to downturn, then BOT expected credit losses to be in upper trend, and raised PD on December 31, 2018.

Notes to the Consolidated Financial Statements

b. Debt investments and placement with central bank and call loans to banks

BOT evaluates the expected credit loss based on the external rating outlook or observation at the reporting date. If any of an issuer's credit rating granted by Moody's, S&P, Fitch, or Taiwan Rating is "Negative" or "-", the issuer will be determined as negative outlook or negative observation.

- i. When the issuer's credit rating outlook is "Negative" or credit rating observation is "-", the BOT uses the average of the long-term PD and one level reducted PD.
- ii. Otherwise, the PD will remain unchanged.
- d) Management of maximum exposure to credit risk and excessive risk concentration
 - i) In accordance with the Banking Law, there is a credit limitation management for the Company's and subsidiaries' person in charge, employees, and any interested party. In respect to credit intensity, BOT provides credit and investment quota rules for the same enterprise, and industry. BOT also limits and manages the credit amount for enterprises, groups and every industry.
 - ii) BOT's Treasury Department, OBU, and foreign branches provide different credit amount according to external credit evaluation and rankings when having a transaction in the currency market or capital market, foreign exchange, new financial instruments transactions and negotiable security transactions.
 - iii) To spread the country risks, BOT allocates different credit amount, based on the ranking of the countries in "Euromoney", to the Financing Department, OBU, and foreign branches. The covered businesses are loan assets, transaction assets, and off balance sheet positions.
- e) Policies of credit risk deduction
 - i) Collateral

BOT has established policy and procedures to mitigate credit risk. Among them, one of the most common ways, is to demand for collateral. In terms of collateral management and valuation, BOT established policies governing the scope of collateral and related procedures to secure debts. Moreover, BOT also requires the provisions that secure debts and collateral should be contained within a credit agreement to reduce credit risk by clearly defining the amounts BOT can cut and the grace periods the banks can offer or even requesting for a prepayment.

Notes to the Consolidated Financial Statements

Non-credit businesses are not required to collect collateral, depending on the nature of the financial instruments. Only asset backed securities and other similar financial instruments are required to pledge an asset pool of financial instruments as collateral.

Considering both credit control and business expansion, BOT shall request collaterals or guarantees to decrease the credit risk. The permitted collaterals and guarantees included mortgages on real estate or properties (i.e., land, building, machinery, car, ship, aircraft, etc.), pledges of securities or other rights (i.e., certificates of deposit; various bonds, stocks, or other securities), guarantees provided by the government agencies, banks, or credit guarantee institutions authorized by the government, and any other guarantees or collaterals approved by the Bank and its subsidiary.

ii) Master netting agreement

BOT's transactions are usually settled individually without bundling or netting with any other transactions. However, BOT also enters into netting agreements or chooses to settle net and terminates the deal if the counterparty is in default.

iii) Other credits enhancement

BOT's credit contract contains the term that BOTs are entitled to offset the obligation by claiming the deposits of the borrower who are in default to mitigate credit risk.

- f) The maximum credit exposure to the credit risk of financial assets (without considering the allowance for bad debt, collaterals and guarantees)
 - i) As of December 31, 2018, the amounts of maximum credit risk exposure to the credit risk displayed by credit rating are as follows:

	_		Dis	counts and loans	1	
		December 31, 2018				
	12	month ECLs	Lifetime ECLs—not impaired	Lifetime ECLs — impaired	Credit impairments of originated or purchased new financial assets — impaired	Total
Credit rating						
Low	\$	852,843,775	13,694	172,377	-	853,029,846
Medium		908,380,450	32,983,797	2,178,188	-	943,542,435
High		34,148,546	23,860,376	2,377,382	-	60,386,304
Others	_	720,769,597	566,568	18,120,028		739,456,193
Gross carrying amount		2,516,142,368	57,424,435	22,847,975	-	2,596,414,778
Allowance for bad debts		(20,113,903)	(1,805,624)	(4,887,531)	-	(26,807,058)
Impairment recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming / Nonaccrual Loans						(12,580,426)
Total	\$	2,496,028,465	55,618,811	17,960,444		2,557,027,294
					(C 1)

(Continued)

Notes to the Consolidated Financial Statements

	Debt instruments measured at fair value through other comprehensive income							
			Dec	cember 31, 2018	Credit			
	<u>12 moi</u>	nth ECLs	Lifetime ECLs—not impaired	Lifetime ECLs – impaired	impairments of originated or purchased new financial assets— impaired	Total		
Credit rating								
Aaa~Baa3		6,587,799	-	-	-	1,036,587,799		
Ba1~Ba3		2,599,246	1,092,208			3,691,454		
Gross carrying amount	1,03	9,187,045	1,092,208	-	-	1,040,279,253		
Allowance for impairment		(76,773)	(6,172)	-	-	(82,945)		
Valuation adjustment		731,461	 .	-		731,461		
Total	\$ 1,03	9,841,733	1,086,036	-		1,040,927,769		
			Debt instrument	s measured at a ember 31, 20				
	12 mai	nth ECLs	Lifetime ECLs — not impaired	Lifetime ECLs — impaired	Credit impairments of originated or purchased new financial assets — impaired	Total		
Credit rating	12 11101	itii ECLs	mpaneu	impan cu		iotai		
Aaa~Baa3	\$ 15	6,881,045	-	-	-	156,881,045		
Ba1~Ba3	1	0,993,183	-	-	-	10,993,183		
Gross carrying amount	16	7,874,228		-		167,874,228		
Accumulated impairment		(49,536)	-	-	-	(49,536)		
Total	\$ 16	7,824,692		=		167,824,692		
		Letter of	Credit Receivable Dece	es and Guarante ember 31, 20		ivables		
		a PCI	Lifetime ECLs—not	Lifetime ECLs—	Credit impairments of originated or purchased new financial assets—	T 1		
Credit rating	12 moi	th ECLs	impaired	impaired	impaired	Total		
Low	\$ 6	0,379,626	217,144	709	-	60,597,479		
Medium		5,743,181	1,243,038	296,427	-	47,282,646		
High		188,282	567,393	130,011	-	885,686		
Others		4,982,111	_	29,599		5,011,710		
Gross carrying amount	11	1,293,200	2,027,575	456,746		113,777,521		
Allowance for bad debts(Guarantee reserve and other reserve)		(370,671)	(33,540)	(158,226)	-	(562,437)		
Impairment recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming / Nonaccrual Loans						(718,039)		
Total	\$ <u>11</u>	0,922,529	1,994,035	298,520		112,497,045		

Notes to the Consolidated Financial Statements

	_	Loan Commitments December 31, 2018						
Credit rating	12	month ECLs	Lifetime ECLs—not impaired	Lifetime ECLs— impaired	Credit impairments of originated or purchased new financial assets — impaired	Total		
Low	\$	2 205 000	00.763	63		2 202 022		
Medium	Э	2,205,098	98,762 140,328	371	-	2,303,923 140,699		
High		- 52 145	140,328	3/1	-	· · · · · · · · · · · · · · · · · · ·		
Others		53,145 412,585,699	-	-	-	53,145 412,585,699		
Gross carrying amount	_	414,843,942	239,090	434		412,383,699		
Allowance for bad debts (Loan commitments reserve)		(13,309)	(2,067)	(236)	-	(15,612)		
Total	\$_	414,830,633	237,023	198		415,067,854		
	_	Acc	counts Receivable Dece	e(including other	financial assets)			
	12	month ECLs	Lifetime ECLs—not impaired	Lifetime ECLs— impaired	Credit impairments of originated or purchased new financial assets — impaired	Total		
Credit rating Aaa~Baa3	•	0.027.206				0.027.207		
Aaa~Baa3 Ba1~Caa1	\$	8,827,396	-	-	-	8,827,396		
Others		94,231	15,890	-	-	110,121		
Gross carrying amount (Note	_	97,242,805	823,467 839,357	109,727 109,727		89,254,372 98,191,889		
1)		97,242,803	839,337	109,727	-	98,191,889		
Allowance for bad debts (Note 2)		(69,743)	(12,151)	(49,008)	-	(130,902)		
Impairment recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming /						(48,656)		
Nonaccrual Loans	_							

Note 1: The gross carrying amount of the table was not included BOT's restrictive deposit \$19,469 thousand and Department of Government Employees' Insurance's accounts receivable \$7,283,748 thousand evaluated by simplification method.

Note 2: The allowance for bad debts of the table were not included BOT's accumulated impairment recognized in restrictive deposit \$11 thousand and Department of Government Employees' Insurance's allowance for impairment \$1,022 thousand evaluated by simplification method.

Notes to the Consolidated Financial Statements

ii) Assets in the Financial Statements (applicable before January 1, 2018)

	December 31, 2017				
Item	Book Value	Maximum credit exposure (Note 2)			
Cash and cash equivalents	114,043	79,489			
Placement with Central Bank and call loans to banks	675,563	251,386			
Financial assets measured at fair value through profit or loss	64,827	64,827			
Available-for-sale financial assets	1,135,941	161,370			
Hedging derivative financial assets	23	23			
Receivables	100,519	83,175			
Loans and discounts	2,318,081	2,252,679			
Held-to-maturity financial assets	81,258	12,809			
Other financial assets	75,715	75,632			
Total =	4,565,970	2,981,390			

Note: December 31, 2017

- (1) The amount of non-performing loans which included the department of loan management was \$4,923 million.
- (2) Apart from cash, the maximum exposure to credit risk of other assets shall exclude the debts (including tax receivables, placement with Central Bank and deposits in Central Bank) from the government and the Central Bank. Explanations were as follows:
 - 1) Cash and cash equivalents excludes cash, notes, and checks for clearing of \$34,554 million.
 - 2) Placement with Central Bank and call loans to banks excludes placement with Central Bank and deposits in Central Bank of \$424,177 million.
 - 3) Available-for-sale financial assets exclude the government bonds of \$42,225 million and negotiable certificate of deposits of \$932,346 million.
 - 4) Held-to-maturity financial assets exclude the government bonds of \$68,449 million.
 - 5) Receivables exclude tax receivable of \$650 million and long-term receivables of \$16,694 million.
 - 6) Loan and discount exclude loans to government of \$65,402 million.
 - 7) Other financial assets exclude short-term advance to government of \$83 million.

Notes to the Consolidated Financial Statements

- (3) The greatest impact of the credit exposure is the fair value at the balance sheet date; the book value of hedging derivatives is the principal of the hedging instruments (IRS); and the amount of greatest credit exposure is the adjusted amount of hedging derivatives at fair value.
- (4) The carrying amounts excluded the assets of the Department of Government Employees Insurance and BankTaiwan Insurance Brokers Co., Ltd.
- iii) Off-balance Sheet Items (applicable before January 1, 2018)

	December	r 31, 2017
Item	Book Value	Maximum credit exposure (Note 2)
Unused of irrevocable loan commitment (with credit agreement)	431,389	12,627
Letter of credit receivables	25,419	23,548
Deposits receivables	85,039	85,000
Total	541,847	121,175

Note: December 31, 2017

- (1) While measuring the maximum exposure to credit risk, BOT only consider the items that are positive at the reporting date, the off balance commitments and guarantee contracts and exclude the position to the government.
 - 1) Irrevocable loan commitment with credit agreement excludes \$418,762 million.
 - 2) Letter of credit receivables exclude \$1,871 million.
 - 3) Acceptance receivable excludes \$39 million.
- (2) This table excluded the Department of Government Employees Insurance and the subsidiary, BankTaiwan Insurance Brokers.

Notes to the Consolidated Financial Statements

iv) The assets in the balance sheet and off-balance sheet items held as collateral, master netting arrangement and other credit enhancements related information on the financial impact the maximum amount of the violence risk in credit risk shows in the following table:

December 31, 2018		Collateral	General agreement of net amount settlement	Enhancement of other credits	Total
In balance sheet:					
Receivables					
Others	\$	1,284	379	2,765	4,428
Loans and discounts		1,342,676	-	1,252,821	2,595,497
Financial assets measured at fair value through profit or loss					
Others		112	-	-	112
Off-balance sheet					
Irrevocable loan commitments		-	-	414,844	414,844
Standby letters of credit		1,650	-	25,026	26,676
Financial guarantees		7,581		79,520	87,101
r manciai guaramees	_	7,561		19,320	67,101
Total	\$ _	1,353,303	379	1,774,976	3,128,658
Č	\$		General agreement of net amount		
Total December 31, 2017	~=		General agreement of	1,774,976 Enhancement	
Total December 31, 2017 In balance sheet:	~=	1,353,303	General agreement of net amount	Enhancement of other	3,128,658
Total December 31, 2017 In balance sheet: Receivables		1,353,303	General agreement of net amount settlement	Enhancement of other credits	3,128,658 Total
Total December 31, 2017 In balance sheet: Receivables Others	~=	1,353,303 Collateral 1,161	General agreement of net amount	Enhancement of other credits	3,128,658 Total 3,591
Total December 31, 2017 In balance sheet: Receivables Others Loans and discounts		1,353,303	General agreement of net amount settlement	Enhancement of other credits	3,128,658 Total
December 31, 2017 In balance sheet: Receivables Others Loans and discounts Off-balance sheet		1,353,303 Collateral 1,161 1,314,590	General agreement of net amount settlement	1,774,976 Enhancement of other credits 2,427 1,002,505	3,128,658 Total 3,591 2,317,095
December 31, 2017 In balance sheet: Receivables Others Loans and discounts Off-balance sheet Irrevocable loan commitments		1,353,303 Collateral 1,161 1,314,590 2,432	General agreement of net amount settlement	1,774,976 Enhancement of other credits 2,427 1,002,505 428,686	3,128,658 Total 3,591 2,317,095 431,118
December 31, 2017 In balance sheet: Receivables Others Loans and discounts Off-balance sheet Irrevocable loan commitments Standby letters of credit		1,353,303 Collateral 1,161 1,314,590 2,432 1,506	General agreement of net amount settlement	2,427 1,002,505 428,686 23,913	3,128,658 Total 3,591 2,317,095 431,118 25,419
December 31, 2017 In balance sheet: Receivables Others Loans and discounts Off-balance sheet Irrevocable loan commitments		1,353,303 Collateral 1,161 1,314,590 2,432	General agreement of net amount settlement	1,774,976 Enhancement of other credits 2,427 1,002,505 428,686	3,128,658 Total 3,591 2,317,095 431,118

The Management believes that the reason why the BOT can continuously manage and minimize the exposure of credit risk to off balance sheet items is because a stricter review process is adopted, and cases are reviewed regularly in subsequent periods

Notes to the Consolidated Financial Statements

v) BOT closely observes the value of collateral for financial instruments, and considers the allowance for impairment of credit-impaired financial assets. Information about credit-impaired financial assets and the value of collateral which may decrease potential loss is shown below:

		December 31, 2018								
	Gr	oss carrying amount								
Impaired financial assets:										
Receivables										
Credit card business	\$	5,238	4,122	1,116	-					
Others		104,489	44,886	59,603	-					
Loans and discounts	_	22,847,974	4,887,531	17,960,443	9,178,478					
Total amount of impaired financial assets	\$	22,957,701	4,936,539	<u>18,021,162</u>	9,178,478					

vi) Financial assets not applicable for rules of impairment:

	December 31, 2018		
	Maximum cred		
Financial assets measured at fair		exposure	
value through profit or loss Debt instruments	\$	144,477,290	
Derivative	Ψ	6,404,769	

g) Concentration of credit risk

When the transaction of financial instruments is concentrated in a single industry or region, the ability to oblige the contract would be impacted by similar factors, thereby, causing concentration of credit risk.

Notes to the Consolidated Financial Statements

The credit risk of BOT is derived from credit, placement with banks, call loans to banks, security investments and so on. Disclosures of concentration of credit risk by industries, regions and collaterals were as follows:

i) Industry

		December 3	31, 2018	December 31, 2017		
Industry type	_	ook Value (Note 1)	%	Book Value (Note 2)	%	
Finance and insurance	_	1,396,688	33.84 %	1,536,358	38.58 %	
Individuals		869,958	21.08 %	859,455	21.59 %	
Manufacturing		391,096	9.48 %	364,778	9.16 %	
Government agencies		710,576	17.22 %	523,183	13.14 %	
Shipping, warehousing and communications		151,845	3.68 %	119,558	3.00 %	
Electricity and gas supply		107,084	2.59 %	105,930	2.66 %	
Others		499,570	12.11 %	472,697	11.87 %	
Total	\$	4,126,817	100.00 %	3,981,959	100.00 %	

Note 1: December 31, 2018

- (1) The carrying amounts include loans (\$2,596,415 million), call loans to banks, overdraft of banks and placement with banks (\$210,945 million), security investments (\$1,319,457 million) and so on. Loans refer to discounts, overdrafts, government overdrafts, secured overdrafts, short-term loans, short-term secured loans, medium-term loans, medium-term secured loans, long-term secured loans, import bill advance and nonperforming loans (\$4,221 million). Security investments include bonds and stocks. Bonds are measured at fair value. However the bonds classified as held-to-maturity financial assets or bond investments in non-active market are carried at cost. Equity investments are measure at fair value but those classified as cost of long-term equity investments under the equity method and financial assets carried at cost are measured at cost.
- (2) This table excluded the Department of Government Employees Insurance and the subsidiary, BankTaiwan Insurance Brokers.

Note 2: December 31, 2017

- (1) The carrying amounts include loans (\$2,318,081 million), call loans to banks, overdraft of banks and placement with banks (\$328,438 million), security investments (\$1,335,440 million) and so on. Loans refer to discounts, overdrafts, government overdrafts, secured overdrafts, short-term loans, short-term secured loans, medium-term loans, medium-term secured loans, long-term loans, long-term secured loans, import bill advance and nonperforming loans (\$4,923 million). Security investments include bonds and stocks. Bonds are measured at fair value. However the bonds classified as held-to-maturity financial assets or bond investments in non-active market are carried at cost. Equity investments are measure at fair value but those classified as cost of long-term equity investments under the equity method and financial assets carried at cost are measured at cost.
- (2) This table excluded the Department of Government Employees Insurance and the subsidiary, BankTaiwan Insurance Brokers.

ii) Region

		December 31	, 2018	December 31, 2017		
Areas type	В	ook Value (Note 1)	%	Book Value(Note 2)	%	
Domestic	\$	3,681,225	89.20 %	3,508,669	88.11 %	
Foreign		445,592	10.80 %	473,290	11.89 %	
Total	\$	4,126,817	100.00 %	3,981,959	100.00 %	

Notes to the Consolidated Financial Statements

Note 1: December 31, 2018

- (1) The carrying amounts include loans (\$2,596,415 million), call loans to banks, overdraft of banks and placement with banks (\$210,945 million), security investments (\$1,319,457 million) and so on. Loans refer to discounts, overdrafts, government overdrafts, secured overdrafts, short-term loans, short-term secured loans, medium-term loans, medium-term secured loans, long-term secured loans, import bill advance and nonperforming loans (\$4,221 million). Security investments include bonds and stocks. Bonds are measured at fair value. However the bonds classified as held-to-maturity financial assets or bond investments in non-active market are carried at cost. Equity investments are measure at fair value but those classified as cost of long-term equity investments under the equity method and financial assets carried at cost are measured at cost.
- (2) This table excluded the Department of Government Employees Insurance and the subsidiary, BankTaiwan Insurance Brokers.

Note 2: December 31, 2017

- (1) The carrying amounts include loans (\$2,318,081 million), call loans to banks, overdraft of banks and placement with banks (\$328,438 million), security investments (\$1,335,440 million) and so on. Loans refer to discounts, overdrafts, government overdrafts, secured overdrafts, short-term loans, short-term secured loans, medium-term loans, medium-term secured loans, long-term secured loans, import bill advance and nonperforming loans (\$4,923 million). Security investments include bonds and stocks. Bonds are measured at fair value. However the bonds classified as held-to-maturity financial assets or bond investments in non-active market are carried at cost. Equity investments are measure at fair value but those classified as cost of long-term equity investments under the equity method and financial assets carried at cost are measured at cost.
- (2) This table excluded the Department of Government Employees Insurance and the subsidiary, BankTaiwan Insurance Brokers.

iii) Collateral

		December 31	, 2018	December 31, 2017		
Name of collateral	В	ook Value (Note 1)	%	Book Value (Note 1)	%	
Non-secured bonds	\$	1,253,738	48.29 %	1,003,492	43.29 %	
Secured bonds		1,342,677	51.71 %	1,314,589	56.71 %	
Guarantee		141,408	5.44 %	144,249	6.22 %	
Securities		80,505	3.10 %	85,437	3.68 %	
Real estate		1,045,746	40.28 %	1,029,837	44.43 %	
Chattel		74,905	2.88 %	54,961	2.37 %	
Valuables		113	0.01 %	105	0.01 %	
Total	\$	2,596,415	100.00 %	2,318,081	100.00 %	

Note 1: The carrying amounts only contain loans which refer to discounts, overdrafts, government overdrafts, secured overdrafts, short-term loans, short-term secured loans, medium-term loans, medium-term secured loans, long-term loans, long-term secured loans, import bill advance and non-performing loans (\$4,221 million at December 31, 2018; \$4,923 million at December 31, 2017).

Note 2: This table excluded the Department of Government Employees Insurance and the subsidiary, BankTaiwan Insurance Brokers.

Notes to the Consolidated Financial Statements

- h) BOT Changes in loss allowance
 - i) Changes in loss allowance of discounts and loans
 - 1. As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of discounts and loans were as follows:

	12 month ECLs	Lifetime ECLs (collectively assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming/Nona ccrual Loans	Total
Beginning balance	\$ 17,285,609	3,337,527	3,728,448	-	24,351,584	8,664,330	33,015,914
Changes due to financial instruments recognized as at beginning:							
- Transfer to lifetime expected credit losses	(160,911)	344,957	(184,046)	-	-		-
- Transfer to lifetime ECL not credit impaired	(21,777)	(74,769)	96,546	-	-		-
- Transfer to 12month expected credit losses	2,529,490	(2,452,291)	(77,199)	-	-		-
Financial assets that have been derecognized during the period	(207,323)	(2,498)	(3,693,297)	-	(3,903,118)		(3,903,118)
Originated or purchased new financial assets	15,091,920	459,339	2,109,276	-	17,660,535		17,660,535
Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming / Nonaccrual Loans	-	-	-	-	-	3,916,096	3,916,096
Bad debts written off	(454,830)	-	(1,661,290)	-	(2,116,120)		(2,116,120)
The recovery of bad debts written off	-	-	994,434	-	994,434		994,434
Foreign exchange and other movements	(13,948,275)	193,359	3,574,659		(10,180,257)		(10,180,257)
Ending balance	\$20,113,903	1,805,624	4,887,531		26,807,058	12,580,426	39,387,484

TAIWAN FINANCIAL HOLDING CO., LTD. AND ITS SUBSIDIARIES Notes to the Consolidated Financial Statements

2. As of December 31, 2018, the carrying amounts of discounts and loans were as follows:

	1.	2 month ECLs	Lifetime ECLs (collectively assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	Total
Beginning balance	\$	2,109,996,917	190,591,002	17,493,186	-	2,318,081,105
- Transfer to lifetime expected credit losses	Ψ	(34,597,724)	35,375,630	(777,906)	-	-
 Transfer to lifetime ECL not credit impaired 		(2,753,701)	(2,585,704)	5,339,405	-	-
- Transfer to 12month expected credit losses		144,420,034	(143,849,225)	(570,809)	-	-
Financial assets that have been derecognized during the period		(884,034,036)	(31,130,544)	(8,093,468)	-	(923,258,048)
Originated or purchased new discounts and loans		1,190,921,679	9,421,456	4,935,710	-	1,205,278,845
Bad debts written off		(21,385)	-	(2,094,735)	-	(2,116,120)
Changes form the amendments not leading to de recognition		-	-	109	-	109
Other movements	_	(7,789,416)	(398,180)	6,616,483		(1,571,113)
Ending balance	\$_	2,516,142,368	57,424,435	22,847,975		2,596,414,778

Notes to the Consolidated Financial Statements

- Changes in loss allowance of debt instruments measured at fair value through other comprehensive income ii)
 - As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of debt instruments measured at fair value through other comprehensive income were as follows:

		12 month ECLs	Lifetime ECLs	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Total
Beginning balance	\$	78,918	-	-	-	78,918	78,918
Changes due to financial instruments recognized as at beginning:							
- Transfer to lifetime expected credit losses		(5,858)	5,858	-	-	-	-
Financial assets that have been derecognized during the period		(15,785)	-	-	-	(15,785)	(15,785)
Originated or purchased new financial assets		20,599	-	-	-	20,599	20,599
Foreign exchange and other movements	_	(1,101)	314			(787)	(787)
Ending balance	\$ _	76,773	6,172			82,945	82,945

Notes to the Consolidated Financial Statements

2. As of December 31, 2018, the carrying amounts of debt instruments measured at fair value through other comprehensive income were as follows:

	1	Downsth ECL c	Lifetime ECL	(not purchased or originated credit impaired	Lifetime ECLs (purchased or originated credit impaired	Takal
		2 month ECLs	Lifetime ECLs	financial assets)	financial assets)	Total
Beginning balance	\$	1,086,229,259	-	-	-	1,086,229,259
- Transfer to lifetime expected credit losses		(1,036,692)	1,036,692	-	-	-
Financial assets that have been derecognized during the period		(920,991,519)	-	-	-	(920,991,519)
Originated or purchased new financial assets		875,749,012	-	-	-	875,749,012
Other movements	_	(763,015)	55,516			(707,499)
Ending balance	\$_	1,039,187,045	1,092,208			1,040,279,253

Notes to the Consolidated Financial Statements

- iii) Changes in loss allowance of debt instruments measured at amortized cost
 - 1. As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of debt instruments measured at amortized cost were as follows:

Beginning balance	<u> </u>	12 month ECLs 48,723	Lifetime ECLs	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Total 48,723
	Ф	40,723	-	-	-	40,723	40,723
Changes due to financial instruments recognized as at beginning:							
Financial assets that have been derecognized during the period		(13,706)	-	-	-	(13,706)	(13,706)
Originated or purchased new financial assets		17,247	-	-	-	17,247	17,247
Foreign exchange and other movements		(2,728)	-	-	-	(2,728)	(2,728)
Ending balance	\$ _	49,536	-		_	49,536	49,536

Notes to the Consolidated Financial Statements

2. As of December 31, 2018, the carrying amounts of debt instruments measured at amortized cost were as follows:

_12	month ECLs	Lifetime ECLs	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	Total
\$	147,836,435	-	-	-	147,836,435
	(31,546,259)	-	-	-	(31,546,259)
	51,409,494	-	-	-	51,409,494
	174,558				174,558
\$	167,874,228				167,874,228
	\$	(31,546,259) 51,409,494 174,558	\$ 147,836,435 - (31,546,259) - 51,409,494 - 174,558 -	12 month ECLs Lifetime ECLs or originated credit impaired financial assets) \$ 147,836,435 - - (31,546,259) - - 51,409,494 - - 174,558 - -	Comparison of the comparison

Impairment

TAIWAN FINANCIAL HOLDING CO., LTD. AND ITS SUBSIDIARIES

Notes to the Consolidated Financial Statements

- iv) Changes in guarantee reserve and other reserve
 - 1. As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of letter of credit receivables and guarantee for trade receivables (guarantee reserve and other reserve) were as follows:

	<u>12 mon</u>	th ECLs	Lifetime ECLs		Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming/Nona ccrual Loans	Total
Beginning balance	\$	706,762	73,17	7 196,387	-	976,326	336,157	1,312,483
Changes due to financial instruments recognized as at beginning:								
- Transfer to lifetime expected credit losses		(7,332)	7,33	2 -	-	-		-
- Transfer to lifetime expected credit losses		(4,823)	-	4,823	-	-		-
- Transfer to 12month expected credit losses		62,325	(62,32	5) -	-	-		-
Financial assets that have been derecognized during the period		(421,918)	(12,38	0) (52,985)	-	(487,283)		(487,283)
Originated or purchased new financial assets		142,536	6,57	4 5,162	-	154,272		154,272
Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming /Nonaccrual Loans		-	-	-	-	-	381,882	381,882
Foreign exchange and other movements		(106,879)	21,16	2 4,839		(80,878)		(80,878)
Ending balance	\$	370,671	33,54	158,226		562,437	718,039	1,280,476

Notes to the Consolidated Financial Statements

2. As of December 31, 2018, the carrying amounts of letter of credit receivables and guarantee for trade receivables were as follows:

12	month ECLs	Lifetime ECLs	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	Total
\$	102,108,066	8,095,456	254,064	-	110,457,586
	(1,156,684)	1,156,684	-	-	-
	(100,104)	(51,433)	151,537	-	-
	6,520,097	(6,520,097)	-	-	-
	(50,324,989)	(1,862,162)	(191,086)	-	(52,378,237)
	55,053,614	360,711	242,231	-	55,656,556
	(806,800)	848,416			41,616
\$	111,293,200	2,027,575	456,746		113,777,521
	¢.	(1,156,684) (100,104) 6,520,097 (50,324,989) 55,053,614 (806,800)	\$\frac{102,108,066}{(1,156,684)} \frac{8,095,456}{(1,156,684)} \frac{1,156,684}{(51,433)} \frac{6,520,097}{(50,324,989)} \frac{(6,520,097)}{(1,862,162)} \frac{55,053,614}{(806,800)} \frac{848,416}{848,416}	12 month ECLs Lifetime ECLs (not purchased or originated credit impaired financial assets) \$ 102,108,066 8,095,456 254,064 (1,156,684) 1,156,684 - (100,104) (51,433) 151,537 6,520,097 (6,520,097) - (50,324,989) (1,862,162) (191,086) 55,053,614 360,711 242,231 (806,800) 848,416 -	12 month ECLs Lifetime ECLs (not purchased or originated credit impaired financial assets) (purchased or originated credit impaired financial assets) \$ 102,108,066 8,095,456 254,064 - (1,156,684) 1,156,684 - - (100,104) (51,433) 151,537 - 6,520,097 (6,520,097) - - (50,324,989) (1,862,162) (191,086) - 55,053,614 360,711 242,231 - (806,800) 848,416 - -

Notes to the Consolidated Financial Statements

- v) Changes in loan commitments reserve
 - 1. As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of loan commitments (loan commitments reserve) were as follows:

		12 month ECLs	Lifetime ECLs	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Total
Beginning balance	\$	8,106	2,284	31	-	10,421	10,421
Changes due to financial instruments recognized as at beginning:							
- Transfer to lifetime expected credit losses		(223)	223	-	-	-	-
- Transfer to lifetime expected credit losses		-	(20)	20	-	-	-
- Transfer to 12month expected credit losses		2,910	(2,910)	-	-	-	-
Financial assets that have been derecognized during the period		(2,902)	(1,736)	(505)	-	(5,143)	(5,143)
Originated or purchased new financial assets		924	1,592	183	-	2,699	2,699
Foreign exchange and other movements	_	4,494	2,634	507		7,635	7,635
Ending balance	\$ _	13,309	2,067	236		15,612	15,612

TAIWAN FINANCIAL HOLDING CO., LTD. AND ITS SUBSIDIARIES Notes to the Consolidated Financial Statements

2. As of December 31, 2018, the carrying amounts of loan commitments were as follows:

(not purchased (purchased or or originated or originated credit credit impaired impaired 12 month ECLs Lifetime ECLs financial assets) financial assets)	Total
Beginning balance \$ 431,118,289 270,461 81 -	431,388,831
- Transfer to lifetime ECL not credit - (2,105) 2,105 - impaired	-
Financial assets that have been derecognized (29,551,908) (746,137) (2,338) - during the period	(30,300,383)
Originated or purchased new discounts and 13,273,627 716,871 586 - loans	13,991,084
Other movements <u>3,934</u>	3,934
Ending balance \$ 414,843,942 239,090 434 -	415,083,466

Impairment

TAIWAN FINANCIAL HOLDING CO., LTD. AND ITS SUBSIDIARIES

Notes to the Consolidated Financial Statements

- vi) Changes in loss allowance of receivables(including other financial assets)
 - 1. As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of receivables were as follows:

	<u>12 n</u>	nonth ECLs	Lifetime ECLs (collectively assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming/Nona ccrual Loans	Total
Beginning balance (Note 1)	\$	50,863	12,145	95,308	-	158,316	84,043	242,359
Changes due to financial instruments recognized as at beginning:								
 Transfer to lifetime expected credit losses 		(1,273)	1,648	(375)	-	-		-
- Transfer to lifetime ECL not credit impaired		(20)	(630)	650	-	-		-
- Transfer to 12month expected credit losses		5,037	(4,728)	(309)	-	-		-
Financial assets that have been derecognized during the period		(43,063)	(5,514)	(75,005)	-	(123,582)		(123,582)
Originated or purchased new financial assets		57,300	8,168	23,507	-	88,975		88,975
Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming / Nonaccrual Loans		-	-	-	-	-	(35,387)	(35,387)
Bad debts written off		(800)	(924)	(9,767)	-	(11,491)		(11,491)
The recovery of bad debts written off		70	-	10,471	-	10,541		10,541
Foreign exchange and other movements		1,629	1,986	4,528		8,143		8,143
Ending balance (Note 2)	<u>\$</u>	69,743	12,151	49,008		130,902	48,656	179,558

Note 1: Not included BOT's accumulated impairment recognized in restrictive deposit \$10 thousand and Department of Government Employees' Insurance's allowance for impairment \$1,022 thousand evaluated by simplification method.

Notes to the Consolidated Financial Statements

Note 2: Not included BOT's accumulated impairment recognized in restrictive deposit \$11 thousand and Department of Government Employees' Insurance's allowance for impairment \$1,022 thousand evaluated by simplification method.

2. As of December 31, 2018, the carrying amounts of receivables were as follows:

	 2 month ECLs	Lifetime ECLs (collectively assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	Total
Beginning balance (Note 1)	\$ 98,555,440	819,759	274,468	-	99,649,667
—Transfer to lifetime expected credit losses	(333,056)	335,528	(2,472)	-	-
 Transfer to lifetime ECL not credit impaired 	(3,277)	(20,951)	24,228	-	-
- Transfer to 12month expected credit losses	250,596	(248,650)	(1,946)	-	-
Financial assets that have been derecognized during the period	(33,675,724)	(600,581)	(137,734)	-	(34,414,039)
Originated or purchased new discounts and loans	32,451,447	538,775	49,599	-	33,039,821
Bad debts written off	(800)	(924)	(9,767)	-	(11,491)
Other movements	 (1,821)	16,401	(86,649)		(72,069)
Ending balance (Note 2)	\$ 97,242,805	839,357	109,727		98,191,889

Note 1: Not included BOT's gross carrying amount of restricted deposit \$18,478 thousand and Department of Government Employees' Insurance's accounts receivables \$12,203,403 thousand evaluated by simplification method.

Note 2: Not included BOT's gross carrying amount of restricted deposit \$19,469 thousand and Department of Government Employees' Insurance's accounts receivables \$7,283,748 thousand evaluated by simplification method.

Notes to the Consolidated Financial Statements

BOT's department of government employees' insurance adopts simplification method to estimate expected credit losses of receivables (including accrued income, premiums receivable, and other receivable), namely, measures expected credit losses for a life time. For the purpose of measurement, these notes receivables and account receivables are classified based on credit risk characteristics reflected the borrower's ability to meet its contractual obligations. Analysis of receivables held by BOT's department of government employees' insurance at December 31, 2018 is shown below:

	_	Gross amounts of account receivables	Weighted average expected loss rate	Allowance for expected credit loss for a life time
Non-overdue	\$	7,282,726	0%	-
Overdue more than 91 days	-	1,022	100%	1,022
	\$_	7,283,748		1,022

The movements of allowance for impairment of account receivables held by BOT's department of government employees' insurance:

	 2018
Beginning balance (under IAS 39)	\$ 1,022
Adjustment for retrospective application due to IFRS 9	-
Beginning balance (under IFRS 9) (equal to ending balance)	\$ 1,022

i) The analysis of credit quality and overdue cases (applicable before January 1, 2017)

The financial instruments held by BOT, such as cash and cash equivalents, due to the Central Bank and other banks, financial assets measured at fair value through profit, bills and bonds purchased under resell agreements, guarantees deposits paid, operating guarantee deposits and settlement funds, are considered to have "very low risk" since all counterparties have good credit ratings.

i) Credit quality analysis for bills purchased, discounts and loans

		Performing loans					NPL but	Impairment	Total	Impairme	nt loss(D)	Net
December 31, 2017	Very good	Good	Medium	Weak	Non-evaluate	Subtotal(A)	not impair amount(B)	Amount(C)	(A)+(B)+(C)	With objective	No objective	(A)+(B) +(C)-(D)
Account receivable	rery good	Good	.viculum	· · · · · · ·	Tion Cimunc	Subtotal(11)	umoum(D)	rimouni(c)	(.1) (.2) ()	With objective	110 objective	·(c)(D)
Credit card business	296,330	80,898	115,560	321,905	318	815,011	23,377	9,044	847,432	6,620	884	839,928
Others	250,773	2,007,931	923,157	222,199	184,417	3,588,477		176,389	3,764,866	118,684	66,586	3,579,596
Loans and Discount	160,621,243	1,286,089,052	591,286,363	142,319,646	118,120,011	2,298,436,315		19,644,790	2,318,081,105	10,493,372	22,548,490	2,285,039,243

Notes to the Consolidated Financial Statements

ii) Credit quality analysis for either overdue nor impaired bill purchases discounts and loans by customers

	Performing loans								
December 31, 2017	Very good	Good	Medium	Weak	Non-evaluate	Total			
Government agencies	65,402,181	335,655,307	-	-	-	401,057,488			
Financial, investment, and insurance	16,300,000	1,336,447	23,044,411	3,397,193	727,554	44,805,605			
Corporate and business	77,401,746	117,213,170	477,218,999	113,669,740	18,093,934	803,597,589			
Individual	-	814,290,345	7,612,739	-	28,409,712	850,312,796			
Other	1,517,316	17,593,783	83,410,214	25,252,713	70,888,811	198,662,837			
Total	160,621,243	1,286,089,052	591,286,363	142,319,646	118,120,011	2,298,436,315			

iii) Credit quality analysis for security investments

2017

			Performi	ing loans			NPL but	Impairment	Total	(D)	Net
Item	Very good	Good	Medium	Weak	Non-evaluate	Subtotal(A)	not impair amount(B)	Amount(C)	(A)+(B)+(C)	With objective evidence	(A)+(B)+(C)- (D)
Available-for-sale Financial Assets											
Bond investment	90,525,466	33,649,293	18,404,341	1,008,514	227,651	143,815,265	-	-	143,815,265	-	143,815,265
Stock investment	2,556,148	50,329,096	3,552,208	-	2,131,835	58,569,287		-	58,569,287	-	58,569,287
Others	932,640,422	421,060	-	-	496,367	933,557,849		-	933,557,849	-	933,557,849
Held-to-maturity Financial Assets											
Bond investment	120,364,279	1,783,360	2,657,617	296,789	-	125,102,045		-	125,102,045	-	125,102,045
Others	18,549,310	-	409,410	-	-	18,958,720		-	18,958,720	-	18,958,720
Other financial assets											
Stock investment	-	-	6,805,780	-	1,764,358	8,570,138		27,687	8,597,825	15,000	8,582,825
Bond investment	10,743,196	3,901,501	-	-	-	14,644,697		-	14,644,697	-	14,644,697

j) Aging Analysis of Overdue but Not Impaired Financial Assets (applicable before January 1, 2017)

	December 31, 2017					
Item		erdue less n 1 month	Overdue 1 to 3 months	Total		
Accounts Receivable						
—Credit Card Business	\$	4,411	1,980	6,391		

Notes to the Consolidated Financial Statements

k) The analysis of allowance for doubtful accounts of loans and receivable (applicable before January 1, 2017)

Loans

	December 31, 20)17	
It	em	Total Loans	Allowance for doubtful accounts
There is objective evidence of impairment on individual	Individual assessment of impairment	6,587,942	1,185,732
asset	Collective assessment of impairment	13,048,535	3,108,230
There is no objective evidence of impairment on individual asset	Collective assessment of impairment	2,298,444,628	28,747,900
Subtotal	•	2,318,081,105	33,041,862

Receivables (including other financial assets)

	December 31, 20)17	
It	em	Total Loans	Allowance for doubtful accounts
There is objective evidence of impairment on individual	Individual assessment of impairment	28,944	13,501
asset	Collective assessment of impairment	192,202	124,315
There is no objective evidence of impairment on individual asset	Collective assessment of impairment	360,492,108	159,195
Subtotal		360,713,254	297,011
Total			33,338,873

Notes to the Consolidated Financial Statements

- l) Disclosures required by the Regulations Governing the Preparation of Financial Reports by Public Banks
 - i) Asset Quality of overdue loans and receivables

	,	De	cember 31, 2018			
Type / Ite	m	Amount of overdue loans (Note 1)	Total amount of loans	Ratio (%) (Note 2)	Allowance for doubtful debt	Coverage ratio (%) (Note 3)
Enterprise	Secured	1,613,717	555,425,190	0.29 %	11,850,338	734.35 %
	Non secured	411,776	1,219,569,860	0.03 %	21,460,074	5,211.59 %
	House mortgage (Note 4)	2,020,486	579,538,061	0.35 %	3,305,763	163.61 %
	Cash card	=	-	- %	-	- %
Consumer	Micro credit (Note 5)	24,018	4,610,709	0.52 %	211,695	881.40 %
finance	Others Secured	1,222,024	207,712,918	0.59 %	2,082,759	170.44 %
	(Note 6) Non secured	215,050	29,558,040	0.73 %	476,855	221.74 %
Total		5,507,071	2,596,414,778	0.21 %	39,387,484	715.22 %
		Overdue receivables	Account receivable	Ratio (%)	Allowance for bad debt	Cover ratio
Credit card business		2,498	816,123	0.31 %	9,849	394.28 %
Non-recou	rse factoring (Note 7)	=	13,232,575	- %	67,352	- %

		De	cember 31, 2017			
Type / Ite	m	Amount of overdue loans (Note 1)	Total amount of loans	Ratio (%) (Note 2)	Allowance for doubtful debt	Coverage ratio (%) (Note 3)
Enterprise		2,095,613	540,476,564	0.39 %	11,362,328	542.20 %
	Non secured	571,687	968,383,422	0.06 %	13,698,993	2,396.24 %
	House mortgage (Note 4)	2,341,594	563,681,594	0.42 %	4,597,724	196.35 %
	Cash card	-	-	- %	-	- %
Consumer	Micro credit (Note 5)	31,440	4,856,602	0.65 %	148,237	471.49 %
finance	Others Secured	1,364,773	210,430,752	0.65 %	2,650,379	194.20 %
	(Note 6) Non secured	232,525	30,252,171	0.77 %	584,201	251.24 %
Total		6,637,632	2,318,081,105	0.29 %	33,041,862	497.80 %
		Overdue receivables	Account receivable	Ratio (%)	Allowance for bad debt	Cover ratio
Credit car	d business	2,356	849,735	0.28 %	10,096	428.52 %
Non-recou	rrse factoring (Note 7)	-	11,462,525	- %	52,894	- %

- Note 1: Nonperforming loans are reported to the authorities and disclosed to the public, as required by the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Nonperforming/Non-accrued Loans." Nonperforming credit card receivables are reported to the authorities and disclosed to the public, as required by the Banking Bureau's letter dated July 6, 2005 (Ref. No. 0944000378).
- Note 2: Ratio of nonperforming loans: Nonperforming loans ÷ Outstanding loan balance. Ratio of nonperforming credit card receivables: Nonperforming credit card receivables ÷ Outstanding credit card receivables balance.
- Note 3: Coverage ratio of loans: Allowance for possible losses for loans ÷ Nonperforming loans. Coverage ratio of credit card receivables: Allowance for possible losses for credit card receivables ÷ Nonperforming credit card receivables.
- Note 4: The mortgage loan is for house purchase or renovation and is fully secured by housing that is purchased (owned) by the borrower, the spouse or the minor children of the borrowers.
- Note 5: Based on the Banking Bureau's letter dated December 19, 2005 (Ref. No. 09440010950), small-scale credit loans are unsecured, involve small amounts, and exclude credit cards and cash cards.

Notes to the Consolidated Financial Statements

Note 6: Other consumer banking loans refer to secured or unsecured loans that exclude housing mortgages, cash cards, credit cards and small-scale credit loans.

Note 7: As required by the Banking Bureau in its letter dated July 19, 2005 (Ref. No. 094000494), factored accounts receivable without recourse are reported as nonperforming receivables within three months after the factors or insurance companies refuse to indemnify banks for any liabilities on these accounts.

ii) Non performing Loans and Overdue Receivables Exempted from Reporting

	Decembe	r 31, 2018	December 31, 2017		
	Excluded NPL	Excluded overdue receivables	Excluded NPL	Excluded overdue receivables	
As a result of debt consultation and loans agreement	306	-	471	-	
As a result of debt solvency and restart plan	21,289	19,984	29,209	20,554	
Total	21,595	19,984	29,680	20,554	

iii) Concentration of Credit Risk

Units: In Millions of NTD, %

	December 31	1, 2018	Ź
Rank	Group Name	Credit Extensions Balance	% of Net Asset Value
1	A company — Transport via Railways	54,026	17.41 %
2	B group — Air Transport	51,010	16.44 %
3	C group—Retail Sale in Non- specialized Stores	28,028	9.03 %
4	D group—Smelting and Refining of Iron and steel	80,978	26.10 %
5	E group—Aluminum material Rolls over Extends and Crowding	50,348	16.23 %
6	F group—Cable Television	36,782	11.86 %
7	G group—Real Estate Development Activities	21,529	6.94 %
8	H group – Air Transport	15,952	5.14 %
9	I group—Real Estate Development Activities	26,029	8.39 %
10	J group—Ocean Transportation	13,138	4.23 %

Notes to the Consolidated Financial Statements

	December 31	, 2017	
Rank	Group Name	Credit Extensions Balance	% of Net Asset Value
1	A company — Transport via Railways	55,856	19.32 %
2	B group—Air Transport	39,771	13.76 %
3	C group—Smelting and Refining of Iron and steel	24,625	8.52 %
4	D group—Ocean Transportation	20,083	6.95 %
5	E group—Smelting and Refining of Iron and steel	20,028	6.93 %
6	F group—Cable Television	17,190	5.95 %
7	G group—Real Estate Development Activities	16,089	5.57 %
8	H group — Ocean Transportation	11,908	4.12 %
9	I group—Air Transport	11,384	3.94 %
10	J group—Manufacture of Liquid Crystal Panel and Components	11,138	3.85 %

iv) Average balance and current average interest rates of interest bearing assets and liabilities

	December 31, 2018		December 31, 2017		
		Average	Average interest rate (%)	Average	Average interest rate (%)
Interest earnings assets			(,,,)		
Call loans and placement with banks	\$	273,478,077	2.37	279,785,036	1.78
Placement with Central Bank		439,388,837	0.69	463,711,187	0.69
Financial assets		1,282,180,900	0.91	1,192,639,414	0.87
Negotiation, discounts and total loans		2,389,866,529	1.69	2,326,583,609	1.66
Interest bearing liabilities					
Deposit of Central Bank		15,077,628	-	13,783,569	-
Deposits and call loans from banks		221,694,751	1.46	212,369,290	1.06
Demand deposit		398,352,371	0.22	395,050,689	0.15
Demand savings		947,078,863	0.48	869,863,600	0.57
Time savings		1,630,869,080	1.52	1,700,764,509	1.57
Time deposits		721,675,689	1.83	636,316,359	1.44
Government deposits		280,344,637	0.18	265,804,022	0.19
Structured products		908,476	2.50	1,296,613	1.33
Financial bonds		25,000,000	1.22	25,000,000	1.22

Note 1: Each average balance is calculated by respectively summing up the daily average balances and then dividing the number of days in the year starting from January to the financial statement date.

Note 2: The balances are derived from the Department of banking, credit cards, trusts and securities.

Notes to the Consolidated Financial Statements

4) Liquidity Risk

a) Causes and definition of liquidity risk

The definition for liquidity risk is BOT encounter difficulty in meeting the obligations with its financial liabilities and causes the losses, for example, a saving account cancels its saving ahead of time, the ways or conditions to call loans to banks drop, creditors' credit become worsen and cause an exceptional condition, financial instruments cannot be financed, interest floating policy holder terminates the policy ahead of time and etc. The situation mentioned above may reduce the cash flow for lending, trading, and investing activities. In some extreme situation, the poor liquidity position may decrease the level of balance sheet, sale assets, or the possibility of not fulfilling the contractual loan balance. Liquidity risk is containing in the inherent risk of bank operation, and could be affected by a separate industry or whole market's incident, which are included but not only as: credit event, consolidation or merger and acquisition, system shock, and natural disaster.

b) Management policies of liquidity risk

- i) To optimize the structure of assets and liabilities, BOT sets up an Assets and Liabilities Management Committee of which the chairperson is the general manager and the vice chairpersons are the vice general managers to decide the direction of assets and liabilities management, to manage the liquidity portion, interest rate risk, and to review the structure of deposits and loans and so on.
- ii) To enforce the management of liquidity and interest rate risk and maintain suitable liquidity for higher effectiveness of capital and good operations, BOT sets up policies for liquidity and interest rate risk. Assets and Liabilities Management Committee discusses the liquid position and risk management every month and reports to the Board of Directors periodically.

iii) Management of liquidity risk

- 1. Maintain liquidity reserve ratio: According to "Liquidity Guidelines for Financial Institutions" published by the Center Bank, BOT has to maintain the liquidity reserve ratio of deposit balances greater than 15%.
- 2. Short term gap analysis: Calculate 1~10 day and 11~30 day gaps which should be greater than zero.
- 3. Liquidity coverage ratio: calculate their liquidity coverage ratio and report it to the authorities on a monthly basis. In accordance with the "Standards Implementing the Liquidity Coverage Ratio of Banks" announced by FSC and Central Bank, the ratio shall be higher than 100%.

Notes to the Consolidated Financial Statements

- 4. Net stable funding ratio: Calculate their net stable funding ratio and report it to the authorities on a monthly basis. In accordance with the "Standards Implementing the Net Stable Funding Ratio of Banks" announced by FSC and Central Bank, the ratio shall be higher than 100%.
- 5. Foreign currency gap management: Make sure the ratio of accumulated capital liquidity gap to each currency assets of the major foreign currencies of the Bank measured for every month and every term under one year between $\pm 50\%$ and $\pm 40\%$.
- 6. Fund management: Utilize the assets and Liabilities Management Information System to analyze the gaps of assets and liabilities and the change of the structure. Allocate appropriate fund and adjust the fund structure according to financial status. For NTD fund management, the Bank maintains appropriate cash and cashable securities on hand, draw up notice about NTD fund management and request every unit to notify significant cash transactions, analyze the gaps for maturity amount of purchased bills, bonds and call loans to control the fund trend and decrease the liquidity risk. For foreign currencies, manage the financial gap of actual amount received on due date and payment in a year by using the maturity method.
- 7. Establish "Bank of Taiwan operational crisis management plan" to prevent and response quickly to the crisis.
- c) Maturity date analysis of non derivative financial assets and liabilities

These tables represent the cash outflow analysis of non derivative financial liabilities of BOT's major currencies according to the unexpired term of the contracts. The disclosed amounts are presented on the basis of contract cash flows, so some disclosed items are not correspond to the accounts in the financial statements. These tables do not include BankTaiwan Insurance Brokers.

Maturity analysis of assets and liabilities (United State Dollars)

nit:	In	thousand	USD

December 31, 2018	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Cash and placement with banks	733,223	92,000	39,550	46,550	943	912,266
Call loans to banks and overdrafts	905,000	948,000	275,000	355,000	-	2,483,000
Investment securities	50,400	68,435	89,085	119,508	1,660,622	1,988,050
Loans (including overdue loans)	651,046	495,734	325,227	253,169	4,215,327	5,940,503
Interest receivables and income receivables	20,128	20,428	8,339	4,158	55,588	108,641
Other expired items	9,077,528	7,312,653	7,487,994	3,816,275	3,786,310	31,480,760
Total major matured capital inflow	11,437,325	8,937,250	8,225,195	4,594,660	9,718,790	42,913,220

Notes to the Consolidated Financial Statements

December 31, 2018	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Deposits from banks, bank overdrafts, and call loans from bank	2,350,755	728,700	138,000	,	30,000	3,247,455
Demand deposits	872,953	881,191	1,321,787	-	816,700	3,892,631
Time deposits	2,738,632	3,990,237	2,095,007	3,494,759	-	12,318,635
Bills and bonds sold under repurchase agreements	600,000	-	-	-	-	600,000
Borrowings	-	-	-	-	1,500,000	1,500,000
Interest payables	33,935	33,705	18,250	11,817	62,377	160,084
Loan Commitments	372,680	75,852	339,246	408,081	756,112	1,951,971
Equities	-	-	-	-	(29,239)	(29,239)
Other expired items	5,842,470	5,501,033	3,799,972	543,788	4,530,252	20,217,515
Total major matured capital outflow	12,811,425	11,210,718	7,712,262	4,458,445	7,666,202	43,859,052

Maturity analysis of assets and liabilities (New Taiwan Dollars)

Unit. In they and NTD

					Cilit. II	thousand NTD
December 31, 2018	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Cash and placement with banks	62,641,140	207,866,979	75,915,116	68,287,753	46,728,229	461,439,217
Call loans to banks and overdrafts	28,565,000	-	-	-	10,000	28,575,000
Investment securities	698,753,368	52,746,345	94,758,612	264,243,329	232,833,911	1,343,335,565
Loans (including overdue loans)	177,994,043	235,838,634	290,925,948	385,556,753	1,264,332,745	2,354,648,123
Interest receivables and income receivables	3,045,670	2,589,786	1,835,638	1,315,878	106,356	8,893,328
Other expired items	199,992,760	131,705,103	99,654,174	13,685,935	219,639,092	664,677,064
Total major matured capital inflow	1,170,991,981	630,746,847	563,089,488	733,089,648	1,763,650,333	4,861,568,297

December 31, 2018	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Deposits from banks, bank overdrafts, and call loans from bank	68,374,187	6,384,285	7,105,680	12,329,177	6,717,822	100,911,151
Demand deposits	62,280,862	38,851,395	33,068,172	5,041,784	1,343,635,449	1,482,877,662
Time deposits	158,954,887	257,910,512	296,021,871	732,412,354	379,501,013	1,824,800,637
Bills and bonds sold under repurchase agreements	2,442,473	3,553,108	634,463	7,003	-	6,637,047
Borrowings	25	4,847	5,470	6,529	25,009,954	25,026,825
Interest payables	5,306,528	658,627	852,310	1,326,182	312,572	8,456,219
Loan Commitments	77,334,309	154,832,462	232,166,771	464,497,385	709,607,821	1,638,438,748
Equities	-	-	-	-	308,486,503	308,486,503
Other expired items	271,073,338	211,900,608	198,808,152	119,913,803	114,337,772	916,033,673
Total major matured capital outflow	645,766,609	674,095,844	768,662,889	1,335,534,217	2,887,608,906	6,311,668,465

Maturity analysis of assets and liabilities (United State Dollars)

Unit: In thousand USD

December 31, 2017	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Cash and placement with banks	685,562	43,000	36,550	61,100	423	826,635
Call loans to banks and overdrafts	2,237,500	1,444,000	267,000	208,500	-	4,157,000
Investment securities	22,427	67,451	29,522	92,248	1,344,039	1,555,687
Loans (including overdue loans)	420,914	525,476	403,829	296,249	4,155,407	5,801,875
Interest receivables and income receivables	13,289	19,152	6,007	8,069	28,134	74,651
Other expired items	8,306,433	9,250,130	4,715,773	2,094,134	4,407,708	28,774,178
Total major matured capital inflow	11,686,125	11,349,209	5,458,681	2,760,300	9,935,711	41,190,026

Notes to the Consolidated Financial Statements

December 31, 2017	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Deposits from banks, bank overdrafts, and call loans from bank	2,396,271	1,044,500	30,000	-	206,000	3,676,771
Demand deposits	1,042,282	1,110,732	1,666,098	-	1,044,795	4,863,907
Time deposits	2,567,487	3,006,595	2,377,422	2,740,567	-	10,692,071
Bills and bonds sold under repurchase agreements	317,487	246,047	-	-	-	563,534
Borrowings	-	-	-	-	880,000	880,000
Interest payables	17,582	20,541	11,238	6,049	16,985	72,395
Loan Commitments	167,632	120,972	220,707	589,353	774,240	1,872,904
Equities	-	-	-	-	(3,059)	(3,059)
Other expired items	6,629,444	4,481,628	2,033,486	1,113,112	5,740,471	19,998,141
Total major matured capital outflow	13,138,185	10,031,015	6,338,951	4,449,081	8,659,432	42,616,664

Maturity analysis of assets and liabilities (New Taiwan Dollars)

Unit: In thousand NTD

December 31, 2017	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Cash and placement with banks	55,920,213	208,085,904	87,158,581	87,954,053	40,896,697	480,015,448
Call loans to banks and overdrafts	94,006,000	10,000	-	-	-	94,016,000
Investment securities	781,053,459	47,862,163	77,980,002	167,211,276	294,779,406	1,368,886,306
Loans (including overdue loans)	143,714,983	202,597,837	229,077,697	254,480,215	1,263,075,307	2,092,946,039
Interest receivables and income receivables	2,877,709	2,289,307	1,522,539	1,135,370	163,342	7,988,267
Other expired items	191,298,745	84,594,075	78,046,142	75,976,583	188,353,831	618,269,376
Total major matured capital inflow	1,268,871,109	545,439,286	473,784,961	586,757,497	1,787,268,583	4,662,121,436

December 31, 2017	1~30days	31~90days	91~180days	181day1year	Over one year	Total
Deposits from banks, bank overdrafts, and call loans from bank	58,057,801	5,440,244	11,017,475	14,319,145	6,546,530	95,381,195
Demand deposits	54,078,111	31,091,592	35,476,304	49,294,790	1,158,759,736	1,328,700,533
Time deposits	189,544,537	298,535,702	318,110,861	734,670,472	396,460,681	1,937,322,253
Bills and bonds sold under repurchase agreements	10,249,342	6,248,588	668,324	14,167	-	17,180,421
Borrowings	41	5,735	6,494	7,954	25,021,206	25,041,430
Interest payables	6,605,481	660,718	1,271,377	743,557	371,796	9,652,929
Loan Commitments	81,988,270	164,150,244	246,138,515	492,277,029	752,485,566	1,737,039,624
Equities	-	-	-	-	286,583,277	286,583,277
Other expired items	236,169,834	254,727,798	143,979,169	66,186,480	82,212,914	783,276,195
Total major matured capital outflow	636,693,417	760,860,621	756,668,519	1,357,513,594	2,708,441,706	6,220,177,857

d) Maturity analysis of derivatives

December 31, 2018 Derivative financial instruments	1.Overdue less than 1 month	2.Overdue 1 to 3 months	3.Overdue 3 to 6 months	4.Overdue 6 months to 1 year	5.Overdue 1 to 5 years	6.Overdue more than 5 years	Total
Financial assets and liabilities me	easured at fair value	through profit or l	oss, Derivative inst	ruments (Foreign e	xchange)		
Foreign exchange outflow	10,223,061	9,560,999	2,409,367	1,489,024	163,842	1,607	23,847,900
Foreign exchange inflow	10,197,799	9,643,345	1,810,879	1,489,024	163,842	1,607	23,306,496
Financial assets and liabilities me	easured at fair value	through profit or l	oss, Derivative inst	ruments (Interest)			
Interest outflow	400,981,674	345,120,973	280,552,565	116,063,674	1,355,589	13,543	1,144,088,018
Interest inflow	390,596,031	331,184,919	273,717,175	98,828,449	1,390,496	4,392	1,095,721,462
Hedging derivative financial inst	ruments (Interest)						
Interest outflow	13,010	44,751	49,645	-	-	-	107,406
Interest inflow	14,671	33,483	49,459	-	-	-	97,613
Financial assets and liabilities me	easured at fair value	through profit or l	oss, Derivative inst	ruments (Commodi	ty)		
Interest outflow	-	-	-	-	-	-	-
Interest inflow	-	(72)	-	-	-	-	(72)

Notes to the Consolidated Financial Statements

December 31, 2017 Derivative financial instruments	1.Overdue less than 1 month	2.Overdue 1 to 3 months	3.Overdue 3 to 6 months	4.Overdue 6 months to 1 year	5.Overdue 1 to 5 years	6.Overdue more than 5 years	Total			
Financial assets and liabilities measured at fair value through profit or loss, Derivative instruments (Foreign exchange)										
Foreign exchange outflow	11,228,075	12,985,294	1,638,380	770,031	1,616,418	-	28,238,198			
Foreign exchange inflow	11,245,164	13,606,119	1,638,380	840,360	1,616,418	-	28,946,441			
Financial assets and liabilities me	easured at fair value	through profit or l	oss, Derivative inst	ruments (Interest)						
Interest outflow	361,851,127	322,601,974	184,332,159	80,730,081	1,440,668	45,318	951,001,327			
Interest inflow	366,976,122	317,192,197	184,044,239	82,146,280	1,606,216	28,390	951,993,444			
Hedging derivative financial inst	ruments (Interest)									
Interest outflow	17,286	55,112	39,465	-	-	-	111,863			
Interest inflow	13,299	34,877	23,301	-	-	-	71,477			

e) Maturity analysis of off balance sheet items

If the off balance credit items of BOT are classified as "Under One Year", "One to Five Years" and "Above Five Years", the maturity analysis of both off balance items and lease agreements and capital expenditures are disclosed together.

December 31, 2018	0-30 days	31-90 days	91-180days	181 days-1 year	Over 1 year	Total
Irrevocable loan commitment	-	211,375,700	1,280,000	202,000,000	188,242	414,843,942
Irrevocable credit card commitment	-	-	-	-	239,524	239,524
Letter of credit receivables	8,665,257	1,940,266	4,163,251	7,861,398	4,046,012	26,676,184
Guarantee receivables	56,869,848	2,312,070	4,151,114	11,885,401	11,882,902	87,101,335
Total	65,535,105	215,628,036	9,594,365	221,746,799	16,356,680	528,860,985

December 31, 2017	0-30 days	31-90 days	91-180days	181 days-1 year	Over 1 year	Total
Irrevocable loan commitment	-	-	1,171,662	239,283,744	190,662,883	431,118,289
Irrevocable credit card commitment	-	-	-	-	270,542	270,542
Letter of credit receivables	5,475,797	3,050,021	3,790,534	11,362,227	1,740,268	25,418,847
Guarantee receivables	58,542,125	3,058,657	4,792,337	9,826,968	8,818,651	85,038,738
Total	64,017,922	6,108,678	9,754,533	260,472,939	201,492,344	541,846,416

f) Maturity analysis of lease agreements and capital expenditures

The lease agreements of BOT refer to operational lease.

Maturity analysis of lease agreements and capital expenditures was as follows:

	Less than 1			
December 31, 2018	year	1-5 year	Over 5 year	Total
Lease commitments				
Operating lease payments (Lessee)	(330,878)	(557,578)	(1,805)	(890,261)
Operating lease income(Lessor)	144,332	256,379	-	400,711
Total	(186,546)	(301,199)	(1,805)	(489,550)

December 31, 2017	Less than 1 year	1-5 year	Over 5 year	Total
Lease commitments				
Operating lease payments (Lessee)	(336,672)	(514,828)	(370)	(851,870)
Operating lease income(Lessor)	137,470	180,893	-	318,363
Total	(199,202)	(333,935)	(370)	(533,507)

Notes to the Consolidated Financial Statements

- g) Disclosures requested by the "Regulations Governing the Preparation of Financial Reports by Publicly Banks"
 - i) Maturity analysis of assets and liabilities (New Taiwan Dollars) (excluding BankTaiwan Insurance Brokers)

2018

Units: In Thousands of NI									
			Amount for each remaining period to maturity						
	Total	Less than 10 days	11~30 days	31~90 days	91~180 days	181~365 days	Over 1 year		
Major matured capital inflow	\$ 4,861,568,297	613,718,976	557,273,005	630,746,847	563,089,488	733,089,648	1,763,650,333		
Major matured capital outflow	6,311,668,465	261,875,331	383,891,278	674,095,844	768,662,889	1,335,534,217	2,887,608,906		
Canital gan	(1.450.100.168	351 843 645	173 381 727	(43 348 997)	(205 573 401)	(602 444 569)	(1 123 958 573)		

2017

Units: In Thousands of NTD

			Amount for each remaining period to maturity						
	Total	Less than 10 days	11~30 days	31~90 days	91~180 days	181~365 days	Over 1 year		
Major matured capital inflow	\$ 4,662,121,436	739,299,500	529,571,609	545,439,286	473,784,961	586,757,497	1,787,268,583		
Major matured capital outflow	6,220,177,857	255,400,881	381,292,536	760,860,621	756,668,519	1,357,513,594	2,708,441,706		
Capital gap	(1,558,056,421)	483,898,619	148,279,073	(215,421,335)	(282,883,558)	(770,756,097)	(921,173,123)		

ii) Maturity analysis of assets and liabilities (United State Dollars) (excluding BankTaiwan Insurance Brokers)

2018

Unit: In Thousand of USD

		Amount for each remaining period to maturity					
	Total	Less than 30 days	31~90 days	91~180 days	181~365 days	Over 1 year	
Major matured capital inflow	\$ 42,913,220	11,437,325	8,937,250	8,225,195	4,594,660	9,718,790	
Major matured capital outflow	43,859,052	12,811,425	11,210,718	7,712,262	4,458,445	7,666,202	
Capital gap	(945,832)	(1,374,100)	(2,273,468)	512,933	136,215	2,052,588	

2017

Unit: In Thousand of USD

		Amount for each remaining period to maturity						
	Total	Less than 30 days	31~90 days	91~180 days	181~365 days	Over 1 year		
Major matured capital inflow	\$ 41,190,026	11,686,125	11,349,209	5,458,681	2,760,300	9,935,711		
Major matured capital outflow	42,616,664	13,138,185	10,031,015	6,338,951	4,449,081	8,659,432		
Capital gap	(1,426,638)	(1,452,060)	1,318,194	(880,270)	(1,688,781)	1,276,279		

- 5) Market risk
 - a) Causes and definition of market risk

Market risk means that changes in market price lead to the fair value and future cash flow volatility risk of the held financial instruments, even if it is not included in the financial statements. The risk factors usually refer to interest rate, exchange rate, equity investment and price. When the factors change, BOT's net operating income and the value of investment portfolio will have volatility risk.

Notes to the Consolidated Financial Statements

The main market risks of BOT are interest rate risk, exchange rate risk and equity investment risk. The main position of interest rate risk includes transactions with conditions, bonds, securities investments, interest rate swaps and so on. The main position of exchange risks includes forward exchange, foreign exchange swaps, FX options and so on. The main position of equity investment risk includes stocks, funds, stock market index futures and so on.

b) Management policies of market risk

BOT sets up market risk management regulations and policies according to the risk management strategies approved by the board of directors, the Basel Accord and government regulations. In order to identify, assess, measure and monitor various risks of investments, they also decide the quota of investments and stop-loss point for financial instruments by types and characteristics in accordance with whole management target and offer reports to the board of directors, risk management committee and high-level managers.

c) Procedure of market risk management

i) Identification

The identification procedures are as follows. First, use the business analysis or product analysis to identity the market risk factors of financial instruments. Second, measure the market risk of all financial instruments according to the risk factors changes of the important exposure. Finally, identify the market risk factors of every constitution of structured products and use the factors as the measurement basis. The above risk factors include interest rate, exchange rate and price of equity security.

ii) Measurement

BOT's market risk exposure can be classified into trading book and banking book. The financial instruments classified in trading book are measured at daily market value; those classified in banking book are measured at market value at least once a month. Following IFRS 13, BOT ensures that Level 1 inputs (i.e. quoted prices in an active market, such as OTC or Bloomberg) and Level 2 inputs (those which can be directly or indirectly observed in the market) are available. When the aforementioned inputs are not available, the related instruments shall be classified to Level 3. The sources from which BOT obtains inputs largely remain the same as prior periods and BOT will check if a financial instrument can be reasonably measured before entering into a transaction.

Notes to the Consolidated Financial Statements

iii) Monitor and Report

BOT conduct various risks monitoring for ordinary trading activities. The monitor includes the control of market risk position and profit and loss, the control of exposure and quota of investments, the control of concentration, the sensitivity analysis and the stress testing. They report to the risk management committee or the Board of Directors to let the directors understand the market risk control status. BOT also have communication mechanism. Each operating units put forward transaction information to management departments periodically in order to ensure accuracy and effectiveness, and communicate the events when trading amount excesses the quota, important events and abnormal conditions.

d) Management policies of trading book risk

The trading book refers to the financial instruments held for trading or hedging. The positions held for trading mean the positions that are held to earn profit from the buy-sell spread. The positions not belong to trading book are regarded as banking book.

i) Policy and Procedure

The Bank formulates "Taiwan Bank Trading Book Management Provision" as important guideline for all trading units.

ii) Valuation Policy

BOT's market risk exposure can be classified into trading book and banking book. Following IFRS 13, BOT ensures that Level 1 inputs (i.e. quoted prices in an active market, such as OTC or Bloomberg) and Level 2 inputs (which can be directly or indirectly observed in the market) are available. When the aforementioned inputs are not available, the related instruments shall be classified to Level 3. The sources from which the BOT obtains inputs largely remain the same as prior periods and the BOT will check if a financial instrument can be reasonably measured before entering into a transaction.

iii) Measurement Method

- 1. Monitoring the trading book of risk exposure including stocks, funds, bonds, spot exchanges, forward exchanges, rate swap, option, etc. Checking the ratio of risk exposure with total investment everyday and reporting monthly.
- 2. BOT conduct stress test every quarter under unfavorable economic scenarios which are set up risk factors: equity securities, interest rate, foreign exchange and commodities, setting the scene to calculate possible impacts by inputting different on profit or loss of each risk factor.

Notes to the Consolidated Financial Statements

- 3. Check the market price every month.
- 4. Prepare the risk monitor report to chief director and put it on BOT's website as reference.
- e) Management policies of trading book interest risk
 - i) Definition of interest risk

"Interest risk" is the risk derived from changes in interest rate that may lead to changes in fair value of BOT's position or losses to earnings. Main position includes interest related securities and derivatives.

ii) Management procedures for trading book interest risk

BOT sets different quotas and stop-loss points for commercials, bonds, and interest related derivatives. Each trading department assesses market price of the trading book position daily, reports to the department of risk management monthly, and reports to the committee of risk management and the board quarterly.

iii) Measurement Method

Except setting up quotas and stop-loss point, BOT also monitors its position affected by interest risk with PV01, and Duration.

- f) Exchange rate risk management
 - i) Definition of exchange rate risk

The exchange rate risk refers to the profit or loss resulted from two different currencies transferred at different times. BOT exchange rate risk is derived from exchange, forward exchange, FX swaps, cross currency swaps, and foreign exchange options. Because BOT squares customer's position every day, the exchange rate does not have any significant risk.

ii) Management procedures and measurement method of exchange rate risk

To control the exchange rate risk, BOT sets different quotas and stop-loss point for employees with different levels and have annual total loss quota to control the loss in a tolerable range.

BOT conducts stress testing. The simulated situations are $\pm 3\%$ changes of exchange rate for every currency. The relevant statements are disclosed at sensitivity analysis.

Notes to the Consolidated Financial Statements

g) Equity security risk management

i) Definition of equity security risk

The market risk of holding equity securities includes the respective risk arising from the market price changes of respective equity security and general market risk resulted from the whole market price changes.

ii) The intention of equity security price risk management

The intention is to avoid loss and worse financial status due to violent fluctuations of equity security price and increase the effectiveness of capital usage and improve the business.

iii) Procedure of equity security price risk management

BOT sets different investment quotas by industries, enterprises and groups. They use the β value to measure the influence of systematic risk monthly and monitor the risk value of equity securities and unrealized profit/loss ratio every day. The stop-loss point mechanism is approved by the security investment committee and executed by the risk management department.

iv) Measurement method

The control of the equity security price risk is based on the unrealized gain (loss) ratio, β value and the aforementioned investment limitations.

BOT conducts stress testing every season. The simulated situations are $\pm 15\%$ changes of equity security price. The relevant statements are disclosed at sensitivity analysis.

h) Market risk valuation technique

i) Interest Rate Risk Sensitivity

BOT assumes that other factors are unchanged and the yield curve of the whole world moves upward by 100 bps at December 31, 2018 and 2017. Under this assumption, the income after tax will decrease \$3,814 million and \$4,743 million, respectively and the other comprehensive income will decrease \$6,369 million and \$6,169 million, respectively. If the yield curve moves downward by 100 bps, the income after tax will increase \$4,364 million and \$5,362 million, respectively and the other comprehensive income will increase \$6,659 million and \$6,440 million, respectively.

Notes to the Consolidated Financial Statements

ii) Exchange Rate Risk Sensitivity

BOT assumes that other factors are unchanged and the foreign currency to New Taiwan Dollars exchange rate appreciates by 3% at December 31, 2018 and 2017. Under this assumption, the income after tax will increase \$1,410 million and \$1,795 million, respectively and the other comprehensive income will increase \$2,771 million and \$2,285 million, respectively.

If the exchange rate depreciates by 3%, the income after tax will decrease \$1,410 million and \$1,795 million, respectively and the other comprehensive income will decrease \$2,771 million and \$2,285 million, respectively.

iii) Equity Security Price Risk Sensitivity

BOT assumes that other factors are unchanged and the market prices of the equity securities increase by 15% at December 31, 2018 and 2017. Under this assumption, the income after tax will increase \$6,482 million and \$8,177 million, respectively and the other comprehensive income will increase \$11,507 million and \$8,860 million, respectively.

If the market prices decrease by 15%, the income after tax will decrease \$6,482 million and \$8,177 million, respectively and the other comprehensive income will decrease \$11,507 million and \$8,860 million, respectively.

iv) Sensitivity analysis is as follows:

Units: In Millions of NTD

December 31, 2018							
Amount Influence							
Main risk	Range	Equity	Gain or loss				
Interest rate risk	Interest rate curve rise 100BPS	(6,369)	(3,814)				
Interest rate risk	Interest rate curve fall 100BPS	6,659	4,364				
	Other foreign currency/ NTD rise 3%	2,771	1,410				
	Other foreign currency / NTD fall 3%	(2,771)	(1,410)				
Price of equity stock risk	Price of equity stock rise 15%	11,507	6,482				
Price of equity stock risk	Price of equity stock fall 15%	(11,507)	(6,482)				

Notes to the Consolidated Financial Statements

Units: In Millions of NTD

December 31, 2017							
Amount Influence							
Main risk	Range	Equity	Gain or loss				
Interest rate risk	Interest rate curve rise 100BPS	(6,169)	(4,743)				
Interest rate risk	Interest rate curve fall 100BPS	6,440	5,362				
1	Other foreign currency/ NTD rise 3%	2,285	1,795				
_	Other foreign currency / NTD fall 3%	(2,285)	(1,795)				
Price of equity stock risk	Price of equity stock rise 15%	8,860	8,177				
Price of equity stock risk	Price of equity stock fall 15%	(8,860)	(8,177)				

i) Net position of major foreign currencies

Units: In Thousands of stated currencies

December 31, 2018				
Amount in original	currency	Amount in New Taiwan Dollars		
USD	939,761	28,883,554		
CNY	1,209,269	5,404,223		
JPY	2,985,129	828,075		
GBP	18,272	710,781		
AUD	28,452	616,128		

	December 31, 2017					
	Amount in original	currency	Amount in New Taiwan Dollars			
USD		962,416	28,564,507			
CNY		1,271,223	5,782,793			
JPY		2,966,635	781,115			
GBP		18,387	734,193			
KRW		16,555,529	460,244			

Note 1: The major foreign currencies were the top 5 currencies by position expressed in New Taiwan Dollars after exchange rate conversion.

Note 2: The net position represented the absolute value of each currency.

Notes to the Consolidated Financial Statements

All held foreign financial assets and liabilities are classified by currencies and represented using the carrying amounts. The following tables are the information at December 31, 2018 and 2017, respectively.

Decem			

	DU	ccmbci 51, 20	10	
Assets	U	SD to NTD	Other currency to NTD	Total NTD
Cash and cash equivalents	\$	43,760,141	62,182,412	105,942,553
Placement with central bank and call loans to banks		49,080,583	56,035,227	105,115,810
Financial assets measured at fair value through profit or loss		66,053,621	18,865,443	84,919,064
Financial assets measured at fair value through other comprehensive income		15,097,620	74,984,013	90,081,633
Debt investments measured at amortized cost		20,099,228	21,975,671	42,074,899
Hedging derivative financial assets		-	41,693	41,693
Receivables, net		10,629,303	4,778,805	15,408,108
Current income tax assets		170,067	175,802	345,869
Loans and discounts, net		141,013,561	97,830,017	238,843,578
Other financial assets, net		108,944	19,758	128,702
Property and equipment, net		63,559	52,505	116,064
Intangible assets		14,435	5,124	19,559
Deferred income tax assets, net		127,740	62,149	189,889
Other assets, net		41,697,422	(39,551,956)	2,145,466
Total assets	\$_	387,916,224	297,456,663	685,372,887

Notes to the Consolidated Financial Statements

D 1	I	21	- 20	116	•
Decem	ner	1 1	- / 1	אוו	L
Decem	\mathbf{u}	010	, ~ \	,,,	,

Other

		Other			
		currency to			
Liabilities	USD to NTD	NTĎ	Total NTD		
Deposits of Central Bank	\$ 68,635,480	52,209,508	120,844,988		
and other banks	46.046.740	62.024	46.200.626		
Financial liabilities measured at fair value through profit or loss	46,316,712	63,924	46,380,636		
Hedging derivative financial liabilities	-	12,973	12,973		
Bills and Bonds Sold under Repurchase Agreements	18,441,000	-	18,441,000		
Payables	7,612,984	2,264,724	9,877,708		
Current income tax liabilities	42,749	6,888	49,637		
Deposits and remittances	469,398,377	249,114,004	718,512,381		
Other financial liabilities	385,459	266,559	652,018		
Provisions	11,301	5,305	16,606		
Deferred income tax liabilities	-	21,541	21,541		
Other liabilities	112,470,812	33,217,502	145,688,314		
Total liabilities	\$ 723,314,874	337,182,928	1,060,497,802		
2000 1000 1000	December 31, 20				
Other					
		currency to			
Assets	USD to NTD	NTD	Total NTD		
Cash and cash equivalents	\$ 37,363,032	64,466,405	101,829,437		
Placement with Central Bank	85,638,257	72,348,322	157,986,579		
and call loans to banks					
Financial assets measured at fair value through profit or loss, net	69,756,516	19,029,826	88,786,342		
Available-for-sale financial assets	11,107,435	60,532,829	71,640,264		
Hedging derivative financial assets	-	22,759	22,759		
Receivables, net		,,,,,	,		
Receivables, net	7,213,203	3,912,394	11,125,597		
		3,912,394	11,125,597		
Current income tax assets Loans and Discounts, net	131,895	3,912,394 267,825	11,125,597 399,720		
Current income tax assets		3,912,394	11,125,597		
Current income tax assets Loans and Discounts, net Held-to-maturity financial	131,895 136,368,376	3,912,394 267,825 86,447,448	11,125,597 399,720 222,815,824		
Current income tax assets Loans and Discounts, net Held-to-maturity financial assets, net	131,895 136,368,376 10,601,839	3,912,394 267,825 86,447,448 21,832,468	11,125,597 399,720 222,815,824 32,434,307		
Current income tax assets Loans and Discounts, net Held-to-maturity financial assets, net Other financial assets, net	131,895 136,368,376 10,601,839 1,200,256	3,912,394 267,825 86,447,448 21,832,468 13,558,975	11,125,597 399,720 222,815,824 32,434,307 14,759,231		
Current income tax assets Loans and Discounts, net Held-to-maturity financial assets, net Other financial assets, net Property and equipment, net	131,895 136,368,376 10,601,839 1,200,256 53,789	3,912,394 267,825 86,447,448 21,832,468 13,558,975 19,396	11,125,597 399,720 222,815,824 32,434,307 14,759,231 73,185		
Current income tax assets Loans and Discounts, net Held-to-maturity financial assets, net Other financial assets, net Property and equipment, net Intangible assets Deferred income tax assets,	131,895 136,368,376 10,601,839 1,200,256 53,789 6,030	3,912,394 267,825 86,447,448 21,832,468 13,558,975 19,396 4,095	11,125,597 399,720 222,815,824 32,434,307 14,759,231 73,185 10,125		
Current income tax assets Loans and Discounts, net Held-to-maturity financial assets, net Other financial assets, net Property and equipment, net Intangible assets Deferred income tax assets, net	131,895 136,368,376 10,601,839 1,200,256 53,789 6,030 212,323	3,912,394 267,825 86,447,448 21,832,468 13,558,975 19,396 4,095 39,876	11,125,597 399,720 222,815,824 32,434,307 14,759,231 73,185 10,125 252,199		

(Continued)

Notes to the Consolidated Financial Statements

December 31, 2017

December 31, 2017						
			Other			
			currency to			
Liabilities	<u> </u>	JSD to NTD	NTD	Total NTD		
Deposits of Central Bank and other banks	\$	64,847,252	58,792,937	123,640,189		
Financial liabilities measured at fair value through profit or loss		270,822	26,196,172	26,466,994		
Hedging derivative financial liabilities		-	60,480	60,480		
Bills and Bonds Sold under Repurchase Agreements		16,725,699	-	16,725,699		
Payables		5,857,607	663,414	6,521,021		
Current income tax liabilities		75,125	52,691	127,816		
Deposits and remittances		436,646,132	238,849,658	675,495,790		
Other financial liabilities		136,760	664,632	801,392		
Provisions		5,862	2,486	8,348		
Deferred income tax liabilities		-	49,172	49,172		
Other liabilities	_	109,269,941	41,007,308	150,277,249		
Total liabilities	\$ _	633,835,200	366,338,950	1,000,174,150		

- j) Disclosures required by the Regulations Governing the Preparation of Financial Reports by Public Banks
 - i) Interest rate sensitivity assets and liabilities analysis (New Taiwan Dollars)

December 31, 2018						
Item	1~90 days	91~180 days	181 days to one year	Over one year	Total	
Interest rate sensitive assets	\$ 1,673,382,215	1,638,302,711	266,935,209	307,311,037	3,885,931,172	
Interest rate sensitive liabilities	422,546,294	2,955,016,635	331,223,291	77,972,260	3,786,758,480	
Interest rate sensitive gap	1,250,835,921	(1,316,713,924)	(64,288,082)	229,338,777	99,172,692	
Net worth					308,486,502	
Ratio of interest rate sensitive assets to liabilities (%)					102.62	
Ratio of interest rate sensit worth (%)	ive gap to net				32.15	

Notes to the Consolidated Financial Statements

December 31, 2017						
Item	1~90 days	91~180 days	181 days to one year	Over one year	Total	
Interest rate sensitive assets	\$ 1,789,260,805	1,368,411,212	274,603,809	321,835,409	3,754,111,235	
Interest rate sensitive liabilities	473,231,012	2,777,386,813	293,928,923	131,538,240	3,676,084,988	
Interest rate sensitive gap	1,316,029,793	(1,408,975,601)	(19,325,114)	190,297,169	78,026,247	
Net worth					286,583,277	
Ratio of interest rate sensitive assets to liabilities (%)					102.12	
Ratio of interest rate sensit worth (%)	ive gap to net				27.23	

- Note 1: The above amount included only new Taiwan dollar amounts held by the Bank, and excluded contingent assets and contingent liabilities.
- Note 2: Interest rate sensitivity assets and liabilities are interest-earning assets and interesting-bearing liabilities with revenues and costs affected by interest rate changes.
- Note 3: Interest rate sensitivity gap=Interest-rate-sensitivity assets-Interest-rate-sensitivity liabilities.
- Note 4: Ratio of interest-rate-sensitivity assets to liabilities=Interest-rate-sensitivity assets/Interest-rate-sensitivity liabilities (in New Taiwan Dollars).
- ii) Assets and liabilities interest rate sensitivity analysis (United Stated Dollars)

Unit: In Thousand of USD

December 31, 2018						
Item	1~90 days	91~180 days	181 days to one year	Over one year	Total	
Interest rate sensitive assets	\$ 25,735,649	7,127,788	5,381,028	756,158	39,000,623	
Interest rate sensitive liabilities	23,004,234	8,930,311	4,038,545	1,539,087	37,512,177	
Interest rate sensitive gap	2,731,415	(1,802,523)	1,342,483	(782,929)	1,488,446	
Net worth					(30,512)	
Ratio of interest rate sensitive assets to liabilities (%)					103.97	
Ratio of interest rate sensit worth (%)	atio of interest rate sensitive gap to net					

Unit: In Thousand of USD

December 31, 2017										
Item	1~90 days	91~180 days	181 days to one year	Over one year	Total					
Interest rate sensitive assets	\$ 28,823,293	5,395,605	3,420,487	787,330	38,426,715					
Interest rate sensitive liabilities	20,704,148	9,049,931	3,406,640	1,112,683	34,273,402					
Interest rate sensitive gap	8,119,145	(3,654,326)	13,847	(325,353)	4,153,313					
Net worth					(11,308)					
Ratio of interest rate sensit liabilities (%)	112.12									
Ratio of interest rate sensit worth (%)	ive gap to net				(36,728.98)					

Notes to the Consolidated Financial Statements

- Note 1: The above amount included only U.S. dollar amounts held by the Bank, and excluded contingent assets and contingent liabilities.
- Note 2: Interest rate sensitivity assets and liabilities are interest-earning assets and interest-bearing liabilities with revenues and costs affected by interest rate changes.
- Note 3: Interest rate sensitivity gap=Interest-rate-sensitivity assets-Interest-rate-sensitivity liabilities.
- Note 4: Ratio of interest-rate-sensitivity assets to liabilities=Interest-rate-sensitivity assets/Interest-rate-sensitivity liabilities (in U.S. dollars).

6) Interest rate risk management for banking book

The main management purpose is to strengthen the interest rate risk management, increase the effectiveness of capital usage and improve the business.

a) Strategy

The interest rate risk management increases BOT's flexibility in order to measure, manage and hedge the interest rate risk. BOT formulates "Liquidity and Interest Rate Management Strategies" to reinforce the management and maintain proper liquidity and adjust the interest rate sensitivity gap for the steady long-term profitability and business .

b) Management procedure

In order to adapt the economic financial environment changes and to fulfill the capital requirement, BOT conducts different pricing management strategies, such as adopting variable or fixed interest rate, and use financial futures, foreign exchange swaps, interest rate swaps to manage the interest rate sensitivity gap. To adjust the interest rate sensitivity gap properly, the risk management department monitors the ratio of interest rate sensitivity assets to interest rate sensitivity liabilities, the ratio of NTD capital gap to equity and the interest rate sensitivity gap of foreign exchange and report monthly to the risk management committee and board of directors.

c) Measurement method

BOT uses the "Assets and Liabilities Management Information System" to identify interest rate sensitivity assets and liabilities and analyses the maturity gap and changes of maturity structure as the basis of interest rate risk management and pricing strategies. They also make proper financial transfer and adjust the capital structure to lower the liquidity risk and increase the profit.

7) Other risks

a) Operational risk and legal risk

BOT has identified, measured and monitored operational risk and legal risk and also disclosed qualitative and quantitative information in accordance with the "Information of the Capital Adequacy and the Risk Managements" and the FSC's requirements.

Notes to the Consolidated Financial Statements

According the "The Explanations and Formats of Calculation of Bank's Self-Owned Capital and Risk-Weighted Assets," operation risks is the risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems, or from external events (including legal risk), differ from the expected losses. As legal risk is part of the operational risk, where it involves legal risk to be reported together with the operation risk to the appropriate management level.

b) Compliance risks and reputation risks

The Department of Compliance has set up the "Regulations and Guidelines of Legal Compliance" which clearly states the responsibility of the competent unit (Department of Compliance), the task units (each unit of the head office, Secretary Department of the Board of directors, Department of Internal Auditing of the Board of Directors), training unit (Department of Human Resources), and the self-assessment unit (each operational unit, excluding Department of Internal Auditing Board of Directors). The Department of Compliance also holds the responsibility of planning, managing and executing the overall legal compliance of the Bank. For instance, the task unit should look into potential risks of legal compliance and obtain the opinion and approval of the department of compliance before new services and products are introduced to the market or applications are submitted to the authorities for the approval of sales.

In response to continuous changes in external regulations, the Department of Compliance prepares the "Legislation and Amendment of External Financial Regulations Checklist" to let each operation unit recheck their internal guidelines and make necessary adjustments in time. The Department of Compliance passes the information to colleagues about changes in financial regulations related to the Bank's operations to lower the risk of legal compliance. If any operational loss events involving legal compliance occur and cause loss, they will be reported as part of operation risk to the appropriate management level.

The Bank's "Declaration of Operation Risk Appetite" stresses that the Bank should attach importance not only to the direct financial loss cause by operational loss events, but also the indirect loss which might damage its quality of service and reputation. In view of an internal fraud that may cause enormous loss and seriously jeopardize reputation, the Bank actively establishes the enterprise culture with risk awareness. In addition to enhance its colleagues' concept of risk (e.g. collecting and compiling the information as a report about the concept of risk), and to firmly execute internal controls, the Bank also avoids internal fraud by emphasizing the importance of compliance with regulations and laws. Any events that may damage the Bank's reputation will be reported as part of operation risk to the appropriate management level.

In the future, the Bank shall meet the requirements proposed by the authorities. Moreover, the Bank will keep collecting domestic and international information and refer them to other banks' practical operations to enhance the quantitative measurement and qualitative management on operation risk, legal risk, compliance risk and reputation risk.

Notes to the Consolidated Financial Statements

c) Money laundering and terrorist financing risks

The Bank has established and amended the related policies and procedures in accordance with the "Money Laundering Control Act" and related regulations announced by the FSC, as well as the "Template of Directions Governing Anti-Money Laundering and Countering the Financing of Terrorism of Banks" and the 53 suspicious transaction patterns amended or issued by the bankers association of the R.O.C. The Bank took the following actions to combat money laundering and terrorism financing (AML/CFT):

i) Setting up responsible unit and appoint AML/CFT Responsible Officer

The board of directors of the Bank appointed the Chief Compliance Officer to serve as AML/CFT Responsible Officer, and set up "AML Center" under The Department of Compliance in January 16, 2017. A Supervisor and a Vice Supervisor are set up in the center, and the Deputy Chief Compliance Officer is appointed to serve as the Supervisor. So far, there are 13 members in the center.

ii) Setting up AML/CFT Committee

The Bank set up "Anti-Money Laundering and Combating Terrorism Financing Committee (AML/CFT Committee)" according to the "Regulations for Anti-Money Laundering and Combating Terrorism Financing Committee, Bank of Taiwan". The President is the Chairperson, and the Chief Compliance Officer is the Vice President of the committee. The managers of the 16 other departments also serve as the committee members. The AML/CFT Committee is responsible for examining and supervising AML/CFT related affairs.

iii) Optimizing AML/CFT managerial mechanisms

1. In order to strengthen the Bank's AML/CFT managerial mechanisms, the Bank has already hired independent third parties to audit the effectiveness of the AML/CFT managerial mechanisms since 2017. Against the findings of the audit, the Bank then would hire external consultants to assist the Bank for improvement if necessary. The external consultants also participated and provided suggestions in the establishment of the Bank's AML/CFT information systems.

Notes to the Consolidated Financial Statements

- 2. The consulting engagement is divided into three stages, including "Anti-Money Laundering and Combating Terrorism Financing System Difference analysis", "Anti-Money Laundering and Combating Terrorism Financing Managerial System Improvement and Optimization", and "Managerial System Operation". By analyzing the differences between the Bank's current AML/CFT operation and the regulatory requirements all over the world, the consulting engagement focuses on mitigating the differences, optimizing the mechanisms, and re-examing the effectiveness of the optimized managerial mechanisms to ensure the perfectness of the systems.
- iv) Setting up and optimizing AML/CFT information systems

According to "Regulations Governing Anti-Money Laundering" Art. 9.1., financial institutions should gradually integrate customer information and transaction data by information systems, for the purpose of enhancing its capability of account and transaction monitoring. The Bank will strengthen its policies and procedures regarding ongoing monitoring of accounts and transactions by applying risk-based approach and the assistance of information systems.

v) Establishing AML/CFT area in its internal information network

In order for its employees to have an immediate access to AML/CFT related information, the Bank set up an AML/CFT website within its internal network. This measure simplifies the procedures of collecting related information, and is beneficial to the Bank by providing compliance guidance to its employees in their daily operations.

- vi) Training responsible officers and supervisors
 - 1. In order to respond to the announcement of the amendments to AML/CFT related regulations and to enhance the employees' understanding of related regulations, the Bank hired external expert to hold orientation training for the Bank's responsible officers and supervisors. The Bank also held seminars and invited professional lecturer to discuss the amendments to AML/CFT related regulations and patterns for the Board of Directors, General President, and responsible officers or supervisors.
 - 2. To propagate "Money Laundering Control Act" and related regulations, the Bank recorded AML/CFT online courses, and requires all employees to finish the online courses. The Bank also drew up "Understanding AML Q&A", and held online exam about the Q&A. The Bank requires all its employees to read the Q&A thoroughly and finish the online exam so as to improve their knowledge on AML related regulations.

Notes to the Consolidated Financial Statements

8) Transfer of financial assets – transferred financial assets without overall derecognition

The transferred financial assets of BOT that are not qualified for de-recognition in the daily operation are mainly debt securities under repurchase agreements. Since the right to receive cash flow is transferred and it reflects the associated liabilities to repurchase transferred financial assets at fixed price in future period, BOT cannot use, sell or pledge these transferred financial assets during the valid transaction period. However, since BOT still bear the interest rate risk and credit risk, transferred financial assets are not completely derecognized. Analysis of financial assets that are not completely derecognized and the associated liabilities are as follows.

		De	cember 31, 201			
Financial assets type Financial asset at fair value through profit or loss	Transferred financial assets book value	Financial liability book value	Transferre d financial assets fair value	Financial liability fair value	Net fair	
Issued under repurchase agreement	\$ 5,577,177	5,272,516	5,577,177	5,272,516	304,661	
Available-for-sale financial assets Issued under repurchase agreement	21,193,500	19,805,531	21,193,500	19,805,531	1,387,969	
		December 31, 2017				
Financial assets type	Transferred financial assets book value	Financial liability book value	Transferre d financial assets fair value	Financial liability fair value	Net fair	
Financial assets type Financial asset at fair value through profit or loss	financial		d financial		Net fair	
Financial asset at fair value through profit	financial assets book	liability	d financial assets fair	liability	Net fair 197,751	

9) Offsetting of financial assets and financial liabilities

BOT hold financial instruments which meet Section 42 of the IAS 32 endorsed by FSC. Therefore, the financial instrument will be offset on the balance sheet.

Although BOT do not engage in transactions that meet the offsetting condition in IFRSs, they have signed the net settlement contracts of similar agreements with counterparties, such as global master repurchase agreement, global securities lending agreement and similar repurchase agreement or reverse repurchase agreement. If both parties choose to net settle, the abovementioned executable net settlement contracts or similar agreements will be allowed to be settled in net amount after offsetting the financial assets and financial liabilities. Otherwise, the transaction will be settled in gross amount. However, if one party defaults, the other party could opt for net settling.

Notes to the Consolidated Financial Statements

The offsetting information of financial assets and financial liabilities is shown below:

The offsetth	ng informatio		nber 31, 2018	manciai naoi	illies is show	ii below.
Financial asse	ts under offsetti			t amount settle	ment or similar	norms
Financial assets Derivative financial assets	Total recognized financial assets (a) \$_6,298,504	Total recognized financial liabilities offsetting on the balance sheets (b)	Net amount of financial assets on the balance sheets (c)=(a)-(b) 6,298,504	Relevant amo	count not offset nee sheet (d) Cash received as collaterals 38,214	Net amount (e)=(c)-(d) 4,525,219
Financial liabili	ties under offse	tting or general	l agreement of 1	net amount sett	lement or simil	ar norms
		Total				
Financial liabilities Derivative financial liabilities	Total recognized financial liabilities (a) \$ 4,646,438	recognized financial assets offsetting on the balance sheets (b)	Net amount of financial liabilitieson the balance sheets (c)=(a)-(b) 4,646,438		Pledged cash Collaterals 387,813	Net amount (e)=(c)-(d) 2,523,554
Note: Netting settleme	ent agreement ar	nd non-cash fina	ncial collaterals	are included.		
			nber 31, 2017			
Financial asse	ts under offsett		igreement of ne	t amount settle	ment or similar	norms
Financial assets Derivative financial assets	Total recognized financial assets (a) \$ 7,071,851	Total recognized financial liabilities offsetting on the balance sheets (b)	Net amount of financial assets on the balance sheets (c)=(a)-(b) 7,071,851	Relevant amo on the balar Financial instrument (note) 529,545	count not offset nee sheet (d) Cash received as collaterals 1,461,975	Net amount (e)=(c)-(d) 5,080,331
Financial liabili	ties under offse	tting or general	l agreement of i	net amount sett	lement or simil	ar norms
Financial	Total recognized financial liabilities	Total recognized financial assets offsetting on the balance sheets	Net amount of financial liabilitieson the balance sheets	Relevant amo	ount not offset nce sheet (d) Pledged cash	Net amount
liabilities	(a)	(b)	(c)=(a)-(b)	(note)	Collaterals	(e)=(c)-(d)

Note: Netting settlement agreement and non-cash financial collaterals are included.

Derivative financial liabilities

Notes to the Consolidated Financial Statements

(iv) The subsidiary, BTLI

1) Risk management system

a) The structure, organization and the responsibility of the risk management

The risk management structure of BTLI is composed of the Board of Directors, the risk management committee, the director of the heads of risk management, the internal audit department, the risk management department and all the operational units. Their responsibilities are described as follows:

i) Board of Directors

The Board of Directors is responsible for the oversight of the Company's risks. They should identify risks in business operations and ensure the effectiveness of risk management.

ii) Risk management committee

The Risk Management Committee is responsible for formulating risk the management policies and organization functions: (i) establish qualified and quantified management standards, structure; (ii) regularly report the performance and provide advice to the Board of Directors.

iii) The Chief Risk Officer is responsible for overseeing the overall risk management.

iv) Risk management department

The Risk Management Department is responsible for monitoring, measuring and evaluating the implementation of the risk management on a daily basis. The Risk Management Department shall remain independent of other operational units.

v) All the operational units

Each department shall identify, measure, response and monitor the risk of implementation.

vi) The internal audit department

The internal audit department shall audit the risk management performance of each department in accordance with the applicable regulations and legislations.

b) Risk management procedures and protocols

i) Risk management procedures include risk identification, risk measurement, risk response, risk monitoring, data communication and documentation. Moreover, integrating risk management procedures to an operational level is helpful to reflect the impact on risk arising from changing in business environment.

Notes to the Consolidated Financial Statements

- ii) BTLI establishes the relevant risk indicators for the risks in business operations concerning the procedures, period and frequency of identification, measurement and evaluation of risk as means of decision making. It also includes performance evaluation and resource allocation.
- iii) After the evaluation and compilation of risks, the appropriate responding procedure from the Company shall include the followings:
 - 1. Risk averse: to exclude any participation or terminate the operations and activities.
 - 2. Risk transfer: to reinsure or transfer all or partial risks to a third party.
 - 3. Risk control: to adopt risk controlling procedures in order to minimize any impact.
 - 4. Risk tolerance: to tolerate any possible impact of risk by not initiating procedures as means of changing the probabilities of outcome.
- iv) BTLI establishes a risk monitoring system, timely scrutinize and monitor all the risks. If a risk is higher than expected or the tolerant limit, the Company should report and respond accordingly.
- v) The aforementioned risk monitoring and reporting system shall change along with the adjustment of operating objectives, risk exposure and external conditions of BTLI, including the effectiveness of the risk management system and the appropriateness of risk elements.

c) Credit risk management

BTLI sets credit limits for each rating and continuous credit risk mechanism for the credit risk management of securities investment. Performs strict credit analysis based on the different characteristics of financial instruments in order to control the credit risk exposure by investment instrument, issuer, counterparty, nation and industry, and to set the credit limits for each rating. Also prepares its related reports periodically to ensure it abides by the law.

BTLI performs strict credit analysis before undertaking mortgage loans and insurance loans. The mortgage loan policy not only limits the Loan to Value but also requests the evaluation of personal financial ranking to decide whether or not to undertake the loan. For the insurance loans, the loan amount shall be under the policy value reserves of the insurance product.

BTLI uses the Probability of Default (PD) and Loss Given Default (LGD) to measure the credit risk of risk related instruments, including the investments without quoted price in active market and the held to maturity investments. Also performs pressure tests to evaluate the effect of abnormal credit changes on investment portfolio as a reference for making corresponding countermeasures.

Notes to the Consolidated Financial Statements

d) Liquidity risk management

BTLI manages sufficient cash and cash equivalents so as to cope with its operations and mitigate the effects of fluctuations in cash flows.

e) Market risk management

BTLI performs evaluations before any financial instruments investment. Furthermore, the Company uses VaR model, scenario analysis, stress test, back test, position limit, risk limit, and stop loss system to manage market risk derived from financial investments.

f) Operational risk

Operational risk is the risk of loss arising from fraud, unauthorized authorities, error, omission, inefficiency system failure or external events. BTLI manages the risk through a control-based environment in which processes are documented, authorization is independent and transactions are reviewed and monitored.

BTLI sets up operation regulations and internal control system for each product and operating activity. BTLI also sets emergency management and recovery plan (Business Continuity Plan) with respect to some events caused by nature or human, such as the regional disasters, significant infectious diseases, employee's strikes, system interruptions and so on. In doing so, BTLI can ensure operations can continue even if a material incident occurs.

The risk management department monitors the operation risk exposure periodically and offers suggestions on topics regarding operational risk management. If a significant operation risk event happens, the risk management department should immediately prepare a risk management report.

g) The insurance risk management

Insurance risk refers to the risk resulting from the assumption of risks transferred from policy holders and unexpected changes in benefit claims, including product design and pricing risk, underwriting risk, reinsurance risk, catastrophe risk, claim risk, provision risk, etc. By implementing appropriate risk management procedures, such as risk identification and measurement in advance, risk responding and risk monitoring during the business process, and risk reporting thereafter, the Company and subsidiaries can limit their potential damage to a reasonable and acceptable level.

Notes to the Consolidated Financial Statements

2) Credit risk

As engaging in financial transactions, BTLI has exposure to credit risk, including issuer credit risk, counterparty credit risk, and credit risk of underlying assets:

- · Issuer credit risk is the risk that an issuer of financial debt instruments or a bank will default and be unable to fulfill the repayment obligation, or go into bankruptcy or liquidation, and thereby cause BTLI to suffer a financial loss.
- · Counterparty credit risk is the risk that a counterparty will default on a transaction and fail to pay due to price movement in the underlying securities of BTLI's derivatives, and thereby cause BTLI to suffer a financial loss.
- · Credit risk of underlying assets is the risk that an underlying asset of an instrument held by BTLI will have its credit quality weakened, its risk premium increased, or its credit rating downgraded, or that the issuer will be unable to meet the contractual obligation, and thereby cause BTLI to suffer a financial loss.

a) Concentration of Credit Risk

When the transaction of financial instruments is concentrated in a single industry or region, the ability to oblige the contract would be impacted by similar factors, thereby causing concentration of credit risk.

BTLI maintains a diversified portfolio, limits its exposure to any one geographic region, country or individual creditor and monitors the exposure continuously. BTLI's most significant concentrations of credit risk are summarized as follows:

i) Industry

			Petrochemical			
Item	 Finance	Government	Industry	Manufacturing	Electricity	Other
December 31, 2018						
Financial assets						
Cash and cash equivalents	\$ 19,546,768	-	-	-	-	-
Receivables	927,224	341,442	-	21,261	7,941	747,727
Financial assets at fair value through profit or loss	6,363,661	2,541,346	-	-	-	-
Financial assets measured at fair value through other comprehensive income — debt instruments	1,565,981	373,632	-	-	-	102,010
Financial assets measured at amortized cost—debt instruments	196,546,414	35,426,083	-	3,349,879	1,198,535	24,409,278
Other financial assets net	5,655,000	-	-	-	-	-
Loans	-	-	1,415,938	-	20,692	7,979,461
Guarantee deposits paid	-	5,446,789	-	-	-	2,439

Notes to the Consolidated Financial Statements

Item December 31, 2017	Finance	Government	Petrochemical Industry	Manufacturing	Electricity	Other
Financial assets						
Cash and cash equivalents	\$ 41,926,709	-	-	-	-	-
Receivables	913,761	380,393	-	16,593	13,489	651,780
Financial assets at fair value through profit or loss	1,412,330	-	-	-	-	-
Available for sale financial assets—debt instruments	2,379,172	-	-	-	-	202,787
Debt investments without active market debt instruments	14,090,425	10,614,689	-	-	-	636,860
Held to maturity financial assets – debt instruments	171,479,316	32,293,925	-	2,846,853	1,698,145	16,786,094
Other financial assets net	1,890,400	-	-	-	-	-
Loans	-	-	1,292,813	-	20,692	8,315,260
Guarantee deposits paid	38,666	3,443,596	-	-	-	2,435
ii) Region						
Item	Taiwan	America	Europe	Asia	Oceania	Other

December 31, 2018 Financial assets Cash and cash equivalents 19,546,768 Receivables 1,240,876 323,001 375,380 26,714 79,624 Financial assets at fair value through profit or loss 6,348,234 2,541,346 15,427 Financial assets measured at fair value through other comprehensive income — debt instruments 1,667,991 373,632 Financial assets measured at amortized cost—debt instruments 70,068,559 92,322,643 63,903,876 18,694,696 15,940,415 Other financial assets net 5,655,000 Loans 9,416,091 Guarantee deposits paid 5,449,228

ltem	 Taiwan	America	Europe	Asia	Oceania	Other
December 31, 2017						
Financial assets						
Cash and cash equivalents	\$ 41,926,709	-	-	-	-	-
Receivables	1,326,224	277,592	118,432	168,661	85,107	-
Financial assets at fair value through profit or loss	1,179,959	-	-	232,372	-	-
Available for sale financial assets—debt instruments	2,581,959	-	-	-	-	-
Debt investments without active market debt instruments	8,400,000	11,323,589	2,986,387	2,052,812	579,186	-
Held to maturity financial assets – debt instruments	57,233,478	78,737,587	54,367,241	18,369,622	16,396,405	-
Other financial assets net	1,890,400	-	-	-	-	-
Loans	9,628,764	-	-	-	-	-
Guarantee deposits paid	3,484,697	-	-	-	-	-

Notes to the Consolidated Financial Statements

- b) Credit Quality Analysis of the subsidiary, BTLI:
 - i) Categories for credit risk quality

BTLI internally categorizes the credit risk into three levels, which are low risk, high risk and impaired risk. The definition of each level is as follows:

- 1. Low risk: The issuers or the counterparties are rated as robust or above to fulfill their obligation of the contracts. Even under various negative news or disadvantageous economic conditions, the companies are capable of dealing with the situations.
- 2. High risk: The possibility that the issuers or counterparties fulfill their obligation is remote and mainly relies on the business environment. Negative news or disadvantageous economic conditions will lower their ability and willingness to fulfill their obligation.
- 3. Impaired risk: the counterparties or the target did not perform its obligation according to the contracts, and the potential estimated loss of BTLI has reached the standard of impairment
- ii) Determination on the credit risk that has increased significantly since initial recognition

BTLI determines whether the credit risk of financial instruments applying the impairment requirements in IFRS 9 increased significantly since the initial recognition on each reporting date. For this assessment, BTLI considers the reasonable and supportable information (including forward looking information) which shows that the credit risk has increased significantly since initial recognition. The main considerations include:

1. Credit business (including related interest receivables)

The main consideration for the credit business is the information pertinent to overdue status of counterparties. If the contract payments are overdue for more than 30 days, BTLI determines that the credit risk of the related financial assets has significantly increased since initial recognition.

Business	Combination	Definition
	Current: 0 DPD	Credit risk has not significantly increased
	M1: 1-30/31 DPD	Credit risk has
Loan on real estate	M2: 31-60 DPD	significantly increased
	M3: 61-90 DPD	
	D: 91 DPD/Defaulted Mark=Y	Credit has impaired

Notes to the Consolidated Financial Statements

2. Debt investments (including related interest receivables)

If, at the reporting date, the external credit rating of financial assets has declined equal to or over one credit rating and the financial assets are classified as high risk, BTLI determines that the credit risk of financial assets has significantly increased since initial recognition.

Details of the correlation between credit risk quality of debt investments and external credit rating are as follows:

Credit risk quality	Credit rating of domestic credit rating agencies (Taiwan Ratings)
	twAAA
	twAA+
	twAA
Low risk	twAA-
	twA+
	twA
	twA-~twBBB+
	twBBB
	twBBB-
	twBB+~twBB
High risk	twBB-~twB+
	twB~twB-
	twCCC

Notes to the Consolidated Financial Statements

Credit risk quality	Credit rating of international credit rating agencies (S&P)
	AAA
	AA+
	AA
	AA-
Low risk	A+
	A
	A-
	BBB+
	BBB
	BBB-
	BB+
	BB
High risk	BB-
	B+
	В
	В-
	CCC

All types of credit assets owned by BTLI are not applicable to the following assumption: if the credit risk of the credit assets is low, BTLI may consider that the credit risk of financial assets has not significantly increased since initial recognition.

iii) Definitions for default and credit impairment of financial assets

BTLI uses the same definitions for default and credit impairment of financial assets. If one or more of the following conditions are met, BTLI determine that the financial assets have been defaulted and credit impaired:

1. Quantitative indicators

When financial assets receivables are overdue for more than 90 days.

Notes to the Consolidated Financial Statements

2. Qualitative indicators

If there is evidence that the borrower or the issuer will be unable to pay the contract, or show that the borrower or the issuer has significant financial difficulties, such as:

- The borrower / issuer has filed for bankruptcy or is likely to file a bankruptcy.
- · The borrower / issuer has died or the company is dissolved.
- The financial instrument's contract of the borrower's or issuer's has defaulted.
- The financial market of the financial asset disappeared due to the financial difficulties of the borrower or the issuer.
- Due to financial or contractual reasons related to the financial difficulties of the borrower / issuer, the creditor of the borrower / issuer gives the borrower a concession that would not have been considered.
- · Purchase or originate financial assets at a substantial discount that reflects the credit losses have occurred.

The aforementioned definition of breach of contract and credit impairment applies to all financial assets held by BTLI, and is consistent with the definition used for the purpose of internal credit risk management for financial assets, and is also applied to the relevant impairment assessment model.

If a financial asset no longer meets the definition of default and credit impairment for a period of time, it is deemed to return to the state of compliance and is no longer considered defaulted and credit impaired.

iv) Write off policy

If there is no realistic prospect of recovery for the financial assets (either partially or in full), BTLI will write off part or full of the financial assets. The indications of financial assets which have no realistic prospect of recovery include:

1. The loan cannot be recovered in full or in part because the debtors have dissolved, gone into hiding, reached a settlement, declared bankruptcy, or for other reasons.

Notes to the Consolidated Financial Statements

- 2. The collateral and property of the primary/subordinate debtors have been appraised at a very low value or become insufficient to repay the loan after the subtraction of senior mortgages; or the execution cost approaches or possibly exceeds the amount that BTLI might collect from the debtors where there is no financial benefit in execution.
- 3. The primary/subordinate debtor's collateral has failed to sell at successive auctions where the price of such collateral has been successively lowered, and there is no financial benefit to be derived from BTLI 's taking possession of such collateral.
- 4. More than two years have elapsed since the maturity date of the non performing loans or non accrual loans, and the efforts of collection have failed.
- v) Expected credit loss measurement
 - 1. Adopted methods and assumptions

For BTLI, if the financial assets are of low credit risk or no significant increase in credit risk, the 12 month expected credit losses will be recognized. If the financial assets are significantly increased in credit risk or the credits have been impaired, the expected credit losses for a lifetime will be recognized.

In order to measure expected credit losses, BTLI adopts Probability of default ("PD"), and include Loss given default ("LGD") and Exposure at default ("EAD"), and consider the impact of the time value of money, to calculate the expected credit losses for 12 months and for a lifetime, respectively.

Default probability is how likely the issuer or the counterparty breaches the contract, and the loss given default is the rate of loss due to default by the issuer or the counterparty. The default probability and loss given default used by BTLI, related impairment assessments are based on domestic credit rating agencies (Taiwan Rating) and international credit rating agencies (S&P), regularly publish information on default rate and loss given default, or internal historical information (such as credit losses experience, etc.) and calculate based on current observable data and forward looking general economic information (such as gross domestic production) after adjusting historical data.

BTLI uses financial assets at amortized cost to measure Exposure at default ("EAD").

Notes to the Consolidated Financial Statements

The estimation techniques or material assumptions made by BTLI to assess expected credit losses have no significant changes during the year.

vi) Forward looking information considerations

BTLI takes forward looking information into account when judging whether the credit risk of a financial instrument has increased significantly since its initial recognition, and when the expected credit loss is measured. BTLI uses historical data to analyze and identify the economic factors that affect the credit risk and expected credit losses of various asset portfolios. Regarding the economic factors and its impact on expected credit losses vary according to the types of financial instruments.

1. Credit business (including related interest receivables)

BTLI provides predicted information of relevant economic factors (basic economic situation) every season. The information includes the best estimation of future economic status within a year, and average long term probability of default predicted by Stepwise Reversion Method.

The relevant economic factors that BTLI identifies for credit business in 2018 are chain linked GDP and the total value of import in Taiwan.

2. Debt investments (including related interest receivables)

The probability of default which BTLI utilizes to assess related impairment is based on the information issued by the domestic credit rating agencies (Taiwan Rating) and international credit rating agencies (S&P). The aforementioned information includes forward looking macroeconomic information.

Notes to the Consolidated Financial Statements

vii) Changes in loss allowance

1. Changes in loss allowance of secured loans (including accrual loans)

As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of secured loans (including accrual loans) were as follows:

Beginning balance	12 month ECLs 1,306	Lifetime ECLs (collectively assessed)	Lifetime ECLs (individually assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming/Non accrual Loans 59,280	Total61.059
	1,300	3/	-	416	-	1,//9	39,280	61,039
Changes due to financial instruments recognized as at beginning:								
 Transfer to lifetime expected credit losses 	(1)	1	-	-	-	-		-
 Transfer to 12month expected credit losses 	37	(37)	-	-	-	-		-
 Financial assets that have been derecognized during the period 	(48)	-	-	(272)	-	(320)		(320)
Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming / Nonaccrual Loans	-	-	-	-	-	-	(5,006)	(5,006)
The recovery of bad debts written off	680	-	-	-	-	680		680
Foreign exchange and other movements	(1,582)	8	-	858	-	(716)		(716)
Ending balance	\$ 392	29		1,002	-	1,423	54,274	55,697

Notes to the Consolidated Financial Statements

In 2018, there was no significant change in the allowance loss resulting from significant changes in the total carrying amount.

2. Changes in loss allowance of debt instruments measured at amortized cost

As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of debt instruments measured at amortized cost were as follows:

	12 month ECLs	Lifetime ECLs (collectively assessed)	Lifetime ECLs (individually assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Total
Beginning balance	87,459	-	-	-	-	87,459	87,459
Changes due to financial instruments recognized as at beginning:							
 Financial assets that have been derecognized during the period 	(7,518)	-	-	-	-	(7,518)	(7,518)
Originated or purchased new financial assets	13,249	-	-	-	-	13,249	13,249
Foreign exchange and other movements	(966)	_				(966)	(966)
Ending balance	\$ 92,224	-				92,224	92,224

In 2018, there was no significant change in the allowance loss resulting from significant changes in the total carrying amount.

Notes to the Consolidated Financial Statements

3. Changes in loss allowance of debt instruments measured at fair value through other comprehensive income

	12 month ECLs	Lifetime ECLs (collectively assessed)	Lifetime ECLs (individually assessed)	Lifetime ECLs (not purchased or originated credit impaired financial assets)	Lifetime ECLs (purchased or originated credit impaired financial assets)	The loss allowances measured in accordance with IFRS 9	Total
Beginning balance	1,033	-	-	-	-	1,033	1,033
Changes due to financial instruments recognized as at beginning:							
 Financial assets that have been derecognized during the period 	(303)	-	-	-	-	(303)	(303)
Foreign exchange and other movements	(301)					(301)	(301)
Ending balance	\$ 429	-	-			429	429

4. In 2018, BTLI does not have originated or purchased new financial assets whose credit are impaired.

Notes to the Consolidated Financial Statements

viii) Credit Quality Analysis for Securities Investment

Non overdue nor non impaired amount								Impairment Amount	Total	Recognized Impairment	Net (A)+(B)+
December 31, 2017	Very Good	Good	Medium	Weak	Non evaluate	Subtotal (A)	amount (B)	(C)	(A)+(B)+(C)	Amount (D)	(C) (D)
Available-for-sale financial assets											
Debt investments	202,787	2,379,172	-	-	-	2,581,959	-	-	2,581,959	-	2,581,959
Held-to-maturity financial assets Debt investments	43,503,405	119,934,452	61,666,476	-	-	225,104,333	-	-	225,104,333	-	225,104,333
Debt investments without a quoted price in active market Debt investments	10,705,934	13,581,140	1,054,900	_	-	25,341,974	_		25,341,974	_	25,341,974
Guarantee deposits paid	3,443,596	-	-	-	-	3,443,596	-	-	3,443,596	-	3,443,596

Internal Credit Risk Grades of
The Subsidiary, BTLI
Taiwan Ratings

Very Good
twAA~twA+
Good
twAA~twA+
Medium
twA~BBB+
Weak
Non-evaluate

Credit Rating of
Taiwan Ratings

twAA~twA+

TuwA-twA+

Under twBBB

ix) Credit Quality Analysis for Discounts and Loans (other than insurance loans and premium loans) and Receivables

		Non-o	verdue nor no	on-impaired a	mount		Recognized Impairment Amour				irment Amount	
December 31, 2017	Very Good	Good	Medium	Weak	Non- evaluate	Subtotal (A)	NPL but not impair amount (B)	Impairment Amount (C)	Total (A)+(B)+(C)	With objective	No objective	Net (A)+(B)+(C)-(D)
Receivables	\$				1,976,044	1,976,044	12	18,197	1,994,253	18,197	41	1,976,015
Loans	s				3,938,651	3,938,651	3,458	24,648	3,966,757	334	60,725	3,905,698

x) Aging Analysis of discounts and loans (Other than insurance loans and premium loans) and receivables which overdue but not impaired

December 31,

2017

Overdue 30 to 90 days

\$\frac{2017}{3,470}\$

Notes to the Consolidated Financial Statements

c) Credit risk exposure

i) The gross carrying amounts of secured loans (including non accrual loans) with maximum credit risk exposure are as follows:

	_			Secured loans cember 31, 2018		
	12 n	nonth ECLs	Lifetime ECLs—not impaired	Lifetime ECLs — impaired	Credit impairments of originated or purchased new financial assets — impaired	Total
Current 0~M1	\$	3,548,772	-	-	-	3,548,772
M2~M3		-	3,271	-	-	3,271
Default (D)		<u> </u>		27,299		27,299
Gross carrying amount		3,548,772	3,271	27,299	-	3,579,342
Allowance for impairment		(391)	(29)	(1,003)	-	(1,423)
Impairment difference recognized in accordance with "Regulations Governing the Procedures for Institutions to Evaluate Assets and Deal with Nonperforming / Nonaccrual Loans					(54,274)	(54,274)
Total	\$	3,548,381	3,242	26,296	(54,274)	3,523,645

1. Collateral and other credit enhancements

BTLI adopts a series of policies and measures to mitigate credit risks in relation to credit business, and one of the most common methods is requesting the borrower for the collateral. BTLI sets up the scope of collateral that can be recovered and the appraisal, as well as the management and disposing procedures to ensure the credit right. The major collateral of BTLI is real estate.

On the other hand, the loan security, terms of collateral, conditions to offset are addressed in the credit extending contract. The reduced facility and shortened repayment period or whether or not a loan is deemed matured are all well defined to mitigate credit risk in case that the credit event does incur.

The collateral policies and the overall quality of collateral of BTLI do not change significantly during 2018.

Notes to the Consolidated Financial Statements

BTLI observes the collateral value of financial instruments closely and determines whether the credit impaired financial assets have further impairment. The details of credit impaired financial assets and collateral value which reduces potential losses are as follows:

			Allowance for	Fair value
	Ex	posures	impairment	of collateral
Impaired financial assets:				
Secured loans (including non accrual loans)	\$	27,318	(1,007)	447,727
Gross impaired financial assets	\$	27,318	(1,007)	447,727

ii) The gross carrying amounts of financial assets with maximum credit risk exposure are as follows:

			Debt instrumer	nts measured at a	amortized cost	
	_		D	ecember 31, 201	8	
	12	month ECLs	Lifetime ECLs—not impaired	Lifetime ECLs — impaired	Credit impairments of originated or purchased new financial assets — impaired	Total
Total	\$	256,772,413	-			256,772,413
High risk	_	4,250,000				4,250,000
Gross carrying amount		261,022,413	-	-	-	261,022,413
Allowance for impairment	_	(92,224)				(92,224)
Total	\$_	260,930,189				260,930,189

iii) The gross carrying amounts of financial assets with maximum credit risk exposure are as follows:

	1	Debt instrumer			th other comprehens	ive income					
	December 31, 2018										
			Lifetime ECLs—not	Lifetime ECLs —	Credit impairments of originated or purchased new financial assets—						
	12 n	nonth ECLs	impaired	impaired	impaired	Total					
Credit rating	\$	2,010,948				2,010,948					
Gross carrying amount		2,010,948	-	-	-	2,010,948					
Allowance for impairment		(429)	-	-	-	(429)					
Fair value adjustments		30,675				30,675					
Total	s _	2,041,194	-		: =	2,041,194					

Notes to the Consolidated Financial Statements

iv) The amount of maximum credit risk exposure of the financial instruments not applicable to impairment requirements is as follows:

	De	ecember 31,
		2018
	Max	kimum credit
		exposure
Debt instruments	\$	8,657,031

v) Before 2017, the amounts of maximum credit risk exposure of the financial assets deducting the equity instruments, government bonds and treasury bills were as follows:

		December 3	31, 2017
Item		Carrying	Maximum
Financial assets			
Cash and cash equivalents	\$	41,926,709	41,926,709
Receivables		1,976,016	1,976,016
Financial assets measured at fair value through profit or loss		1,412,330	1,412,330
Available for sale financial assets		29,519,837	2,581,959
Debt investments without quoted price in active market		25,341,974	25,341,974
Held to maturity financial assets		225,104,333	201,020,123
Other financial assets – net		1,890,400	1,890,400
Loans		9,628,764	9,628,764
Refundable deposits		3,484,697	41,101
Total	\$	340,285,060	285,819,376

3) Liquidity Risk

The followings are the contractual maturities of financial liabilities, including estimated interest payments but excluding the impact of netting agreements.

Derivatives settled in net

	December 31, 2018								
			91~181	181 days			Over 5		
	0~30 days	31~90 days	days	~1 year	1~2 years	2~5 years	years	Total	
Financial liabilities measured at fair value through profit or loss									
Foreign exchange derivatives	\$(25,453)							(25,453)	

Notes to the Consolidated Financial Statements

Derivatives settled in total

	December 31, 2018										
	0~30 days	31~90 days	91~181 days	181 days ~1 year	1~2 years	2~5 years	Over 5 years	Total			
Financial liabilities measured at fair value through profit or loss	o so days	<u>51 70 days</u>	days		1 2 years	2 3 years	years	Total			
-Foreign exchange outflow	\$(13,234,500)	(15,390,600)	(3,075,000)	-	-	-	-	(31,700,100)			
-Foreign exchange inflow	13,128,130	15,254,600	3,042,850	-	-	-	-	31,425,580			
	(13,234,500)	(15,390,600)	(3,075,000)					(31,700,100)			
Subtotal of outflows	\$ <u>(13,234,500)</u>	(15,390,600)	(3,075,000)					(31,700,100)			
Subtotal of inflows	\$ (106,370)	(136,000)	(32,150)			-		(274,520)			
Derivatives settled in net											

	December 31, 2017								
				91~181 181 days			Over 5		
	0~3	30 days	31~90 days	days	~1 year	1~2 years	2~5 years	years	Total
Financial liabilities measured at fair value through profit or loss									
Foreign exchange derivatives	\$	(1,226)	(15,724)						(16,950)

Derivatives settled in total

December 31, 2017									
	91~181	181 days			Over 5				
0~30 days 31~90	days days	~1 year	1~2 years	2~5 years	years	Total			

Financial liabilities measured at fair value through profit or loss

Foreign exchange derivatives Foreign exchange derivatives

Maturity analysis of non-derivative:

				December	31, 2018			
			91~181	181 days			Over 5	
Assets	0~30 days	31~90 days	days	~1 year	1~2 years	2~5 years	years	Total
Cash and cash equivalents	\$ 19,551,550	-	-	-	-	-	-	19,551,550
Receivables	13,293	-	-	-	-	-	-	13,293
Non derivative financial assets measured at fair value through profit or loss	27,901	77,007	142,135	238,029	463,705	2,762,601	12,002,713	15,714,091
Financial assets measured at fair value through other comprehensive income	602,000	5,294	-	21,923	927,165	36,941	574,158	2,167,481
Financial assets measured at amortized cost	1,472,645	4,085,768	17,915,755	11,468,408	18,948,411	16,053,286	563,454,382	633,398,655
Other financial assets net	6,521	951,786	2,507,316	2,216,670	-	-	-	5,682,293
Guarantee deposits paid							5,446,789	5,446,789
Total	\$ <u>21,673,910</u>	5,119,855	20,565,206	13,945,030	20,339,281	18,852,828	581,478,042	681,974,152

Notes to the Consolidated Financial Statements

				December :	31, 2017			
			91~181	181 days			Over 5	
Assets	0~30 days	31~90 days	days	~1 year	1~2 years	2~5 years	years	Total
Cash and cash equivalents	\$ 41,192,280	745,348	-	-	-	-	-	41,937,628
Receivables	142,224	-	-	-	-	-	-	142,224
Available for sale financial assets	-	-	-	1,543,874	16,650	920,250	157,200	2,637,974
Held to maturity financial assets	727,874	2,663,991	4,602,348	7,501,057	15,696,158	27,416,995	521,780,373	580,388,796
Debt investments without in active market	110,091	190,139	297,504	927,912	1,494,935	4,440,191	55,263,044	62,723,816
Other financial assets net	550	905,070	1,001,349	-	-	-	-	1,906,969
Guarantee deposits paid	38,666						3,443,596	3,482,262
Total	\$ 42,211,685	4,504,548	5,901,201	9,972,843	17,207,743	32,777,436	580,644,213	693,219,669

4) Market Risk

- a) Exchange rate risk
 - i) The significant exchange rate risk exposure of the financial assets and liabilities are as follows:

	Dec	ember 31, 201	18	De	cember 31, 20	17
	Foreign currency	Exchange rate	NTD	Foreign currency	Exchange rate	NTD
Financial assets	 					
Monetary items						
AUD	\$ 248,272	21.6550	5,376,337	306,364	23.1350	7,087,737
CAD	25,230	22.5800	569,702	28,920	23.6300	683,373
EUR	4,963	35.1800	174,605	5,141	35.4500	182,250
HKD	388,380	3.9230	1,523,613	526,939	3.7960	2,000,261
USD	6,102,569	30.7350	187,562,443	5,948,886	29.6800	176,562,947
CNY	1,669,776	4.4690	7,462,229	2,857,752	4.5490	12,999,916
SGD	76,733	22.4400	1,721,892	73,560	22.2000	1,633,043
Financial liabilities						
Monetary items						
USD	758,908	30.7350	23,325,030	791,269	29.6800	23,484,865

ii) The concentration of the exchange rate risk is as follows:

	_					Dec	ember 31, 201	8				
	_	USD	AUD	HKD	EUR	CAD	NZD	CNY	JPY	ZAR	SGD	Total
Foreign financial assets												
Cash and cash equivalents	\$	1,167,696	21,219	94,998	6,199	2,358	-	23,088	-	-	22	1,315,580
Financial assets at fair value through profit or loss		4,521,721	84,011	1,428,611	168,406	-	-	-	-	-	-	6,202,749
Financial assets measured at fair value through other comprehensive income		373,632	-	-		-	-	-	-	-	-	373,632
Loans and receivables		366,351	247,303	4	-	-	-	122,114	-	-	-	735,772
Financial assets measured at amortized cost		156,275,494	5,107,815	-	-	567,344	-	7,317,027	-	-	1,721,870	170,989,550
Total	s_	162,704,894	5,460,348	1,523,613	174,605	569,702	-	7,462,229	-		1,721,892	179,617,283

Notes to the Consolidated Financial Statements

						De	ecember 31, 2018					
		USD	AUD	HKD	EUR	CAD	NZD	CNY	JPY	ZAR	ZAR	Total
Foreign financial liabilities												
Financial liabilities measured at fair value through profit or loss	\$	143,808	-	-	-	-	-	4,981	-	-	-	148,789
Payables	_	2,017	-						-			2,017
Total	s	145,825						4,981				150,806

Note: December 31, 2018: 1 USD = 30.735 NTD; 1 AUD = 21.655 NTD; 1 HKD = 3.923 NTD; 1 EUR = 35.18 NTD; 1 CAD = 22.58 NTD; 1 NZD = 20.63 NTD; 1 CNY = 4.469 NTD; 1 JPY = 0.2774 NTD; 1 ZAR = 2.12 NTD; 1 SGD = 22.44 NTD

SGD = 22.44 NTD												
						Dec	ember 31, 2017					
		USD	AUD	HKD	EUR	CAD	NZD	CNY	JPY	ZAR	SGD	Total
Foreign financial assets												
Cash and cash equivalents	\$	2,729,516	9,077	1,024,952	-	17,496	-	18,668	-	-	22	3,799,731
Financial assets measured at fair value through profit or loss		1,412,330	-	-	-	-	-	-	-	-	-	1,412,330
Available fo -sale financial assets		3,318,905	-	975,293	182,250	-	-	-	-	-	-	4,476,448
Loans and receivables		288,649	57,575	16	-	1,428	-	268,669	-	-	-	616,337
Held-to-maturity financial assets		138,700,597	7,021,085	-	-	664,449	-	10,477,806	-	-	1,633,021	158,496,958
Debt investments without quoted price in active market		6,457,613	-	-	-	-	-	2,234,772	-	-	-	8,692,385
Total	s_	152,907,610	7,087,737	2,000,261	182,250	683,373		12,999,915	-		1,633,043	177,494,189
						Dec	ember 31, 2017					
		USD	AUD	HKD	EUR	CAD	NZD	CNY	JPY	ZAR	ZAR	Total
Foreign financial liabilities												
Financial liabilities measured at fair value through profit or loss	\$	2,178	98,472	-	-	-	-	15,791	-	-	-	116,441
Payables	_	1,771		-		-	-		-			1,771
Total	\$_	3,949	98,472	-	-		-	15,791	-			118,212
	=											

Note: December 31, 2017: 1 USD = 29.680 NTD; 1 AUD = 23.135 NTD; 1 HKD = 3.796 NTD; 1 EUR = 35.45 NTD; 1 CAD = 23.63 NTD; 1 NZD = 21.07 NTD; 1 CNY = 4.549 NTD; 1 JPY = 0.2633 NTD; 1 ZAR = 2.39 NTD; 1 SGD = 22.20 NTD.

b) Interest rate risk

The changes in the interest rates of financial assets and financial liabilities were addressed in the notes of liquidity risk management of BTLI.

The sensitivity analysis represents the interest rate risk exposure of the derivatives and non derivatives at the reporting date. The risk of interest rate is mainly derived from the risk of interest reprising. The measurement of monitoring account interest rate risk is to compute the reprising gap of risk sensitive assets/ liabilities and to develop risk standard as the monitoring benchmark. Its measurements are to set the interest rate, which increases or decreases 50 basis points to evaluate the risk.

Notes to the Consolidated Financial Statements

c) Sensitivity analysis

The subsidiary, BTLI, uses risk value analysis and sensitivity analysis to manage the market risk. The sensitivity analysis is used as the basis for BTLI to perform risk analysis, risk alarming and business management. The sensitivity analysis measures the effects of changes in each risk factors on the value of the portfolios, easier for BTLI to realize the influences of risk factors in possible extreme variation on the portfolios.

Units: In 100 Millions of NTD

	December 31, 2018		
		Amount 1	Influence
Main risk	Range	Equity	Gain or loss
Exchange rate risk	Other foreign currencies / NTD	4.84	39.24
	rise 5%		
Exchange rate risk	Other foreign currencies / NTD	(4.84)	(39.24)
	fall 5%		
Interest rate risk	Interest rate curve rises 50BPS	(13.15)	-
Interest rate risk	Interest rate curve falls 50BPS	16.13	-
Price of equity stock risk	Price of equity stock rises 10%	29.41	-
	(Monetary market funds rises 2%)	(29.41)	-
Price of equity stock risk	Price of equity stock falls 10%		
	(Monetary market funds rises 2%)		

Units: In 100 Millions of NTD

	December 31, 2017		
		Amount	Influence
Main risk	Range	Equity	Gain or loss
	Other foreign currencies / NTD rise 5%	3.35	31.36
Exchange rate risk	Other foreign currencies / NTD fall 5%	(3.35)	(31.36)
Interest rate risk	Interest rate curve rises 50BPS	(0.25)	-
Interest rate risk	Interest rate curve falls 50BPS	0.26	-
Price of equity stock risk	Price of equity stock rises 10%	26.94	-
Price of equity stock risk	(Monetary market funds rises 2%) Price of equity stock falls 10% (Monetary market funds rises 2%)	(26.94)	-

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES **Notes to the Consolidated Financial Statements**

The nature and scope of the Insurance Contract Risk

Information of insurance risk

5)

a)

Sensitivity of insurance risk – Insurance contracts and financial instruments i) with discretionary feature:

	D	ecember 31, 2018	}
	Change in assumption	Changes in profit or loss before tax	Changes in shareholder's equity
Death rate	X1.1	(9,870)	(7,896)
Morbidity	X1.1	(47,070)	(37,656)
Contract Default Rate	X0.9	(35,856)	(28,685)
Expense	X1.1	(260,859)	(208,687)
Ratio of Return on Investment	(0.25)%	(830,881)	(664,705)

	Change in assumption profit or loss before tax shareholder equity X1.1 (9,708) (8,05) X1.1 (30,246) (25,10)								
	U	profit or loss	Changes in shareholder's equity						
Death rate	X1.1	(9,708)	(8,058)						
Morbidity	X1.1	(30,246)	(25,104)						
Contract Default Rate	X0.9	(35,312)	(29,309)						
Expense	X1.1	(258,148)	(214,263)						
Ratio of Return on Investment	(0.25)%	(805,224)	(668,336)						

ii) The interpretation for the concentration of insurance risk

BTLI does not target its insurance product at any group, age or gender. Insurance service area includes the whole Taiwan. In order to increase its management in insurance risk, BTLI established "BankTaiwan Life Insurance reinsurance management plan" to further implement all sorts of risk managing strategies. As a result, the concentration risks are minimal.

Notes to the Consolidated Financial Statements

iii) Claim development trend

1. Development trend of direct business loss

The development trends of the accumulated claims for the past ten years on December 31, 2018 and 2017 are as follows:

2018

Occurrence		Development year										
year	1	2	3	4	5	6	7	8	9	10	Provision	
2009	160,616	202,266	207,255	208,577	208,657	208,739	208,740	208,740	208,743	208,783	-	
2010	150,536	200,284	207,399	208,700	208,778	208,889	208,907	208,937	208,961	209,006	45	
2011	158,363	203,032	210,554	211,065	211,107	211,110	211,153	211,222	211,233	211,278	56	
2012	174,121	224,805	228,749	229,003	229,080	229,096	229,102	229,140	229,151	229,197	95	
2013	184,487	240,404	246,748	247,020	247,450	248,029	248,048	248,084	248,100	248,155	125	
2014	194,819	238,026	245,923	248,279	248,542	248,688	248,709	248,749	248,761	248,809	267	
2015	194,813	243,357	248,027	248,696	248,847	248,997	249,017	249,058	249,070	249,119	424	
2016	189,755	244,369	249,639	250,847	251,006	251,160	251,179	251,218	251,231	251,282	1,643	
2017	202,733	259,431	266,039	267,312	267,476	267,636	267,658	267,700	267,713	267,766	8,335	
2018	176,786	225,563	231,264	232,299	232,443	232,587	232,607	232,647	232,659	232,706	55,920	

Provision for unreported and within 1 year unpaid claims

66,910 18,396

Add: over 1 year reported but unpaid claims

85,306

Unreported provision claims

2017

Occurrence					Developn	nent year					Claim
year	1	2	3	4	5	6	7	8	9	10	Provision
2008	165,310	213,533	216,353	221,841	221,880	221,881	221,909	221,919	221,939	221,939	-
2009	160,616	202,266	207,255	208,577	208,657	208,739	208,740	208,740	208,743	208,743	-
2010	150,536	200,284	207,399	208,700	208,778	208,889	208,907	208,937	208,948	208,948	11
2011	158,363	203,032	210,554	211,065	211,107	211,110	211,153	211,167	211,180	211,180	27
2012	174,121	224,805	228,749	229,003	229,080	229,096	229,122	229,139	229,152	229,152	56
2013	184,487	240,404	246,748	247,020	247,450	247,498	247,523	247,538	247,552	247,552	102
2014	194,819	238,026	245,923	248,278	248,389	248,441	248,469	248,487	248,501	248,501	223
2015	194,813	243,357	248,027	250,124	250,237	250,290	250,318	250,336	250,351	250,351	2,324
2016	197,945	252,559	258,915	261,361	261,483	261,534	261,560	261,577	261,590	261,590	9,031
2017	202,733	256,762	262,639	265,161	265,276	265,330	265,359	265,377	265,392	265,392	62,659

Provision for unreported and within 1 year unpaid claims

74,433 19,970

Add: over 1 year reported but unpaid claims

94,403

Unreported provision claims

Notes to the Consolidated Financial Statements

2. Development trend of retained business loss

The development trends of the accumulated claims for the past ten years on December 31, 2018 and 2017 are as follows:

2018

Occurrence			•	•	Developn	nent year	•			•	Claim
year	1	2	3	4	5	6	7	8	9	10	Provision
2009	153,588	193,488	198,157	199,358	199,438	199,521	199,521	199,522	199,524	199,565	-
2010	143,101	189,407	196,245	197,440	197,518	197,629	197,647	197,677	197,701	197,743	43
2011	152,753	195,787	202,928	203,439	203,481	203,484	203,527	203,596	203,607	203,650	54
2012	166,896	216,798	220,742	220,995	221,073	221,089	221,094	221,132	221,143	221,187	93
2013	177,338	230,255	236,199	236,471	236,901	237,480	237,499	237,535	237,550	237,601	121
2014	192,319	233,110	241,007	243,364	243,626	243,769	243,789	243,830	243,841	243,887	261
2015	193,219	239,697	244,227	244,896	245,043	245,189	245,210	245,251	245,262	245,311	415
2016	187,037	241,651	246,921	248,110	248,266	248,418	248,437	248,476	248,489	248,539	1,618
2017	199,983	254,781	261,234	262,470	262,630	262,788	262,810	262,852	262,865	262,917	8,136
2018	174,831	223,069	228,690	229,706	229,848	229,991	230,011	230,051	230,062	230,109	55,277

2017

Occurrence					Developn	nent year					Claim
year	1	2	3	4	5	6	7	8	9	10	Provision
2008	151,816	196,181	198,907	203,895	203,934	203,935	203,963	203,973	203,993	203,993	-
2009	153,588	193,488	198,157	199,358	199,438	199,521	199,521	199,522	199,524	199,524	-
2010	143,101	189,407	196,245	197,440	197,518	197,629	197,647	197,677	197,688	197,688	11
2011	152,753	195,787	202,928	203,439	203,481	203,484	203,527	203,542	203,554	203,554	27
2012	166,896	216,798	220,742	220,995	221,073	221,089	221,115	221,131	221,145	221,145	56
2013	177,338	230,255	236,199	236,471	236,901	236,949	236,973	236,989	237,002	237,002	101
2014	192,319	233,110	241,007	243,363	243,469	243,521	243,549	243,566	243,581	243,580	217
2015	193,219	239,697	244,227	246,299	246,408	246,461	246,489	246,507	246,522	246,522	2,295
2016	195,227	249,841	256,053	258,474	258,594	258,645	258,671	258,688	258,701	258,701	8,860
2017	202,733	256,762	262,639	265,161	265,276	265,330	265,359	265,377	265,392	265,392	62,659

Notes to the Consolidated Financial Statements

BTLI provides claim reserve based on the expected future payments and relevant compensation processing cost of reported and unreported claims. In computation of such provision involves vast uncertainty, estimates and judgments, and is highly complicated. Any changes of estimation and judgment are regarded as changes in accounting estimates and the amount of changes is recognized in profit or loss. Some customers may be delayed to inform the claims to BTLI. In addition, when estimating the potential compensation of unreported claims, it involves vast past experience and subjective judgment; therefore, it is not able to confirm that the estimated reserve for claims on the balance sheet date will be the same as the actual compensation. The estimate of reserve for claims is based on the information currently available; however, the final result may be different from the original estimation due to the subsequent development.

The above table shows the development trend of claims (excluding the claims of which the compensation will be confirmed in a year). The vertical shaft represents the year when the claim event occurred, and the horizontal shaft represents the development years. Every slash represents the accumulated compensation at the end of each year. The compensation refers to the claims whether they are ruled or not. It explains how BTLI estimates the compensation of each year as time passes by. The scenario and trend which affect the amount of reserve for claims may not be consistent in the future; therefore, the estimated future compensation cannot be determined by the claim development trend revealed in the above table.

b) Credit risk, liquidity risk and market risk of insurance contracts

i) Credit risk

	December 31,	2018	
	Credit rating		
Name	agent	Credit rating	Date of rating
Central Re	S&P	A	102.06.10
Munich Re	S&P	AA-	95.12.22
Swiss Re	S&P	AA-	100.10.28
Cologne Re	S&P	AA+	99.02.04
Gibraltar Re	S&P	A^+	104.09.17
France Re	S&P	AA-	104.09.07
Dai-ichi Mutual Life	S&P	A+	103.11.26

Notes to the Consolidated Financial Statements

T	1	21	~ (1
Decem	har	41	71	11'/
DUCCH	II/CI	J	- 41	, , /

	Credit rating		
Name	agent	Credit rating	Date of rating
Central Re	S&P	A	102.06.10
Munich Re	S&P	AA-	95.12.22
Swiss Re	S&P	AA-	100.10.28
Cologne Re	S&P	AA+	99.02.04
Gibraltar Re	S&P	A+	104.09.17
France Re	S&P	AA-	104.09.07
Dai-ichi Mutual Life	S&P	A+	103.11.26

ii) Liquidity risk

Formulating relative actuarial assumption including death rate, contract default rate, expense, commission expense, morbidity and declared interest rate, by the actual rate of occurrence and valid insurance contract, without considering premium income from new contracts and beginning cash equivalent, of Conventional Insurance Product, Universal Life Insurance Product, Interest Sensitive Annuity Insurance Product, Participating Policy and Foreign Currency Policy up to December 31, 2017, the Company estimate future cash flow of provisions found that there will be negative value of net cash flow from assets and liabilities in next 10 years. However, after considering premium income from new contracts and beginning cash equivalent, the circumstance of cash flow from assets and liabilities mismatching may not occur.

The maturity analysis of insurance and investment contract liabilities on December 31, 2018 and 2017 are as follows:

Units: In Millions of NTD

Uı	ndiscounted exp	ected cash outflow	v (inflow) on Dec	cemb	er 31, 2018
<	12 months	1~5 years	>5 years		total
\$	(15,657)	41,703	965,815	\$	991,861
				_	

Undiscounted expected cash outflow (inflow) on December 31, 2017 < 12 months</td> 1~5 years >5 years total

\$ 12,677 15,805 922,562 \$ 951,04

iii) Market risk

Market risk in insurance contracts refers to the adverse changes in the market resulting in the returns on investment lower than the forecasted interest rate. As a result, insurers are subjected to financial losses. Considering BTLI's forecasted interest rate with the return on investment for the year ended December 31, 2018, the undertaken risk is within the acceptable level.

Notes to the Consolidated Financial Statements

- c) Information regarding risk exposure for embedded insurance contracts not measured using fair value: None.
- 6) Offsetting financial assets and financial liabilities

BTLI engages in the transactions of financial instruments that meet the offsetting conditions set forth in paragraph 42 of IAS 32 endorsed by the FSC. Those transactions are presented at the net amount on the balance sheet.

BTLI also engages in the transactions on repurchase agreement or reversed repurchase agreement that do not meets the offsetting condition. Such transactions include global master repurchase agreement, global securities lending agreement and related agreements. If both parties agree to settle the transactions on a net basis, BTLI can settle the transactions by netting the assets and liabilities. If there are no such agreements, BTLI shall settle the transaction on a gross basis. However, one party can choose to settle a transaction on a net basis if the other party defaults.

The offsetting information of financial assets and financial liabilities is shown below:

		Decen	nber 31, 2018			
Financial assets	s subject to offse	etting, enforcea	ble master nett	ing arrangeme	nt or similar ag	reement
		Recognized financial	Net financial assets			
	Recognized	liabilities offset in the	reported in the	Related amount the balance		
	financial assets	balance sheet	balance sheet	Financial instruments	Cash collateral	Net
Description	<u>(a)</u>	(b)	(c)=(a)-(b)	(Note)	received	(e)=(c)-(d)
Derivative financial assets	\$ <u>247,976</u>		<u>247,976</u>	124,933		123,043

Financial liabilities subject to offsetting, enforceable master netting arrangement or similar agreement

		Recognized financial	Net financial			
	Dagagnizad	assets offset in the	liabilities	Related amount the balance		
	Recognized financial	balance	reported in the balance	Financial	Cash	
	liabilities	sheet	sheet	instruments	collateral	Net
Description	(a)	(b)	(c)=(a)-(b)	(Note)	received	(e)=(c)-(d)
Derivative financial	\$148,789		148,789	148,789		

Note: Include master netting arrangement and non-cash collateral.

		Decer	nber 31, 2017			
Financial assets	s subject to offse	etting, enforcea	ble master nett	ting arrangeme	nt or similar ag	reement
		Recognized	Net financial			
		financial	assets			
		liabilities	reported	Related amoun	nt not offset in	
	Recognized	offset in the	in the	the balanc	e sheet (d)	
	financial	balance	balance	Financial	Cash	
	assets	sheet	sheet	instruments	collateral	Net
Description	(a)	(b)	(c)=(a)-(b)	(Note)	received	(e)=(c)-(d)
Derivative financial	\$ 1,412,330		1,412,330	2,178		1,410,152
assets						

Notes to the Consolidated Financial Statements

Financial liabiliti	ies subject to off	setting, enforce	eable master ne	etting arrangem	ent or similar a	greement
		Recognized				
		financial	Net financial			
		assets offset	liabilities	Related amoun	nt not offset in	
	Recognized	in the	reported in	the balanc	e sheet (d)	
	financial	balance	the balance	Financial	Cash	
	liabilities	sheet	sheet	instruments	collateral	Net
Description	(a)	(b)	(c)=(a)-(b)	(Note)	received	(e)=(c)-(d)
Derivative financial	\$ 116,441		116,441	116,441		
liabilities						

Note: Include master netting arrangement and non-cash collateral.

(v) The Subsidiary, BTS

1) Risk Management Strategies and Organization Structure

The risk management strategies are the highest principles for BTS's risk management system. The risk management strategies include the risk management principles, the scope, the authority, the procedures and so on.

The risk management strategies are designed to measure various risks including market risks, credit risks, liquidity risk, operational risks, legal risks, strategy risks, reputation risks and so on. The business units are required to identify the potential risks and offer a risk management plan to the management in the course of conducting business.

The risk management mechanism is as follows:

- a) Measure, monitor and control every risk under an affordable level in order to achieve the goal of the risk management.
- b) Build risk indicators and precaution system to conduct proper risk monitor.
- c) Establish a communication mechanism to report the complete risk information to the management periodically or properly, to announce to the subordinate units and to communicate between different departments; and to disclose to the public according to the regulations.
- d) Assessing risk and preparing paper work before creating new business or products, changing operating process, or developing information system.
- e) Enforcing the professional knowledge and training, and harness risk sensitivity within the corporation culture.

BTS sets a risk management department which is directly responsible to the general manager to ensure that the risks are well-controlled. The risk management organization of BTS is composed of the Board of Directors, the risk management committee, the risk management department and business units. Through a proper division of authority and responsibility, BTS establishes a risk management culture to make sure that the risk management system operates effectively.

Notes to the Consolidated Financial Statements

Financial risk management

i) Market risk

Market risk is the risk that BTS will suffer losses due to the changes in market interest rate, exchange rate or the security price fluctuation.

BTS manages its market risk through the following risk management mechanism:

- 1. The content, range of transaction, and authorization of levels should be clearly defined.
- 2. Risk should be identified, measured, supervised, and controlled while operating financial instrument, the risk undertaken should be within the risk appetite of BTS.
- 3. Establishing risk target of market, precaution system, overrunning handling, and communication system to take proper policy of market risk, in order to accomplish fully supervising and prevention.
- 4. Establishing market risk information management system, including transaction system, operating system, and risk management system to define the responsibility, ensure the independence of the system, and keep the system proper and in balance.
- 5. Create a model of market risk to assess and express the exposure of BTS; furthermore, to systematically manage the risk exposed.
- 6. Assessing market risk and preparing paper work before creating financial instrument, changing operating process, or developing information system and explore new financial services and products.
- 7. Enforcing the professional knowledge and training, and harness risk sensitivity within the corporation culture.

ii) Credit risk

The causes of credit risk are derived from both balance sheet and off balance sheet items. The major credit risks arise from discounts and loans, investments, over-due receivables, risk mitigation instruments (such as collaterals, guarantees and hedge instruments), securities financing, and derivatives.

The subsidiary, BTS, uses the following mechanism to manage credit risks:

- 1. Formulate the acceptable business and transactions and the division of the authority and responsibility.
- 2. Identify, measure, monitor and control the risks in the course of business.

Notes to the Consolidated Financial Statements

- 3. Establish the credit risk indicators, the credit rating management, the alarm system, the communication mechanism to improve and prevent the risk supervision.
- 4. Establish a complete credit risk information system and define the access rights to ensure that the credit risk monitoring operates independently.
- 5. Build a quantification model of credit risk to assess the exposures.
- 6. Assess credit risk and prepare paper work before creating financial instrument, changing operating process, or developing information system and new financial services and products.
- 7. Enforce the professional knowledge and training, and harness risk sensitivity within the corporation culture.

iii) Liquidity risk

Liquidity risk includes market liquidity risk and capital liquidity risk (financial risk). Market liquidity risk is the risk of facing market price movement in processing or offsetting assets caused by a low-volume market. Capital liquidity risk, on the other hand, is the risk of default at maturity due to inability to sell assets or obtain sufficient capital.

BTS has different policies in accordance with capital demands for different kinds of business aiming to effectively monitor market liquidity risk. The risk management department is in charge of the overview of capital and conducts a daily review to respond to system risk and capital demand in abnormal conditions.

In order to enhance the fund liquidity, BTS requests all business units to report the cash flow status every day. In addition, BTS also maintains sufficient cash and convertible securities consistently.

BTS's approach to managing liquidity is to ensure, as far as possible, that it always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions. If BTS is unavailable to meet its obligations, the following emergency plans should be used:

- 1. Ask for a loan from the financial institutions.
- 2. Sell the short-term securities, government bonds or corporate bonds.
- 3. Adjust the financing rate and the LTV ratio.
- 4. Sell the stocks of listed company and funds.

Notes to the Consolidated Financial Statements

iv) Operational risk

Operational risk is the risk of loss arising from fraud, unofficial authorities, error, omission, inefficiency system failure or external events. BTS manages the risk through a control-based environment in which processes are documented, authorization is independent and transactions are reviewed and monitored.

If any risk loss is defined, the business unit shall report it to the risk management department before the end of the month. The risk management department shall build an operational risk loss database to summarize, analyze and offer suggestions to the risk management committee or the Board of Directors.

2) Credit Risk

Credit risk is the risk that the counterparties of the financial instruments held by BTS and BTS's clients will default on the contracts, and thereby cause BTS to suffer a financial loss. The main considerations are the financial debts instruments and account receivables.

BTS has exposure to credit risk, including issuer credit risk, counterparty credit risk, and credit risk of underlying assets.

- Issuer credit risk is the risk that an issuer of financial debt instruments or a bank will default and be unable to fulfill the repayment obligation, or go into bankruptcy or liquidation, and thereby cause BTS to suffer a financial loss.
- Counterparty credit risk is the risk that a counterparty will default on a transaction and fail to pay due to price movement in the underlying securities of BTS's financial instrument derivative, and thereby cause BTS to suffer a financial loss.
- Credit risk of underlying assets is the risk that an underlying asset of an instrument held by BTS will have its credit quality weakened, its risk premium increased, or its credit rating downgraded, or that the issuer will be unable to meet the contractual obligation, and thereby cause BTS to suffer a financial loss.

a) Categories for credit risk quality

BTS internally categorizes the credit risk into three levels, which are low risk, high risk and impaired risk. The definition of each level is as follows:

- i) Low risk: The issuers or the counterparties are rated as robust or above to fulfill their obligation of the contracts. Even under various negative news or disadvantageous economic conditions, BTS is capable of dealing with the situations.
- ii) High risk: The possibility that the issuers or counterparties fulfill their obligation is remote and mainly relies on the business environment. Negative news or disadvantageous economic conditions will lower their ability and willingness to fulfill their obligation.

Notes to the Consolidated Financial Statements

- iii) Impaired risk: the counterparties or the target did not perform its obligation according to the contracts, and the potential estimated loss of the Company has reached the standard of impairment
- b) Determination on the credit risk that has increased significantly since initial recognition

BTS determines whether the credit risk of financial instruments applying the impairment requirements in IFRS 9 increased significantly since the initial recognition on each reporting date. For this assessment, BTS considers the reasonable and supportable information (including forward looking information) that shows the credit risk increased significantly since initial recognition (including forward looking information). The main considerations include: internal/external credit rating, overdue situation, credit spreads, other marketing information relating to the borrowers, issuers or the counterparties, and other financial instruments of the same borrower have significantly increased their credit risk.

c) Definitions for default and credit impairment of financial assets

BTS uses the same definitions for default and credit impairment of financial assets. If one or more of the following conditions are met, BTS determine that the financial assets have been defaulted and credit impaired:

i) Qualitative indicators

If there is evidence that the counterparty or the issuer will be unable to pay the contract, or show that the borrower or the issuer has significant financial difficulties, such as:

- 1. The counterparty / issuer has filed for bankruptcy or is likely to file a bankruptcy.
- 2. The financial instrument's contract of the counterparty's or issuer's has defaulted.
- 3. The financial market of the financial asset disappeared due to the financial difficulties of the counterparty or the issuer.
- 4. Purchase or originate financial assets at a substantial discount that reflects the credit losses have occurred.
- ii) If a financial asset no longer meets the definition of default and credit impairment for a period of time, it is deemed to return to the state of compliance and is no longer considered defaulted and credit impaired.

The aforementioned definition of breach of contract and credit impairment applies to all financial assets held by BTS, and is consistent with the definition used for the purpose of internal credit risk management for financial assets, and is also applied to the relevant impairment assessment model.

Notes to the Consolidated Financial Statements

d) Expected credit loss measurement

i) Adopted methods and assumptions

For BTS, if the financial assets are of low credit risk or no significant increase in credit risk, the 12 month expected credit losses will be recognized. If the financial assets are significantly increased in credit risk or the credits have been impaired, the expected credit losses for a lifetime will be recognized.

In order to measure expected credit losses, BTS adopts Probability of default ("PD"), and include Loss given default ("LGD") and Exposure at default ("EAD"), and consider the impact of the time value of money, to calculate the expected credit losses for 12 months and for a lifetime, respectively.

Default probability is how likely the issuer or the counterparty breaches the contract, and the loss given default is the rate of loss due to default by the issuer or the counterparty. The default probability and loss given default used by BTS, related impairment assessments are based on domestic credit rating agencies (Taiwan Rating), regularly publish information on default rate and loss given default, or internal historical information (such as credit losses experience, etc.) and calculate based on current observable data and forward looking general economic information (such as gross domestic production and GDP growth rate) after adjusting historical data.

BTS measures the exposure at default ("EAD") based on the amortized cost of financial assets.

The estimation techniques or material assumptions made by BTS to assess expected credit losses have no significant changes during the year.

ii) Forward looking information considerations

BTS takes forward looking information into account when judging whether the credit risk of a financial instrument has increased significantly since its initial recognition, and when the expected credit loss is measured.

BTS related impairment assessments are based on domestic credit rating agencies (Taiwan Rating), regularly publish information on default rate and loss given default, and regulate based on forward looking general economic information.

Notes to the Consolidated Financial Statements

e) Credit risk exposure

The carrying amounts of the financial assets represent the maximum exposure amount. The maximum exposure to credit risk at reporting date is as follows:

	D	ecember 31, 2018	December 31, 2017
Cash and cash equivalents	\$	80,192	79,937
Financial assets measured at fair value through profit or loss-current		448,314	236,333
Available-for-sale financial assets-current		-	2,072,100
Financial assets at fair value through other comprehensive income current		982,041	-
Financial assets measured at amortized cost		89,380	-
Loans and receivables		4,944,494	6,746,595
Other receivables (note)	_	1,427	847
	\$ _	6,545,848	9,135,812

The gross carrying amounts of financial assets with maximum credit risk exposure are based on risk rating as follows:

		De	ecember 31, 201	18	
	12 month ECLs	Lifetime ECLs — not impaired	Lifetime ECLs— impaired	Credit impairments of originated or purchased new financial assets— impaired	Total
Low risk	\$ 982,041				982,041
Gross carrying amount	982,041	-	-	-	982,041
Allowance for impairment	(169)	-		-	(169)
Total	\$ 981,872			. <u> </u>	981,872
		Debt instrumen De	ecember 31, 201		
				Credit	
	12 month	Lifetime ECLs—not	Lifetime ECLs—	impairments of originated or purchased new financial assets—	Total
Low risk	12 month ECLs \$ 89,380			of originated or purchased new financial	Total 89,380
Low risk Gross carrying amount	ECLs	ECLs-not	ECLs-	of originated or purchased new financial assets—	
Low risk Gross carrying amount Allowance for impairment	ECLs \$89,380	ECLs-not	ECLs-	of originated or purchased new financial assets—	89,380

Notes to the Consolidated Financial Statements

The amount of maximum credit risk exposure of the financial instruments not applicable to impairment requirements is as follows:

	De	cember 31,
		2018
	Max	imum credit
		exposure
Debt instruments	<u>\$</u>	440,121

The maximum exposure amounts by regions are as follows:

		December 31, 2018 (Taiwan)	December 31, 2017 (Taiwan)
Cash and cash equivalents	\$	80,192	79,937
Financial assets measured at fair value through profit or loss-current		448,314	236,333
Available-for-sale financial assets-current		-	2,072,100
Financial assets at fair value through other comprehensive income current		982,041	-
Financial assets measured at amortized cost		89,380	-
Loans and receivables		4,944,494	6,746,595
Other receivables (note)	_	1,427	847
	\$_	6,545,848	9,135,812

The maximum exposure amounts by counterparties are as follows:

	Ex	change	Finance	Other companies	Individuals	Total
December 31, 2018		.,				
Cash and cash equivalents	\$	-	80,192	-	-	80,192
Financial assets measured at fair value through profit or loss—current		-	40,532	407,782	-	448,314
Financial assets at fair value through other comprehensive income current		-	-	982,041	-	982,041
Financial assets measured at amortized cost		-	89,380	-	-	89,380
Loans and receivables		546,413	141	120	4,397,820	4,944,494
Other receivables (note)					1,427	1,427
	\$	546,413	210,245	1,389,943	4,399,247	6,545,848

Notes to the Consolidated Financial Statements

	Other					
	_ F	xchange	Finance	companies	Individuals	Total
December 31, 2017			_			
Cash and cash equivalents	\$	-	79,937	-	-	79,937
Financial assets measured at fair value through profit or loss—current		-	34,809	201,524	-	236,333
Available-for-sale financial assets – current		-	559,825	1,512,275	-	2,072,100
Loans and receivables		128,176	2,794	605	6,615,020	6,746,595
Other receivables (note)	_				847	847
	\$	128,176	677,365	1,714,404	6,615,867	9,135,812

Note: recorded in other current assets

f) Impairment loss

Aging analysis of loans and receivables:

	December 31, 2017				
	Amount		Impairment		
Non-overdue	\$	6,747	-		
Overdue 0 to 30 days	-	-	-		
Overdue 31 to 120 days	-		-		
Overdue over 1 year		<u> </u>			
	\$	6,747			

There is no recognition of impairment due to both loans and receivables are non-overdue on December 31, 2017.

The movements of the impairment were as follows:

	2	2018	2017
Beginning balance	\$	323	648
Allowance (reversal)		771	(325)
Ending balance	\$	1,094	323

The allowance for bad debt of other receivables is used to record bad debt or impairment. In the case where BTS believes the receivables cannot be collected, the receivables will be directly offset by the allowance for bad debt previously booked.

Notes to the Consolidated Financial Statements

g) The credit quality information

i) Changes in loss allowance of debt instruments measured at fair value through other comprehensive income

As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of debt instruments measured at fair value through other comprehensive income were as follows:

					Lifetime	Lifetime		
					ECLs (not	ECLs		
					purchased or	(purchased		
					originated	or originated	The loss	
			Lifetime	Lifetime	credit	credit	allowances	
			ECLs	ECLs	impaired	impaired	measured in	
		12 month	(collectively	(individually	financial	financial	accordance	
		ECLs	assessed)	assessed)	assets)	assets)	with IFRS 9	Total
Beginning balance	\$	459	-	-	-	-	459	459
Foreign exchange and other movements	_	(290)					(290)	(290)
Ending balance	\$_	169					169	169
	-							

In 2018, there was no significant change in the allowance loss resulting from significant changes in the total carrying amount.

Notes to the Consolidated Financial Statements

ii) Changes in loss allowance of financial assets measured at amortized cost

As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of financial assets measured at amortized cost were as follows:

			Lifetime	Lifetime	Lifetime ECLs (not purchased or originated credit	Lifetime ECLs (purchased or originated credit	The loss allowances	
			ECLs	ECLs	impaired	impaired	measured in	
		12 month	(collectively	(individually	financial	financial	accordance	
	_	ECLs	assessed)	assessed)	assets)	assets)	with IFRS 9	Total
Beginning balance	\$	262	-	-	-	-	262	262
Foreign exchange and other movements	_	(262)					(262)	(262)
Ending balance	\$_	-						

In 2018, there was no significant change in the allowance loss resulting from significant changes in the total carrying amount.

Notes to the Consolidated Financial Statements

iii) Changes in loss allowance of notes and accounts receivable and other receivables

As of December 31, 2018, the reconciliations of the beginning and ending balances for loss allowance of notes and accounts receivable and other receivables were as follows:

					Lifetime ECLs (not purchased or originated	Lifetime ECLs (purchased or originated	The loss	
			Lifetime ECLs	Lifetime ECLs	credit impaired	credit impaired	allowances measured in	
		12 month	(collectively	(individually	financial	financial	accordance	
		ECLs	assessed)	assessed)	assets)	assets)	with IFRS 9	Total
Beginning balance	\$	331	-	-	-	-	331	331
Foreign exchange and other movements	_	764					764	764
Ending balance	\$	1,095					1,095	1,095

In 2018, there was no significant change in the allowance loss resulting from significant changes in the total carrying amount.

Notes to the Consolidated Financial Statements

Units: In Thousands of NTD

	December 31, 2017							
		Normal	Caution	Abnormal	Subtotal			
Cash and cash equivalents	\$	79,937	-	-	79,937			
Financial assets measured at fair value through profit or loss- current		236,333	-	-	236,333			
Available-for-sale financial assets-current		2,072,100	-	-	2,072,100			
Loans and receivables		6,746,595	-	-	6,746,595			
Other receivables	_	251	278	318	847			
Total	\$ _	9,135,216	<u>278</u>	318	9,135,812			

3) Liquidity Risk

The following tables represent the expiration date of the financial liabilities. The amounts included the estimated interest expenses but without considering the effects of the netting agreements.

			91days ~	0 1	
December 21, 2019	1~30 days	31~90 days	1 year	Over 1 year	<u>Total</u>
December 31, 2018					
Non derivatives financial liabilities					
Commercial paper payable	\$ 289,886	-	-	-	289,886
Bonds sold under repurchase agreements	1,484,864	-	-	-	1,484,864
Accounts payables	2,278,325	-	-	-	2,278,325
Accounts payables — related-party	2	-	-	-	2
Collections	11,769	-	-	-	11,769
Other payables	64,213	-	-	-	64,213
Other payables — related- party	68,731	-	-	-	68,731
Guaranteed price deposits received from securities borrowers	37,509	37,509	75,019	-	150,037
Deposits received from securities borrowers	34,637	34,637	69,275	-	138,549
Other current liabilities	106	-	-	-	106
Other non-current liabilities				5,772	5,772
	\$ <u>4,270,042</u>	72,146	144,294	5,772	4,492,254

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

December 31, 2017	1~30 days	31~90 days	91days ~ 1 year	Over 1 year	Total
Non derivatives financial liabilities					
Commercial paper payable	\$ 1,189,859	-	-	-	1,189,859
Bonds sold under repurchase agreements	2,661,693	135,271	-	-	2,796,964
Deposits received from securities borrowers	33,275	33,275	66,549	-	133,099
Guaranteed price deposits received from securities borrowers	35,824	35,824	71,649	-	143,297
Accounts payables	2,987,786	-	-	-	2,987,786
Accounts payables — related-party	3	-	-	-	3
Collections	108,877	-	-	-	108,877
Other payables	60,936	-	-	-	60,936
Other payables — related- party	82,700	-	-	-	82,700
Other current liabilities	113	-	-	-	113
Other non-current liabilities	-	-	-	5,325	5,325
Derivatives financial liabilities					
Financial liabilities measured at fair value	1	-	1,299	-	1,300
	\$ 7,161,067	204,370	139,497	5,325	7,510,259

BTS does not expect the occurrence of the actual cash flow will be earlier or significantly different.

4) Market Risk

a) Equity securities price risk

Sensitivity analysis

	Units: In Million of N			
	Equity	Gain or loss		
December 31, 2018		_		
Price increases 10%	0.58	76.06		
Price decreases 10%	(0.34)	(27.36)		
	Equity	Gain or loss		
December 31, 2017		_		
Price increases 10%	29.99	50.57		
Price decreases 10%	(21.19)	(19.67)		

Notes to the Consolidated Financial Statements

b) Interest rate risk

The overview of the financial instruments held with interest rates is as follows:

	December 31, 2018		December 31, 2017
Financial instruments with fixed rate:		_	
Convertible bonds	\$	440,121	235,334
Corporate bonds		1,071,421	1,851,203
	\$	1,511,542	2,086,537

5) Currency Risk

	Γ	December 31, 2018	
	Foreign currency (in thousand dollars)	Exchange rate (in dollars)	NTD
Financial assets:			
Monetary items:			
CNY	20,388	4.4690	91,116
USD	120	30.7350	3,691
		December 31, 2017	
	Foreign currency (in thousand dollars)	Exchange rate (in dollars)	NTD
Financial assets:			
Monetary items:			
CNY	19,788	4.5490	90,017
USD	32	29.6800	957

The currency risk mainly arises from the available-for-sale financial assets and receivables denominated in foreign currencies. Foreign currency difference arises from the retranslation of the report. A 1% strengthening/ weakening of the TWD against the CNY at the reporting date would have increased (decreased) profit before tax by \$948 thousand and \$909 thousand, respectively, in 2018 and 2017. The analysis assumes that all other variables in particular interest rates remained constant.

Notes to the Consolidated Financial Statements

6) Transfer of Financial Assets - Transferred Financial Assets Without Overall Derecognition

The transferred financial assets of BTS that are not qualified for de recognition in the daily operation are mainly debt securities under repurchase agreements. Since the right to receive cash flow is transferred and it reflects the associated liabilities to repurchase transferred financial assets at fixed price in future period, BTS cannot use, sell or pledge these transferred financial assets during the valid transaction period. However, since BTS still bear the interest rate risk and credit risk, transferred financial assets are not completely derecognized. Analysis of financial assets that are not completely derecognized and the associated liabilities are as follows.

			D	ecember 31, 2018		
Financial assets type Financial asset at fair value through profit or loss	finan	ansferred icial assets ok value	Financial liability book value	Transferred financial assets fair value	Financial liability fair value	Net fair value
Issued under repurchase agreement	\$	27,914	26,500	27,914	26,500	1,414
Available-for-sale financial assets						
Issued under repurchase agreement		982,041	975,183	982,041	975,183	6,858
			D	ecember 31, 2017		
Financial assets type Financial asset at fair value through	finan	ansferred acial assets ok value	Financial liability book value	Transferred financial assets fair value	Financial liability fair value	Net fair value
profit or loss Issued under repurchase agreement	\$	54,979	52,026	54,979	52,026	2,953
Available-for-sale financial assets						
Issued under repurchase					1,752,107	10,847

7) Offsetting financial assets and financial liabilities

BTS and its subsidiary hold financial instruments which meet Section 42 of the IAS 32 endorsed by FSC. Therefore, the financial instrument will be offset on the balance sheet.

Although BTS does not engage in transactions that meet the offsetting condition in IFRSs, they have signed the net settlement contracts of similar agreements with counterparties, such as global master repurchase agreement, global securities lending agreement and similar repurchase agreement or reverse repurchase agreement. If both parties choose to net settle, the abovementioned executable net settlement contracts or similar agreements will be allowed to be settled in net amount after offsetting the financial assets and financial liabilities. Otherwise, the transaction will be settled in gross amount. However, if one party defaults, the other party could opt for net settling.

Notes to the Consolidated Financial Statements

The offsetting information of financial assets and financial liabilities is shown below:

		Decer	nber 31, 2017			
Financial assets	s subject to offse	etting, enforcea	ble master nett	ting arrangeme	nt or similar ag	reement
		Recognized financial	Net financial assets			
		liabilities	reported in	Related amou	nt not offset in	
	Recognized	offset in the	the	the balanc	e sheet (d)	
	financial	balance	balance	Financial	Cash	
	assets	sheet	sheet	instrumen	collateral	Net
Description	(a)	(b)	(c)=(a)-(b)	ts (Note)	received	(e)=(c)-(d)
Derivative financial	\$ 999		999			999
assets						

Note: Netting settlement agreement and non-cash financial collaterals are included.

		Decen	nber 31, 2017			
Financial liabiliti	es subject to off	setting, enforce	eable master ne	etting arrangen	nent or similar a	greement
		Recognized	Net financial			
		financial	liabilities	Related amou	nt not offset in	
		assets offset	reported in	the balanc	e sheet (d)	
	Recognized	in the	the	Financial		
	financial	balance	balance	instrumen	Cash	
	liabilities	sheet	sheet	ts	collateral	Net
Description	(a)	(b)	(c)=(a)-(b)	(Note)	received	(e)=(c)-(d)
Derivative financial	\$1,300		1,300		<u> </u>	1,300
liabilities					<u> </u>	

Note: Netting settlement agreement and non-cash financial collaterals are included.

(9) Capital Management:

(a) The capital management objectives and processes

The Company's and subsidiaries' basic objective of capital management shall be in compliance with the capital requirements of FSC and achieve the minimum statutory capital adequacy ratio. The qualified capital calculation is in accordance with regulation by competent authorities.

Maintain an optimal capital structure to respond to possible operational or economic risks, and to sustain future development of the business. The Company and subsidiaries also make appropriate and effective capital allocation to react the different capital portfolio and risk characteristics.

The Company and subsidiaries comply with the "Regulations Governing the Consolidated Capital Adequacy of Financial Holding Companies" and the "Standards Governing the Capital Adequacy Management of Taiwan Financial Holdings" and report the ratio to the authority twice a year. However, the subsidiaries shall comply with the regulations of different industries.

The Company and subsidiaries set target ratios and alarm ratios in order to react properly if the capital adequacy ratio is close to or lower than the alarm ratio.

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

(b) Capital adequacy ratio

2018

Unit: %

Item Name	the financial holding company's shareholding in the subsidiary	net eligible capital	statutory capital requirement
The Company	100 %	305,180,349	330,666,302
Subsidiary BOT	100 %	250,482,752	197,062,535
Subsidiary BTS	100 %	2,913,777	632,695
Subsidiary BTLI	100 %	17,997,060	13,926,914
Deducted Amount	-	(341,528,290)	(330,628,290)
Subtotal		235,045,648	211,660,156
The Company's and subsidiaries' Capital Ac	lequacy Ratio (C)=	(A)÷(B)	111.05

2017

Unit: %

Item Name	the financial holding company's shareholding in the subsidiary	net eligible capital	statutory capital requirement
The Company	100 %	286,219,936	302,184,667
Subsidiary BOT	100 %	246,987,645	173,984,554
Subsidiary BTS	100 %	2,779,888	815,211
Subsidiary BTLI	100 %	9,714,048	12,603,324
Deducted Amount	-	(314,673,032)	(302,173,032)
Subtotal	_	231,028,485	187,414,724
The Company's and subsidiaries' Capital Ac	lequacy Ratio (C)=	=(A)÷(B)	123.27

Explain: 1. The numbers are accordance with the "Regulations Governing the Consolidated Capital Adequacy of Financial Holding Companies"

- 2. The term "capital adequacy ratio of a financial holding company calculated on a consolidated basis" shall mean the Company's and subsidiaries' net eligible capital divided by the Company's and subsidiaries' statutory capital requirement.
- 3. Do not need to prepare the format for the first and third quarters.

Notes to the Consolidated Financial Statements

(c) Financial holding company's eligible capital

December 31, 2018			
Item	Amount		
Common stock	90,000,000		
Capital instruments with Tier 1 capital	-		
Other preferred stock and subordinated bonds	-		
Advance receipts for common stock	-		
Capital surpluses	111,385,226		
Legal reserve	7,419,683		
Special reserve	45,115,479		
Cumulative gain or loss	12,075,787		
Other equity	39,184,174		
Reduce: Goodwill and other intangible assets	-		
Reduce: Deferred assets	-		
Reduce: Treasury stocks	-		
Total qualifying capital	305,180,349		

December 31, 2017			
Item	Amount		
Common stock	90,000,000		
Capital instruments with Tier 1 capital	-		
Other preferred stock and subordinated bonds	-		
Advance receipts for common stock	-		
Capital surpluses	111,385,226		
Legal reserve	6,793,230		
Special reserve	41,357,939		
Cumulative gain or loss	12,121,258		
Other equity	24,562,281		
Reduce: Goodwill and other intangible assets	-		
Reduce: Deferred assets	-		
Reduce: Treasury stocks	-		
Total qualifying capital	286,219,934		

Explain: 1. The numbers are accordance with the "Regulations Governing the Consolidated Capital Adequacy of Financial Holding Companies".

2. No need to prepare the format for the first and third quarters.

Notes to the Consolidated Financial Statements

(10) Related-party Transactions:

(a) Name of related party and relationship

Name	Relationship
Hua Nan Financial Holdings Co., Ltd. and its subsidiaries	Investee company of BOT and BTLI under the equity method
Tang Eng Iron Works Co., Ltd.	Investee company of BOT under the equity method
Tai Yi Real Estate Management Co., Ltd	I.Investee company of BOT under the equity method
Taiwan Business Bank Co., Ltd	Related-Party
Land Bank Of Taiwan	Related-Party
The Export-Import Bank of the Republic of China	Related-Party
Cathy United Bank	Related-Party
Deutsche Bank Taipei Branch	Directors, supervisors, managers and their relatives up to the second degree, affiliates and so on
Chang Hwa Commercial Bank	Related-Party
Others	Directors, supervisors, managers and their relatives up to the second degree, affiliates and so on

(b) Name of related party and relationship

(i) The related information about the salaries and bonus for the key management personnel in 2018 and 2017 were as follows:

	December 31, 2018		December 31, 2017	
Short-term employee benefits	\$	47,639	42,981	
Retired benefits		11,310	1,284	
	\$	58,949	44,265	

(c) Name of related party and relationship

(i) Placement with banks

	December 3		31, 2018	December 31, 2017	
			Percentage		Percentage
			of account		of account
Name	A	mount	balance	Amount	balance
Hua Nan Financial Holdings Co.,	\$	54,571	0.01	7,283	0.01
Ltd.					

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

(ii) Bank deposits

(11)	Bank deposits				
		December	Percentage	December	Percentage
	Name	Amount	of account <u>balance</u>	Amount	of account balance
	Hua Nan Financial Holdings Co., Ltd.	\$ <u>228,890</u>	<u>0.48</u>	317,818	<u>0.66</u>
(iii)	Call loans to banks				
	Hua Nan Financial Haldings Co	Highest balance \$ 19,663,275	Ending balance 1,299,175	31, 2018 Interest rate range (%) 0.178~5.08	Interest income 46,434
	Hua Nan Financial Holdings Co., Ltd.	\$ 19,003,273			40,434
			December		
		Highest balance	Ending balance	Interest rate range (%)	Interest income
	Hua Nan Financial Holdings Co., Ltd.	\$ 11,112,275	1,528,375	0.17~5.10	50,511
(iv)	Call loans from banks (recognized as	s deposit of cent	ral bank and o	ther bank)	
			December	31, 2018	
				Interest	
		Highest balance	Ending	rate range	Interest
	Hua Nan Financial Holdings Co.,	\$ 10,670,305	balance 245,880	(%) 0.09~4.40	<u>income</u> 8,693
	Ltd.				
			December	31, 2017	
				Interest	
		Highest	Ending	rate range	Interest
	Hua Nan Financial Holdings Co., Ltd.	balance \$ 10,000,000	<u>296,800</u>	(%) 0.01~5.10	income 1,459

The lending rates for the related party have no difference with the others.

Notes to the Consolidated Financial Statements

(v) Deposits

	December 31, 2018		December 31, 2017		
Name		Amount	Percentage of account balance	Amount	Percentage of account balance
Hua Nan Financial Holdings Co., Ltd.	\$	371,497	0.01	376,291	0.01
Tai Yi Real Estate Management Co., Ltd.	_			10,333	
Total	\$	371,497	0.01	386,624	0.01

The deposits rates for the above related parties are calculated using the board rates and the conditions are not different from the others.

(vi) Financial assets at fair value through profit or loss/Financial assets measured at fair value through other comprehensive income/Available for sale financial assets-current

Name	Summary	De	cember 31, 2018	December 31, 2017
Hua Nan Financial Holdings Co., Ltd. Financial bonds (recorded in the Financial assets at fair value through profit or loss)		\$	800,000	-
	Financial bonds (recorded in the Financial assets measured at fair value through other comprehensive income)		900,000	-
	Financial bonds (recorded in the Available for sale financial assets)		-	900,000
	Valuation adjustment		59,235	20,327
	Carrying amount	\$	1,759,235	920,327
	Interest receivable	\$	12,475	1,587

The interest income for the year ended 2018 and 2017 derived from the BTLI's financial bond investment on related party are \$33,136 thousand and \$14,850 thousand.

(vii) Loans

	December 31, 2018									
Category	House holder amount or name of related party	Highest balance in current period	Ending balance	Performing	Non- performing loans	Type of collateral	Differences in transaction terms between related and non related parties			
Consumer loans	30 households	15,070	9,374	9,374	-	None	None			
House mortgages	191 households	721,580	622,246	622,246	-	Land and buildings	None			
Call loans to banks	Land Bank of Taiwan Co., Ltd.	19,500,000	-	-	-	None	None			
Call loans to banks	Hua Nan Financial Holdings Co., Ltd.	15,000,000	-	-	-	None	None			

Notes to the Consolidated Financial Statements

	December 31, 2018								
Category	House holder amount or name of related party	Highest balance in current period	Ending balance	Status of portion of p	Non- performing loans	Type of collateral	Differences in transaction terms between related and non related parties		
Call loans to banks	Taiwan Business Bank Co., Ltd.	2,000,000	-	=	-	None	None		
Call loans to banks	Cathy United Bank Co., Ltd.	11,000,000	-	=	-	None	None		
Call loans to banks	The Export Import Bank of the Republic of China	2,300,000	1,050,000	1,050,000	-	None	None		
Call loans to banks	Deutsche Bank Taipei Branch Co., Ltd.	3,500,000	-	-	-	None	None		
Short term loans	Taiwan Financial Holdings	25,800,000	25,800,000	25,800,000	-	None	None		
Secured overdrafts loans	Tang Eng Iron Works Co., Ltd.	67,405	67,405	67,405	-	Land and factory	None		
Short term secured loans	Tang Eng Iron Works Co., Ltd.	100,000	100,000	100,000	-	Land and factory	None		
Short term secured loans	Tang Eng Iron Works Co., Ltd.	1,882,984	1,200,000	1,200,000	-	Land and factory	None		
Medium term secured loans	Tang Eng Iron Works Co., Ltd.	1,800,000	1,800,000	1,800,000	-	Land and factory	None		

			December 31	, 2017			
_	House holder	Highest	Ending		erformance		Differences in
Category	amount or name of related party	balance in current period	balance	Performing loans	Non- performing loans	Type of collateral	transaction terms between related and non related parties
Consumer loans	27 households	14,354	9,642	9,642	-	None	None
House mortgages	104 households	574,881	521,316	521,316	-	Land and buildings	None
Call loans to banks	Land Bank of Taiwan Co., Ltd.	15,000,000	5,000,000	5,000,000	-	None	None
Call loans to banks	Hua Nan Financial Holdings Co., Ltd.	5,000,000	-	-	-	None	None
Call loans to banks	Taiwan Business Bank Co., Ltd.	3,000,000	-	-	-	None	None
Call loans to banks	Cathy United Bank Co., Ltd.	10,000,000	-	-	-	None	None
Call loans to banks	The Export Import Bank of the Republic of China	1,800,000	1,500,000	1,500,000	-	None	None
Call loans to banks	Chang Hwa Bank Co., Ltd.	5,000,000	-	-	-	Land and buildings	None
Short term loans	Taiwan Financial Holdings	16,250,000	16,250,000	16,250,000	-	None	None
Secured overdrafts loans	Tang Eng Iron Works Co., Ltd.	402,676	91,395	91,395	-	Land and factory	None
Short term secured loans	Tang Eng Iron Works Co., Ltd.	100,000	100,000	100,000	-	Land and factory	None
Short term secured loans	Tang Eng Iron Works Co., Ltd.	1,189,338	973,428	973,428	-	Land and factory	None
Long term secured loans	Tai Yi Real Estate Management Co.,Ltd	2,934	-	-	-	Land and factory	None
Medium term secured loans	Tang Eng Iron Works Co., Ltd.	400,000	-	=	-	Land and factory	None
Medium term secured loans	Tang Eng Iron Works Co., Ltd.	1,600,000	1,300,000	1,300,000	-	Land and factory	None

Notes to the Consolidated Financial Statements

Note 1: The consumer loans to staff and mortgage loans to staff can be lumped together for disclosure. The disclosure of other loans is sorted by respective related parties.

Note 2: Collateral is classified by real estate, short term notes, government bonds, secured or non secured bonds, TSEC and GTSM stocks, non TSEC and non GTSM stocks, and others.

(viii) Short-term borrowings

				Decemb	er 31, 2018	
			Highest balance	Ending balance	Interest rate rang (%)	
	Hua Nan Financial Holdings C Ltd.	Co.,	\$ 1,000,000		0.300	<u>137</u>
				Decemb	er 31, 2017	
				2000111	Interest	t
			Highest	Ending balance	rate rang	9
	Hua Nan Financial Holdings C Ltd.	Co.,	balance \$ 800,000	- Datance		<u>expense</u> <u>38</u>
(ix)	Payables					
				Dece	mber 31,	December 31,
	Name		Summary		2018	2017
	Hua Nan Financial Holdings Co., Ltd.	Agen	t fee	\$	123	487
	Hua Nan Financial Holdings Co., Ltd.	Intere	est expense		2	3
				\$	125	<u>490</u>
(x)	Commission expenses					
	Name		Nature	2	2018	2017
	Hua Nan Financial Holdings Co., Ltd.	Agen	t fee	\$	4,681	10,592
(xi)	Service charges					
	Name		Nature		2018	2017
	Hua Nan Financial Holdings		ttance fee and	\$	63	62
	Co., Ltd.	ınsu	rance agent fee			

Notes to the Consolidated Financial Statements

(xii) Other operating expenses

Name	Nature	,	2018	2017	
Hua Nan Financial Holdings Co., Ltd.	Sales charge	\$	12	11	
Hua Nan Financial Holdings Co., Ltd.	Business expense		961	961	
Hua Nan Financial Holdings Co., Ltd.	Service charge		16	5	
Total		\$	989	977	

- (xiii) The Company and subsidiaries have no different in transaction price between related party and non-related party.
- (d) Information on related party transactions amounting to more than \$100,000 thousand:

Since the related-party transactions had been offset when the Company prepared the consolidated financial statements, only one of the consolidated parties needs to disclose its related-party transaction.

The company and subsidiaries have no different in transaction price between related party and non-related party.

(i) The subsidiary, BOT

1) Name of related party and relationship

Name	Relationship
Taiwan Financial Holding Co., Ltd.	Holding company of BOT
BankTaiwan Life Insurance Co., Ltd.	Wholly-owned subsidiary of Taiwan Financial Holdings
BankTaiwan Securities Co., Ltd.	Wholly-owned subsidiary of Taiwan Financial Holdings
Hua Nan Financial Holdings Co., Ltd. and its subsidiaries	Investee company of BOT under the equity method
Tang Eng Iron Works Co., Ltd.	Investee company of BOT under the equity method
Tai Yi Real Estate Management Co., Ltd.	Investee company of BOT under the equity method
Taiwan Business Bank Co., Ltd	Related- Party
Land Bank of Taiwan Co., Ltd	Related- Party
The Export-Import Bank of The ROC Co., Ltd	Related- Party
Cathy United Bank	Related- Party

Notes to the Consolidated Financial Statements

	Name		Rela	ationship		
Cha	ng Hwa Commercial Bank	Related- Party				
Deu	tsche Bank Taipei Branch	Holiding company's directors, supervisors, managers and their relatives up to the second degree, affiliates and so on				
Othe	ers			managers and and degree, aff		
Othe	er related party transactions					
a)	Call loans to banks					
			December			
		III ah aa4	E-di	Interest	Intonost	
		Highest balance	Ending balance	rate range (%)	Interest	
	Hua Nan Financial	\$ 19,663,275	1,299,175	$\frac{(70)}{0.178 \sim 5.08}$	income 46,434	
	Holdings Co., Ltd.	ψ 13,000, <u>2</u> 70		0.176-3.00		
			December	31, 2017		
				Interest		
		Highest	Ending	rate range	Interest	
	Hua Nan Financial Holdings Co., Ltd.	balance \$ 11,112,275	balance 1,528,375	(%) 0.17~5.10	income 50,551	
b)	Deposits of banks					
		Decembe	er 31, 2018	Decembe	er 31, 2017	
			Percentage of account		Percentage of account	
	Name	Amount	balance	Amount	balance	
	Hua Nan Financial Holdings Co., Ltd.	\$228,890	0.48		0.66	
c)	Call loans from banks (rec	orded in Depos	it of Central E	Bank and Other	r Bank)	
			December	31, 2018		
				Interest		
		Highest	Ending	rate range	Interest	
	Hua Nan Financial Holdings Co., Ltd.	balance \$ 10,670,305	<u>balance</u> <u>245,880</u>	(%) 0.09~4.40	income 8,693	

Notes to the Consolidated Financial Statements

		December 31, 2017					
			Interest	_			
	Highest balance	Ending balance	rate range (%)	Interest income			
Hua Nan Financial Holdings Co., Ltd.	\$ 10,000,000	296,800	0.01~5.10	1,459			

d) Deposits

	Decembe	er 31, 2018	December 31, 2017		
Name	Amount	Percentage of account balance	Amount	Percentage of account balance	
Taiwan Financial Holding Co., Ltd.	\$ 291,908	0.01	130,657	-	
BankTaiwan Life Insurance Co., Ltd.	2,485,748	0.06	3,656,360	0.09	
BankTaiwan Securities Co., Ltd.	263,988	0.01	377,400	0.01	
Hua Nan Financial Holdings Co., Ltd.	371,497	0.01	376,291	0.01	
Tai Yi Real Estate Management Co., Ltd.		<u>-</u>	12,035		
Total	\$ <u>3,413,141</u>	0.09	4,552,743	0.11	

e) Service fee income

		20	18	2017		
Name	Ā	Amount	Percentage of account balance	Amount	Percentage of account balance	
BankTaiwan Life Insurance Co., Ltd.	\$	609,563	10.23	568,193	9.76	
BankTaiwan Securities Co., Ltd.		3,643	0.06	2,935	0.05	
Total	\$ _	613,206	10.29	571,128	9.81	

f) Interest income

		20	18	2017		
		Percentage of account			Percentage of account	
Name		Amount	balance	Amount	balance	
Taiwan Financial Holdings	\$	170,324	0.27	132,410	0.22	
BankTaiwan Life Insurance		657	-	520	-	
Co., Ltd.	_					
Total	\$ _	170,981	<u>0.27</u>	132,930	<u>0.22</u>	

Notes to the Consolidated Financial Statements

g) Gain (loss) on financial assets or liabilities measured at fair value through profit or loss

		201	18	2017		
Name		Amount	Percentage of account balance	Amount	Percentage of account balance	
BankTaiwan Life Insurance Co., Ltd.	\$	697,995	(15.48)	372,504	1.18	
BankTaiwan Securities Co., Ltd.	_	(6,614)	0.15	(4,315)	0.01	
Total	\$_	691,381	(15.33)	368,189	1.19	

h) Other non-interest income (loss)

		20	18	2017		
Name	A	Amount	Percentage of account balance	Amount	Percentage of account balance	
Taiwan Financial Holdings	\$	28,177	1.68	28,796	0.09	
BankTaiwan Life Insurance Co., Ltd.		43,634	2.59	37,363	0.12	
BankTaiwan Securities Co., Ltd.	_	30,915	1.84	30,350	0.10	
Total	\$ _	102,726	6.11	96,509	0.31	

i) Loans

			December 31	, 2018			
	House holder	Highest	Ending	Status of p	erformance		Differences in
Category	amount or name of related party	balance in current period	balance	Performing loans	Non- performing loans	Type of collateral	transaction terms between related and non related parties
Consumer loans	30 households	15,070	9,374	9,374	-	None	None
House mortgages	191 households	721,580	622,246	622,246	-	Land and buildings	None
Call loans to banks	Land Bank of Taiwan Co., Ltd.	19,500,000	-	-	-	None	None
Call loans to banks	Hua Nan Financial Holdings Co., Ltd.	15,000,000	-	-	-	None	None
Call loans to banks	Taiwan Business Bank Co., Ltd.	2,000,000	-	-	-	None	None
Call loans to banks	Cathy United Bank Co., Ltd.	11,000,000	-	-	-	None	None
Call loans to banks	The Export Import Bank of the Republic of China	2,300,000	1,050,000	1,050,000	-	None	None
Call loans to banks	Deutsche Bank Taipei Branch Co., Ltd.	3,500,000	-	-	=	None	None
Short term loans	Taiwan Financial Holdings Co., Ltd.	25,800,000	25,800,000	25,800,000	-	None	None
Short term secured loans	Bank Taiwan Securities Co., Ltd.	500,000	-	-	-	Government (or financial institutions) guarantee	None
Secured overdrafts loans	Tang Eng Iron Works Co., Ltd.	67,405	67,405	67,405	-	Land and factory	None

Notes to the Consolidated Financial Statements

	December 31, 2018										
Category	House holder amount or name of related party	Highest balance in current period	Ending balance	Status of performance Performing Non- loans performing loans		Type of collateral	Differences in transaction terms between related and non related parties				
Short term secured loans	Tang Eng Iron Works Co., Ltd.	100,000	100,000	100,000	-	Land and factory	None				
Short term secured loans	Tang Eng Iron Works Co., Ltd.	1,882,984	1,200,000	1,200,000	-	Land and factory	None				
Medium term secured loans	Tang Eng Iron Works Co., Ltd.	1,800,000	1,800,000	1,800,000	-	Land and factory	None				

December 31, 2017									
	House holder	Highest	Ending	Status of p	erformance		Differences in		
Category	amount or name of related party	balance in current period	balance	Performing loans	Non- performing loans	Type of collateral	transaction terms between related and non related parties		
Consumer loans	27 households	14,354	9,642	9,642	-	None	None		
House mortgages	104 households	574,881	521,316	521,316	-	Land and buildings	None		
Call loans to banks	Land Bank of Taiwan Co., Ltd.	15,000,000	5,000,000	5,000,000	-	None	None		
Call loans to banks	Hua Nan Financial Holdings Co., Ltd.	5,000,000	-	-	-	None	None		
Call loans to banks	Taiwan Business Bank Co., Ltd.	3,000,000	-	-	=	None	None		
Call loans to banks	Cathy United Bank Co., Ltd.	10,000,000	-	-	-	None	None		
Call loans to banks	The Export Import Bank of the Republic of China	1,800,000	1,500,000	1,500,000	-	None	None		
Call loans to banks	Chang Hwa Bank Co., Ltd.	5,000,000	-	-	=	Land and buildings	None		
Short term loans	Taiwan Financial Holdings Co., Ltd.	16,250,000	16,250,000	16,250,000	-	Government (or financial institutions) guarantee	None		
Secured overdrafts loans	Tang Eng Iron Works Co., Ltd.	402,676	91,395	91,395	-	Land and factory	None		
Short term secured loans	Tang Eng Iron Works Co., Ltd.	100,000	100,000	100,000	-	Land and factory	None		
Short term secured loans	Tang Eng Iron Works Co., Ltd.	1,189,338	973,428	973,428	-	Land and factory	None		
Long term secured loans	Tai Yi Real Estate management Co., Ltd.	2,934	-	-	-	Land and factory	None		
Medium term secured loans	Tang Eng Iron Works Co., Ltd.	400,000	-	-	-	Land and factory	None		
Medium term secured loans	Tang Eng Iron Works Co., Ltd.	1,600,000	1,300,000	1,300,000	-	Land and factory	None		
Short term secured loans	Bank Taiwan Securities Co., Ltd.	500,000	-	-	-	Real estate and government (or financial institutions) guarantee	None		

Note 1: The consumer loans to staff and mortgage loans to staff can be lumped together for disclosure. The disclosure of other loans is sorted by interested parties.

Note 2: Collateral is classified by real estate, short term notes, government bonds, secured or non secured bonds, TSEC and GTSM stocks, non TSEC and non GTSM stocks, and others.

Notes to the Consolidated Financial Statements

j) Derivative instruments

December 31, 2018										
Name of relative		Agreement	Notional	Current	Balance sheet					
				valuation	Account name	Amount				
party	Subject	period	amounts	adjustment						
BankTaiwan Life Insurance Co., Ltd.	Swap agreement	2017.08.04~ 2019.02.20	9,161,600	ŕ	Valuation adjustment of financial assets measured at fair value through profit or loss - swap	21,138				
BankTaiwan Life Insurance Co., Ltd.	Swap agreement	2010.08.20~ 2019.03.20	13,938,680	, , ,	Valuation adjustment of financial liabilities measured at fair value through profit or loss - swap	(29,327)				

December 31, 2017										
Name of relative	tive Agreement Notional Current Balance sheet									
				valuation	Account name	Amount				
party	Subject	period	amounts	adjustment						
BankTaiwan Life Insurance Co., Ltd.	Swap agreement	2010.08.20~ 2018.04.20	19,890,440		Valuation adjustment of financial assets measured at fair value through profit or loss - swap	(221,156)				

(ii) The subsidiary, BTLI

1) Name of related party and relationship

Name	Relationship
Taiwan Financial Holding Co., Ltd.	Holding company of BTLI
Bank of Taiwan Co., Ltd.	Wholly-owned subsidiary of Taiwan Financial Holdings
BankTaiwan Securities Co., Ltd.	Wholly-owned subsidiary of Taiwan Financial Holdings
BankTaiwan Insurance Brokers Co., Ltd	Wholly-owned subsidiary of BOT
Hua Nan Financial Holdings Co., Ltd. and its subsidiaries	Investee company of BOT and BTLI under the equity method
Others	Directors, supervisors, managers and their relatives up to the second degree, affiliates and so on

2) Other related party transactions

a) Secured loans

The real estate secured loans to the directors, supervisors, general manager, vice general manger, employees with credit amounts, their spouses and their first or second degree relatives on December 31, 2018 and 2017 are as follows:

	December 31,		December 31,	
Name		2018	2017	
Real estate secured loans	\$	187,427	217,407	
Interest receivables	\$	138	151	

Notes to the Consolidated Financial Statements

All interest rate collars on December 31, 2018 and 2017 are $0.820\% \sim 2.280\%$ and $0.820\% \sim 1.657\%$, respectively.

b) Bank deposits

The bank deposits in the related banks and the relevant interest revenues on December 31, 2018 and 2017 were as follows:

			December 31, 2018		December 31, 2017	
				Percentage of account		Percentage of account
Name	Account		Amount	<u>balance</u>	Amount	balance
Bank of Taiwan Co., Ltd	Bank deposits	\$	3,586,044	18.35	9,251,340	22.07
Hua Nan Financial Holdings	Bank deposits		52,913	0.27	5,488	0.01
		\$_	3,638,957		9,256,828	

The relevant interest revenues of the subsidiary, BTLI, in 2018 and 2017 were \$48,800 thousand and \$41,304 thousand, respectively.

c) Current tax assets

Name	Summary	Dec	ember 31, 2018	December 31, 2017	
Taiwan Financial	Refundable tax	\$	401,814	2,405,279	

d) Financial assets at fair value through profit or loss/Financial assets measured at fair value through other comprehensive income/Available for sale financial assets

Name	Summary	Transactions	Ι	December 31, 2018	December 31, 2017
Hua Nan Financial Holdings Co., Ltd.	Financial bonds (recorded in the Financial assets at fair value through profit or loss)	Cost	\$	800,000	-
	Financial bonds (recorded in the Financial assets measured at fair value through other comprehensive income)			900,000	-
	Financial bonds (recorded in the Available for sale financial assets)			-	900,000
		Valuation adjustment	_	59,235	20,327
		Carrying amount	\$_	1,759,235	920,327
		Interest receivable	\$_	12,475	1,587

Notes to the Consolidated Financial Statements

Both of the interest revenues from the aforementioned financial bonds in 2018 and 2017 are \$33,136 thousand and \$14,850 thousand.

e) Derivatives

December 31, 2018						
				Current	Balance sheet	
Name of relative		Agreement	Notional	valuation		
party	Subject	period	amounts	adjustment	Account name	Amount
Bank of Taiwan	Swap agreement	2018.10.05~	USD 755,000	(61)	Valuation Adjustment	29,336
Co., Ltd.		2019.01.31			on Financial Assets	
					Designated as at Fair	
					Value through Profit	
					or Loss	
			USD -	(54,569)	Valuation adjustment	(21,240)
					of financial liabilities	
					measured at fair value	
					through profit or loss -	
					-current- held for	
					trading-swap	

	December 31, 2017							
				Current	Balance sheet			
Name of relative party	Subject	Agreement period	Notional amounts	valuation adjustment	Account name	Amount		
Bank of Taiwan Co., Ltd.	Swap agreement	2017.10.20~ 2018.01.16	USD 665,000		Valuation Adjustment on Financial Assets Designated as at Fair Value through Profit or Loss	221,227		
			USD -	ŕ	Valuation adjustment of financial liabilities measured at fair value through profit or losscurrent- held for trading-swap	-		

f) Current tax liabilities

		December 31,	December 31,
Name	Summary	2018	2017
Taiwan Financial	Income tax expense	\$	386,818
Holding Co., Ltd.			

g) Gain (loss) on disposal of investments

Name	Summary		2018	2017
Bank of Taiwan	Gain (loss) on	- \$ <u></u>	643,528	340,818
	disposal of			_
	investment			

Notes to the Consolidated Financial Statements

h) Commission fees expense

Name	Summary	 2018	2017
Bank of Taiwan Co., Ltd	Sales charge	\$ 5,405	29,822
BankTaiwan Insurance Brokers Co., Ltd	Agent fee	560,892	496,529
Hua Nan Financial Holding	Agent fee	 4,681	10,592
Total		\$ 570,978	536,943

(iii) The subsidiary, BTS

1) Name of related party and relationship

Name	Relationship
Taiwan Financial Holding Co., Ltd.	Holding company of BTS
Bank of Taiwan Co., Ltd.	Wholly-owned subsidiary of Taiwan Financial Holdings
BankTaiwan Life Insurance Co., Ltd.	Wholly-owned subsidiary of Taiwan Financial Holdings
BankTaiwan Insurance Brokers Co., Ltd	Wholly-owned subsidiary of BOT
Hua Nan Financial Holdings Co., Ltd. and its subsidiaries	Investee company of BOT and BTLI under the equity method
Others	Directors, supervisors, managers and their relatives up to the second degree, affiliates and so on

2) Other related party transactions

a) Bank deposits

The bank deposits in the Bank of Taiwan on December 31, 2018 and 2017 were as follows:

	De	ecember 31, 2018	December 31, 2017
Cash and cash equivalents	\$	50,147	46,100
Operation guarantee deposits (recorded in other non-current assets)		180,000	230,000
Amounts awaiting delivery (recorded in other current assets)		28,971	1,457
Collections for underwriting stock value (recorded in other current assets)		4,770	99,843
	\$	263,888	<u>377,400</u>

Notes to the Consolidated Financial Statements

The bank deposits in the Hua Nan Financial Holdings on December 31, 2018 and 2017 were as follows:

	Dece	mber 31,	December 31,	
	2018		2017	
Cash and cash equivalents	\$	1,658	1,795	

The interest revenues from the deposits in the Bank of Taiwan on December 31, 2018 and 2017 were \$734 thousand and \$826 thousand, respectively.

b) Short-term loans borrowings

	 December 31, 2018									
			Interest ra	te range (%)	Interest					
Name	Highest balance	Ending balance	NTD	Foreign currency	expense, net					
Bank of Taiwan Co., Ltd	\$ 559,190		-	2.00 ~2.65	657					
Hua Nan Financial Holdings Co., Ltd.	\$ 1,000,000		0.300	-	137					

	 December 31, 2017								
			Interest ra	te range (%)	Interest				
Name	Highest balance	Ending balance	NTD	Foreign currency	expense, net				
Bank of Taiwan Co., Ltd	\$ 561,550		-	1.250 ~1.780	520				
Hua Nan Financial Holdings Co., Ltd.	\$ 800,000		0.300	-	38				

Notes to the Consolidated Financial Statements

(11) Pledged Assets:

The carrying amounts of the pledged assets offered by the Company and subsidiaries are as follows:

(a) Parent company-Taiwan Financial Holding Co., Ltd.: None.

(b) The subsidiary, BOT

Pledged assets Available-for-sale financial assets — bonds	Purpose of pledge Guarantee deposit for provisional seizure against defaulted loans and others	December 31, 2018	520,400
	0 1 1 1 0		
Available-for-sale financial assets – bonds	Operating deposit for securities investment trust and consulting	-	150,000
Held-to-maturity financial assets – government bonds	Guarantee deposits for trust business compensation reserve	-	450,000
Deposit in Central Bank – time deposits of deposit	Payment and settlement systems of Central Bank	20,000,000	20,000,000
Available-for-sale financial assets – negotiable certificate of deposit	Payment and settlement systems of Central Bank	-	27,400,000
Financial assets measured at fair value through other comprehensive income — bonds	Guarantee deposit for provisional seizure against defaulted loans and others	471,100	-
Financial assets measured at fair value through other comprehensive income — bonds	Operating deposit for securities investment trust and consulting	150,000	-
Financial assets measured at amortized cost—bonds	Guarantee deposits for trust business compensation reserve	450,000	-
Financial assets measured at fair value through other comprehensive income –	Payment and settlement systems of Central Bank	27,400,000	-
negotiable certificate		\$48,471,100	48,520,400

(c) The subsidiary, BTLI

Pledged assets	Purpose of pledge	Dece	mber 31, 2018	December 31, 2017
Government bonds (accounted in refundable deposits)	Operating guarantee	\$	5,446,789	3,443,596
Cash (accounted in refundable deposits)	Lease and futures exchange guarantee		2,439	41,101
		\$	5,449,228	3,484,697

(d) The subsidiary, BTS

Pledged assets	Purpose of pledge	Decen	ıber 31, 2018	December 31, 2017
Property and Equipment—Land	Short-term borrowings	\$	379,309	379,309
Property and Equipment —	Short-term borrowings		74,564	78,334
Building				
		\$	453,873	457,643

(12) Commitments and Contingencies:

(a) Commitments and contingencies

(i) Commitments and contingencies of the subsidiary, BOT

	December 31, 2018	December 31, 2017
Consignment collection	\$ 49,477,512	51,138,609
Contract guarantee on behalf of counter parties	1,241,441	1,230,613
Traveler's checks held on consignment	884,739	971,512
Marketable securities held as custodian	2,215,098,957	1,945,718,196
Letters of credit	26,676,184	25,418,847
Goods held in custody	42,603,991	39,968,747
Issuance of New Taiwan Dollars	2,199,308,024	2,044,208,550
Trustee of behalf of Lenders	608,892,514	697,542,841
Registered government bonds for sale	798,484,400	802,097,600
Registered short term bills for sale	254,133,758	257,055,720
Consigned sales of goods	885,736	1,625,640
Trust liabilities	601,845,330	618,391,788
Guarantees	87,101,336	85,038,738
	\$ <u>6,886,633,922</u>	6,570,407,401

(ii) Commitments and contingencies of the subsidiary, BTLI

The contract guarantees on behalf of counter parties of the subsidiary, BTLI, are \$5,601 thousand and \$2,272 thousand on December 31, 2018 and 2017, respectively.

(iii) Commitments and contingencies of the subsidiary, BTS

The subsidiary, BTS, had several proxy delivery agreements with certain securities companies. In accordance with these agreements, the companies have agreed to be BTS's first and second proxy. If BTS is unable to fulfill its obligation to the TSE, the proxies must then act pursuant to said obligations and responsibilities.

(b) Balance sheet, income statement and details of assets under trust, BOT

Trust assets		December 31, 2	December 31, 2017		
		Amount	%	Amount	%
Deposits					
Deposits in BOT	\$	29,268,129	5	33,934,811	6
Deposits in other banks		310,038	-	892,101	-
Short term investment					
Investment in funds		164,389,046	27	164,744,058	27
Investment in bonds		260,782,413	43	246,406,386	40
Common stock investment— marketable securities		51,622,134	9	50,742,896	8
Receivables					
Interest receivable		1,376,314	-	1,470,549	-
Cash dividend receivable		1,267	-	591	-
Receivables from trading securities		292,965	-	211,773	-
Receivables from forward contracts		5,553,635	1	4,498,190	1
Real estate					
Land		22,894,616	4	17,554,272	3
Buildings		121,199	-	121,433	-
Construction in progress		3,691,800	1	20,867,817	3
Marketable securities under custody		61,541,774	10	76,946,911	12
Total of trust assets	\$_	601,845,330	<u>100</u>	618,391,788	100

Trust liabilities		December 31, 2	December 31, 2017		
		Amount	%	Amount	%
Payables					
Payables from trading securities	\$	87,901	-	214,740	-
Payables from forward contracts		5,462,050	1	4,611,400	1
Payables from management fee		2,909	-	2,846	-
Payables from supervision fee		413	-	329	-
Other payables		1,575	-	1,498	-
Tax payable		722	-	402	-
Securities held in custody payable		61,541,774	10	76,946,911	12
Trust capital					
Money trust		388,748,062	64	395,622,083	64
Marketable securities trust		155,028	-	169,981	-
Real estate investment trust		28,387,883	5	41,897,668	7
Other reserve and accumulated income					
Accumulated loss		89,196,791	15	72,680,382	12
Foreign currency translation		(7,715,868)	(1)	(7,696,426)	(1)
Deferred unrealized income		13,805,837	2	14,243,990	2
Current income		22,170,253	4	19,695,984	3
Total of trust liabilities	\$_	601,845,330	100	618,391,788	100

Notes: The funds invested by the OBU branch of the subsidiary, BOT, are included. The amounts as of December 31, 2018 and 2017 are \$291,683 thousand and \$297,466 thousand, respectively.

Details of trust	D	ecember 31, 2018	December 31, 2017
Deposits			
Deposits in the Bank	\$	29,268,129	33,934,811
Deposits in other banks		310,038	892,101
Short term investment			
Investment in funds		164,389,046	164,744,058
Investment in bonds		260,782,413	246,406,386
Common stock investment- marketable securities		51,622,134	50,742,896
Real estate			
Land		22,894,616	17,554,272
Buildings		121,199	121,433
Construction in progress		3,691,800	20,867,817
Marketable securities under custody		61,541,774	76,946,911
Total	\$	594,621,149	612,210,685

Income statement for assets under trust	 2018	2017
Trust revenue		
Capital interest revenue	\$ 11,987,923	11,074,157
Cash dividend revenue	2,297,993	1,993,096
Donation revenue	328,336	344,272
Realized capital gain shares	308,916	120,211
Realized capital gain fund	2,265,566	2,384,913
Realized exchange gain – bond	1,980,364	852,895
Realized gain on property exchange	316,380	1,210,426
Income from beneficiary certificates	4,021,211	3,475,430
Realized foreign exchange gains	42,586	-
Other revenue	 63	61
Total trust revenue	 23,549,338	21,455,461
Trust expense		
Capital management fee	449,652	474,397
Tax expense	10,653	21,560
Supervisory fee	476	353
Storage fee	13,710	8,939
Commission fee	89	18
Donation cost	880,657	594,640
Realized foreign exchange losses	-	585,715
Other expense	 23,848	73,855
Total trust expense	 1,379,085	1,759,477
Net income	\$ 22,170,253	19,695,984

(13) Profitability:

(a) The Company

Unit: %

Item		December 31, 2018	December 31, 2017
Return on Assets	pre-tax	5.19	5.21
(note 6)	after-tax	5.20	5.25
Return on Equity	pre-tax	5.57	5.52
(Note 8)	after-tax	5.57	5.56
Profit Margin		98.66	99.70

(b) The Company and subsidiaries

Unit: %

Item		December 31, 2018	December 31, 2017
Return on Assets	pre-tax	0.34	0.32
(note 7)	after-tax	0.33	0.32
Return on Equity	pre-tax	5.66	5.52
(note 8)	after-tax	5.57	5.56
Profit Margin	•	18.13	10.07

(c) The subsidiary, BOT

Unit: %

Item	December 31, 2018	December 31, 2017	
Return on Assets	pre-tax	0.40	0.43
(note 7)	after-tax	0.38	0.41
Return on Equity	pre-tax	6.25	6.91
(note 8)	after-tax	5.88	6.58
Profit Margin		26.28	31.30

(d) The subsidiary, BTLI

Unit: %

Item		December 31, 2018	December 31, 2017
Return on Assets	pre-tax	(0.51)	(1.12)
	after-tax	(0.27)	(0.85)
Return on Equity	pre-tax	(14.10)	(39.58)
	after-tax	(7.51)	(30.12)
Profit Margin		(10.06)	(32.10)

Notes to the Consolidated Financial Statements

(e) The subsidiary, BTS

Unit: %

Item		December 31, 2018	December 31, 2017
Return on Assets	pre-tax	1.70	2.39
	after-tax	1.26	2.08
Return on Equity	pre-tax	4.56	6.65
	after-tax	3.39	5.78
Profit Margin	•	20.84	31.97

- Note 1: Return on assets=Income before (after) income tax/Average total assets.
- Note 2: Return on Shareholder's Equity=Income before (after) income tax/Average equity.
- Note 3: Profit margin=Income after income tax/Net revenues.
- Note 4: Income before (after) income tax is the income for the whole year of 2018 and 2017.
- Note 5: The above profitability ratios are at annual rates.
- Note 6: Return on total assets is calculated by the pre-tax or after-tax earnings, plus, excess preferential interest expense.
- Note 7: The return on total assets of the Company and subsidiaries are the pre-tax or after-tax earnings, plus, the excess preferential interest expense divided by the assets, less, the temporary advances and the total assets of the Government employees' department's.
- Note 8: Return on equity is calculated by pre-tax or after-tax earnings, plus, excess favorable interest expense.

(14) Losses Due to Major Disasters: None

(15) Specific Inherent Risks in Operating as Futures Dealer: None

(16) Other:

(a) The employee benefit expenses, depreciation, depletion and amortization, categorized by function, were as follows:

By function		2018			2017	
By nature	Operating costs	Operating expenses	Total	Operating costs	Operating expenses	Total
Employee benefits						
Salary	62,839	11,766,668	11,829,507	66,365	11,226,585	11,292,950
Labor and health insurance	105,387	570,738	676,125	101,905	553,741	655,646
Pension	2,984	927,182	930,166	3,180	893,076	896,256
Director and supervisor compensation payment	-	6,525	6,525	-	7,365	7,365
Others	-	304,221	304,221	-	286,850	286,850
Depreciation	118,074	752,650	870,724	110,413	781,420	891,833
Amortization	-	291,345	291,345	-	375,103	375,103

The number of employees in 2018 and 2017 were 9,158 and 9,069, respectively.

(Continued)

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

(b) Government audit adjustments for fiscal year ended 2017

The accounting records as at and for the year ended 2017, have been audited and examined by the MoA, and the resulting adjustments were summarized as follows:

The Company and subsidiaries

Balance Sheet	As Previously Reported December 31, 2017	Adjustments —Increase (Decrease)	As Audited by the MoA, December 31, 2017
Assets			
Cash and cash equivalents	\$ 176,557,484	(27,094)	176,530,390
Financial assets measured at fair value through profit or loss, net	238,298,393	28,137	238,326,530
Accounts receivable, net	67,938,513	30,460	67,968,973
Current income tax assets	3,856,127	(25,156)	3,830,971
Investments accounted for using equity method, net	369,165,099	3,443,595	372,608,694
Deferred tax assets	2,654,324	3,670	2,657,994
Other assets, net	11,809,607	(3,444,639)	8,364,968
Liabilities			
Accounts payable	60,080,069	466	60,080,535
Current income tax liabilities	984,175	(25,934)	958,241
Deferred tax liabilities	18,475,398	13,017	18,488,415
Other liabilities, net	8,983,572	30,460	9,014,032
Stockholders' equity			
Special reserve	41,357,939	858	41,358,797
Unappropriated retained earnings	12,121,258	3,875	12,125,133
Other equity	24,562,281	(13,769)	24,548,512
Income statement	as Previously eported 2017	Adjustments — Increase (Decrease)	As Audited by the MoA, 2017
Interest income	\$ 68,764,834	(27)	68,764,807
Share of profit of associates and joint ventures accounted for using equity method	3,073,663	(1,019)	3,072,644
Premiums gain (loss)	1,983,700	20	1,983,720
Other non-interest gain (loss)	362,290	(312)	361,978
Operating expenses	(21,429,585)	(173)	(21,429,758)
Income tax expenses (benefits)	108,718	5,225	113,943
Net income	7,362,657	3,714	7,366,371

Taiwan Financial Holding

Government audit adjustments for fiscal year ended December 31, 2017:

Balance Sheet	As Previously Reported December 31, 2017		Reported		Adjustments — Increase (Decrease)	As Audited by the MoA, December 31, 2017
Assets						
Current income tax assets	\$	289,905	53,522	343,427		
Investments under equity method, net		302,173,032	(62,040)	302,110,992		
Liabilities						
Payables	\$	23,813	518	24,331		
Stockholders' equity						
Special reserve		41,357,939	858	41,358,797		
Unappropriated retained earnings		12,121,258	3,875	12,125,133		
Other equity		24,562,281	(13,769)	24,548,512		
Income statement		s Previously eported 2017	Adjustments —Increase (Decrease)	As Audited by the MoA, 2017		
Share of profit of associates and joint ventures accounted for using equity method	\$	7,577,862	(49,290)	7,528,572		
Operating expenses		155,914	518	156,432		
Net income before income tax		7,281,656	(49,808)	7,231,848		
Income tax benefit		81,001	53,522	134,523		
Net income		7,362,657	3,714	7,366,371		

Revised entries by the MoA in 2017 were as follows:

Item	Adjustment accounts	Amount revis	ed by the MoA	Explanation of revision by the MoA
1.	Current income tax assets	\$ 53,522		Adjusted taxable income by amendment.
	Share of profit (loss) of associates and joint ventures accounted for using equity method	42,290		
	Other equity	13,769	1.010	
	Unappropriated retained earnings		1,019	
	Investments under equity method-net		62,040	
	Income tax benefit		53,522	

Item	Adjustment accounts	Amount revised by the MoA		Explanation of revision by the MoA
2.	Unappropriated retained earnings	858		Reversal of special reserve.
	Special reserve		858	
3.	Operating expenses	518		Adjusted employees' welfare funds by amendment.
	Payables		518	

Bank of Taiwan

Government audit adjustments for fiscal year ended December 31, 2017:

Balance Sheet	As Previously Reported December 31, 2017		Adjustments — Increase (Decrease)	As Audited by the MoA, December 31, 2017
Assets				
Current income tax assets	\$	1,160,916	(78,652)	1,082,264
Deferred tax assets		167,171	3,670	170,841
Liabilities				
Current income tax liabilities		514,709	(25,987)	488,722
Deferred tax liabilities		18,130,057	13,017	18,143,074
Stockholders' equity				
Unappropriated retained earnings		15,930,139	(48,243)	15,881,896
Other equity		29,091,376	(13,769)	29,077,607
Income statement		Previously orted 2017	Adjustments — Increase (Decrease)	As Audited by the MoA, 2017
Share of profit of associates and joint ventures accounted for using equity method	\$	2,612,076	(1,019)	2,611,057
Income tax expenses		893,506	48,243	941,749
Net income		10,403,590	(49,262)	10,354,328

Revised entries by the MoA in 2017 were as follows:

Item	Adjustment accounts	Amount revised by the MoA		Explanation of revision by the MoA
1.	Current income tax assets Income tax expense	\$ 28	28	The accountant of Hong Kong branch adjusted taxable income.
2.	Unrealized gain on available for sale financial assets	\$ 13,017		The accountant of Singapore branch adjusted taxable income.
	Income tax expense Current income tax liabilities	924	924	
	Deferred tax liabilities		13,017	
3.	Deferred tax assets	\$ 3,636		The accountant of South Africa branch adjusted taxable income.
	Income tax expense Unrealized gain on available for sale financial assets Current income tax	31 752	4,419	
	assets		1,117	
4.	Deferred tax assets	\$ 34		The accountant of Shanghai branch adjusted taxable income.
	Current income tax liabilities	27,083		
	Current income tax assets		20,474	
	Income tax expense		6,643	
5.	Current income tax	\$ 172	172	The accountant of Fuzhou branch adjusted taxable income.
6	liabilities	\$ 53,787		MoA adjusted taxable income by
6.	Income tax expense	33,/8/		amendment.
	Current income tax assets		53,787	
7.	Profit (loss) of accounted for using equity method Gain or loss accumulated in equity	\$ 1,019	1,019	MoA adjusted the CPA adjusting entries for investments under equity method of Tang Eng.

BankTaiwan Life Insurance

The accounting records as at and for the year ended 2017, have been auditred and examined by the MoA, and the resulting adjustments were summarized as follows:

Government audit adjustments for fiscal year ended December 31, 2017:

Balance Sheet	s Previously Reported ecember 31, 2017	Adjustments —Increase (Decrease)	As Audited by the MoA, December 31, 2017
Assets			
Current income tax assets	\$ 2,405,306	(27)	2,405,279
Payables	14,496,671	(52)	14,496,619
Current income tax liabilities	386,814	4	386,818
Stockholders' equity			
Accumulated deficit	(9,908,799)	21	(9,908,778)

			Adjustments		
	As	Previously	-Increase	As Audited by	
Income statement	Rep	oorted 2017	(Decrease)	the MoA, 2017	
Interest income	\$	9,669,318	(27)	9,669,291	
General expenses		733,077	(37)	733,040	
Administrative expenses		143,043	(15)	143,028	
Net loss before income taxes		(3,986,618)	25	(3,986,593)	
Income tax expense (benefits)		(952,455)	4	(952,451)	
Net gains (loss)		(3,034,163)	21	(3,034,142)	

Revised entries by the MoA in 2017 were as follows:

Item	Adjustment accounts	Amount revise	ed by the MoA	Explanation of revision by the MoA
1.	Payables	\$ 52		Adjusted taxable income by amendment.
	Interest income	27		
	Income tax benefits	4		
	Deferred tax assets		27	
	Current income tax assets		4	
	General expenses		37	
	Administrative expenses		15	

BankTaiwan Securities

Government audit adjustments for fiscal year ended December 31, 2017:

Balance Sheet	R	Previously deported sember 31, 2017	Adjustments —Increase (Decrease)	As Audited by the MoA, December 31, 2017	
Liabilities					
Other payables-relatives	\$	82,651	49	82,700	
Stockholders' equity					
Retained earnings		314,797	(49)	314,748	
Income statement		Previously orted 2017	Adjustments —Increase (Decrease)	As Audited by the MoA, 2017	
Income tax expense	\$	31,233	49	31,282	
Net income		208,434	(49)	208,385	

Revised entries by the MoA in 2017 were as follows:

Item	Adjustment accounts	Amount revise	ed by the MoA	Explanation of revision by the MoA
1.	Income tax expense Other payables- relatives	\$ 49	49	Adjusted taxable income.

(c) Supplementary information for government employees' insurance department

(i) Balance sheets

		employees' epartment	
	D	ecember 31, 2018	December 31, 2017
Cash and cash equivalents	\$	49,625,324	44,300,291
Financial assets measured at fair value through profit or loss		151,082,813	171,775,507
Debt investments measured at amortized cost		84,604,931	-
Receivables, net		8,052,203	13,045,439
Held-to-maturity financial assets		-	62,802,459
Property and equipment, net		4,673	5,842
Intangible assets, net		4,657	6,017
Other assets, net		3,039,547	3,228,093
Total assets	\$	296,414,148	295,163,648

Government employees'

TAIWAN FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

		insurance department			
	D	ecember 31, 2018	December 31, 2017		
Payables	\$	34,334	107,877		
Provisions		296,379,792	295,055,660		
Other liabilities	_	22	111		
Total liabilities	\$	296,414,148	295,163,648		

(ii) Income statement

	Government employees' insurance department		
		2018	2017
Net interest income	\$	2,088,822	1,758,366
Service fee expenses		(1,942)	(15,411)
Gain (loss) on financial assets and liabilities at fair value through profit or loss		(12,832,454)	24,913,983
Foreign exchange gain (loss)		1,827,970	(5,235,079)
Impairment loss of assets		(5,024)	-
Premium income		24,863,334	23,478,165
Government subsidy		8,892,009	10,452,705
Insurance payments		(23,242,767)	(24,923,675)
Provision for insurance premium reserve		(1,371,850)	(30,214,824)
Miscellaneous expense		(89,704)	(93,142)
Miscellaneous revenue		15,591	13,504
Net revenue		143,985	134,592
Bad debt expenses and reserve for guarantees		3,639	-
Employee benefits		122,437	116,354
Depreciation and amortization expenses		3,318	4,779
Other general and administrative expenses		14,591	13,459
		143,985	134,592
Net income	\$	<u> </u>	

Note: According to Government Employees and School Staff Insurance Act, if GESSI experiences a loss, the loss before May 30, 1999, would be covered by the Ministry of Finance; and the loss after that date would be covered by an adjustment of the insurance premium. Besides, according to the same Act, the expenses to carry on government employees and school staff insurance are subsidized by the budget designated by the Ministry of Civil Service.

(d) Financial information classified by business type

2018

Businesses Items	Banking business	Insurance business	Securities business	Government insurance	Other operations	Total
Net interest income	23,415,507	10,102,309	149,877	2,088,822	8	35,756,523
Non-interest income, net	15,723,286	931,434	498,317	(1,944,837)	(110,112)	15,098,088
Net revenue	39,138,793	11,033,743	648,194	143,985	(110,104)	50,854,611
Bad debt expense	(7,298,849)	5,961	(1,183)	(3,639)	-	(7,297,710)
Provisions	(1,371,850)	(10,642,821)	-	-	-	(12,014,671)
Operating expenses	(20,492,969)	(887,436)	(411,532)	(140,346)	(124,223)	(22,056,506)
Net income before income tax	9,975,125	(490,553)	235,479	-	(234,327)	9,485,724
Income tax expenses	(1,108,160)	857,828	(43,055)	-	26,981	(266,406)
Net income	8,866,965	367,275	192,424	-	(207,346)	9,219,318

2017

Businesses Items	Banking business	Insurance business	Securities business	Government insurance	Other operations	Total
Net interest income	23,673,173	9,526,329	147,693	1,758,366	28	35,105,589
Non-interest income, net	38,364,038	913,173	546,618	(1,623,774)	(154,048)	38,046,007
Net revenue	62,037,211	10,439,502	694,311	134,592	(154,020)	73,151,596
Bad debt expense	(1,685,005)	4,021	-	-	-	(1,680,984)
Provisions	(30,214,824)	(12,573,602)	-	-	-	(42,788,426)
Operating expenses	(19,933,668)	(843,186)	(390,674)	(134,592)	(127,638)	(21,429,758)
Net income before income tax	10,203,714	(2,973,265)	303,637	-	(281,658)	7,252,428
Income tax expenses	(941,749)	952,451	(31,282)	-	134,523	113,943
Net income	9,261,965	(2,020,814)	272,355	-	(147,135)	7,366,371

(e) There were cross-selling products between the subsidiaries. The subsidiary which offers products to the consigned subsidiary, will incur commission expenses in accordance to the product sold. Please refer to note 10 for further information.

Notes to the Consolidated Financial Statements

- (f) Internal control of corporate governance
 - (i) The board of directors: The board of directors complies with laws, regulations, articles of incorporation, and the resolutions of the shareholders' meetings of the company. In addition, they supervises and the management of the company, and are responsible for the Company's overall operations. In accordance with Article 26-3 of the "Securities and Exchange Act," and Article 2 of the "Regulations Governing Procedure for Board of Directors Meetings of Public Companies", the Company's establishes its own "Rules and Procedures for the Meeting of the Board of Directors". The agenda of the board meetings, operational procedures, required content of meeting minutes, public announcements, and other compliance requirements shall be handled in accordance with the aforementioned rules. The board of directors of company shall meet at least once every month. Board members shall be concerned with protecting the rights and interests of shareholders, conduct corporate affairs faithfully and act with the care of a good administrator, exercising their powers with a high degree of prudence and self-discipline.
 - (ii) Audit committees: The main function of the Audit Committee is to supervise the following matters: fair presentation of the financial reports of this Corporation; the hiring (and dismissal), independence and the performance of certificated public accountants; the effective implementation of the internal control system; compliance with relevant laws and regulations; management of the existing or potential risks of this Corporation. Moreover, the audit committee charter is established by referring to the "Regulations Governing the Exercise of Powers by Audit Committees of Public Companies" to improve operating efficiency and corporate governance. The audit committees of the Company shall meet at least once every quarter to ensure the credibility of corporate governance and information transparency.
 - (iii) In order to establish a good system of corporate governance, fulfill the responsibility of business operation and protect the legitimate rights and interests of shareholders and other parties, the Company considered its organizational structure and operating activities and referred to Article 51 of the "Financial Holding Company Act" and Article 4 of the "Implementation Rules of Internal Audit and Internal Control System of Financial Holding Companies and Banking Industries" to establish the internal control system.
 - 1) Internal controls: The basic objectives of internal controls of a financial holding company or banking business are to promote sound operations and, through joint compliance by the board of directors, management, and all personnel, to reasonably ensure that the following objectives are achieved:
 - a) Effectiveness and efficiency of operations;
 - b) Reliability, timeliness, transparency and compliance of reporting; and
 - c) Compliance with applicable rules and regulations.
 - 2) Internal audit: the Company sets up an internal audit unit that is directly subsidiary to the board of directors. The unit is required to report its audit business to the board of directors or audit committee at a minimum period of every six months.

Notes to the Consolidated Financial Statements

- 3) Legal compliance: the Company sets up a compliance unit under the General President to take charge of the planning, management, and execution of the regulatory compliance system. Another high level manager shall also be assigned to act as the chief compliance officer for the head office to conduct the compliance affairs. The officer should make a report to the board of directors or the audit committee at least semiannually.
- 4) Risk Management Mechanism: the Company formulates adequate risk management policies and procedures and establishes operationally independent and effective risk management mechanisms, by which to assess and monitor the respective risk-bearing capacity, and current status of risks already incurred, and to determine their compliance with the risk response strategies and risk management procedures.

(g) Implementation Rules of Legal Compliance

- (i) For planning, managing, and executing of legal compliance, the Company and subsidiaries formulate the implementation guidelines of legal compliance in accordance with the Article 6 of the Implementation Rules of Internal Audit and Internal Control System of Financial Holding Companies and Banking Industries.
- (ii) The Department of Compliance is responsible for:
 - 1) Establishing the system for conveying, consulting, coordinating and communicating the regulations.
 - 2) Ensuring all the guidelines are updated on a timely basis so that each operation activity is in conformity with the regulations all the time.
 - 3) Formulating the assessment procedures of legal compliance, supervising regularly the executions of self-assessment of each operation unit, and evaluating its effectiveness. The results of the self-assessment will be treated as part of the performance review after reporting them to the General Manager.
 - 4) Supervising the execution of self-inspection of legal compliance semiannually in accordance with the Article 12 of the Company's internal guideline "the Regulations of Internal Control System."
 - 5) Analyzing the reasons and making suggestions on material weakness and malpractice of legal compliance of each operation unit. The Department shall report to the management, and then, to the Audit Committee and Board of Directors.
 - 6) Providing appropriate legal compliance training to the members of each operation unit.
 - 7) Filing electronically the information on the chief and the members of the Department of Compliance, as well as training with the competent authority.

h) Financial statements of Taiwan Financial Holding Co., Ltd.

TAIWAN FINANCIAL HOLDING CO., LTD.

Balance Sheets

December 31, 2018 and 2017

(Expressed in Thousands of New Taiwan Dollars)

		December 31, 2	018_	December 31, 2	cember 31, 2017						December 31, 2	, 2018 December 31		017
11000	Assets	Amount	<u>%</u>	Amount	%		Liabilities and Equity	_	Amount	%	Amount	%		
11000	Cash and Cash Equivalents	\$ 301,992	-	140,733	-	23000	Payables	\$	30,390	-	24,331	-		
12150	Financial Assets Measured at Fair Value through	25,000	-	-	-	24400	Other borrowings		25,800,000	7	16,250,000	5		
	Other Comprehensive Income					24600	Provision		118,282	-	121,463	-		
13000	Receivables, net	8	-	3	-	29500	Other Liabilities	_	69,058		94			
13200	Current Income Tax Assets	229,785	-	343,427	-		Total liabilities	_	26,017,730	7	16,395,888	5		
15000	Investments under Equity Method, net	330,628,290	100	302,110,992	100	31100	Capital Stock		90,000,000	27	90,000,000	30		
18500	Property and Equipment, net	6,151	-	5,049	-	31500	Capital Surplus		111,385,226	34	111,385,226	37		
19000	Intangible Assets	388	-	280	-		Retained earnings:							
19500	Other Assets	6,465	-	6,302	-	32001	Legal Reserve		7,419,683	2	6,793,230	2		
						32003	Special Reserve		45,115,479	14	41,358,797	14		
						32011	Unappropriated Retained Earnings	_	12,075,787	4	12,125,133	4		
							Total retained earnings	_	64,610,949	20	60,277,160	20		
						32500	Other Equity		39,184,174	12	24,548,512	8		
							Total equity	_	305,180,349	93	286,210,898	95		
	Total assets	\$ <u>331,198,079</u>	100	302,606,786	100		Total liabilities and equity	\$_	331,198,079	100	302,606,786	100		

TAIWAN FINANCIAL HOLDING CO., LTD.

Statements of Comprehensive Income

For the years ended December 31, 2018 and 2017

(Expressed in Thousands of New Taiwan Dollars, Except for Earnings Per Common Share)

			2018		2017		Change
			Amount	<u>%</u>	Amount	<u>%</u>	%
	Revenue and income:						
47000	Share of profit of associates and joint ventures accounted for	or					
	using equity method	\$	9,515,764	100	7,528,572	100	26
49999	Other gains		5,365		2,401		123
			9,521,129	100	7,530,973	100	26
	Expenses:						
58500	Operating expenses		(152,401)	2	(156,432)	2	(3)
58598	Other expenses and losses	_	(176,391)	2	(142,693)	2	24
		_	(328,792)	<u>(4)</u>	(299,125)	<u>(4</u>)	10
	Net income before income tax		9,192,337	96	7,231,848	96	27
61003	Income tax benefit	_	26,981		134,523	2	(80)
	Net income	_	9,219,318	96	7,366,371	98	25
	Other comprehensive income (losses):						
69560	Items that may not be reclassified subsequently to profit						
	or loss						
69561	Gains (losses) on remeasurements of defined benefit plans		3,389	-	(13,588)	-	125
69564	Share of other comprehensive income of subsidiaries,						
	associates and joint ventures accounted for using equity						
	method, components of other comprehensive income						
	that will not be reclassified to profit or loss		3,385,296	36	(1,142,574)	(15)	396
69569	Income tax related to components of other comprehensive						
	income that will not be reclassified to profit or loss	_	-		_		-
	Subtotal of items not to be reclassified to profit or loss	_	3,388,685	<u>36</u>	(1,156,162)	<u>(15</u>)	393
69570	Items that may be reclassified subsequently to profit or						
	loss						
69576	Share of other comprehensive income of subsidiaries,						
	associates and joint ventures accounted for using equity						
	method, components of other comprehensive income						
	that will be reclassified to profit or loss		(1,585,976)	(17)	7,526,302	100	(121)
69579	Income tax related to components of other comprehensive						
	income that will be reclassified to profit or loss	_					-
	Subtotal of items that may be subsequently reclassified						
	to profit or loss	_	(1,585,976)	<u>(17</u>)	7,526,302	100	(121)
69500	Other comprehensive income	_	1,802,709	<u>19</u>	6,370,140	<u>85</u>	(72)
	Total comprehensive income (loss), net of tax for the year	\$ =	11,022,027	<u>115</u>	13,736,511	183	(20)
	Basic earnings per share (In dollars)	\$ _		1.02		0.82	

TAIWAN FINANCIAL HOLDING CO., LTD.

Statements of Changes in Equity For the years ended December 31, 2018 and 2017 (Expressed in Thousands of New Taiwan Dollars)

						Total other equity interest									
	Share capital Common stock	Capital surplus	Legal reserve	Retained e	earnings Undistributed earnings	Total	Exchange differences on translation of foreign operations	Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income	Unrealized gains (losses) on available for sale financial assets	Gains (losses) on effective portion of cash flow hedges	Change in fair value of financial liability attributable to change in credit risk of liability	Gains (losses) on financial instruments for hedging	Other comprehensive income reclassified by applying overlay approach	Total	Total equity
Balance at January 1, 2017	\$ 90,000,000	111,385,217	5,392,503	32,983,414	15,636,705	54,012,622	530,488		16,527,296	8,197	10,558	-	· <u> </u>	17,076,539	272,474,378
Appropriation and distribution of retained earnings:															
Legal reserve appropriated	-	-	1,400,727	-	(1,400,727)	-	-	-	-	-	-	-	-	-	-
Special reserve appropriated	-	-	-	8,404,363	(8,404,363)	-	-	-	-	-	-	-	-	-	-
Reversal of special reserve	-	-	-	(28,980)	28,980	-	-	-	-	-	-	-	-	-	-
Changes in equity of associates and joint ventures accounted for using equity method	-	9	-	-	-	-	-	-	-	-	-	-	-	-	9
Net income for the period	-	-	-	-	7,366,371	7,366,371	-	-	-	-	-	-	-	-	7,366,371
Other comprehensive income				 .	(1,101,833)	(1,101,833)	(1,871,218)		9,401,725	(4,206)	(54,328)		 	7,471,973	6,370,140
Total comprehensive income					6,264,538	6,264,538	(1,871,218)		9,401,725	(4,206)	(54,328)		<u> </u>	7,471,973	13,736,511
Balance at December 31, 2017	90,000,000	111,385,226	6,793,230	41,358,797	12,125,133	60,277,160	(1,340,730)	-	25,929,021	3,991	(43,770)	-	-	24,548,512	286,210,898
Effects of retrospective application				 .	(3,403,808)	(3,403,808)	(2,787)	38,114,593	(25,929,021)	(3,991)		3,991	(829,780)	11,353,005	7,949,197
Equity at beginning of period after adjustments	90,000,000	111,385,226	6,793,230	41,358,797	8,721,325	56,873,352	(1,343,517	38,114,593			(43,770)	3,991	(829,780)	35,901,517	294,160,095
Appropriation and distribution of retained earnings:															
Legal reserve appropriated	-	-	626,453	-	(626,453)	-	-	-	-	-	-	-	-	-	-
Special reserve appropriated	-	-	-	3,758,723	(3,758,723)	-	-	-	-	-	-	-	-	-	-
Reversal of special reserve	-	-	-	(2,041)	2,041	-	-	-	-	-	-	-	-	-	-
Net income for the period	-	-	-	-	9,219,318	9,219,318	-	-	-	-	-	-	-	-	9,219,318
Other comprehensive income					(1,212,690)	(1,212,690)	684,435	3,580,017			236,682	202	(1,485,937)	3,015,399	1,802,709
Total comprehensive income					8,006,628	8,006,628	684,435	3,580,017			236,682	202	(1,485,937)	3,015,399	11,022,027
Disposal of investments in equity instruments measured at fair value through other	-	-	-	-	(267,258)	(267,258)	-	267,258	-	-	-	-	-	267,258	-
comprehensive income															
Changes in special reserve				<u> </u>	(1,773)	(1,773)								<u> </u>	(1,773)
Balance at December 31, 2018	\$ 90,000,000	111,385,226	7,419,683	45,115,479	12,075,787	64,610,949	(659,082	41,961,868			192,912	4,193	(2,315,717)	39,184,174	305,180,349

TAIWAN FINANCIAL HOLDING CO., LTD.

Statements of Cash Flows

For the years ended December 31, 2018 and 2017 (Expressed in Thousands of New Taiwan Dollars)

		2018	2017
Cash flows from (used in) operating activities:	Ф	0.100.005	7.001 .010
Income before income tax	\$	9,192,337	7,231,848
Adjustments:			
Adjustments to reconcile profit (loss):		1.075	1 216
Depreciation expense		1,075	1,216
Amortization expense		124	139
Interest expense		170,324	132,410
Interest income		(520)	(348)
Share of profit of associates and joint ventures accounted for using equity method		(9,515,764)	(7,528,572)
Loss on disposal of property and equipment		18	246
Subtotal of income of non-cash activities		(9,344,743)	(7,394,909)
Changes in operating assets and liabilities:			
Changes in operating assets:			
Decrease in receivables and current tax assets		-	1
(Increase) decrease in other assets		(119)	16,366
Subtotal of changes in operating assets		(119)	16,367
Changes in operating liabilities:			
Increase in payable and current tax liabilities		3,537	1,870
Increase in provisions for employee benefits		207	5,558
Increase (decrease) in other liabilities		68,965	(1)
Subtotal of changes in operating liabilities		72,709	7,427
Subtotal of all adjustments		(9,272,153)	(7,371,115)
Cash outflow generated from operations		(79,816)	(139,267)
Interest received		516	349
Dividends received		745,211	536,217
Income taxes refund		140,623	97,637
Net Cash flows used in operating activities		806,534	494,936
Cash flows from (used in) investing activities:			
Acquisition of financial assets measured at fair value through other comprehensive income		(25,000)	-
Acquisition of investments accounted for using equity method		(10,000,000)	-
Acquisition of property and equipment		(2,197)	(702)
Proceeds from disposal of property and equipment		3	-
Increase in refundable deposits		(45)	(8)
Acquisition of intangible assets		(232)	(127)
Net cash flows used in investing activities		(10,027,471)	(837)
Cash flows from (used in) financing activities:		(,,,,,	(33.)
Increase in short-term loans		25,800,000	_
Decrease in short-term loans		(16,250,000)	(500,000)
Decrease in guarantee deposits received		(2)	(84)
		(167,802)	(132,142)
Interest paid		•	, , , , , , , , , , , , , , , , , , , ,
Net cash flows from financing activities		9,382,196	(632,226)
Net increase (decrease) in cash and cash equivalents		161,259	(138,127)
Cash and cash equivalents at beginning of period	_	140,733	278,860
Cash and cash equivalents at end of period	\$	301,992	140,733
Composition of cash and cash equivalents:			
Cash and cash equivalents reported in the statement of financial position	\$	301,992	140,733
Cash and cash equivalents at end of period	\$	301,992	140,733

Notes to the Consolidated Financial Statements

(i) The balance sheets and income statements of the subsidiaries

(i) Balance sheets

	Bank of Taiwa	n (Individual)
	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 165,864,930	158,343,054
Placement with Central Bank and call loans to banks	535,130,849	675,504,410
Financial assets measured at fair value through profit or loss	236,408,718	236,519,757
Hedging derivative financial assets, net	41,693	22,759
Receivables, net	59,258,329	59,237,166
Current income tax assets	1,236,103	1,082,264
Loans and discounts, net	2,557,027,294	2,285,039,243
Available-for-sale financial assets, net	-	1,135,942,401
Held-to-maturity financial assets, net	-	144,060,765
Financial assets measured at fair value through other comprehensive income	1,117,727,277	-
Debt investments measured at amortized cost	167,824,692	-
Investments under equity method, net	38,434,590	36,594,041
Other financial assets, net	46,040,182	75,603,497
Property and equipment, net	96,222,499	96,340,880
Investment property, net	15,238,207	15,238,207
Intangible assets, net	764,829	708,629
Deferred tax assets	308,336	166,887
Other assets, net	8,986,040	8,168,927
Total assets	\$ <u>5,046,514,568</u>	4,928,572,887
Deposits of Central Bank and other banks	\$ 221,756,139	219,021,384
Financial liabilities measured at fair value through profit or loss	50,554,317	35,030,435
Hedging derivative financial liabilities, net	12,973	60,480
Bills and bonds sold under repurchase agreements	25,078,047	33,906,120
Payables	45,769,665	42,248,261
Current tax liabilities	262,675	480,372
Deposits and remittances	4,026,190,539	3,941,518,628
Financial bonds payable	24,998,566	24,998,316
Other financial liabilities	678,843	842,822
Provisions	315,017,702	314,774,236
Deferred tax liabilities	18,191,904	18,143,074
Other liabilities	7,751,184	8,506,000
Total liabilities	4,736,262,554	4,639,530,128

(Continued)

	Bank of Taiwa	n (Individual)
	December 31, 2018	December 31, 2017
Capital stock	\$ 95,000,000	95,000,000
Capital surplus	80,453,043	80,453,043
Retained earnings		
Legal reserve	42,037,924	39,246,685
Special reserve	33,103,998	29,383,528
Unappropriated retained earnings	17,742,711	15,881,896
	92,884,633	84,512,109
Other equity	41,914,338	29,077,607
Total equity	310,252,014	289,042,759
Total liabilities and stockholders' equity	\$ <u>5,046,514,568</u>	4,928,572,887
	BankTaiwan I	
	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 19,546,768	41,926,709
Receivables	2,045,595	1,976,016
Current income tax assets	402,257	2,405,279
Financial assets measured at fair value through profit or loss	33,305,525	1,412,330
Financial assets measured at fair value through other comprehensive income	9,063,105	-
Available-for-sale financial assets	-	29,519,837
Financial assets measured at amortized cost	260,930,189	-
Debt investments without quoted price in an active market	-	25,341,974
Held-to-maturity financial assets	-	225,104,333
Investments under equity method, net	6,687,570	6,306,531
Other financial assets, net	5,655,000	1,890,400
Real estate investments	7,853,960	7,931,466
Loans	9,416,091	9,628,764
Reinsurance assets	17,098	10,125
Property and equipment	994,058	977,370
Intangible assets	32,286	10,343
Deferred tax assets	3,319,494	2,478,578
Other assets	5,550,965	3,516,311
Separate account-insurance assets	11,026	11,934
Total assets	\$364,830,987	360,448,300

Notes to the Consolidated Financial Statements

	BankTaiwan Life Insurance					
		December 31,	December 31,			
		2018	2017			
Payables	\$	758,694	14,496,619			
Current income tax liabilities		-	386,818			
Financial liabilities measured at fair value through profit or loss		148,789	116,441			
Insurance liabilities		344,827,889	334,393,675			
Foreign exchange volatility reserves		1,214,234	279,465			
Provisions		642,181	776,347			
Deferred tax liabilities		41,164	251,284			
Other liabilities		495,992	383,262			
Separate account-insurance liabilities	_	11,026	11,934			
Total liabilities	_	348,139,969	351,095,845			
Capital stock		32,500,000	22,500,000			
Capital surplus		360,000	360,000			
Retained earnings						
Legal reserve		96,557	96,557			
Special reserve		866,206	832,484			
Unappropriated retained earnings	_	(14,400,824)	(9,908,778)			
	_	(13,438,061)	(8,979,737)			
Other equity	_	(2,730,921)	(4,527,808)			
Total equity	_	16,691,018	9,352,455			
Total liabilities and equity	\$_	364,830,987	360,448,300			

Notes to the Consolidated Financial Statements

		BankTaiwan	Securities
	De	ecember 31, 2018	December 31, 2017
Current assets	\$	7,586,753	10,597,247
Property and equipment		487,473	486,930
Employee benefit liabilities reserves – noncurrent		17,264	14,365
Deferred tax assets		10,647	8,574
Other non-current assets		314,561	340,936
Total assets	\$	8,416,698	11,448,052
Current liabilities	\$	4,486,482	7,504,934
Liabilities reserves		144,406	127,958
Deferred tax liabilities		94,781	94,057
Other non-current liabilities		5,772	5,325
Total liabilities		4,731,441	7,732,274
Capital stock		3,000,000	3,000,000
Legal reserve		102,966	82,222
Special reserve		361,584	320,095
Unappropriated retained earnings		219,950	314,748
		684,500	717,065
Other equity		757	(1,287)
Total equity		3,685,257	3,715,778
Total liabilities and equity	\$	8,416,698	11,448,052
			urance Broker
	De	ecember 31, 2018	December 31, 2017
Cash and cash equivalents	\$	451,466	386,610
Receivables		74,101	91,802
Property and equipment		3,528	3,503
Intangible asset		107	103
Deferred tax assets		3,955	3,955
Other assets		3,882	3,780
Total assets	\$	537,039	489,753

Notes to the Consolidated Financial Statements

	_Ban	BankTaiwan Insurance							
	Dec	ember 31, 2018	December 31, 2017						
Payables	\$	78,546	90,761						
Current tax liabilities		28,769	8,351						
Other liabilities		2,973	100						
Total liabilities		110,288	99,212						
Capital stock		20,000	20,000						
Legal reserve		107,347	87,866						
Special reserve		107,347	87,866						
Unappropriated retained earnings		192,057	194,809						
		406,751	370,541						
Total equity		426,751	390,541						
Total liabilities and equity	\$	537,039	489,753						

(ii) Income statements

	Bank of Taiwan (Individual)
	2018	2017
Interest income	\$ 63,883,640	59,105,478
Less: interest expense	(38,258,657)	(33,583,762)
Net interest income	25,624,983	25,521,716
Other non-interest income	13,668,495	7,417,544
Net revenue	39,293,478	32,939,260
Bad debt expense and reserve for guarantees	(7,302,488)	(1,685,005)
Operating expenses	(20,563,400)	(19,998,078)
Net income before income tax	11,427,590	11,256,177
Income tax expense	(1,059,415)	(901,849)
Net income	10,368,175	10,354,328
Other comprehensive income	3,365,802	4,739,114
Total comprehensive income (loss) after tax for the period	13,733,977	15,093,442
Basic earnings per share (In dollars)	1.09	1.09

Notes to the Consolidated Financial Statements

		BankTaiwan Life	e Insurance
		2018	2017
Operating income	\$	56,098,579	50,336,080
Operating cost		(56,975,255)	(53,431,049)
Operating expense		(925,398)	(879,906)
Operating loss		(1,802,074)	(3,974,875)
Non operating income (expense)		(33,787)	(11,718)
Net income (loss) before income tax		(1,835,861)	(3,986,593)
Income tax benefit		857,828	952,451
Net loss		(978,033)	(3,034,142)
Other comprehensive income		(1,551,616)	1,592,479
Total comprehensive income (loss) after tax for the period		(2,529,649)	(1,441,663)
Basic earnings per share (In dollars)		(0.35)	(1.35)
		BankTaiwan S	ecurities
		2018	2017
Revenue	\$	673,438	700,727
Cost and expense		(515,868)	(484,218)
Net operating income		157,570	216,509
Non operating income		11,107	23,158
Net income before income tax		168,677	239,667
Income tax expense		(43,055)	(31,282)
Net income		125,622	208,385
Other comprehensive income		(14,865)	52,136
Total comprehensive income after tax for the period		110,757	260,521
Basic earnings per share (In dollars)		0.42	0.69
	Ba	ankTaiwan Insur	
	Φ.	2018	2017
Operating income	\$	1,716,215	1,676,090

(17) Other Disclosures:

(a) Information on Significant Transactions:

Following the principle of financial report for public bank, the disclosure of information on significant transaction of the Company and subsidiaries were as follow:

- (i) Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT\$300 million or 10% of the capital stock:None
- (ii) Acquisition of individual real estate with amount exceeding the lower of NT\$300 million or 10% of the capital stock:None
- (iii) Disposal of individual real estate with amount exceeding the lower of NT\$300 million or 10% of the capital stock:None
- (iv) Service charge discounts on transactions with related parties in an aggregate amount of NT\$5 million or more:None: None
- (v) Receivables from related parties with amounts exceeding the lower of NT\$300 million or 10% of the capital stock:None
- (vi) Information on NPL disposal transaction:
 - 1) Summary table of NPL disposal:None
 - 2) Disposal of a single batch of NPL up to NT\$1 billion and information on each transaction:None
- (vii) Types of securitization instruments approved to be issued pursuant to financial assets securitization rules or real estate securitization rules and other relevant information:None
- (viii) Other significant transactions that may have substantial influence upon the decisions made by financial report users:None
- (b) Information on Investees:

The followings are the information on investees:

(In Thousands of New Taiwan Dollars)

					Gain(Loss) recognized Held by the company and related party at year-end						
Name of the	Investee	Major	% of	for the	investment	during the			Subtotal		Notes
investee	Location	Operation	shares	period	cost	period	Shares		Shares	% of Shares	
Hua Nan Financial Holdings Co., Ltd. and its subsidiaries	Taipei	Financial Holding	25.07 %	25.07 %	43,660,779	3,665,778	2,894,429,030	-	2,894,429,030	25.07 %	
Tang Eng Iron Works Co., Ltd.	Kaohsiung	Iron Industry	21.37 %	21.37%	1,013,547	(308,086)	74,802,414	-	74,802,414	21.37%	
Tai Yi Real Estate Management Co., Ltd	Taipei	Real Estate Service	30.00 %	30.00%	21,084	4,059	1,500,000	-	1,500,000	30.00%	
Bank of Taiwan	Taipei	Banking	100.00%	100.00%	310,252,014	10,368,175	9,500,000,000	-	9,500,000,000	100.00%	note 4
BankTaiwan Life Insurance	Taipei	Life insurance	100.00%	100.00%	16,691,018	(978,033)	3,250,000,000	-	3,250,000,000	100.00%	note 4
BankTaiwan Securities	Taipei	Securities	100.00%	100.00%	3,685,257	125,622	300,000,000	-	300,000,000	100.00%	note 4
BankTaiwan Insurance Brokers	Taipei	Insurance broker	100.00%	100.00%	426,750	194,980	2,000,000	-	2,000,000	100.00%	note 4

- Note 1: The investee's shares or pro-forma shares held by the Company's board of directors, supervisors, general manager, vice general managers and affiliates conforming to the Company Act should be included.
- Note 2: (1) Pro-forma shares are the "equity-type securities" or "derivative instrument contracts (have not been converted into stock)" that can be converted into shares of the investee company under Article 74 of the "Company Act" for investment purpose.

Notes to the Consolidated Financial Statements

- (2) The aforementioned equity-type securities refer to the securities defined in Securities and Exchange Act Enforcement Rules such as convertible corporate bonds and warrants.
- (3) The aforementioned derivative instrument contracts refer to the contracts defined in the GAAP No.34 such as stock options.
- Note 3: The table do not need to disclosure in the financial statement at first and third quarter.
- Note 4: This transaction had been written off when preparation the consolidated financial statements.
- (c) Information on Investment in Mainland China:
 - (i) Information on investees' names, locations, etc. in China:

Investee Company	Main Business	Total Amount of Paid-in Capital	Investment types (Note		Investmen Outflow	nt flows Regain	Accumulated outflow of investment from Taiwan as of December 31, 2018	Net income from investee	% of shares	The highest	Investment income recognized as of December 31, 2018	Carrying value as of December 31, 2018	Accumulated inward remittance of earnings as of December 31, 2018
Bank of Taiwan, Shanghai Branch	Banking business	4,469,000 CNY1,000,000		4,469,000 CNY1,000,000		-	4,469,000 CNY1,000,000		- %	- %	169,150	5,776,052	-
Bank of Taiwan, Guangzhou Branch	Banking business	4,469,000 CNY1,000,000	(3)	4,469,000 CNY1,000,000		-	4,469,000 CNY1,000,000		- %	- %	(26,569)	4,896,494	-
Bank of Taiwan, Fuzhou Branch	Banking business	4,469,000 CNY1,000,000	(5)	4,469,000 CNY1,000,000		-	4,469,000 CNY1,000,000		- %	- %	(49,643)	4,742,475	-

Note 1: Three types as follows of investments:

- 1) Direct investment in Mainland China
- 2) Investment in Mainland China through a company set up in a third region.
- 3) Others through overseas branches.

Note 2: Equity in the earnings for the year:

- 1) If a subsidiary has no income or loss during the period, the parent company should disclose all the related information.
- 2) A Company can recognize the investment income by obtaining the followings:
 - a) Financial statements audited or reviewed by an international accounting firm which has a member firm in Taiwan.
 - b) Financial statements audited or reviewed by the auditor of the parent company.
 - c) Others
- 3) If the information regarding a subsidiary's current profit and loss is not available, the parent company should disclose it.
- Note 3: Numbers in this table are shown in thousands of TWD.
- (ii) Rationed investment in China:

Current period of accumulate investment amount remitting from	The rationed investing amount approved by Investment Commission,	The regulation announced by Investment Commission, MOEA		
Taiwan	MOEA	rationed investing amount		
13,407,000	13,407,000	186,151,208		

- (iii) Significant transactions with the invested company in China:None
- (d) Subsidiaries lending to other parties, guarantees and endorsements for other parties, securities held as of December 31, 2016, securities for which purchase or sale amount for the period exceed \$300 million or 10% of the Company's paid-in capital, and trading in derivative financial instruments: BOT, BTLI and BTS are banking industry, insurance industry and securities industry and their main operations include the above activities; hence it is not necessary to disclose the related information. The BankTaiwan Insurance Brokers does not have those transactions. Besides, transactions related to derivatives, please refer to note 6(c), 6(t) and 7.

(e) Information on significant transactions between parent and subsidiary company were as follow

Number	Name of Company	Name of the counter-party	Existing relationship State of transaction with the counter-party	Account name	Amount	Terms of trading	Percentage of the total consolidated revenues or total assets	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Cash and cash equivalents	291,908	Same as regular transaction	- %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Receivables, net	7	"	- %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Other assets-net	2,762	"	- %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Short-term borrowings	25,800,000	"	0.48 %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Payables	5,760	"	- %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Interest income	512	"	- %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Other non-interest income	645	"	- %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Other general and administrative expenses	28,177	II.	0.04 %	
0	Taiwan Financial Holdings	Bank of Taiwan	1	Interest expense	170,324	"	0.23 %	
0	Taiwan Financial Holdings	BankTaiwan Life Insurance	1	Other non-interest income	623	"	- %	
0	Taiwan Financial Holdings	BankTaiwan Securities	1	Other non-interest income	555	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Deposits and remittances	291,908	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Payables	7	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Other liabilities	2,762	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Loans and discounts, net	25,800,000	"	0.48 %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Receivables, net	5,760	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Interest expense	512	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Employee benefits expenses	645	"	- %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Other non-interest income	28,177	"	0.04 %	
1	Bank of Taiwan	Taiwan Financial Holdings	2	Interest income	170,324	"	0.23 %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Receivables, net	9,682	"	- %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Other assets, net	5,891	"	- %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Payables	1,366	"	- %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Financial assets measured at fair value through profit or loss	8,096	"	- %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Deposits and remittances	3,585,871	"	0.07 %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Services fee, net	48,671	"	0.07 %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Gain (loss) on financial assets or liabilities measured at fair value through profit or loss	698,157	"	0.94 %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Other non-interest income	46,362	"	0.06 %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Interest expense	48,705	"	0.07 %	
1	Bank of Taiwan	BankTaiwan Life Insurance	3	Other general and administrative expenses	35,618	"	0.05 %	
	Bank of Taiwan	BankTaiwan Securities	3	Other assets, net	14	"	- %	
1	Bank of Taiwan	BankTaiwan Securities	3	Payables	61	"	- %	
	Bank of Taiwan	BankTaiwan Securities	3	Deposits and remittance	263,888	"	- %	
1	Bank of Taiwan	BankTaiwan Securities	3	Other liabilities	1,794	"	- %	
1	Bank of Taiwan	BankTaiwan Securities	3	Interest income	657	"	- %	
1	Bank of Taiwan	BankTaiwan Securities	3	Service fee, net	80	"	- %	
1	Bank of Taiwan	BankTaiwan Securities	3	Other non-interest income	34,474	"	0.05 %	
1	Bank of Taiwan	BankTaiwan Securities	3	Interest expense	734	"	- %	
	Bank of Taiwan	BankTaiwan Securities	3	Other general and administrative expenses	86	"	- %	
2	BankTaiwan Life Insurance	Taiwan Financial Holdings	2	Employee benefits expenses	623	"	- %	

Notes to the Consolidated Financial Statements

			Existing relationship					
Number	Name of Company	Name of the counter-party	State of transaction with the counter-party	Account name	Amount	Terms of trading	Percentage of the total consolidated revenues or total assets	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Payables	9,682	Same as regular transaction	- %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Other liabilities	5,891	"	- %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Receivables, net	1,366	"	- %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Financial liabilities measured at fair value through profit or loss	8,096	"	- %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Cash and cash equivalents	3,585,871	"	0.07 %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Service fee, net	48,671	"	0.07 %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Gain (loss) on financial assets or liabilities measured at fair value through profit or loss	(698,157)	"	0.94 %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Gain on real estate investment, net	35,618	"	0.05 %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Interest income	48,705	"	0.07 %	
2	BankTaiwan Life Insurance	Bank of Taiwan	3	Other general and administrative expenses	46,362	"	0.06 %	
2	BankTaiwan Life Insurance	BankTaiwan Insurance Brokers	3	Payables	36,738	"	- %	
2	BankTaiwan Life Insurance	BankTaiwan Insurance Brokers	3	Service fee, net	560,892	"	0.76 %	
3	BankTaiwan Securities	Taiwan Financial Holdings	2	Employee benefits expenses	555	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Other liabilities	14	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Receivables, net	61	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Other assets-net	187,127	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Cash and cash equivalents	78,555	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Interest expense	657	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Service fee, net	13,827	"	0.02 %	
3	BankTaiwan Securities	Bank of Taiwan	3	Other general and administrative expenses	20,727	"	0.03 %	
3	BankTaiwan Securities	Bank of Taiwan	3	Interest income	734	"	- %	
3	BankTaiwan Securities	Bank of Taiwan	3	Other non-interest income	86	"	- %	
4	BankTaiwan Insurance Brokers	BankTaiwan Life Insurance	3	Receivables, net	36,738	"	- %	
4	BankTaiwan Insurance Brokers	BankTaiwan Life Insurance	3	Service fee, net	560,892	"	0.76 %	
4	BankTaiwan Insurance Brokers	BankTaiwan Securities	3	Service fee, net	521	"	- %	

Note 1: Number is based on the following rules:

- 1) The parent company is 0.
- 2) Subsidiaries are numbered by company from 1.
- Note 2: The relation with trader is numbered as follow:
 - 1) The parent company to its subsidiary is 1.
 - 2) The subsidiary to its parent company is 2.
 - 3) The subsidiary to another subsidiary is 3.

Note 3: The transactions mention above have already write-off when building the financial report.

Notes to the Consolidated Financial Statements

(18) Segment Information:

The Company and subsidiaries have seven reportable segments, as describes below. Each department offers different services and products, and are managed separately based on their diverse techniques and marketing tactic. The higher level managements of the Company and subsidiaries review each department's internal management report on a quarterly basis. The information of asset and income disclose by segments are in accordance with the significant accounting policies stated above. The following describes the operations in each of the Company's and subsidiaries' reportable segments:

- (a) Bank Department: Includes transacting deposit, loan, and foreign exchange; dispatching, managing, performing NTD and foreign currency; investing in securities, and analyzing, managing interest for loan and deposit, and etc.
- (b) Government Employees' Insurance Department: Includes managing government employees' insurance business; auditing insurance, cash settlement, and issue business; analyzing, managing, and taking statistics of government employees' insurance business, and etc.
- (c) Department of Procurement: Includes managing government institutions, public schools, and public enterprises' centralized purchasing business; being agency of government institutions, public schools, and public enterprises for inter-entity supply contract, and etc.
- (d) Department of Precious Metals: Includes managing gold, silver, precious metals and analyzing customs duty; gold, silver and precious metals intermediary trading, planning, marketing, training, settlement, risk management, assuring and etc.
- (e) Insurance Business: Provides a variety of insurance services.
- (f) Security Business: Engages in securities business.
- (g) Other Business: Engages in financial holding, venture capital and asset management, etc.

						2018				
			Department of							
	_	Bank department	Government Employees' Insurance	Department of Procurement	Department of Precious Metals	Insurance Business	Securities Business	Other business	Reconciliation and elimination	Total
Interest income	\$	61,793,949	2,088,822	12	857	10,175,943	167,573	896	(221,308)	74,006,744
Less: interest expense		(38,258,657)				(24,929)	(17,619)	(170,324)	(221,308)	(38,250,221)
Interest income, net		23,535,292	2,088,822	12	857	10,151,014	149,954	(169,428)	-	35,756,523
Non-interest income, net		16,286,681	(1,944,837)	316,780	381,720	(426,270)	452,720	9,883,826	(9,852,532)	15,098,088
Net revenue		39,821,973	143,985	316,792	382,577	9,724,744	602,674	9,714,398	(9,852,532)	50,854,611
Bad debt expenses and reserve for guarantees		(7,298,861)	(3,639)	-	12	5,961	(1,183)	-	-	(7,297,710)
Provisions for policyholder's reserve premium		(1,371,850)	-	-	-	(10,642,821)	-	-	-	(12,014,671)
Operating costs		(20,220,693)	(140,346)	(109,528)	(92,833)	(923,745)	(432,814)	(278,336)	141,789	(22,056,506)
Continuing operating income before income tax	\$	10,930,569		207,264	289,756	(1,835,861)	168,677	9,436,062	(9,710,743)	9,485,724
Continuing operating income after income tax	\$	9,871,154		207,264	289,756	(978,033)	125,622	9,414,298	(9,710,743)	9,219,318
Total assets	\$	4,751,358,643	296,414,148	2,002,026	1,479,559	364,830,987	8,416,698	331,735,118	(366,361,508)	5,389,875,671
Total Liabilities	\$	4,441,603,649	296,414,148	1,794,762	1,189,803	348,139,969	4,731,441	26,128,019	(35,306,469)	5,084,695,322

Notes to the Consolidated Financial Statements

					2017				
	Bank department	Department of Government Employees' Insurance	Department of Procurement	Department of Precious Metals	Insurance Business	Securities Business	Other business	Reconciliation and elimination	Total
Interest income	\$ 57,346,281	1,758,366	9	822	9,669,291	165,018	817	(175,797)	68,764,807
Less: interest expense	(33,583,762	·			(101,711)	(17,020)	(117,474)	(160,749)	(33,659,218)
Interest income, net	23,762,519	1,758,366	9	822	9,567,580	147,998	(116,657)	(15,048)	35,105,589
Non-interest income, net	38,589,919	(1,623,774)	241,919	424,303	(113,959)	504,169	7,813,700	(7,790,270)	38,046,007
Net revenue	62,352,438	134,592	241,928	425,125	9,453,621	652,167	7,697,043	(7,805,318)	73,151,596
Bad debt expenses and reserve for guarantees	(1,685,005)	-	-	-	4,021	-	-	-	(1,680,984
Provisions for policyholder's reserve premium	(30,214,824)	-	-	-	(12,573,602)	-	-	-	(42,788,426)
Operating costs	(19,625,653	(134,592)	(107,463)	(91,022)	(870,633)	(412,508)	(230,485)	42,598	(21,429,758)
Continuing operating income before income tax	\$ 10,826,956		134,465	334,103	(3,986,593)	239,659	7,466,558	(7,762,720)	7,252,428
Continuing operating income after income tax	\$ 9,925,108		134,465	334,103	(3,034,142)	208,385	7,561,180	(7,762,728)	7,366,371
Total assets	\$ <u>4,634,831,225</u>	295,163,648	1,835,376	1,445,558	360,448,300	11,448,052	303,096,539	(333,915,932)	5,274,352,766
Total Liabilities	\$ 4,346,257,035	295,163,648	1,700,910	1,111,455	348,139,969	7,732,274	16,495,100	(28,458,523)	4,988,141,868