Cathay United Bank Co., Ltd. and Subsidiaries

Consolidated Financial Statements for the Years Ended December 31, 2019 and 2018 and Independent Auditors' Report DECLARATION OF CONSOLIDATION OF FINANCIAL STATEMENTS OF AFFILIATES

The Bank and its subsidiaries that are required to be included in the consolidated financial statements of

affiliates in accordance with the "Criteria Governing Preparation of Affiliation Reports, Consolidated

Business Reports and Consolidated Financial Statements of Affiliated Enterprises" for the year ended

December 31, 2019 are all the same as the companies required to be included in the consolidated financial

statements of parent and subsidiary companies as provided in International Financial Reporting Standard

10. Relevant information that should be disclosed in the consolidated financial statements of affiliates has

all been disclosed in the consolidated financial statements of parent and subsidiary companies. Hence, we

have not prepared a separate set of consolidated financial statements of affiliates.

Very truly yours,

CATHAY UNITED BANK CO., LTD.

By:

March 11, 2020

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholder Cathay United Bank Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Cathay United Bank Co., Ltd. (the "Bank") and its subsidiaries (collectively, the "Company"), which comprise the consolidated balance sheet as of December 31, 2019, and the consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2019, its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks, Regulations Governing the Preparation of Financial Reports by Securities Firms, and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect 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 Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2019. 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.

Key audit matters for the Company's consolidated financial statements for the year ended December 31, 2019 are as follows:

Impairment Assessment on Loans

The domestic loans of the Bank amounted to \$1,399,537,914 thousand was considered material to the financial statements as a whole. As the assessment of impairment of loans involves accounting estimates and management's significant judgment, and as the impairment assessment on loans under the relevant regulations issued by the authorities is substantially larger than that under IFRS 9, hence, we determined the impairment of the loans under the relevant regulations prescribed by the authorities as a key audit matter.

Its management regularly assesses the impairment on its loans. Recognition of impairment loss on loans is based on compliance with regulations issued by the authorities regarding the classification of credit assets and provision of impairment loss. For the accounting policies and relevant information on the impairment assessment of loans, refer to Notes 4, 5 and 14.

The main audit procedures we performed in response to the key audit matter described above are as follows:

- 1. We understood and tested its internal controls of impairment assessment on loans.
- 2. We tested the classification of the credit assets into their respective categories out of the total five categories to see if it complies with the relevant regulations issued by the authorities.
- 3. We performed the test on selected samples to ensure the appropriateness of impairment by the length of the overdue period and the value of the collateral of each respective loan.
- 4. We calculated the provision of impairment loss by classifying the credit assets into their respective category to see if it complies with the relevant regulations issued by the authorities.

Other Matter

We have also audited the separate financial statements of the Bank as of and for the year ended December 31, 2019 on which we have issued an unmodified opinion.

The consolidated financial statements of the Company as of and for the year ended December 31, 2018 were audited by other auditors who expressed an unmodified opinion on those statements on March 21, 2019.

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 Regulations Governing the Preparation of Financial Reports by Public Banks, Regulations Governing the Preparation of Financial Reports by Securities Firms, and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect 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 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 or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the supervisors, are responsible for overseeing the Company's financial reporting process.

Auditors' 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 the 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 and appropriate audit evidence regarding the financial information of entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

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

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, 2019 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 Li-Chi Chen and Shiuh-Ran Cheng.

Deloitte & Touche Taipei, Taiwan Republic of China

March 11, 2020

Notice to Readers

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

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

CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

	2019		2018	
ASSETS	Amount	%	Amount	%
CASH AND CASH EQUIVALENTS (Notes 4, 6 and 44)	\$ 52,997,997	2	\$ 67,857,464	2
DUE FROM THE CENTRAL BANK AND CALL LOANS TO BANKS (Notes 4, 7 and 44)	110,945,093	4	104,223,315	4
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (Notes 4, 8, 44 and 49)	298,874,753	10	250,685,216	9
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (Notes 4, 9, 11, 45 and 49)	324,130,110	11	200,572,902	7
INVESTMENTS IN DEBT INSTRUMENTS AT AMORTISED COST (Notes 4, 10, 11, 45 and 49)	444,934,985	15	421,022,506	15
SECURITIES PURCHASED UNDER RESELL AGREEMENTS (Notes 4 and 12)	14,295,350	1	44,612,132	2
RECEIVABLES, NET (Notes 4, 13, 15 and 44)	100,888,023	3	85,978,726	3
DISCOUNTS AND LOANS, NET (Notes 4, 5, 14 and 44)	1,553,150,906	52	1,595,323,251	56
INVESTMENTS MEASURED BY EQUITY METHOD, NET (Notes 4 and 17)	1,776,839	-	1,768,874	-
OTHER FINANCIAL ASSETS, NET	909	-	1,271	-
PROPERTY AND EQUIPMENT, NET (Notes 4 and 18)	25,774,420	1	25,440,564	1
RIGHT-OF-USE ASSETS, NET (Notes 4, 19 and 44)	4,226,097	-	-	-
INVESTMENT PROPERTIES, NET (Notes 4 and 20)	857,504	-	1,439,686	-
INTANGIBLE ASSETS, NET (Notes 4 and 21)	8,153,189	-	8,020,939	-
DEFERRED TAX ASSETS (Notes 4 and 42)	3,864,923	-	1,872,542	-
OTHER ASSETS, NET (Notes 22 and 44)	28,625,256	1	35,061,248	1
TOTAL	<u>\$ 2,973,496,354</u>	<u>100</u>	<u>\$ 2,843,880,636</u>	<u>100</u>
LIABILITIES AND EQUITY				
DEPOSITS FROM THE CENTRAL BANK AND BANKS (Notes 23 and 44)	\$ 84,108,128	3	\$ 81,432,233	3
FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS (Notes 4, 8, 44 and 49)	106,770,939	4	103,407,778	4
NOTES AND BONDS ISSUED UNDER REPURCHASE AGREEMENTS (Notes 4 and 24)	48,180,452	2	55,974,509	2
PAYABLES (Notes 25 and 44)	26,864,803	1	24,912,970	1
CURRENT TAX LIABILITIES (Notes 4 and 42)	395,561	-	184,817	-
DEPOSITS AND REMITTANCES (Notes 26 and 44)	2,335,331,108	78	2,227,661,690	78
FINANCIAL DEBENTURES PAYABLE (Note 27)	53,900,000	2	55,600,000	2
OTHER FINANCIAL LIABILITIES (Note 28)	65,604,222	2	76,509,334	3
PROVISIONS (Notes 4, 15 and 29)	3,698,353	-	3,421,427	-
LEASE LIABILITIES (Notes 4, 19 and 44)	4,246,381	-	-	-
DEFERRED INCOME TAX LIABILITIES (Notes 4 and 42)	3,250,712	-	1,657,768	-
OTHER LIABILITIES (Notes 4, 31 and 44)	9,250,515		7,311,083	
Total liabilities	2,741,601,174	92	2,638,073,609	93
EQUITY ATTRIBUTABLE TO OWNERS OF BANK (Note 32) Capital stock Common stock	101,658,353	4	91,197,623	3
Capital surplus Retained earnings Legal reserve	38,687,276 57,935,811	<u>1</u> 2	33,610,983 51,631,140	<u>1</u>
Special reserve Unappropriated earnings	2,183,978 21,675,159	_ 1	2,933,808 21,015,571	_ 1
Total retained earnings Other equity	81,794,948 5,345,027	3	75,580,519 1,376,421	<u>3</u>
Total equity attributable to owners of parent	227,485,604	8	201,765,546	7
NON-CONTROLLING INTERESTS (Note 32)	4,409,576		4,041,481	
Total equity	231,895,180	8	205,807,027	7
TOTAL	\$ 2,973,496,354	<u>100</u>	\$ 2,843,880,636	<u>100</u>

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

(With Deloitte & Touche auditors' report dated March 11, 2020)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	Changes	
	Amount	%	Amount	%	(%)
NET INTEREST REVENUE (Notes 4, 33 and 44)					
Interest income	\$ 58,126,269	92	\$ 53,787,868	88	8
Interest expense	(21,680,489)	(34)	(20,390,612)	(33)	6
Total net interest revenue	36,445,780	58	33,397,256	_55	9
NET REVENUE OTHER THAN INTEREST					
Net service fee revenue (Notes 4, 34 and 44) Gain on financial assets or liabilities at	17,090,430	27	16,678,178	28	2
fair value through profit or loss (Notes 4, 35 and 44) Realized gain on financial assets at fair	5,703,706	9	5,892,981	10	(3)
value through other comprehensive income (Notes 4, 9 and 36) Loss arising from derecognition of	2,093,576	3	2,663,486	4	(21)
financial assets measured at amortised cost (Notes 4 and 10)	(38,960)	_	-	_	_
Foreign exchange gain (Note 4)	1,165,079	2	1,512,717	2	(23)
Impairment loss on assets (Notes 4, 5 and 37) Share of profit of associates and joint	(18,623)	-	(305,704)	(1)	(94)
ventures accounted for using equity method (Notes 4 and 17) Net other revenue other than interest	91,103	-	98,384	-	(7)
income (Notes 4 and 44)	593,757	1	917,746	2	(35)
Total net revenue other than interest	26,680,068	42	27,457,788	45	(3)
NET REVENUE	63,125,848	100	60,855,044	100	4
BAD DEBTS EXPENSE, COMMITMENT AND GUARANTEE LIABILITY PROVISION (Notes 4, 5, 13, 14, 15 and 38)	(2,852,780)	(4)	(5,031,541)	<u>(8</u>)	(43) (Continued)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	2018		
	Amount	%	Amount	%	Changes (%)	
TOTAL OPERATING EXPENSES Employee benefits expenses (Notes 4,						
39 and 44) Depreciation and amortization expense	\$ (16,881,873)	(27)	\$ (16,057,085)	(26)	5	
(Notes 4, 18, 19, 21 and 40) Other general and administrative	(2,965,515)	(5)	(1,526,862)	(3)	94	
expense (Notes 4, 41 and 44)	(13,958,294)	(22)	(13,756,201)	<u>(23</u>)	1	
Total operating expenses	(33,805,682)	<u>(54</u>)	(31,340,148)	<u>(52</u>)	8	
PROFIT FROM CONTINUING OPERATIONS BEFORE TAX	26,467,386	42	24,483,355	40	8	
INCOME TAX EXPENSE (Notes 4 and 42)	(3,980,972)	<u>(6</u>)	(3,230,004)	<u>(5</u>)	23	
INCOME FROM CONTINUING OPERATIONS, NET OF TAX	22,486,414	<u>36</u>	21,253,351	_ 35	6	
OTHER COMPREHENSIVE INCOME, NET OF TAX (Notes 4 and 32) Components of other comprehensive income that will not be reclassified to profit or loss, net of tax Remeasurement of defined benefit						
plans Property revaluation surplus Revaluation gains (losses) on investments in equity instruments measured at fair value through	(433,779) 217,619	(1)	(96,202)	-	351	
other comprehensive income Change in fair value of financial liability attributable to change in	3,976,271	6	(892,775)	(1)	545	
credit risk of liability Share of other comprehensive income of associates and joint	(3,280,741)	(5)	2,402,577	4	(237)	
ventures accounted for using equity method Income tax related to components of other comprehensive income that	6,452	-	-	-	-	
will not be reclassified to profit or loss (Notes 4 and 42)	288,371	1	(196,484)	-	247 (Continued)	

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	Changes	
	Amount	%	Amount	%	(%)
Components of other comprehensive income that will be reclassified to profit or loss, net of tax Exchange differences on translating the financial statements of foreign					
operations Share of other comprehensive income of associates and joint ventures accounted for using	\$ (911,361)	(2)	\$ (511,263)	(1)	78
equity method Gains (losses) from investments in debt instruments measured at fair value through other	(22,687)	-	-	-	-
comprehensive income Income tax related to components of other comprehensive income that will be reclassified to profit or	4,143,959	7	(1,525,090)	(3)	372
loss (Notes 4 and 42)	(65,244)		147,946		(144)
Other comprehensive income (loss), net of tax	3,918,860	6	(671,291)	(1)	684
TOTAL COMPREHENSIVE INCOME, NET OF TAX	\$ 26,405,274	<u>42</u>	<u>\$ 20,582,060</u>	<u>34</u>	28
PROFIT ATTRIBUTABLE TO:					
Owners of the Bank	\$ 21,822,653	35	\$ 21,020,332	35	4
Non-controlling interests	663,761	1	233,019		<u> 185</u>
	<u>\$ 22,486,414</u>	<u>36</u>	<u>\$ 21,253,351</u>	<u>35</u>	6
COMPREHENSIVE INCOME ATTRIBUTABLE TO:					
Owners of the Bank Non-controlling interests	\$ 25,643,765 761,509	41 1	\$ 20,103,126 478,934	33 1	28 59
	<u>\$ 26,405,274</u>	<u>42</u>	\$ 20,582,060	<u>34</u>	28
EARNINGS PER SHARE (Note 43) Basic	<u>\$ 2.25</u>		<u>\$ 2.17</u>		

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

(With Deloitte & Touche auditors' report dated March 11, 2020)

(Concluded)

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

						Equity Attributable t	to Owners of the Bank		Other Equity					
				Retained Earnings		Exchange Differences on Translation the Financial	Unrealized Gains (Losses) on Financial Assets at Fair Value Through Other	Unrealized Gains (Losses) on	Changes in the Fair Value of Financial Liabilities Attributable to	Gains (Losses) on	Property			
	Capital Stock Common Stock	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Statements of Foreign Operations	Comprehensive Income	Available-for-sale Financial Assets	Changes in the Credit Risk	Remeasurements of Defined Benefit	Revaluation Surplus	Total	Non-controlling Interests	Total Equity
BALANCE AT JANUARY 1, 2018	\$ 78,604,060	\$ 33,610,983	\$ 45,823,601	\$ 1,977,363	\$ 19,302,403	\$ (532,567)	\$ -	\$ 1,906,796	\$ (1,191,026)	\$ (1,340,811)	\$ 302,676	\$ (854,932)	\$ 3,844,089	\$ 182,307,567
Effect of retrospective application and restatement	-	_		-	(492,615)		5,598,353	(1,906,796)	-	-	_	3,691,557	_	3,198,942
BALANCE AT JANUARY 1, 2018 AS RESTATED	78,604,060	33,610,983	45,823,601	1,977,363	18,809,788	(532,567)	5,598,353	-	(1,191,026)	(1,340,811)	302,676	2,836,625	3,844,089	185,506,509
Appropriation of 2017 earnings			5,807,539		(5,807,539)									
Legal reserve Special reserve	-	-	3,807,339	951,443	(951,443)	-	-	-	-	-	-	-	-	-
Stock dividends	12,593,563	-	-	-	(12,593,563)	-	-	-	-	-	-	-	-	-
Net income for the year ended December 31, 2018	-	-	-	-	21,020,332	-	-	-	-	-	-	-	233,019	21,253,351
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-			-		(476,168)	(2,379,818)	_	1,965,110	(28,617)	2,287	(917,206)	245,915	(671,291)
Total comprehensive income (loss) for the year ended December 31, 2018	<u>-</u>	_		_	21,020,332	(476,168)	(2,379,818)	<u>-</u>	1,965,110	(28,617)	2,287	(917,206)	478,934	20,582,060
Change in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	(281,542)	(281,542)
Disposals of investments in equity instruments														
designated as at fair value through other comprehensive income	-	-	-	-	487,854	-	(487,854)	-	-	-	-	(487,854)	-	-
Others		_	-	5,002	50,142		-				(55,144)	(55,144)	-	
BALANCE AT DECEMBER 31, 2018	91,197,623	33,610,983	51,631,140	2,933,808	21,015,571	(1,008,735)	2,730,681	-	774,084	(1,369,428)	249,819	1,376,421	4,041,481	205,807,027
Appropriation of 2018 earnings Legal reserve			6,304,671	_	(6,304,671)									
Special reserve	-	-	0,304,071	(749,830)	749,830	-	-	-	-	-	-	-	-	-
Cash dividends		-	-	-	(10,000,000)	-	-	-	-	-	-	-	-	(10,000,000)
Stock dividends	5,460,730	-	-	-	(5,460,730)	-	-	-	-	-	-	-	-	-
Net income for the year ended December 31, 2019	-	-	-	-	21,822,653	-	-	-	-	-	-	-	663,761	22,486,414
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	_	_	_	_	_	(661,988)	7,246,044	_	(2,624,592)	(346,501)	208,149	3,821,112	97,748	3,918,860
			 -			(001,500)	7,210,011		(2,021,0)2)	(5 10,501)	200,110	3,021,112		
Total comprehensive income (loss) for the year ended December 31, 2019		<u>-</u> _	<u>-</u>	_	21,822,653	(661,988)	7,246,044		(2,624,592)	(346,501)	208,149	3,821,112	761,509	26,405,274
Issuance of ordinary shares for cash	5,000,000	5,000,000	-	-	-	-	-	-	-	-	-	-	-	10,000,000
Recognition of share-based payments granted by the parent company	-	76,293	-	-	-	-	-	-	-	-	-	-	-	76,293
Change in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	(393,414)	(393,414)
Disposals of investments in equity instruments designated as at fair value through other comprehensive income		_			(147,494)		147,494			_		147,494	_	
•														
BALANCE AT DECEMBER 31, 2019	\$ 101,658,353	\$ 38,687,276	<u>\$ 57,935,811</u>	\$ 2,183,978	\$ 21,675,159	<u>\$ (1,670,723)</u>	\$ 10,124,219	\$ -	<u>\$ (1,850,508</u>)	<u>\$ (1,715,929</u>)	<u>\$ 457,968</u>	\$ 5,345,027	<u>\$ 4,409,576</u>	\$ 231,895,180

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

(With Deloitte & Touche auditors' report dated March 11, 2020)

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

		2019		2018
CASH FLOWS FROM OPERATING ACTIVITIES				
Profit before tax	\$	26,467,386	\$	24,483,355
Adjustments:	_	, ,	_	_ 1,100,000
Depreciation expense		2,509,883		1,180,682
Amortization expense		455,632		346,180
Expected credit loss/bad debt expense		2,852,780		5,031,541
Net gains on financial assets and liabilities at fair value through		, ,		, ,
profit or loss		(5,703,706)		(5,892,981)
Interest expense		21,680,489		20,390,612
Net gains arising from derecognition of financial assets measured at				
amortised cost		38,960		-
Interest income		(58,126,269)		(53,787,868)
Dividend income		(994,684)		(1,529,632)
Compensation costs of share-based payments		76,293		-
Share of profit of associates and joint ventures accounted for using				
equity method		(91,103)		(98,384)
Loss on disposal of property and equipment		13,142		39,433
Gains on disposal of investment properties		(18,624)		(14,100)
Gains on disposal of investments		(1,098,892)		(1,133,854)
Impairment loss on financial assets		18,623		305,704
Loss on fair value adjustment of investment property		84,482		21,786
Changes in operating assets and liabilities				
Due from the Central Bank and call loans to banks		(5,546,911)		(4,155,043)
Financial assets at fair value through profit or loss		8,708,317		88,182,014
Financial assets at fair value through other comprehensive income	(114,356,000)		(24,001,127)
Investments in debt instruments at amortised cost		(23,952,148)		(44,893,575)
Receivables		(18,347,498)		(7,714,191)
Discounts and loans		39,492,540	((164,403,763)
Other financial assets		366		5
Other assets		(2,225,264)		(2,338,101)
Deposits from the Central Bank and banks		2,675,895		(9,178,733)
Financial liabilities at fair value through profit or loss		(50,576,726)		18,400,765
Notes and bonds issued under repurchase agreement		(7,794,057)		(53,966,916)
Payables		(1,045,249)		1,076,695
Deposits and remittances		107,669,418		128,064,296
Other financial liabilities		(10,905,112)		10,453,079
Provisions		(192,900)		20,829
Other liabilities		139,910	_	160,152
Cash used in operations		(88,091,027)		(74,951,140)
Interest received		63,187,286		52,444,000
Dividends received		985,537		1,585,095
Interest paid		(23,144,421)		(19,690,918)
Income tax paid	_	(1,683,314)		(4,112,514)
Not and and be according and 10		(40.745.020)		(44.705.477)
Net cash used in operating activities		<u>(48,745,939</u>)	_	(44,725,477)
				(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM INVESTING ACTIVITIES Acquisition of property and equipment Proceeds from disposal of property and equipment Acquisition of intangible assets Proceeds from disposal of investment properties Other assets Dividends received	\$ (1,409,688) 10,476 (544,990) 880,361 8,152,868 66,904	\$ (1,980,515) 1,146 (217,554) 100,000 (8,641,530) 73,557
Net cash generated from (used in) investing activities	7,155,931	(10,664,896)
CASH FLOWS FROM FINANCING ACTIVITIES Repayments of financial debentures payable Payments of lease liabilities Other liabilities Cash dividends paid Share issuance for cash Net cash used in financing activities	(1,700,000) (1,226,706) 1,800,424 (10,393,414) 10,000,000 (1,519,696)	(7,750,000) - (1,855,319) (291,840) (9,897,159)
EFFECTS OF EXCHANGE RATE CHANGES ON CASH AND CASH	(954 102)	(025 220)
EQUIVALENTS NET DECREASE IN CASH AND CASH EQUIVALENTS CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE	(854,192) (43,963,896)	(835,338) (66,122,870)
YEAR	157,478,989	223,601,859
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$ 113,515,093</u>	<u>\$ 157,478,989</u>
	Decem	
RECONCILIATIONS OF CASH AND CASH EQUIVALENTS REPORTED IN THE CONSOLIDATED STATEMENTS OF CASH FLOWS WITH THOSE REPORTED IN THE CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2019 AND 2018 Cash and cash equivalents reported in the statement of financial position Due from the Central Bank and call loans to banks qualifying for cash and cash equivalents under the definition of IAS 7 Securities purchased under resell agreements qualifying for cash and cash equivalents under the definition of IAS 7 Cash and cash equivalents at the end of the period	\$ 52,997,997 46,221,746 14,295,350 \$ 113,515,093	\$ 67,857,464 45,009,393 44,612,132 \$ 157,478,989
The accompanying notes are an integral part of the consolidated financial s	tatements.	
(With Deloitte & Touche auditors' report dated March 11, 2020)		(Concluded)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. INFORMATION ON THE BUSINESS

Cathay United Bank Co., Ltd. ("the Bank"), originally named United World Chinese Commercial Bank ("UWCCB"), was established in December 1974 after obtaining approval from the Ministry of Finance, Republic of China ("ROC") and officially started operations on May 20, 1975. The Bank is mainly engaged in the following operations: (1) all commercial banking operations authorized by the ROC Banking Act ("Banking Act"); (2) international banking business and related operations; (3) trust business; (4) off-shore banking business; and (5) other financial operations related to the promotion of investments by overseas Chinese. The Bank's registered office and main business location is at No. 7, Songren Rd., Xinyi District, Taipei City, Republic of China (ROC).

The Bank's stock was originally trading on the Taiwan Stock Exchange (the "TWSE") until December 18, 2002, where it was delisted after becoming a wholly-owned subsidiary of Cathay Financial Holding Co., Ltd. ("Cathay Financial Holdings") on the same date through a share swap. Under the Financial Institutions Merger Act, the Bank merged with the former Cathay Commercial Bank, a wholly-owned subsidiary of Cathay Financial Holdings on October 27, 2003, with UWCCB as the surviving entity and was renamed Cathay United Bank Co., Ltd.

The Bank merged with Lucky Bank on January 1, 2007. The Bank was the surviving entity after this merger and Lucky Bank was the extinguished entity. In addition, the Bank acquired specific assets, liabilities, and business of China United Trust & Investment Corporation ("CUTIC") on December 29, 2007.

Cathay Financial Holdings is the Bank's parent company and ultimate parent company.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements of the Bank and its subsidiaries ("the Company") were approved by the Bank's board of directors and authorized for issue on March 11, 2020.

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

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

Except for the following, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Public Banks and the IFRSs endorsed and issued into effect by the FSC did not have material impact on the Company's accounting policies:

• IFRS 16 "Leases"

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and lessor. It supersedes IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement contains a Lease", and a number of related interpretations. Refer to Note 4 for information relating to the relevant accounting policies.

Definition of a lease

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

The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Company presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liabilities are classified within financing activities; cash payments for the interest portion are classified within operating activities. Prior to the application of IFRS 16, payments under operating lease contracts, were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the statements of cash flows.

Lease liabilities were recognized on January 1, 2019 for leases currently classified as operating leases under IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at an amount equal to the lease liabilities, adjusted by the amount of any prepaid or accrued lease payments. Except for the following practical expedients which are applied, the Company applies IAS 36 to all right-of-use assets.

The Company expects to apply the following practical expedients:

- 1) The Company also applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.
- 2) The Company accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.
- 3) The Company excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.
- 4) The Company uses hindsight, such as in determining lease terms, to measure lease liabilities.

The lessee's weighted-average incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 0.89%. The difference between the (i) lease liabilities recognized and (ii) operating lease commitments disclosed under IAS 17 on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease	
commitments on December 31, 2018	\$ 5,544,509
Less: Recognition exemption for short-term leases	(501,288)
Less: Recognition exemption for leases of low-value assets	(613,756)
Undiscounted amounts on January 1, 2019	<u>\$ 4,429,465</u>
Lease liabilities recognized on January 1, 2019	\$ 4,354,604

The Company as lessor

The Company will not make any adjustments for leases in which it is a lessor and will account these leases with the application of IFRS 16 starting from January 1, 2019.

The impact on assets, liabilities and equity as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	As Originally Stated on January 1, 2019	Adjustments Arising from Initial Application	Restated on January 1, 2019
Other assets Right-of-use assets	\$ 35,061,248	\$ (17,660) 4,347,260	\$ 35,043,588 4,347,260
Total effect on assets	\$ 35,061,248	<u>\$ 4,329,600</u>	\$ 39,390,848
Payables Lease liabilities	\$ 24,912,970 	\$ (25,004) 4,354,604	\$ 24,887,966 4,354,604
Total effect on liabilities	<u>\$ 24,912,970</u>	<u>\$ 4,329,600</u>	\$ 29,242,570

b. The IFRSs endorsed by FSC for application starting from 2020

New, Revised or Amended Standards and Interpretations	Announced by IASB
Amendments to IFRS 3 "Definition of a Business" Amendments to IFRS 9, IAS 39 and IFRS 7 "Interest Rate Benchmark	January 1, 2020 (Note 1) January 1, 2020 (Note 2)
Reform" Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

- Note 1: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.
- Note 2: The Company shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.
- Note 3: The Group shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

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

c. The IFRSs issued by IASB but not yet endorsed and issued into effect by FSC

New, Revised or Amended Standards and Interpretations	Effective Date Announced by IASB (Note)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 "Classification of Liabilities as Current or	January 1, 2022
Non-current"	

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

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Statement of Compliance

The consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks, Regulations Governing the Preparation of Financial Reports by Securities Firms and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the FSC. Disclosure information included in the consolidated financial statements is less than that required in a complete set of annual financial statements.

Basis of Preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments and investment property which are measured at fair value.

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

- a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- b. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- c. Level 3 inputs are unobservable inputs for the asset or liability.

Basis of Consolidation

Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of the Bank and the entities controlled by the Bank (Indovina Bank, CUBC Bank and CUBCN Bank).

The accounting policies of the consolidated entities are same.

All intercompany transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Bank and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Company's ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the interests of the Company and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to the owners of the Bank.

The Bank's financial statements include the accounts of the Head Office, all branches, and OBU, in addition to the subsidiaries accounts. All intercompany transactions and accounts balances have been eliminated for consolidation purposes.

Entities included in consolidated financial statements

See Note 16 for detailed information on subsidiaries (including percentages of ownership and main businesses).

Foreign Currencies

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

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise except for: Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investments.

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

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Company's foreign operations (including subsidiaries, associates, joint ventures and branches in other countries that use currencies which are different from the currency of the Company) are translated into the presentation currency, the New Taiwan dollars, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the transacting exchange rate or the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income (attributed to the owners of the Bank and non-controlling interests as appropriate).

Current and Non-current Assets and Liabilities

Since the operating cycle in the banking industry cannot be reasonably identified, accounts included in the consolidated financial statements of the Company were not classified as current or non-current. Nevertheless, accounts were properly categorized in accordance with the nature of each account and sequenced by their liquidity.

Cash and Cash Equivalents

In the consolidated balance sheet, cash and cash equivalents comprise cash on hand, demand deposits, and short-term, highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. In the consolidated statements of cash flows, cash and cash equivalents comprise cash and cash equivalents defined in the consolidated balance sheets, due from the Central Bank, call loans to other banks and securities purchased under resale agreements that correspond to the definition of cash and cash equivalents under IAS 7 - "Statement of Cash Flows," as endorsed and issued into effect by the FSC.

Financial Instruments

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

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

a. Financial assets

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

1) Measurement category

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

a) Financial asset at FVTPL

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

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset.

Fair value is determined in the manner described in Note 49.

b) Financial assets at amortized cost

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

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

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, due from the Central Bank and call loans to other banks, investments in debt instruments at amortised cost, receivables and discounts and loans, are measured at amortized cost, which equals the gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

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

- Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset; and
- ii. Financial assets that are not credit impaired on purchase or origination but have subsequently become credit impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

A financial asset is credit impaired when one or more of the following events have occurred:

- i. Significant financial difficulty of the issuer or the borrower;
- ii. Breach of contract, such as a default;
- iii. It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization; or
- iv. The disappearance of an active market for that financial asset because of financial difficulties.

c) Investments in debt instruments at FVTOCI

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

- i. The financial asset is held within a business model whose objective is achieved by both the collecting of contractual cash flows and the selling of the financial assets; and
- ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

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

d) Investments in equity instruments at FVTOCI

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

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

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

2) Impairment of financial assets

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost, investments in debt instruments that are measured at FVTOCI.

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

For receivables that do not contain a significant financing component, the allowance for losses is recognized at the lifetime expected credit losses.

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

The definition of the financial assets which were in default is described in Note 50.

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

According to the Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans, the Bank assesses the customers' financial position, the overdue payments of the principal and interest, and the value of collaterals to classify credit assets into normal credit assets (excluding loans to the ROC government) and unsound assets which should be further classified by special mention, substandard, doubtful and losses, for which minimum provisions are 1%, 2%, 10%, 50%, and 100% of the outstanding balance, respectively. Furthermore, the FSC stipulates that banks should recognize provision of at least 1.5% of normal credit assets in mainland China (including short-term advances for trade finance) and loans for mortgage and construction loans that have been classified as normal assets, and further determine the allowance for losses based on the higher of the above-mentioned provision and the assessment of the expected credit losses.

The Company writes off credits deemed uncollectable after the write-off is proposed and approved by the board of directors. Recoveries of credits written off are recognized as a reversal of loss provision in current period.

3) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

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

b. Equity instruments

The Company classifies the debt and equity instruments issued either as financial liabilities or as equity in accordance with the substance of the contractual agreements and the definitions of a financial liability or an equity instrument.

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

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

c. Financial liabilities

1) Subsequent measurement

Except for the cases stated below, all financial liabilities are measured at amortized cost using the effective interest method:

a) Financial liabilities at FVTPL

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

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

A financial liability is classified as designated as at FVTPL upon initial recognition if:

- i. Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- ii. The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- iii. The contract contains one or more embedded derivatives so that the entire hybrid (combined) contract can be designated as at fair value through profit or loss.

For a financial liability designated as at fair value through profit or loss, the amount of changes in fair value attributable to changes in the credit risk of the liability is presented in other comprehensive income, and it will not be subsequently reclassified to profit or loss. The gain or loss accumulated in other comprehensive income will be transferred to retained earnings when the financial liabilities are derecognized. The change in fair value of the outstanding liabilities are recognized in profit or loss. If this accounting treatment related to credit risk would create or enlarge an accounting mismatch, all changes in fair value of the liability are presented in profit or loss.

Fair value is determined in the manner described in Note 49.

b) Financial guarantee contracts

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

- i. The amount of the loss allowance reflecting expected credit loss; and
- ii. The amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with the revenue recognition policies.

2) Derecognition of financial liabilities

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

d. Derivatives

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the balance sheet date. The resulting gain or loss is recognized in profit or loss immediately. If the fair value of a derivative is a positive number, the derivative is recognized as an asset and if the fair value is a negative number, the derivative is recognized as a liability.

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

Investments in Associates

An associate is an entity over which the Company has significant influence and which is neither a subsidiary nor an interest in a joint venture.

The Bank uses the equity method to account for its investments in associates. Under the equity method, investments in an associate are initially recognized at cost and adjusted thereafter to recognize the Bank's share of the profit or loss and other comprehensive income of the associate. The Bank also recognizes the changes in the Bank's share of the equity of associates attributable to the Bank.

Any excess of the cost of acquisition over the Bank's share of the net fair value of the identifiable assets and liabilities of an associate at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Bank's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

When the Bank subscribes for additional new shares of an associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Bank's proportionate interest in the associate. The Bank records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus - changes in capital surplus from investments in associates and joint ventures accounted for using the equity method. If the Bank's ownership interest is reduced due to its additional subscription of the new shares of the associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate is reclassified to profit or loss on the same basis as would be required had the investee directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for using the equity method is insufficient, the shortage is debited to retained earnings.

When the Bank's share of losses of an associate equals or exceeds its interest in that associate (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Bank's net investment in the associate), the Bank discontinues recognizing its share of further loss, if any. Additional losses and liabilities are recognized only to the extent that the Bank has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of an investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Bank discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date, and the fair value is regarded as the investment's fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Bank accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required had that associate directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Bank continues to apply the equity method and does not remeasure the retained interest.

Profits or losses resulting from downstream transactions are eliminated in full only in the Bank's financial statements. Profits and losses resulting from upstream transactions and transactions between associates are recognized only in the Bank's financial statements only to the extent of interests in the associates that are not related to the Bank.

Nonperforming Loans

Under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Nonperforming/Nonaccrual Loans" issued by the authorities, loans and other credits (including the accrued interest) that remain unpaid on their maturity are transferred immediately to nonperforming loans if the transfer is approved by the board of directors.

Nonperforming loans transferred from loans are recognized as discounts and loans, and those transferred from other credits are recognized as other financial assets.

Repurchase and Resale Transactions

Securities purchased under resale agreements and securities sold under repurchase agreements are generally treated as collateralized financing transactions. Interest earned on reverse repurchase agreements or interest incurred on repurchase agreements is recognized as interest income or interest expense over the life of each agreement.

Property and Equipment

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

Freehold land is not depreciated.

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

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

Investment Properties

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

Investment properties are measured initially at cost, including transaction costs, and are subsequently measured using the fair value model. Changes in the fair value of investment properties are included in profit or loss for the period in which they arise.

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

The Company decides to transfer in or out investment property based on the actual use of assets.

For a transfer from the property and equipment classification to investment property based on the actual use of assets, any difference between the fair value of the property at the transfer date and its previous carrying amount is recognized in other comprehensive income.

Goodwill

Goodwill arising from the acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purposes of impairment testing, goodwill is allocated to each of the Company's cash-generating units or groups of cash-generating units (referred to as "cash-generating units") that are expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributed goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then pro rata to the other assets of the unit based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. Any impairment loss recognized on goodwill is not reversed in subsequent periods.

If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation which is disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal and is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

Foreclosed Collateral

Collaterals assumed (recorded in other assets) are recognized at cost, which includes the assumed prices and any necessary repairs to make the collaterals saleable, and evaluated at the lower of cost or net realizable value as of the balance sheet date.

Intangible Assets (Excluding Goodwill)

Intangible assets acquired separately

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

Derecognition

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

Impairment of Tangible and Intangible Assets (Excluding Goodwill)

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered any impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Corporate assets are allocated to cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the resulting impairment loss is recognized in profit or loss. When an impairment loss is subsequently reversed, the reversal of an impairment loss is recognized in profit or loss. But only to the extent of the carrying amount (net of depreciation or amortization) that would have been determined had no impairment loss been recognized for the asset.

Leasing

2019

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease.

a. The Company as lessor

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

Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

Variable lease payments that do not depend on an index or a rate are recognized as income in the periods in which they are incurred.

When a lease includes both land and building elements, the Company assesses the classification of each element separately as a finance or an operating lease based on the assessment as to whether substantially all the risks and rewards incidental to ownership of each element have been transferred to the Company. The lease payments are allocated between the land and the building elements in proportion to the relative fair values of the leasehold interests in the land element and building element of the lease at the inception of a contract. If the allocation of the lease payments can be made reliably, each element is accounted for separately in accordance with its lease classification. When the lease payments cannot be allocated reliably between the land and building elements, the entire lease is generally classified as a finance lease unless it is clear that both elements are operating leases; in which case, the entire lease is classified as an operating lease.

b. The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the consolidated balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, residual value guarantees, the exercise price of a purchase option if the Company is reasonably certain to exercise that option, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Company uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, a change in the amounts expected to be payable under a residual value guarantee, a change in the assessment of an option to purchase an underlying asset, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Company remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the consolidated balance sheets.

Variable lease payments that do not depend on an index or a rate are recognized as expenses in the periods in which they are incurred.

2018

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

a. The Company as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and amortized on a straight-line basis over the lease term.

Lease incentives included in an operating lease are recognized as an asset. The aggregate cost of incentives is recognized as a reduction of rental income on a straight-line basis.

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

b. The Company as lessee

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

Lease incentives received under operating leases are recognized as liabilities. The aggregate benefit of incentives is recognized as a reduction of rental expenses on a straight-line basis.

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

c. Leasehold land for own use

When a lease includes both land and building elements, the Company assesses the classification of each element separately as a finance or an operating lease based on the assessment as to whether substantially all the risks and rewards incidental to ownership of each element have been transferred to the Company. The minimum lease payments are allocated between the land and the building elements in proportion to the relative fair values of the leasehold interests in the land element and building element of the lease at the inception of the lease.

If the allocation of the lease payments can be made reliably, each element is accounted for separately in accordance with its lease classification. When the lease payments cannot be allocated reliably between the land and building elements, the entire lease is generally classified as a finance lease unless it is clear that both elements are operating leases; in which case, the entire lease is classified as an operating lease.

Provisions

Provisions are recognized when the Bank has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions is the best estimate of the consideration required to settle a present obligation at the consolidated balance sheet date, taking the risks and uncertainties into account on the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying its the present value of those cash flows. (If the time value of currency affects materially.)

Employee Benefits

a. Short-term employee benefits

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

b. Retirement benefits

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

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

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Company's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

c. Termination benefits

A liability for a termination benefit is recognized at the earlier of when the Bank can no longer withdraw the offer of the termination benefit and when the Bank recognizes any related restructuring costs.

d. Employee preferential interest deposits

The Bank offers its employees preferential interest deposits, including of preferential interest deposits to current employees and those to retired employees and current employees after retirement in finite amounts. The difference between the interest rate of preferential interest deposits and the market rate is considered as employee benefits.

In accordance with Article 30 of the Regulations Governing the Preparation of Financial Reports by Public Banks, the excess of the interests incurred from post-employment preferential interest deposits over those inputed by the market rate should be applicable to the requirements for defined benefit plans in IAS 19 Employee Benefits since the employee's retirement and accrued by actuarial method.

Income Tax

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

a. Current tax

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

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

Since 2002, in accordance with Article 49 of the Financial Holding Company Act, the Bank elect Financial Holding Company to be the tax payer, and jointly declare and report profit-seeking enterprise income tax and the tax surcharge on surplus retained earnings of a profit-enterprise in accordance with the relevant provisions of the Income Tax Law. Addition tax payable or receivable due to the joint declaration of income tax is recognized under the payables or receivables for allocation of integrated income tax systems account.

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Bank can control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are recognized only to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and these differences are expected to reverse in the foreseeable future.

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

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

c. Current and deferred taxes

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

Recognition of Interest Revenue and Expense

Except for the financial assets and liabilities at fair value through profit or loss, the interest revenue and interest expense arising from all interest-bearing financial instruments are calculated using the effective interest method in accordance with the relevant provisions and recognized in the consolidated statement of profit or loss under "interest revenue" and "interest expense" items.

Recognition of Service Fee Revenue and Expense

The service fee revenue and expense are recognized once after the completion of the provision of the loan or other services; if the service fee earned by the execution of the major project is recognized at the completion of the major project, service fee revenue and expense related to subsequent lending services are either amortized over the service period or included in the calculation of the effective interest rate on loans and receivables.

Customer Loyalty Program

The points earned by customers under loyalty programs are treated as multiple-element revenue arrangements, in which consideration is allocated to the goods or services and the award credits based on their fair values through the eyes of the customer. The consideration is not recognized as earnings at the time of the original sales transaction but at the time when the points are redeemed and the obligation is fulfilled.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

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

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

Assessment of impairment of loans

The assessment of impairment of loans is based on the value of the collaterals, amount of principal and interest due, and the length of the overdue period. Change of credit ratings on individual assets and collection received are also considered to determine the category. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's historical experience, existing market conditions as well as forward looking estimates as of the end of each reporting period. The inputs include risk of default and expected loss rates. For details of the key assumptions and inputs used, refer to Note 50.

6. CASH AND CASH EQUIVALENTS

	December 31				
	2019	2018			
Cash on hand	\$ 23,746,182	\$ 17,003,482			
Checks for clearance	2,930,797	7,060,146			
Due from banks	26,325,206	43,812,218			
	53,002,185	67,875,846			
Less: Allowance for impairment loss	(4,188)	(18,382)			
	<u>\$ 52,997,997</u>	<u>\$ 67,857,464</u>			

7. DUE FROM THE CENTRAL BANK AND CALL LOANS TO BANKS

	December 31	
	2019	2018
Deposit reserves - general account	\$ 57,897,754	\$ 53,222,764
Deposit reserves - foreign currency account	6,890,818	6,038,018
Deposits in the Central Bank - general account	14,455,036	28,491,195
Call loans and overdrafts	<u>31,766,710</u>	16,518,198
	111,010,318	104,270,175
Less: Allowance for impairment loss	(65,225)	(46,860)
	<u>\$ 110,945,093</u>	\$ 104,223,315

The Bank

As provided by the Central Bank of the ROC, NTD-denominated deposit reserves are determined monthly at prescribed rates on the average balances of customers' NTD-denominated deposits, and the deposit reserves account B is subject to withdrawal restrictions.

In addition, the foreign-currency deposit reserves are determined at prescribed rates on balances of additional foreign-currency deposits. These non-interest bearing reserves may be withdrawn at any time. As of December 31, 2019 and 2018, the balances of foreign-currency deposit reserves were \$2,099,097 thousand and \$1,683,601 thousand, respectively.

Indovina Bank

In accordance with the relevant local laws and regulations governing credit institutions, the amounts of compulsory reserves for the State Bank of Vietnam were \$1,212,635 thousand and \$705,341 thousand as of December 31, 2019 and 2018, respectively.

CUBC Bank

In accordance with the relevant local laws and regulations governing credit institutions, the amounts of compulsory reserves for the National Bank of Cambodia were \$1,259,294 thousand and \$1,437,362 thousand as of December 31, 2019 and 2018, respectively.

CUBCN Bank

In accordance with the relevant local laws and regulations governing credit institutions, the amounts of compulsory reserves for the People's Bank of China were \$2,319,792 thousand and \$2,211,714 thousand as of December 31, 2019 and 2018, respectively.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2019	2018
Financial assets mandatorily classified as at		
fair value through profit or loss		
Treasury bills	\$ 9,912,981	\$ -
Commercial paper	141,390,530	99,829,344
Government bonds	41,562,839	25,763,954
Corporate bonds	6,617,762	4,908,033
Financial debentures	8,724,915	7,958,565
Negotiable Certificates of Deposit	38,680,277	62,649,171
Stock investments	308,796	3,657
Fund beneficiary certificates	288,747	96,786
•	247,486,847	201,209,510
Derivative financial instruments	·	
Foreign exchange forward contracts	18,280,727	21,078,912
Interest rate swap	30,557,553	26,800,296
Options	1,947,083	884,544
Others	602,543	711,954
	51,387,906	49,475,706
	<u>\$ 298,874,753</u>	<u>\$ 250,685,216</u>
Financial liabilities designated as at fair value through profit or loss		
Bonds	\$ 57,604,294	\$ 51,441,482
Financial liabilities held for trading		
Derivative financial instruments		
Foreign exchange forward contracts	19,006,155	21,124,958
Interest rate swaps	25,867,768	25,440,315
Options	3,753,962	4,450,003
Others	538,760	951,020
	49,166,645	51,966,296
	<u>\$ 106,770,939</u>	<u>\$ 103,407,778</u>

The Company engages in derivative transactions mainly to accommodate customers' needs, and manage its exposure positions. The financial risk management objective of the Company is to minimize risk due to changes in fair value or cash flows.

The contract amounts (nominal amounts) of derivative transactions for accommodating customers' needs and managing its exposure positions as of December 31, 2019 and 2018 were as follows:

Unit: Thousands of U.S. Dollars

	December 31	
	2019	2018
Foreign exchange forward contracts	\$ 85,742,506	\$ 89,265,988
Interest rate swaps	68,168,029	93,366,752
Options	6,704,612	5,275,165
Futures	1,398,149	1,731,998
Cross currency swaps	1,396,786	1,461,149
Commodity exchange contracts	584	9,751

As of December 31, 2019, none of the financial assets at fair value through profit or loss was sold under repurchase agreements.

As of December 31, 2018, certain financial assets at FVTPL of the Company with notional amounts of \$583,927 thousand were sold under repurchase agreement. The proceeds amounting to \$523,342 thousand were recognized as notes and bonds sold under repurchase agreement and were repurchased for \$523,725 thousand before the end of January 2019.

Financial Liabilities Designated at Fair Value through Profit or Loss

In September 2014, the Bank was authorized to issue subordinated financial debentures amounting to US\$990 million; as of October 8, 2014, the issued subordinated financial debentures were US\$660 million (perpetual) and US\$330 million (fifteen years) with a fixed interest rate of 5.10% and 4.00%, respectively, and the interest is payable annually. The Bank is authorized by the authorities to redeem the US\$660 million of bonds at book value after 12 years and after fulfilling the specified conditions.

In December 2014, the Bank was authorized to issue unsubordinated financial debentures amounting to US\$180 million (thirty years), which were subsequently issued on March 30, 2015. In addition to the redemption of bonds by the exercise of call options, the bonds are redeemable on maturity; the bonds were issued in the form of zero-coupon bonds, and the internal rate of return is 4.20%.

In March 2017, the Bank was authorized to issue unsubordinated financial debentures amounting to US\$195 million (thirty years), which were subsequently issued on April 11, 2017. In addition to the redemption of bonds by the exercise of call options, the bonds are redeemable on maturity; the bonds were issued in the form of zero-coupon bonds, and the internal rate of return is 4.30%.

In March 2017, the Bank was authorized to issue unsubordinated financial debentures amounting to US\$300 million (thirty years), which were subsequently issued on November 24, 2017. In addition to the redemption of bonds by the exercise of call options, the bonds are redeemable on maturity; the bonds were issued in the form of zero-coupon bonds, and the internal rate of return is 4.10%.

The Bank converted fixed interest rates into floating interest rates with interest rate swap contracts to hedge against the fair value risk resulting from interest rate fluctuations. For the years ended December 31, 2019 and 2018, such interest rate swaps were valued with a net gain of \$4,094,478 thousand and net loss of \$2,290,940 thousand, respectively.

9. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31	
	2019	2018
Investments in equity instruments		
Domestic listed shares	\$ 12,547,311	\$ 4,214,066
Overseas stock investments	9,413,887	4,505,813
Domestic unlisted shares	4,043,607	3,367,271
	26,004,805	12,087,150
Investments in debt instruments		
Corporate bonds	45,974,087	42,711,025
Financial debentures	80,267,723	75,905,600
Asset-based securities	27,942,654	3,191,683
Negotiable Certificates of Deposit	70,253,313	-
Government bonds	<u>73,687,528</u>	66,677,444
	298,125,305	188,485,752
	<u>\$ 324,130,110</u>	<u>\$ 200,572,902</u>

These investments in equity instruments are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Company's strategy of holding these investments for long-term purposes.

For investment strategy, the Company sold the investments in equity instruments at FVTOCI with the fair value of \$25,613,617 thousand and \$32,175,518 thousand during the years ended December 31, 2019 and 2018, respectively, and the related unrealized loss of \$147,494 thousand and unrealized gain of \$487,854 thousand were transferred from other equity to retained earnings, accordingly.

Dividends of \$994,684 thousand and \$1,529,632 thousand were recognized during the years ended December 31, 2019 and 2018, respectively. Those related to investments held as of December 31, 2019 and 2018 were \$609,463 thousand and \$602,727 thousand, respectively, and the remaining amounts were related to investments derecognized during the years ended December 31, 2019 and 2018.

As of December 31, 2019 and 2018, certain financial assets at FVTOCI were sold under repurchase agreements with notional amounts of \$35,649,054 thousand and \$46,355,590 thousand, respectively. The proceeds amounting to \$35,456,986 thousand and \$42,613,744 thousand, respectively, were recorded as notes and bonds sold under repurchase agreements and were repurchased for \$35,556,515 thousand and \$42,764,361 thousand before the end of June 2020 and March 2019, respectively.

Refer to Note 45 for information relating to financial assets at fair value through other comprehensive income pledged as security.

10. INVESTMENTS IN DEBT INSTRUMENT AT AMORTISED COST

	December 31	
	2019	2018
Short-term bills	\$ 380,904,061	\$ 348,485,689
Government bonds	2,816,923	2,313,920
Corporate bonds	813,740	2,745,468
Financial debentures	18,140,531	16,462,146
Structured notes	3,436,962	3,073,300
Asset-based bonds	38,850,385	47,973,170
	444,962,602	421,053,693
Less: Allowance for impairment loss	(27,617)	(31,187)
	<u>\$ 444,934,985</u>	<u>\$ 421,022,506</u>

For the year ended December 31, 2019, the Bank disposed of certain asset-based bonds in advance due to the expected increase in credit risk, and recognized the loss arising from derecognition of financial assets measured at amortized cost amounted to \$38,960 thousand.

As of December 31, 2019 and 2018, certain financial assets measured at amortized cost were sold under repurchase agreements with notional amounts of \$16,010,521 thousand and \$19,718,692 thousand, respectively. The proceeds amounting to \$12,723,466 thousand and \$11,447,258 thousand, respectively, were recorded as notes and bonds sold under repurchase agreements and were repurchased for \$12,731,800 thousand and \$11,477,549 thousand before the end of March 2020 and 2019, respectively.

Refer to Note 45 for information relating to investments in debt instruments at amortised cost pledged as security.

11. CREDIT RISK MANAGEMENT FOR INVESTMENTS IN DEBT INSTRUMENTS

The credit risk management of the Company's financial assets at FVTOCI and investments in debt instruments at amortised cost is described as follows:

December 31, 2019

	Financial Assets at FVTOCI	Investments in Debt Instruments at Amortised Cost	Total
Gross carrying amount Less: Allowance for impairment loss Adjustment to fair value	\$ 294,390,952 (98,666) 3,833,019	\$ 444,962,602 (27,617)	\$ 739,353,554 (126,283) 3,833,019
	<u>\$ 298,125,305</u>	<u>\$ 444,934,985</u>	<u>\$ 743,060,290</u>

December 31, 2018

	Financial Assets at FVTOCI	Investments in Debt Instruments at Amortised Cost	Total
Gross carrying amount Less: Allowance for impairment loss Adjustment to fair value	\$ 188,582,733 (314,633) 217,652	\$ 421,053,693 (31,187)	\$ 609,636,426 (345,820) 217,652
	<u>\$ 188,485,752</u>	<u>\$ 421,022,506</u>	\$ 609,508,258

The Company monitors the external credit rating information and price movements of their investments in debt instruments in order to assess whether there has been a significant increase in credit risk since initial recognition.

The Company takes into consideration the multi-period default probability table for each credit rating supplied by external rating agencies, the current financial condition of debtors, industry forecasts, rating of securities issued by credit rating agencies and recovery rates of different types of bonds to assess the 12-month or lifetime expected credit losses.

The carrying values of financial assets at FVTOCI and investments in debt instruments at amortised cost sorted by credit rating of the Company are as follows:

Credit Rating	Definition	Basis for Recognizing ECLs	Gross Carrying Amount at December 31, 2019
Low credit risk Significant increase in credit risk Default	Low credit risk at reporting date Credit risk has increased significantly since initial recognition Objective evidence of impairment at the reporting date	12-month ECLs Lifetime ECLs (not credit-impaired) Lifetime ECLs (credit-impaired)	\$ 739,353,554 - -
Credit Rating	Definition	Basis for Recognizing ECLs	Gross Carrying Amount at December 31, 2018
Low credit risk Significant increase in credit risk Default	Low credit risk at reporting date Credit risk has increased significantly since initial recognition Objective evidence of impairment at the reporting date	12-month ECLs Lifetime ECLs (not credit-impaired) Lifetime ECLs (credit-impaired)	\$ 609,636,426 - -

The changes in balances of loss allowance of financial assets at FVTOCI and investments in debt instruments at amortised cost sorted by credit rating of the Company are as follows:

For the year ended December 31, 2019

	Low Credit Risk (12-month ECLs)	Credit Doul (Lifetim - Not C impa	otful e ECLs Credit-	In De (Life ECLs - impa	time Credit-
Balance at the beginning of the period	\$ 345,820	\$	_	\$	-
New debt instruments purchased	88,444		-		-
From performing to in default	(265,650)		-	265	5,650
Derecognition	(53,624)		-	(26:	5,650)
Effect of exchange rate changes and others	11,293	-	<u> </u>	-	<u> </u>
Balance at the end of the period	<u>\$ 126,283</u>	<u>\$</u>	_	\$	_
E 1 1.15 1 21 2010					

For the year ended December 31, 2018

		Credit Rating	
	Low Credit Risk (12-month ECLs)	Doubtful (Lifetime ECLs - Not Credit- impaired)	In Default (Lifetime ECLs - Credit- impaired)
Balance at the beginning of the period	\$ 39,035	\$ -	\$ -
New debt instruments purchased	385,749	-	-
Derecognition	(71,179)	-	-
Effect of exchange rate changes and others	(7,785)		
Balance at the end of the period	\$ 345,820	<u>\$</u>	<u>\$</u>

12. SECURITIES PURCHASED UNDER RESELL AGREEMENTS

	December 31				
		2019		2018	
Foreign bonds	\$	2,397,041	\$	2,263,810	
Corporate bonds		3,679,849		14,034,493	
Government bonds		6,610,566		24,004,355	
Financial debentures		1,609,102		4,314,168	
		14,296,558		44,616,826	
Less: Allowance for impairment loss		(1,208)		(4,694)	
	\$	14,295,350	\$	44,612,132	

As of December 31, 2019, none of the securities purchased under resell agreements were sold under repurchase agreements.

As of December 31, 2018, certain securities purchased under resell agreements were sold under repurchase agreements with notional amounts of \$1,505,917 thousand. Such repurchase agreements amounting to \$1,390,165 thousand, were recognized under the "securities sold under agreements to repurchase" account on the consolidated balance sheets. Repurchase agreements were settled at \$1,394,432 thousand before the end of April 2019.

13. RECEIVABLES, NET

	December 31					
	2019	2018				
Notes and accounts receivables	\$ 89,486,906	\$ 71,947,102				
Interest receivable	5,673,196	9,480,747				
Acceptance	896,898	1,591,399				
Factoring receivable	3,137,119	2,607,455				
Others	4,071,172	2,413,972				
	103,265,291	88,040,675				
Less: Allowance for impairment loss	(2,377,268)	(2,061,949)				
	<u>\$ 100,888,023</u>	\$ 85,978,726				

Refer to Note 50 the for impairment loss analysis of receivables.

The changes in the gross carrying amounts of the Company's receivables were as follows:

	12-	month ECLs	(C	etime ECLs collectively Assessed)	Pui C	etime ECLs (Neither rchased Nor Driginated Credit- impaired Financial Assets)		Total
Balance at the beginning of								
the period	\$	83,956,813	\$	1,660,989	\$	2,422,873	\$	88,040,675
Transferred to Lifetime ECLs		(689,684)		695,281		(5,597)		-
Transferred to credit-impaired								
financial assets		(88,092)		(26,674)		114,766		-
Transferred to 12-month ECLs		508,568		(503,458)		(5,110)		-
Derecognition of financial								
assets in the period		(44,547,588)		(1,161,967)		(280,774)		(45,990,329)
New financial assets								
purchased or originated		60,392,240		897,899		489,655		61,779,794
Written off as bad debt								
expense		-		-		(485, 265)		(485, 265)
Effects of exchange rate								
changes and others		(93,206)		(1,620)		15,242	_	(79,584)
Balance at the end of the	Φ.	00.400.054	Φ.	1 7 50 170	.	2 2 4 7 7 0 0	Φ.	100057001
period	\$	99,439,051	<u>\$</u>	<u>1,560,450</u>	\$	2,265,790	\$	103,265,291

For the year ended December 31, 2018

	12-	month ECLs	(0	etime ECLs Collectively Assessed)	(Neither rchased Nor Driginated Creditimpaired Financial Assets)	Total
Balance at the beginning of						
the period	\$	74,426,480	\$	2,070,086	\$ 2,915,898	\$ 79,412,464
Transferred to Lifetime ECLs		(639,711)		642,075	(2,364)	-
Transferred to credit-impaired						
financial assets		(81,508)		(9,042)	90,550	-
Transferred to 12-month ECLs		280,500		(276,613)	(3,887)	-
Derecognition of financial						
assets in the period		(68,728,339)		(1,848,225)	(594,290)	(71,170,854)
New financial assets						
purchased or originated		79,100,185		1,081,499	459,513	80,641,197
Written off as bad debt						
expense		_		_	(444,144)	(444,144)
Effects of exchange rate					, , ,	
changes and others		(400,794)		1,209	1,597	(397,988)
				<u> </u>	 <u> </u>	
	\$	83,956,813	\$	1,660,989	\$ 2,422,873	\$ 88,040,675

Lifetime ECLs

The changes in the allowance for doubtful accounts of the Company's receivables were as follows:

	1	2-month ECLs	((etime ECLs Collective (ssessed)]	fetime ECLs (Neither Purchased Nor Originated Credit- impaired Financial Assets)	L	npairment oss under IFRS 9	Im _j Lo	Ference of pairment ss under gulations		Total
Balance at the beginning of the												
period	\$	126,022	\$	116,965	\$	1,768,492	\$	2,011,479	\$	50,470	\$	2,061,949
Changes of financial instruments												
recognized at the beginning of the												
current reporting period												
Transferred to Lifetime ECLs		(2,703)		81,754		(3,647)		75,404		-		75,404
Transferred to credit-impaired		(110)		(4.000)		77 000		50.054				50.054
financial assets		(448)		(1,989)		75,808		73,371		-		73,371
Transferred to 12-month ECLs		2,030		(45,301)		(3,207)		(46,478)		-		(46,478)
Derecognition of financial assets		(00.405)		(5.6.0.60)		(221.266)		(270,020)				(270,020)
in the period		(90,495)		(56,968)		(231,366)		(378,829)		-		(378,829)
New financial assets purchased or		462 275		70.146		520.040		1.062.570				1.062.570
originated		463,375		70,146		530,049		1,063,570		-		1,063,570
Differences of impairment loss										2,501		2,501
under regulations Written off as bad debt expense		-		-		(485,265)		(485,265)		2,301		(485,265)
Effects of exchange rate changes and		-		-		(465,205)		(465,205)		-		(465,205)
others		12,101		(10,301)		9,240		11,040		5		11,045
oniois	-	12,101	-	(10,501)	_	7,240	_	11,040	-		_	11,043
Balance at the end of the period	\$	509,882	\$	154,306	\$	1,660,104	\$	2,324,292	\$	52,976	\$	2,377,268

For the year ended December 31, 2018

	2-month ECLs	(C	time ECLs follective ssessed)	(Neither Purchased Nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Im Lo	ference of pairment ss under gulations	1	Total
Balance at the beginning of the									
period	\$ 78,157	\$	63,923	\$ 2,106,749	\$ 2,248,829	\$	14,830	\$ 2	2,263,659
Changes of financial instruments recognized at the beginning of the current reporting period									
Transferred to Lifetime ECLs Transferred to credit-impaired	(1,861)		64,210	(1,634)	60,715		-		60,715
financial assets	(377)		(637)	62,160	61,146		-		61,146
Transferred to 12-month ECLs Derecognition of financial assets	1,251		(19,979)	(2,667)	(21,395)		-		(21,395)
in the period	(53,572)		(37,863)	(296,585)	(388,020)		-		(388,020)
New financial assets purchased or									
originated	80,911		54,338	287,174	422,423		-		422,423
Differences of impairment loss under regulations	_			· _	, _		37,522		37,522
Written off as bad debt expense	_		_	(442,217)	(442,217)		37,322		(442,217)
Effects of exchange rate changes and				(442,217)	(442,217)				(442,217)
others	 21,513		(7,027)	55,512	69,998		(1,882)		68,116
Balance at the end of the period	\$ 126,022	\$	116,965	\$ 1,768,492	\$ 2,011,479	\$	50,470	\$ 2	2,061,949

Lifetime ECLs

14. DISCOUNTS AND LOANS, NET

		Decem	ber	31
		2019		2018
Discounts and overdrafts	\$	1,695,073	\$	2,031,672
Short-term loans		392,424,750		447,675,391
Medium-term loans		416,600,240		373,978,341
Long-term loans		765,622,224		793,036,173
Export negotiations		1,349,222		1,722,435
Overdue loans		2,870,685		2,306,480
		1,580,562,194		1,620,750,492
Less: Allowance for impairment loss		(27,411,288)		(25,427,241)
	<u>\$</u>	1,553,150,906	\$	1,595,323,251

As of December 31, 2019, the amount of the domestic loans of the Bank, and allowance for impairment loss were \$1,399,537,914 thousand and \$24,940,626, respectively.

As of December 31, 2019 and 2018, the loan and credit balances of nonaccrual loans were \$2,870,685 thousand and \$2,306,480 thousand, respectively. The Company wrote off certain credits after completing the required legal procedures.

Refer to Note 50 for the impairment loss analysis of discounts and loans.

The changes in the gross carrying amounts of the Company's discounts and loans were as follows:

	12-month ECLs	Lifetime ECLs (Collectively Assessed)	Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets)	Total
Balance at the beginning of the period Transferred to Lifetime ECLs	\$ 1,549,705,049 (46,801,158)	\$ 59,275,734 46,990,289	\$ 11,769,709 (189,131)	\$ 1,620,750,492
Transferred to credit-impaired	, , ,		, ,	-
financial assets Transferred to 12-month ECLs	(2,152,909) 25,845,990	(645,716) (25,679,882)	2,798,625 (166,108)	-
Derecognition of financial assets			, ,	
in the period New financial assets purchased or	(550,920,774)	(24,127,993)	(1,964,927)	(577,013,694)
originated	526,341,874	13,219,914	1,486,650	541,048,438
Written off as bad debt expense Effects of exchange rate changes	-	-	(1,732,289)	(1,732,289)
and others	(1,825,584)	(528,827)	(136,342)	(2,490,753)
Balance at the end of the period	<u>\$ 1,500,192,488</u>	<u>\$ 68,503,519</u>	<u>\$ 11,866,187</u>	<u>\$ 1,580,562,194</u>
F 1 115 1 21	2010			
For the year ended December 31	1, 2018			
For the year ended December 3.		Lifetime ECLs (Collectively	Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired	
For the year ended December 3.	1, 2018 12-month ECLs		(Neither Purchased Nor Originated	Total
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired		(Collectively	(Neither Purchased Nor Originated Credit-impaired	Total \$ 1,457,798,099
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets	12-month ECLs \$ 1,399,416,842 (23,802,859) (2,338,666)	(Collectively Assessed) \$ 47,973,789 23,861,030 (909,935)	(Neither Purchased Nor Originated Credit-impaired Financial Assets) \$ 10,407,468 (58,171) 3,248,601	
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired	12-month ECLs \$ 1,399,416,842 (23,802,859)	(Collectively Assessed) \$ 47,973,789 23,861,030	(Neither Purchased Nor Originated Credit-impaired Financial Assets) \$ 10,407,468 (58,171)	
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period	12-month ECLs \$ 1,399,416,842 (23,802,859) (2,338,666)	(Collectively Assessed) \$ 47,973,789 23,861,030 (909,935)	(Neither Purchased Nor Originated Credit-impaired Financial Assets) \$ 10,407,468 (58,171) 3,248,601	
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period New financial assets purchased or originated	12-month ECLs \$ 1,399,416,842 (23,802,859) (2,338,666) 18,817,944	(Collectively Assessed) \$ 47,973,789 23,861,030 (909,935) (18,381,206)	(Neither Purchased Nor Originated Credit-impaired Financial Assets) \$ 10,407,468 (58,171) 3,248,601 (436,738) (313,462) 2,167,168	\$ 1,457,798,099 - - - (509,845,335) 673,010,137
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period New financial assets purchased or originated Written off as bad debt expense	12-month ECLs \$ 1,399,416,842 (23,802,859) (2,338,666) 18,817,944 (493,360,455)	(Collectively Assessed) \$ 47,973,789 23,861,030 (909,935) (18,381,206) (16,171,418)	(Neither Purchased Nor Originated Credit-impaired Financial Assets) \$ 10,407,468 (58,171) 3,248,601 (436,738) (313,462)	\$ 1,457,798,099 - - - (509,845,335)
Balance at the beginning of the period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period New financial assets purchased or originated	12-month ECLs \$ 1,399,416,842 (23,802,859) (2,338,666) 18,817,944 (493,360,455)	(Collectively Assessed) \$ 47,973,789 23,861,030 (909,935) (18,381,206) (16,171,418)	(Neither Purchased Nor Originated Credit-impaired Financial Assets) \$ 10,407,468 (58,171) 3,248,601 (436,738) (313,462) 2,167,168	\$ 1,457,798,099 - - - (509,845,335) 673,010,137

The changes in the allowance for doubtful accounts of the Company's discounts and loans were as follows:

	12-month ECLs	Lifetime ECLs (Collective Assessed)	Lifetime ECLs (Neither Purchased Nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Difference of Impairment Loss under Regulations	Total
Balance at the beginning of the	ф. 2014 440	ф. 1.66 7.22 1	ф. 4.012.c17	# 10 404 207	Ф 14 022 054	Ф 25 425 241
period Changes of financial instruments recognized at the beginning of the current reporting period	\$ 3,914,449	\$ 1,667,321	\$ 4,912,617	\$ 10,494,387	\$ 14,932,854	\$ 25,427,241
Transferred to Lifetime ECLs Transferred to credit-impaired	(204,305)	1,264,335	(31,674)	1,028,356	-	1,028,356
financial assets Transferred to 12-month ECLs Derecognition of financial assets	(29,036) 67,091	(31,906) (736,592)	1,254,439 (53,363)	1,193,497 (722,864)	-	1,193,497 (722,864)
in the period New financial assets purchased or	(1,454,266)	(426,466)	(751,770)	(2,632,502)	-	(2,632,502)
originated	1,471,924	398,566	1,535,468	3,405,958	-	3,405,958
Differences of impairment loss under regulations Written off as bad debt expense	-	-	(1,732,289)	(1,732,289)	2,601,846	2,601,846 (1,732,289)
Effects of exchange rate changes and others	(1,012,301)	(388,517)	253,065	(1,147,753)	(10,202)	(1,157,955)
Balance at the end of the period	\$ 2,753,556	<u>\$ 1,746,741</u>	\$ 5,386,493	\$ 9,886,790	<u>\$ 17,524,498</u>	\$ 27,411,288
For the year ended December	er 31, 2018					
	12-month ECLs	Lifetime ECLs (Collective Assessed)	Lifetime ECLs (Neither Purchased Nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Difference of Impairment Loss under Regulations	Total
Balance at the beginning of the						
period Changes of financial instruments recognized at the beginning of the	\$ 3,724,645	\$ 1,036,509	\$ 4,690,540	\$ 9,451,694	\$ 13,788,238	\$ 23,239,932
current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired	(99,353)	1,014,519	(11,229)	903,937	-	903,937
financial assets Transferred to 12-month ECL Derecognition of financial assets	(31,497) 105,340	(46,974) (543,839)	3,067,341 (94,806)	2,988,870 (533,305)	-	2,988,870 (533,305)
in the period New financial assets purchased or	(1,846,259)	(172,525)	(619,678)	(2,638,462)	-	(2,638,462)
originated Differences of impairment loss	1,968,981	516,685	1,213,006	3,698,672	-	3,698,672
under regulations Written off as bad debt expense	-	-	(3,070,128)	(3,070,128)	836,288	836,288 (3,070,128)
Effects of exchange rate changes and others	92,592	(137,054)	(262,429)	(306,891)	308,328	1,437
Balance at the end of the period	\$ 3,914,449	\$ 1,667,321	\$ 4,912,617	\$ 10,494,387	<u>\$ 14,932,854</u>	\$ 25,427,241

15. RESERVES FOR LOSSES ON GUARANTEES, LETTER OF CREDIT RECEIVABLE AND FINANCING COMMITMENTS

The changes in the Company's guarantee liability provisions, letter of credit receivable and provision of commitments were as follows:

	12-month ECLs	Lifetime ECLs (Collective Assessed)	Lifetime ECLs (Neither Purchased Nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Difference of Impairment Loss under Regulations	Total
Balance at the beginning of the period	\$ 251,972	\$ 73,536	\$ 5,118	\$ 330,626	\$ 71,327	\$ 401,953
Changes of financial instruments recognized at the beginning of the current reporting period	\$ 231,972	\$ 73,330	ф 3,110	\$ 550,020	\$ 71,327	\$ 401,933
Transferred to Lifetime ECLs Transferred to credit-impaired	(18,254)	107,038	(72)	88,712	-	88,712
financial assets Transferred to 12-month ECLs	(50) 2,843	(73) (36,618)	8,694 (664)	8,571 (34,439)	-	8,571 (34,439)
Derecognition of financial assets in the period	(112,336)	(25,362)	(1,836)	(139,534)	-	(139,534)
New financial assets purchased or originated	100,858	24,064	1,682	126,604	-	126,604
Differences of impairment loss under regulations Effects of exchange rate changes and	-	-	-	-	59,731	59,731
others	(32,172)	(46,941)	(7,421)	(86,534)		(86,534)
Balance at the end of the period	<u>\$ 192,861</u>	\$ 95,644	\$ 5,501	<u>\$ 294,006</u>	<u>\$ 131,058</u>	<u>\$ 425,064</u>
For the year ended December	r 31, 2018					
	12-month ECLs	Lifetime ECLs (Collective Assessed)	Lifetime ECLs (Neither Purchased Nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Difference of Impairment Loss under Regulations	Total
Balance at the beginning of the	ECLs	(Collective Assessed)	(Neither Purchased Nor Originated Credit- impaired Financial Assets)	Loss under IFRS 9	Impairment Loss under Regulations	
period Changes of financial instruments recognized at the beginning of the current reporting period	ECLs \$ 114,406	(Collective Assessed) \$ 21,997	(Neither Purchased Nor Originated Credit- impaired Financial Assets)	Loss under IFRS 9 \$ 159,797	Impairment Loss under	\$ 212,749
period Changes of financial instruments recognized at the beginning of the current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired	ECLs \$ 114,406 (434)	(Collective Assessed) \$ 21,997	(Neither Purchased Nor Originated Credit- impaired Financial Assets) \$ 23,394	Loss under IFRS 9 \$ 159,797	Impairment Loss under Regulations	\$ 212,749 19,096
period Changes of financial instruments recognized at the beginning of the current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs	ECLs \$ 114,406	(Collective Assessed) \$ 21,997	(Neither Purchased Nor Originated Credit- impaired Financial Assets)	Loss under IFRS 9 \$ 159,797	Impairment Loss under Regulations	\$ 212,749
period Changes of financial instruments recognized at the beginning of the current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period	ECLs \$ 114,406 (434) (24)	(Collective Assessed) \$ 21,997 19,554 (35)	(Neither Purchased Nor Originated Credit- impaired Financial Assets) \$ 23,394	Loss under IFRS 9 \$ 159,797 19,096 7,968	Impairment Loss under Regulations	\$ 212,749 19,096 7,968
period Changes of financial instruments recognized at the beginning of the current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period New financial assets purchased or originated	**ECLs	(Collective Assessed) \$ 21,997 19,554 (35) (11,728)	(Neither Purchased Nor Originated Credit- impaired Financial Assets) \$ 23,394 (24) 8,027 (445)	Loss under IFRS 9 \$ 159,797 19,096 7,968 (11,300)	Impairment Loss under Regulations	\$ 212,749 19,096 7,968 (11,300)
period Changes of financial instruments recognized at the beginning of the current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period New financial assets purchased or originated Differences of impairment loss under regulations	**ECLs \$ 114,406 (434) (24) 873 (58,795)	(Collective Assessed) \$ 21,997 19,554 (35) (11,728) (9,046)	(Neither Purchased Nor Originated Credit- impaired Financial Assets) \$ 23,394 (24) 8,027 (445) (19,919)	Loss under IFRS 9 \$ 159,797 19,096 7,968 (11,300) (87,760)	Impairment Loss under Regulations	\$ 212,749 19,096 7,968 (11,300) (87,760)
period Changes of financial instruments recognized at the beginning of the current reporting period Transferred to Lifetime ECLs Transferred to credit-impaired financial assets Transferred to 12-month ECLs Derecognition of financial assets in the period New financial assets purchased or originated Differences of impairment loss	**ECLs \$ 114,406 (434) (24) 873 (58,795)	(Collective Assessed) \$ 21,997 19,554 (35) (11,728) (9,046)	(Neither Purchased Nor Originated Credit- impaired Financial Assets) \$ 23,394 (24) 8,027 (445) (19,919)	Loss under IFRS 9 \$ 159,797 19,096 7,968 (11,300) (87,760)	Impairment Loss under Regulations \$ 52,952	\$ 212,749 19,096 7,968 (11,300) (87,760) 233,158

16. SUBSIDIARIES

Subsidiaries Included in the Consolidated Financial Statement

The subsidiaries included in the consolidated financial statements are as follows:

		Nature of	Ownership (%) December 31		-	
Investor	Subsidiary	Activities	2019	2018	Description	
The Bank	Indovina Bank Limited (Indovina Bank) (Note 1)	Bank business	50	50	Incorporated in Vietnam on November 21, 1990	
	Cathay United Bank (Cambodia) Corporation Limited (CUBC Bank) (Note 2)	Bank business	100	100	SBC Bank was incorporated in Cambodia on July 5, 1993, and renamed as CUBC as of January 14, 2014	
	Cathay United Bank (China) Co., Ltd. (CUBCN Bank) (Notes 3 and 4)	Bank business	100	100	Incorporated in China on September 3, 2018	

Note 1: Immaterial subsidiary, but its financial statements have been audited.

Note 2: As an immaterial subsidiary, its financial statements have not been audited.

Note 3: Upon approval by the authorities, the Shanghai Branch, Qingdao Branch and Shenzhen Branch of Cathay United Bank merged into CUBCN Bank. Please refer to Table 5 for the relevant investment information.

Note 4: As a major subsidiary, its financial statements have been audited.

17. INVESTMENTS MEASURED BY EQUITY METHOD, NET

	December 31		
	2019	2018	
Associates that are not individually material			
Taiwan Real-estate Management Corp. Taiwan Finance Corp.	\$ 100,958 	\$ 103,185 1,665,689	
	<u>\$ 1,776,839</u>	<u>\$ 1,768,874</u>	

Aggregate information on the Bank's associates that are not individually material is as follows:

	For the Year Ended December 31		
	2019	2018	
The Bank's share of			
Net profit	\$ 91,103	\$ 98,384	
Other comprehensive income	<u>(16,235</u>)		
Total comprehensive income for the period	\$ 74 <u>,868</u>	\$ 98,384	

Investments accounted for using the equity method and the Bank's share of profit and loss and other comprehensive income are calculated based on the financial statements which have not been audited; however, management believes there is no material impact on the equity method of accounting or the calculation of the share of profit or loss and other comprehensive income from the financial statements which have not been audited.

18. PROPERTY AND EQUIPMENT, NET

	Land	Buildings	Equipment	Transportation Equipment	Other Equipment	Leasehold Improvements	Construction in Progress and Prepayment for Equipment	Total
Cost								
Balance at January 1, 2019 Additions Disposals Reclassification Others (Note) Exchange differences Balance at December 31, 2019 Accumulated depreciation	\$ 15,379,376 - 336,788 (2,400) (13,841) 	\$ 10,311,364 (1,758) (73,548) (6,878) 10,229,180	\$ 4,875,823 531,717 (517,498) 114,952 (15,617) 4,989,377	\$ 109,873 10,599 (12,205) 10,366 (2,434) 116,199	\$ 7,712,030 248,472 (397,796) 316,618 (4,082)	\$ 63,049 826 (1,439) 206,700 (7,942) 261,194	\$ 489,005 618,074 - (689,037) - (3,073) 414,969	\$ 38,940,520 1,409,688 (930,696) 222,839 (2,400) (53,867) 39,586,084
and impairment								
Balance at January 1, 2019 Depreciation Disposals Reclassification Exchange differences Balance at December 31, 2019	- - - -	4,355,181 207,152 (1,758) (41,113) (2,364) 4,517,098	3,103,465 561,214 (509,546) 2,369 (28,538) 3,128,964	81,073 8,064 (11,853) 1,242 (1,586) 76,940	5,934,810 499,019 (382,568) (91,207) (4,804) 5,955,250	25,427 9,433 (1,353) 86,935 12,970	- - - -	13,499,956 1,284,882 (907,078) (41,774) (24,322) 13,811,664
		4,317,098	3,128,904	76,940	3,933,230	155,412	-	15,611,004
<u>Net</u>								
Balance at December 31, 2019	<u>\$ 15,699,923</u>	\$ 5,712,082	<u>\$ 1,860,413</u>	\$ 39,259	<u>\$ 1,919,992</u>	<u>\$ 127,782</u>	<u>\$ 414,969</u>	\$ 25,774,420
Cost								
Balance at January 1, 2018 Additions Disposals Reclassification Others (Note) Exchange differences Balance at December 31, 2018	\$ 15,377,939 - - (2,400) 	\$ 10,303,217 	\$ 4,234,054 1,062,104 (562,089) 134,234 - - - - - - - - - - - - - - - - - - -	\$ 108,381 3,003 (4,617) - - - - - - - - - - - - - - - - - - -	\$ 7,707,438 260,739 (696,600) 430,886 - - - - - - - - - - - - - - - - - -	\$ 59,762 4,752 (3,861) 580 	\$ 532,452 652,317 (698,338) - 2,574 - 489,005	\$ 38,323,243 1,982,915 (1,267,167) (134,313) (2,400) 38,242 38,940,520
Accumulated depreciation and impairment								
Balance at January 1, 2018 Depreciation Disposals Reclassification Exchange differences Balance at December 31, 2018		4,137,330 215,366 (551) 3,036 4,355,181	3,118,151 460,080 (561,432) - 86,666 	75,243 7,733 (4,196) 2,293 81,073	6,099,041 489,147 (657,099) (182) 3,903	20,180 8,356 (3,861) - - - - - - - - - - - - - - - - - - -		13,449,945 1,180,682 (1,226,588) (733) 96,650
<u>Net</u>								
Balance at December 31, 2018	<u>\$ 15,379,376</u>	\$ 5,956,183	<u>\$ 1,772,358</u>	\$ 28,800	<u>\$ 1,777,220</u>	<u>\$ 37,622</u>	<u>\$ 489,005</u>	<u>\$ 25,440,564</u>

Note: The urban renewal demolition and resettlement compensation fees.

Depreciation of the above-mentioned items of property and equipment was calculated on a straight-line basis over their estimated useful lives as follows:

Buildings

Main buildings	50 to 60 years
Buildings renovation	5 years
Equipment	3 to 8 years
Transportation equipment	3 to 7 years
Miscellaneous equipment	3 to 15 years
Leasehold improvements	5 years

As of December 31, 2019 and 2018, no property and equipment was pledged.

19. RENTAL AGREEMENTS

a. Right-of-use assets - 2019

		December 31, 2019
	Carrying amount of right-of-use assets Land and buildings Equipment Transportation equipment	\$ 4,182,603 3,082 40,412
		\$ 4,226,097
		For the Year Ended December 31, 2019
	Additions of right-of-use assets	<u>\$ 1,131,171</u>
	Depreciation expense of right-of-use assets Land and buildings Equipment Transportation equipment	\$ 1,198,208 1,364 25,429 \$ 1,225,001
b.	Lease liabilities - 2019	
		December 31, 2019
	Carrying amount of lease liabilities	<u>\$ 4,246,381</u>
	The discount rate intervals of lease liabilities were as follows:	
		December 31, 2019
	Land and buildings Equipment Transportation equipment	0.35%-5.22% 0.70%-4.15% 0.70%-5.38%
c.	Other lease information	D 41 W
		For the Year Ended December 31, 2019
	Short-term rental expense Low value assets rental expense Variable lease payment expense not included in measurable lease liabilities Gross cash outflow for leases	\$\ 778,845 \\$\ 370,687 \\$\ 460 \\$\ 2,376,698

The Company leases certain assets which qualify as short-term leases and certain assets which qualify as low-value asset leases. The Company has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

2018

The Bank

The total future minimum lease payments for non-cancellable operating leases was as follows:

	December 31, 2018
Within a year	\$ 1,435,798
Over one year and up to five years	3,501,147
Over five years	<u>277,120</u>
	<u>\$ 5,214,065</u>

Indovina Bank

As of December 31, 2018, Indovina Bank has signed an effective tenancy operating lease agreement, and the estimated rent payable for the future lease period was as follows:

	December 31, 2018
Within a year Over one year and up to five years Over five years	\$ 35,813 70,604 <u>9,342</u>
	<u>\$ 115,759</u>

CUBC Bank

As of December 31, 2018, CUBC Bank has signed an effective tenancy operating lease agreement, and the estimated rent payable for the future lease period was as follows:

	December 31, 2018
Within a year	\$ 2,912
Over one year and up to five years	23,114
Over five years	49,341
	<u>\$ 75,367</u>

CUBCN Bank

As of December 31, 2018, CUBCN Bank has signed an effective tenancy operating lease agreement, and the estimated rent payable for the future lease period was as follows:

	December 31, 2018
Within a year Over one year and up to five years	\$ 114,211 25,107
Over five years	
	<u>\$ 139,318</u>

20. INVESTMENT PROPERTIES, NET

	Land	Buildings	Total
January 1, 2019 Transfer from property and equipment Disposal Loss on fair value adjustment	\$ 1,311,785 283,729 (797,667) (76,643)	\$ 127,901 80,308 (64,070) (7,839)	\$ 1,439,686 364,037 (861,737) (84,482)
December 31, 2019	<u>\$ 721,204</u>	<u>\$ 136,300</u>	<u>\$ 857,504</u>
January 1, 2018 Disposal Loss on fair value adjustment	\$ 1,414,476 (85,900) (16,791)	\$ 132,896 - (4,995)	\$ 1,547,372 (85,900) (21,786)
December 31, 2018	<u>\$ 1,311,785</u>	<u>\$ 127,901</u>	<u>\$ 1,439,686</u>

- a. As of December 31, 2019 and 2018, no investment property was pledged.
- b. Part of the purpose of holding certain real estate of the Bank is to earn rent or capital surplus, the other part is for self-use. When the part held for self-use is less than 5% of the individual real estate, the real estate is classified as investment properties.
- c. The Bank's investment properties were appraised by qualified real estate appraisers in Taiwan, according to the "Technical Rules for Real Estate Valuation." The valuation dates were December 31, 2019 and 2018, respectively.

	December 31			
Appraiser Firm	2019	2018		
REPro KnightFrank Real Estate Appraiser Firm	Hong-Xu, Wu; You-Xiang Cai	Hong-Xu, Wu; Zhi-Hao, Wu; Fu-Xue, Shi		

The fair value is supported by observable evidence in the market. The main appraisal approaches applied include the income approach (such as discounted cash flow model and direct capitalization approach), comparison approach and cost approach. The significant unobservable inputs mainly include discount rates and the related adjustments, and categorized as level 3 of fair value hierarchy.

1) As office buildings have market liquidity and their rent levels are similar to comparable properties in the same neighborhood, their fair values have been determined using the comparison approach and the income approach.

Net rental income is based on current market practices, assuming an annual rent increase of between 0% to 1.5% to extrapolate the total income of the underlying property, excluding losses as a result of idle and other reasons and related operation costs.

According to the ROC Real Estate Appraisers Association Gazette No. 5, the house tax is based on the actual payment data. If there is no payment data, the house tax is based on the reference tables of current house values from each city to estimate the total current house value, including the area of the subject property and related public utilities, and then calculated with tax rates according to House Tax Act.

Land value tax is based on the changes in the announced land value of the underlying property in the past few years and the actual payment data, to further extrapolate the announced land value in the future.

According to the ROC Real Estate Appraisers Association Gazette No. 5, replacement allowance for significant renovation costs is calculated based on 10% of construction costs and amortized over 20 years as assumed useful life.

The main parameters are as follows:

	Decem	iber 31
	2019	2018
Direct capitalization rate	1.98%-5.76%	1.98%-5.73%
Overall capital interest rate	0.76%-2.89%	0.76%-2.89%

2) The fair value has been determined by the method of land development analysis and comparison. Reserved area in hillside land, scenic land site, areas for agriculture, animal husbandry and forestry had fewer market transactions as their uses are restricted by law, and will not have significant changes in the market in the near future.

	Decen	nber 31
	2019	2018
Rate of return Overall capital interest rate	-	15.00% 2.11%

Operating expenses directly related to investment properties

	For the Year Ended December 31				
	2019	2018			
Generating rental income Not generating rental income	\$ - <u>5,088</u>	\$ - 5,841			
	<u>\$ 5,088</u>	<u>\$ 5,841</u>			

21. INTANGIBLE ASSETS, NET

	Computer Software	Goodwill	Other	Total
Cost				
Balance at January 1, 2019 Additions Disposal Reclassification Exchange differences Balance at December 31, 2019 Accumulated amortization and impairment	\$ 2,434,377 541,113 (227,080) 81,747 (13,627) 2,816,530	\$ 6,997,944 - - - (6,628) 6,991,316	\$ 22,170 3,877 - (26,145) 	\$ 9,454,491 544,990 (227,080) 55,602 (20,157) 9,807,846
Balance at January 1, 2019 Amortization Disposal Exchange differences Balance at December 31, 2019	1,433,552 455,632 (227,080) (7,447) 1,654,657	- - - -	- - - -	1,433,552 455,632 (227,080) (7,447) 1,654,657
Net				
Balance at December 31, 2019	<u>\$ 1,161,873</u>	\$ 6,991,316	<u>\$</u>	\$ 8,153,189
Cost				
Balance at January 1, 2018 Additions Disposal Reclassification Exchange differences Balance at December 31, 2018 Accumulated amortization and	\$ 1,996,800 216,018 (128,096) 352,850 (3,195) 2,434,377	\$ 6,988,589 - - - - - - - - - - - - - - - - - - -	\$ 20,043 1,536 - - - - - - - - - - - - - - - - - - -	\$ 9,005,432 217,554 (128,096) 352,850 6,751 9,454,491
impairment Balance at January 1, 2018 Amortization Disposal Exchange differences Balance at December 31, 2018 Net	1,219,448 346,180 (128,096) (3,980) 1,433,552	- - - -	- - - -	\$ 1,219,448 346,180 (128,096) (3,980) 1,433,552
Balance at December 31, 2018	<u>\$ 1,000,825</u>	<u>\$ 6,997,944</u>	<u>\$ 22,170</u>	<u>\$ 8,020,939</u>

The Bank acquired China United Trust & Investment Corporation on December 29, 2007 and recognized goodwill amounting to \$6,673,083 thousand.

The Bank acquired 70% of the shares of CUBC Bank on December 13, 2012 and recognized goodwill amounting to US\$10,570 thousand, then further acquired the remaining 30% of shares on September 16, 2013.

During impairment testing of goodwill, the Bank treated individual business units as cash-generating units (CGUs). Goodwill resulting from the merger was allocated to the relevant CGUs. The recoverable amount was determined by the value in use of each CGU and was calculated at the present values of the cash flow forecast for the next five years based on the going-concern assumption. Future cash flows were estimated on the basis of present operations and will be adjusted depending on the business outlook and economic trends.

22. OTHER ASSETS, NET

	December 31			
		2019		2018
Prepayments	\$	871,053	\$	1,290,579
Temporary payments and suspense accounts		259,245		262,216
Interbank clearing funds		8,499,483		6,388,757
Refundable deposits, net		18,283,158		26,380,549
Operating deposits, net		592,456		647,932
Others		119,861		91,215
	<u>\$</u>	<u>28,625,256</u>	\$	35,061,248

23. DEPOSITS FROM THE CENTRAL BANK AND BANKS

	December 31			
	2019	2018		
Call loans from banks	\$ 42,890,945	\$ 38,548,992		
Due to Chunghwa Post Co., Ltd.	17,709,405	18,044,685		
Banks overdrafts	461,623	250,092		
Deposits from the Central Bank and banks	23,046,155	24,588,464		
	<u>\$ 84,108,128</u>	\$ 81,432,233		

24. NOTES AND BONDS ISSUED UNDER REPURCHASE AGREEMENTS

	December 31			
	2019	2018		
Asset-based securities	\$ 6,317,892	\$ 9,190,302		
Corporate bonds	4,825,574	8,797,043		
Asset collateral guarantee securities	-	529,543		
Government bonds	12,102,396	22,326,980		
Financial debentures	24,934,590	15,130,641		
	<u>\$ 48,180,452</u>	<u>\$ 55,974,509</u>		

25. PAYABLES

	December 31			
		2019		2018
Accounts payable	\$	3,494,933	\$	7,412,232
Accrued expenses		8,731,588		7,615,684
Payable on bonds trade settle		1,347,019		69,289
Interest payable		4,705,505		4,625,435
Receipts under custody		823,815		424,823
Banker's acceptances		902,894		1,600,282
Others		6,859,049		3,165,225
	<u>\$ 2</u>	26,864,803	\$	<u>24,912,970</u>

26. DEPOSITS AND REMITTANCES

		December 31			
		2019		2018	
Checking deposits	\$	15,020,465	\$	16,283,818	
Demand deposits		532,155,747		532,446,775	
Demand savings deposits		931,589,893		847,465,305	
Time deposits		469,560,296		457,517,789	
Time savings deposits		382,673,168		367,920,662	
Negotiable certificates of deposits		2,931,000		4,313,300	
Outward remittances and remittances payable		1,400,539		1,714,041	
	<u>\$</u>	2,335,331,108	<u>\$ /</u>	<u>2,227,661,690</u>	

27. FINANCIAL DEBENTURES

	December 31			31
		2019		2018
2nd issue of subordinated financial debentures in 2009; fixed rate at				
2.6%; maturity: July 2019	\$	_	\$	1,500,000
1st issue of subordinated financial debentures in 2011; fixed rate at	Ψ		Ψ	1,500,000
1.72%; maturity: March 2021		1,500,000		1,500,000
2nd issue of subordinated financial debentures in 2011; fixed rate at		,,		, ,
1.72%; maturity: June 2021		2,500,000		2,500,000
1st issue of subordinated financial debentures in 2012; fixed rate at				
1.48%; maturity: June 2019		-		200,000
1st issue of subordinated financial debentures in 2012; fixed rate at				
1.65%; maturity: June 2022		4,200,000		4,200,000
2nd issue of subordinated financial debentures in 2012; fixed rate at				
1.65%; maturity: August 2022		5,600,000		5,600,000
1st issue of subordinated financial debentures in 2013; fixed rate at				
1.55%; maturity: April 2020		100,000		100,000
1st issue of subordinated financial debentures in 2013; fixed rate at		0.000.000		0.000.000
1.7%; maturity: April 2023		9,900,000		9,900,000 (Continued)
				(Continued)

	December 31			
		2019		2018
1st issue of subordinated financial debentures in 2014; fixed rate at 1.7%; maturity: May 2021 1st issue of subordinated financial debentures in 2014; fixed rate at	\$	3,000,000	\$	3,000,000
1.85%; maturity: May 2024		12,000,000		12,000,000
2nd issue of subordinated financial debentures in 2017; fixed rate at 1.85%; maturity: April 2027 2nd issue of subordinated financial debentures in 2017; fixed rate at		12,700,000		12,700,000
1.5%; maturity: April 2024		2,400,000		2,400,000
	<u>\$</u>	53,900,000	<u>\$</u>	55,600,000 (Concluded)

28. OTHER FINANCIAL LIABILITIES

	December 31	
	2019	2018
Principal of structured products	\$ 65,604,222	\$ 76,509,334

29. PROVISIONS

	December 31	
	2019	2018
Reserve for employee benefits		
Defined benefit plan	\$ 2,619,553	\$ 2,401,044
Retired employees' preferential interest deposits	620,011	595,751
Reserve for losses on guarantees	163,312	163,715
Reserve for finance commitments	255,433	233,938
Other operating reserve	33,725	22,680
Other reserve - letter of credit	6,319	4,299
	Φ 2 600 252	Φ 2 421 427
	<u>\$ 3,698,353</u>	<u>\$ 3,421,427</u>

30. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The Bank adopted a pension plan under the Labor Pension Act (the "LPA"), which is a state-managed defined contribution plan. Under the LPA, the Bank makes monthly contributions equal to 6% of each employee's monthly salary to employees' pension accounts in the Bureau of Labor Insurance.

For the years ended December 31, 2019 and 2018, the Company recognized expenses of \$401,391 thousand and \$381,983 thousand in the consolidated statements of comprehensive income in accordance with the defined contribution plan, respectively.

b. Defined benefit plan

The defined benefit plan adopted by domestic branches of the Bank under the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Bank contributes a fixed proportion of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Bank assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Bank is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (the "Bureau"); the Bank had no right to influence the investment policy and strategy.

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

	December 31	
	2019	2018
Present value of defined benefit obligation Fair value of plan assets	\$ 5,655,806 (3,036,253)	\$ 5,296,875 (2,895,831)
Net defined benefit liabilities	<u>\$ 2,619,553</u>	<u>\$ 2,401,044</u>

Movements in net defined benefit liabilities (assets) were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Polonge et January 1, 2019	G	\$ (2,727,610)	
Balance at January 1, 2018 Service cost	\$ 5,234,640	\$ (2,727,010)	\$ 2,507,030
Current service cost	152,137		152,137
Past service cost and loss on settlements	440	-	440
Net interest expense (income)	56,704	(30,739)	25,965
Recognized in profit or loss	209,281	(30,739)	178,542
Remeasurement		(30,137)	
Return on plan assets (excluding amounts			
included in net interest)	_	(63,595)	(63,595)
Actuarial (gain) loss		(00,000)	(00,000)
Changes in financial assumptions	75,454	_	75,454
Experience adjustments	551	_	551
Recognized in other comprehensive income	76,005	(63,595)	12,410
Contributions from the employer		(296,926)	(296,926)
Benefits paid	(223,039)	223,039	-
Effects of exchange rate change	(12)		(12)
Balance at December 31, 2018	5,296,875	(2,895,831)	2,401,044
			(Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Service cost			
Current service cost	\$ 155,274	\$ -	\$ 155,274
Net interest expense (income)	50,532	(28,621)	21,911
Recognized in profit or loss	205,806	(28,621)	177,185
Remeasurement			
Return on plan assets (excluding amounts			
included in net interest)	-	(76,572)	(76,572)
Actuarial (gain) loss			
Changes in financial assumptions	150,928	-	150,928
Experience adjustments	265,101	<u>-</u> _	265,101
Recognized in other comprehensive income	416,029	(76,572)	339,457
Contributions from the employer	-	(298,149)	(298,149)
Benefits paid	(262,920)	262,920	-
Effects of exchange rate change	16		<u> </u>
Balance at December 31, 2019	\$ 5,655,806	<u>\$ (3,036,253)</u>	\$ 2,619,553 (Concluded)

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

- 1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets shall not be below the interest rate for a 2-year time deposit with local banks.
- 2) Interest risk: A decrease in interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plans' debt investments.
- 3) Salary risk: The present value of the defined benefit obligation is calculated using the future salaries of plan participants. As such, an increase in the salaries of the plan participants will increase the present value of the defined benefit obligation.

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

	December 31	
	2019	2018
Discount rate(s)	0.72%	0.97%
Expected rate(s) of salary increase	2.00%	2.00%

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

	December 31	
	2019	2018
Discount rate(s)		
0.5% increase	\$ (288,294)	\$ (280,685)
0.5% decrease	\$ 310,906	\$ 301,869
Expected rate(s) of salary increase		
0.5% increase	\$ 299,600	\$ 291,277
0.5% decrease	\$ (282,641)	\$ (275,390)

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

	December 31	
	2019	2018
Expected contributions to the plans for the next year	<u>\$ 297,480</u>	\$ 296,937
Average duration of the defined benefit obligation	10.6 years	10.9 years

c. Employee' preferential interest deposit plan

The Bank's obligations on preferential interest deposits for current employees and those retired employees and current employees after retirement are in compliance with the Bank's internal rules. Under the Regulations Governing the Preparation of Financial Reports by Public Banks, the excess of the interests incurred from post-employment preferential interest deposits over those inputed by the market rate should be applicable to the requirements for defined benefit plans in IAS 19 Employee Benefits since the employee's retirement and accrued by actuarial method.

The amounts included in the consolidated balance sheet arising from the Bank's obligation on the post-employment preferential interest deposits plan were as follows:

	December 31		
	2019	2018	
Present value of defined benefit obligation Fair value of plan assets	\$ 620,011	\$ 595,751 	
Net defined benefit liabilities (assets)	<u>\$ 620,011</u>	<u>\$ 595,751</u>	

The changes in present value of obligations on the post-employment preferential interest deposits were as follows:

	Present Value of the Defined Benefit Obligation
Balance at January 1, 2018	\$ 579,063
Net interest expense (income)	21,449
Recognized in profit or loss	21,449
Remeasurement	
Experience adjustments	83,789
Recognized in other comprehensive income	83,789
Benefits paid	(88,550)
Balance at December 31, 2018	<u>595,751</u>
Net interest expense (income)	22,043
Recognized in profit or loss	22,043
Remeasurement	
Experience adjustments	94,322
Recognized in other comprehensive income	94,322
Benefits paid	(92,105)
Balance at December 31, 2019	<u>\$ 620,011</u>

Under Order No. 10110000850 issued by the FSC, effective March 15, 2012, the actuarial assumptions for the employee benefits expense of the post-employment preferential deposit were as follows:

	December 31	
	2019	2018
Discount rate(s)	4.00%	4.00%
Return on deposit	2.00%	2.00%
Withdrawal rate of post-employment preferential deposits	1.00%	1.00%

If possible reasonable changes in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of obligations on the post-employment preferential interest deposits would have increased (decreased) as follows:

	December 31	
	2019	2018
Discount rate(s)		
0.5% increase	\$ (29,761)	\$ (29,192)
0.5% decrease	\$ 32,241	\$ 31,575
Mortality rate(s)		
Adjusted to 105%	<u>\$ (6,200)</u>	<u>\$ (5,958)</u>
Adjusted to 95%	<u>\$ 6,200</u>	\$ 5,958
Excess interest rate of employee preferential interest deposits		
0.5% increase	<u>\$ 145,083</u>	<u>\$ 139,406</u>
0.5% decrease	<u>\$ (145,083)</u>	<u>\$ (139,406</u>)

The sensitivity analysis presented above shows the effect on the present value of obligations on the post-employment preferential interest deposits of a change in single assumption while all other assumptions remain unchanged. The sensitivity analysis presented above might not be representative of the actual change in the present value of obligations on the post-employment because it was unlikely that the change in assumptions would occur independently of each other because some of the assumptions might be correlated.

	December 31	
	2019	2018
Expected contributions to the plans for the next year	\$ 93,999	\$ 89,352
Average duration of the defined benefit obligation	10.4 years	10.5 years

31. OTHER LIABILITIES

	December 31	
	2019	2018
Advance receipts	\$ 554,785	\$ 592,919
Temporary receipts and suspense accounts	2,065,820	1,917,586
Guarantee deposits received	5,218,681	3,418,257
Contract liabilities	1,411,216	1,382,319
Others	13	2
	\$ 9,250,515	\$ 7,311,083

32. EQUITY

a. Capital stock

Common stock

	December 31	
	2019	2018
Number of shares authorized (in thousands)	10,165,835	9,119,762
Amount of shares authorized	<u>\$ 101,658,353</u>	<u>\$ 91,197,623</u>
Number of shares issued and fully paid (in thousands)	<u>10,165,835</u>	9,119,762
Amount of shares issued	<u>\$ 101,658,353</u>	\$ 91,197,623

On April 26, 2018, the Bank's board of directors resolved on behalf of the shareholder to transfer the retained earnings of \$12,593,563 thousand to capital and issued 1,259,356 thousand common shares. After the capital increase, the authorized and paid-in capital was \$91,197,623 thousand.

On May 3, 2019, the Bank's board of directors resolved on behalf of the shareholder to transfer the retained earnings of \$5,460,730 thousand in the form of shareholder's dividends to increase capital and issued 546,073 thousand new shares for total authorized capital of \$96,658,353 thousand. The aforementioned capital increase was approved by the FSC and the recapitalization record date was July 3, 2019.

In response to the "Domestic systemically important banks (D-SIBs)" policy announced by the FSC and for business growth, on August 15, 2019, the Bank's board of directors resolved on behalf of the shareholder to issue common stock for cash by private placement. The common stock price is \$20 per share and the upper limit is 500,000 thousand shares. The issue raised funds up to \$10,000,000 thousand, and the issue was made once within one year from the date of the resolution in the shareholder's meeting.

The capital increase was approved by the FSC, and 500,000 thousand new shares were issued on December 4, 2019, the recapitalization record date. Both the authorized capital and the paid-in capital were increased to \$101,658,353 thousand.

b. Capital surplus

	December 31	
	2019	2018
Capital surplus from the merger Additional paid in capital Others	\$ 10,949,303 27,648,873 89,100	\$ 10,949,303 22,648,873 12,807
	<u>\$ 38,687,276</u>	\$ 33,610,983

On August 15, 2019, Cathay Financial Holdings' board of directors resolved to increase its capital and retained 10% of the capital increase in accordance with the law for subscription by employees of the parent company and subsidiaries. The Company recognized salary expense and capital surplus of \$76,293 thousand for share-based payments in December 2019.

c. Legal reserve

A legal reserve should be appropriated until it equals the Company's paid-in-capital. The legal reserve may be used to offset deficit. If the Company has no deficit and the legal reserve has exceeded 25% of its paid-in capital, the excess may be transferred to capital or distributed in cash. In addition, based on the Banking Act, if the legal reserve is less than the Company's paid-in capital, the amount that may be distributed in cash should not exceed 15% of the Company's paid-in-capital. In the event that the accumulated legal reserve equals or exceeds the Company's paid-in capital or the Company is sound in both its finance and business operations and have set aside legal reserve in compliance with the Company Law, the restrictions stipulated in the preceding paragraph shall not apply.

d. Special reserve

According to Rule No. 1030006415 issued by the FSC, on the first-time adoption of the fair value model for investment properties, the Bank shall set aside the same amount of special reserve as the net fair value increment transferred to retained earnings. After transferring the fair value increment of investment properties to retained earnings, if the Bank could not set aside a sufficient amount to the special reserve, the Bank could only set aside the amount according to the retained earnings balance, and the special reserve that is not enough to be set aside would not be counted in the accumulated fair value increment of investment properties. When the Bank adopts the fair value model for subsequent measurement of investment properties, the Bank shall set aside an equal amount of special reserve when transferring the fair value increment of investment properties to retained earnings. For any subsequent reversal of accumulated fair value increment of investment properties or disposal of investment properties, the amount reversed may be distributed.

According to Rule No. 1010012865, Rule No. 1010047490 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs," the Bank should appropriate to or reverse from its special reserve certain specified amounts. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses and is thereafter distributed.

The above special reserve may be used to offset a deficit; if the reserve has reached at least 50% of the paid-in capital, half of this special reserve may be capitalized.

According to Rule No. 10510001510 issued by the FSC, the Bank should appropriate between 0.5% and 1% of net income after tax to special reserve when it appropriates earnings of 2016 through 2018. Since 2017, the Company is allowed to reverse special reserve at the amount of the costs of employee transfer and arrangement in connection with the development of financial technology.

The changes in the special reserve of the Bank for the years ended December 31, 2019 and 2018 were as follows:

	Investment Properties	Others	Total
Balance at January 1, 2019 Decrease	\$ 1,625,296 	\$ 1,308,512 (749,830)	\$ 2,933,808 (749,830)
Balance at December 31, 2019	<u>\$ 1,625,296</u>	\$ 558,682	\$ 2,183,978
Balance at January 1, 2018 Increase	\$ 1,620,294 5,002	\$ 357,069 951,443	\$ 1,977,363 <u>956,445</u>
Balance at December 31, 2018	<u>\$ 1,625,296</u>	\$ 1,308,512	<u>\$ 2,933,808</u>

e. Retained earnings and dividends policy

According to the Bank's Articles of Incorporation, if the Bank made a profit in a fiscal year, the profit shall be first utilized for paying taxes and offsetting deficits of prior years, if any. If the legal reserve is less than the paid-in capital, the legal reserve and the special reserve shall be appropriated in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Bank's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders.

In response to a competitive environment and business growth while considering capital adequacy, the Bank adopts a residual dividend policy. According to the Bank's business plan, except for a necessary amount of capital to be reserved for dividend distribution, the remainder shall be distributed as cash dividends as a principle. However, the maximum cash dividend may not exceed the regulatory limit.

The appropriations of earnings for 2018 and 2017 which were approved by the board of directors on behalf of the shareholders in accordance with the Company Act on May 3, 2019 and April 26, 2018, respectively, were as follows:

	Appropriation	Appropriation of Earnings		er Share (NT\$)
	2018	2017	2018	2017
Legal reserve	\$ 6,304,671	\$ 5,807,539		
Special reserve	(749,830)	951,443		
Cash dividends	10,000,000	-	\$ 1.10	\$ -
Stock dividends	5,460,730	12,593,563	0.60	1.60

The appropriation of earnings for 2019 had been proposed by the Company's board of directors on March 11, 2020; the amounts were as follows:

	Appropriation of Earnings	Dividends Per Share (NT\$)
Legal reserve	\$ 6,590,232	
Special reserve	49,731	
Cash dividends	10,000,000	\$ 0.98
Stock dividends	5,327,477	0.52

The appropriation of earnings for 2019 is subject to the resolution of the shareholder in the shareholder's meeting.

f. Other equity items

1) Exchange differences on translating the financial statements of foreign operations

	For the Year Ended December 31	
	2019	2018
Balance at the beginning of the period Exchange differences generated from translating the net	<u>\$ (1,008,735)</u>	\$ (532,567)
assets of foreign operations Tax effects Other comprehensive income	(827,484) <u>165,496</u> (661,988)	(619,272) <u>143,104</u> (476,168)
Balance at the end of the period	\$ (1,670,723)	\$ (1,008,735)

2) Unrealized gains (losses) on financial assets at FVTOCI

	For the Year Ended December 31		
	2019	2018	
Balance at the beginning of the period Recognized for the period	\$ 2,730,681	\$ 5,598,353	
Unrealized gains (losses)			
Debt instruments	5,161,336	(685,627)	
Equity instruments	3,976,271	(892,775)	
Net remeasurement of loss allowance	(100,110)	156,486	
Share from associates accounted for using equity method	(16,757)	-	
Reclassification adjustments			
Disposal of investment in debt instruments	(1,098,892)	(1,133,855)	
Tax effect	(675,804)	175,953	
Other comprehensive income	7,246,044	<u>(2,379,818</u>)	
Cumulated unrealized gain of equity instruments transferred to retained earnings due to disposal	147,494	(487,854)	
Balance at the end of the period	<u>\$ 10,124,219</u>	\$ 2,730,681	

3) Remeasurement of defined benefit plans

	For the Year Ended December 31		
	2019	2018	
Balance at the beginning of the period	\$ (1,369,428)	<u>\$ (1,340,811)</u>	
Remeasurement of defined benefit plans	(433,779)	(96,202)	
Share from associates accounted for using equity method	522	-	
Tax effect	86,756	67,585	
Other comprehensive income	(346,501)	(28,617)	
Balance at the end of the period	<u>\$ (1,715,929)</u>	<u>\$ (1,369,428)</u>	

4) Property revaluation surplus

	For the Year Ended December 31		
	2019	2018	
Balance at the beginning of the period Gains on property revaluation	\$ 249,819 217,619	\$ 302,676	
Tax effect	(9,470)	2,287	
Other comprehensive income Transferred to retained earnings	<u>208,149</u> 	$\frac{2,287}{(55,144)}$	
Balance at the end of the period	<u>\$ 457,968</u>	<u>\$ 249,819</u>	

5) Changes in the fair value of financial liabilities attributable to changes in the credit risk

	For the Year Ended December 31	
	2019	2018
Balance at the beginning of the period Change in fair value attribute to changes in credit risk Tax effect	\$\frac{774,084}{(3,280,741)} 656,149	\$ (1,191,026) 2,402,577 (437,467)
Other comprehensive income	(2,624,592)	1,965,110
Balance at the end of the period	<u>\$ (1,850,508</u>)	<u>\$ 774,084</u>

g. Non-controlling interests

	For the Year Ended December 31	
	2019	2018
Balance at the beginning of the period	\$ 4,041,481	\$ 3,844,089
Net income attributable to non-controlling interests	663,761	233,019
Exchange differences on translating the financial statements of		
foreign entities	(83,877)	108,009
Change in non-controlling interests	(393,414)	(281,542)
Gains from investments in debt instruments measured at fair		
value through other comprehensive income	<u>181,625</u>	137,906
Balance at the end of the period	<u>\$ 4,409,576</u>	<u>\$ 4,041,481</u>

33. NET INTEREST REVENUE

	December 31	
	2019	2018
Interest income		
Discounts and loans	\$ 40,813,171	\$ 38,215,733
Investment securities	11,645,953	9,746,521
Revolving credit	2,350,482	2,259,144
Due from banks and call loans to banks	2,500,888	2,665,875
Others	815,775	900,595
	58,126,269	53,787,868
Interest expense		
Deposits	15,115,327	13,461,527
Financial debentures	965,302	1,031,899
Structured products	2,303,842	2,353,289
Due to the Central Bank and other banks	2,147,608	1,719,308
Notes and bonds issued under repurchase agreements	999,143	1,768,001
Others	149,267	56,588
	21,680,489	20,390,612
	<u>\$ 36,445,780</u>	<u>\$ 33,397,256</u>

34. NET SERVICE FEE REVENUE

	December 31	
	2019	2018
Service fee income		
Credit card business	\$ 7,879,902	\$ 7,261,710
Trust business	3,627,966	3,095,725
Loan business	1,130,327	1,287,529
Cross-selling marketing	6,116,820	6,042,027
Others	2,853,622	2,235,840
	21,608,637	19,922,831
Service fee expenses		
Credit card business	3,230,870	2,126,709
Others	1,287,337	1,117,944
	4,518,207	3,244,653
	\$ 17,090,430	\$ 16,678,178

The Bank also engaged in the business of providing online payment services. For the years ended December 31, 2019 and 2018, service fee revenue was \$505 thousand and \$636 thousand, respectively, and the revenue and other income resulting from the fund collected were both zero.

35. GAIN (LOSS) ON FINANCIAL ASSETS OR LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	For the Year Ended December 31	
	2019	2018
Stock	\$ 136,198	\$ 136,708
Short-term bills	1,122,993	1,141,235
Fund beneficiary certificates	36,483	(73,208)
Investment in debt instrument	(3,933,623)	(1,012,594)
Derivative financial instruments	8,341,655	5,700,840
	\$ 5,703,706	\$ 5,892,981
Realized gain (loss)		
Gain (loss) on disposal	\$ 5,398,045	\$ 3,034,239
Interest income	1,701,126	2,898,969
Dividend income	14,137	55,463
Interest expense	(2,250,265)	(1,792,011)
Unrealized gain (loss)		
Valuation gain	<u>840,663</u>	1,696,321
	<u>\$ 5,703,706</u>	<u>\$ 5,892,981</u>

36. REALIZED GAIN OR LOSS ON FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	For the Year Ended December 31	
	2019	2018
Net gain on disposal - debt instruments Dividend income	\$ 1,098,892 994,684	\$ 1,133,854
	<u>\$ 2,093,576</u>	\$ 2,663,486

37. IMPAIRMENT LOSS ON ASSETS (REVERSAL)

	For the Year Ended December 31	
	2019	2018
Debt instruments at FVTOCI Debt instruments at amortised cost	\$ 17,914 	\$ 289,971 15,733
	<u>\$ 18,623</u>	<u>\$ 305,704</u>

38. BAD DEBTS EXPENSE, COMMITMENT AND GUARANTEE LIABILITY PROVISION

	For the Year Ended December 31	
	2019	2018
Discounts and loans	\$ 2,679,804	\$ 4,609,309
Receivables	103,990	209,691
Guarantee liability provisions	14,077	78,414
Financial commitment provisions	22,994	115,267
Others	<u>31,915</u>	18,860
	\$ 2,852,780	\$ 5,031,541

39. EMPLOYEE BENEFITS EXPENSES

	For the Year Ended December 31	
	2019	2018
Salaries	\$ 14,920,396	\$ 14,206,894
Insurance	1,043,524	952,882
Post-employment benefits	612,481	595,572
Remuneration of directors	9,130	10,574
Others	296,342	291,163
	<u>\$ 16,881,873</u>	\$ 16,057,085

For the years ended December 31, 2019 and 2018, the average number of the Company's employees was 12,076 and 12,078, including 18 and 16 non-executive directors, respectively.

As of December 31, 2019 and 2018, the number of employees of the Company was 12,133 and 12,203, respectively.

Under the Articles of Incorporation of the Bank, the Bank accrued employees' compensation and remuneration of directors at the rates of 0.05% and no higher than 0.1%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors (after offsetting accumulated deficits).

Employees' compensation and the remuneration of directors for the years ended December 31, 2019 and 2018 which have been approved by the Bank's board of directors on March 11, 2020 and March 21, 2019, respectively, were as follows:

	For the Year Ended December 31	
	2019	2018
Employees' compensation	\$ 12,661	\$ 12,022
Remuneration of directors	\$ 6,000	\$ 6,300

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

There was no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2018 and 2017, respectively.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2019 and 2018 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

40. DEPRECIATION AND AMORTIZATION EXPENSES

	For the Year Ended December 31	
	2019	2018
Depreciation expense		
Property and equipment	\$ 1,284,882	\$ 1,180,682
Right-of-use assets	1,225,001	-
Amortization expense		
Intangible assets	455,632	346,180
	<u>\$ 2,965,515</u>	<u>\$ 1,526,862</u>

41. OTHER GENERAL AND ADMINISTRATIVE EXPENSE

	For the Year Ended December 31	
	2019	2018
Rental expenses	\$ 1,149,9	992 \$ 2,367,639
Tax expenses	2,291,0	578 2,231,266
Product promotion expenses	4,371,0	3,626,395
Insurance expenses	731,	117 697,168
Others	5,413,5	4,833,733
	<u>\$ 13,958,2</u>	<u>\$ 13,756,201</u>

42. INCOME TAX

a. Income tax recognized in profit or loss

Main components of income tax expense were as follows:

	For the Year Ended December 31		
	2019	2018	
Current tax			
In respect of the period	\$ 3,682,546	\$ 3,042,624	
Adjustment for prior year	235,138	(21,810)	
Deferred tax			
In respect of the period	(437,684)	20,390	
Effect of change in tax rate	-	(35,504)	
Income tax of overseas subsidiaries	500,972	224,304	
Income tax expense recognized in profit or loss	\$ 3,980,972	\$ 3,230,004	

Reconciliations of accounting profit and income tax expense/average effective tax rate and the applicable tax rate were as follows:

	For the Year Ended December 31			
	2019	2018		
Profit before tax from continuing operations	<u>\$ 26,467,386</u>	\$ 24,483,355		
Income tax expense calculated at the statutory rate	\$ 5,293,477	\$ 4,896,671		
Nondeductible expenses in determining taxable income	1,933	4,772		
Tax-exempt income	(1,640,095)	(1,594,216)		
Unrecognized deductible temporary differences	(173,426)	(131,835)		
Income tax of overseas branches	(4,081)	(56,417)		
Adjustments for prior years' tax	235,138	(21,810)		
Income tax of overseas subsidiaries	268,026	132,839		
Income tax expense recognized in profit or loss	\$ 3,980,972	\$ 3,230,004		

In 2018, it was announced that the Income Tax Act in the ROC was amended and the corporate income tax rate was adjusted from 17% to 20%. The effect of the change in tax rate on deferred tax expense has been fully recognized in the period of tax rate change. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings has been reduced from 10% to 5%.

According to the Ministry of Finance's Taiwan Finance Tax No. 910458039, "The joint declaration of business income tax by profit-seeking enterprises in accordance with Article 49 of the Financial Holding Company Act and Article 40 of the Business Mergers and Acquisitions Act" released on February 12, 2003, where a Financial Holding Company holds more than or equal to 90% of the outstanding issued shares of a domestic subsidiary, and the period of shareholdings in the subsidiary has reached 12 months of the tax year, the Financial Holding Company may elect to be the taxpayer and jointly declare profit-seeking enterprise tax. The Bank elected to jointly declare the profit-seeking enterprise income tax since 2003 and the undistributed retained earnings since 2002 with its parent company Cathay Financial Holdings Co., Ltd. and its subsidiaries. Additional tax payable or receivable due to the joint declaration of income tax is recognized under the receivables (payables) for allocation of integrated income tax systems account.

b. Income tax recognized directly in equity

	For the Year Ended December 3		
	2019	2018	
Current tax			
Derecognition of equity instruments at FVTOCI	\$ (52,904)	\$ (54,127)	
Deferred tax			
Derecognition of equity instruments at FVTOCI	<u>52,904</u>	54,127	
Total income tax recognized directly in equity	<u>\$ -</u>	<u>\$ -</u>	

c. Income tax recognized in other comprehensive income

	For the Year End	ded December 31
	2019	2018
Deferred tax		
Recognized in OCI		
Remeasurement of defined benefit plans	\$ (86,756)	\$ (67,585)
Gains on property revaluation	9,470	(2,287)
Changes in the fair value attributable to changes in the credit		
risk of financial liabilities designated as at FVTPL	(656,149)	437,467
Translation of foreign operations	(165,496)	(143,104)
Fair value changes of financial assets at FVTOCI	675,804	(175,953)
Total income tax recognized in other comprehensive income	<u>\$ (223,127)</u>	<u>\$ 48,538</u>

d. Deferred tax assets and liabilities

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized Directly in Equity	Closing Balance
Temporary differences					
Allowance for doubtful account	\$ 855,397	\$ 540,165	\$ -	\$ -	\$ 1,395,562
Financial assets at FVTPL	(526,153)	(5,238)	656,149	-	124,758
Investment property	(67,415)	30	(9,470)	-	(76,855)
Equity instruments at FVTOCI	(202,925)	-	(445,064)	(52,904)	(700,893)
Debt instruments at FVTOCI	51,033	-	(230,740)	-	(179,707)
Impairment of Property and equipment	155,414	(2,366)	-	-	153,048
Investments accounted for using the equity					
method	(310,679)	(46,390)	-	-	(357,069)
Fair value adjustments arising from					
business combinations	(714,020)	(46,712)	-	-	(760,732)
Reserve for land value increment tax	(225,617)	21,298	-	-	(204,319)
Defined benefit plan	480,209	(24,189)	67,891	-	523,911
Retired employees' Preferential interest					
deposits	119,150	(14,013)	18,865	-	124,002
Exchange differences resulting from					
translating the financial statements of a					
foreign operation	252,185	-	165,496	-	417,681
Deferred income of customer loyalty					
programmes	276,463	5,779	-	-	282,242
Other	31,157	9,320			40,477
Deferred tax expense/(income)		<u>\$ 437,684</u>	<u>\$ 223,127</u>	<u>\$ (52,904</u>)	
Net deferred tax assets/(liabilities)	<u>\$ 174,199</u>				\$ 782,106
Net deferred income tax assets/(liabilities) of					
overseas branches	<u>\$ 42,336</u>				<u>\$ 30,961</u>
Net deferred income tax assets/(liabilities) of					
foreign subsidiaries	<u>\$ (1,761)</u>				<u>\$ (198,856)</u>
Reflected in balance sheet as follows:					
Deferred tax assets	<u>\$ 1,872,542</u>				\$ 3,864,923
Deferred tax liabilities	<u>\$ (1,657,768</u>)				<u>\$ (3,250,712</u>)

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized Directly in Equity	Closing Balance
Temporary differences					
Allowance for doubtful account	\$ 558,294	\$ 297,103	\$ -	\$ -	\$ 855,397
Financial assets at FVTPL	24,846	(113,532)	(437,467)	-	(526,153)
Investment property	(63,289)	(6,413)	2,287	-	(67,415)
Equity instruments at FVTOCI	(319,909)	-	171,111	(54,127)	(202,925)
Debt instruments at FVTOCI	46,191	-	4,842	-	51,033
Impairment of Property and equipment	126,437	28,977	-	-	155,414
Investments accounted for using the equity					
method	(217,489)	(93,190)	-	-	(310,679)
Fair value adjustments arising from					
business combinations	(565,505)	(148,515)	-	-	(714,020)
Reserve for land value increment tax	(238,701)	13,084	-	-	(225,617)
Defined benefit plan	426,170	8,221	45,818	-	480,209
Retired employees' Preferential interest					
deposits	98,441	(1,058)	21,767	-	119,150
Exchange differences resulting from					
translating the financial statements of a					
foreign operation	109,081	-	143,104	-	252,185
Deferred income of customer loyalty					
programmes	252,932	23,531	-	-	276,463
Other	24,251	6,906	<u>-</u> _	<u>-</u> _	31,157
Deferred tax expense/(income)		\$ 15,114	\$ (48,538)	\$ (54,127)	
Net deferred tax assets/(liabilities)	\$ 261,750				\$ 174,199
Net deferred income tax assets/(liabilities) of	·				
overseas branches	\$ 66,424				\$ 42,336
Net deferred income tax assets/(liabilities) of					
foreign subsidiaries	\$ (132,679)				\$ (1,76 <u>1</u>)
Reflected in balance sheet as follows:					
Deferred tax assets	\$ 2,227,960				\$ 1,872,542
Deferred tax liabilities	\$ (2,032,465)				\$ (1,657,768)

e. Income tax assessments

The Bank's income tax returns through 2014 had been assessed; however, the Bank has invoked the administrative remedy for cases on employee benefits for fiscal years 2011, 2012 and 2014.

f. As of December 31, 2019 and 2018, the deductible temporary differences for which no deferred tax assets have been recognized in the consolidated balance sheet were \$2,258,220 thousand and \$3,125,350 thousand, respectively.

43. EARNINGS PER SHARE

Unit: Dollar Per Share

	For the Year En	ded December 31
	2019	2018
Basic earnings per share	<u>\$ 2.25</u>	<u>\$ 2.17</u>

The number of shares outstanding was retrospectively adjusted to reflect the effects of the stock dividends distributed in the year following earnings appropriation. The earnings and weighted average number of ordinary shares outstanding used in the computation of earnings per share were retrospectively adjusted as follows:

Net income

	For the Year En	ded December 31
	2019	2018
Net income for calculating basic earnings per share	\$ 21,822,653	\$ 21,020,332
Number of shares		
	Unit: In The	ousands of Shares
	For the Year En	ded December 31
	2019	2018
Weighted average number of ordinary shares used for calculating		

9,704,191

9,665,835

44. RELATED-PARTY TRANSACTIONS

basic earnings per share

Transactions between the Company and its related parties are summarized as follows:

a. Related parties and relationships

Related Party	Relationship with the	Company
Cathay Financial Holding Co., Ltd.	Parent company	
Taiwan Real-estate Management Corp.	Associate	
Taiwan Finance Corp.	Associate	
Cathay Life Insurance Co., Ltd.	Other related party	
Cathay Century Insurance Co., Ltd.	Other related party	
Cathay Securities Co., Ltd.	Other related party	
Cathay Securities (Hong Kong) Ltd.	Other related party	
Cathay Venture Inc.	Other related party	
Cathay Securities Investment Trust Co., Ltd.	Other related party	
Cathay Securities Investment Consulting Co., Ltd.	Other related party	
Cathay Investment Inc.	Other related party	
Conning Asia Pacific Ltd.	Other related party	
Cathay Life Insurance (Vietnam) Co., Ltd.	Other related party	
Cathay Insurance (Vietnam) Co., Ltd.	Other related party	
Cathay Futures Co., Ltd.	Other related party	
Symphox Information Co., Ltd.	Other related party	
Seaward Card Co., Ltd.	Other related party	
Cathay Dragon Fund etc.	Other related party	
Cathay United Bank Foundation	Other related party	
Cathay Life Insurance Employees' Welfare Committee	Other related party	
Cathay Real Estate Development Employees' Welfare Committee	Other related party	
Cathay Private Equity Co., Ltd.	Other related party	
•		(Continued)

Related Party	Relationship with the Company

Vietinbank	Other related party
Cathay Real Estate Development Co., Ltd.	Other related party
Lin Yuan Property Management Co., Ltd.	Other related party
Lin Yuan (Shanghai) Real Estate Co., Ltd.	Other related party
Tailin Management Consulting Ltd.	Other related party
Hangzhou Kunning Health Consulting Co., Ltd.	Other related party
Cathay Hospitality Management Co., Ltd.	Other related party
Cathay Healthcare Management Co., Ltd.	Other related party
Neo Cathay Power Co., Ltd.	Other related party
PSS Co., Ltd.	Other related party
Kao-Yi International Investment Co., Ltd.	Other related party
Yua-Yung Marketing (Taiwan) Co., Ltd.	Other related party
Directors, managers, and their relatives and affiliates	Other related party
	(~ 1 1 1)

(Concluded)

b. Significant transactions between the Company and related parties

1) Loans and deposits

Loans

<u>December 31, 2019</u>

				Loan Cla	ssification		Differences in		
Туре	Account Volume or Name of Related Party	Highest Balance	Ending Balance	Normal Loans	Nonperforming Loans	Collaterals	Terms of Transaction with Those for Unrelated Parties	Bad debt Expense 01.01-12.31	Allowance for Bad Debt Expense - Ending Balance
Consumer loans	27	\$ 66,064	\$ 9,862	V	s -	None	None	\$ 27	\$ 175
Self-used housing mortgage loans	252	1,959,428	1,765,551	V	-	Real estate and securities	None	3,062	22,640
Others	Cathay Real Estate Development Co., Ltd.	2,040,000	250,000	V	-	Real estate	None	(1,500)	2,500
Others	Taiwan Real-estate Management Corp.	33,000	33,000	V	-	Real estate	None	(69)	330
Others	Yua-Yung Marketing (Taiwan) Co., Ltd.	10,000	10,000	V	-	Real estate	None	100	100

<u>December 31, 2018</u>

				Loan Classification			Differences in		
Туре	Account Volume or Name of Related Party	Highest Balance	Ending Balance	Normal Loans	Nonperforming Loans	Collaterals	Terms of Transaction with Those for Unrelated Parties	Bad debt Expense 01.01-12.31	Allowance for Bad Debt Expense - Ending Balance
Consumer loans	11	\$ 18,875	\$ 3,107	V	\$ -	None	None	\$ 157	\$ 31
Self-used housing mortgage loans	208	1,762,016	1,455,805	V	-	Real estate	None	(1,046)	18,481
Others	Cathay Real Estate Development Co., Ltd.	400,000	210,000	V	-	Real estate	None	4,000	4,000
Others	Taiwan Real-estate Management Corp.	32,000	30,000	V	-	Real estate	None	79	399
Others	Cathay Securities Co., Ltd.	423,000	-	V	-	Securities	None	-	-
Others	PSS Co., Ltd.	5,000	-	V	-	Real estate	None	-	-

Associates Taiwan Real-estate Management Corp. Other related parties Cathay Real Estate Development Co., Ltd.	\$ 588 1,449	<u>\$ 562</u> 61
Cathay Securities Co., Ltd.	1,777	38
Yua-Yung Marketing (Taiwan) Co., Ltd.	108	30
PSS Co., Ltd.	100	14
Others	27,944	
Others		<u>24,648</u>
	<u>29,501</u>	<u>24,761</u>
	\$ 30,089	<u>\$ 25,323</u>
<u>Deposits</u>		
	Decem	ber 31
Related Parties	2019	2018
Parent company		
Cathay Financial Holding Co., Ltd.	<u>\$ 79,099</u>	<u>\$ 139,920</u>
Other related parties		
Cathay Life Insurance Co., Ltd.	23,917,315	30,744,095
Cathay Century Insurance Co., Ltd.	2,474,304	2,724,193
Cathay Securities Co., Ltd.	2,034,207	2,550,090
Cathay Securities (Hong Kong) Ltd.	63	66
Cathay Futures Co., Ltd.	1,429,607	1,345,519
Cathay Venture Inc.	25,405	113,380
Cathay Securities Investment Trust Co., Ltd.	143,714	149,076
Cathay Securities Investment Consulting Co., Ltd.	204,526	187,533
Cathay Investment Inc.	34,946	-
Cathay Real Estate Development Co., Ltd.	257,587	199,127
Cathay Hospitality Management Co., Ltd.	6,203	16,523
Cathay Life Insurance (Vietnam) Co., Ltd.	497,313	1,809,689
Cathay Insurance (Vietnam) Co., Ltd.	168,057	147,705
Cathay Dragon Fund etc.	84,784	137,823
Symphox Information Co., Ltd.	154,446	122,139
Conning Asia Pacific Ltd.	78,469	78,721
Cathay Private Equity Co., Ltd.	15,989	33,114
Cathay United Bank Foundation	532,486	541,888
Cathay Life Insurance Employees' Welfare Committee	2,142,876	2,221,665
Cathay Real Estate Development Employees' Welfare		
Committee	397,367	386,529
Neo Cathay Power Co., Ltd.	11	137,979
Lin Yuan (Shanghai) Real Estate Co., Ltd.	990,004	623,035
Tailin Management Consulting Ltd.	31,074	-
Hangzhou Kunning Health Consulting Co., Ltd.	312	-
Others	7,614,151	7,457,000
	43,235,216	51,726,889
	<u>\$ 43,314,315</u>	<u>\$ 51,866,809</u>

Interest Revenue
For the Year Ended December 31
2019 2018

	Interest Expense			
	For the Year End	ded December 31		
	2019	2018		
D				
Parent company	Φ 006	Φ 52.6		
Cathay Financial Holding Co., Ltd.	<u>\$ 906</u>	<u>\$ 726</u>		
Other related parties	20.074	50.000		
Cathay Life Insurance Co., Ltd.	39,874	50,892		
Cathay Century Insurance Co., Ltd.	8,305	7,808		
Cathay Securities Co., Ltd.	4,520	4,458		
Cathay Futures Co., Ltd.	7,784	7,578		
Cathay Venture Inc.	11	60		
Cathay Securities Investment Trust Co., Ltd.	167	192		
Cathay Securities Investment Consulting Co., Ltd.	581	633		
Cathay Investment Inc.	2	-		
Cathay Real Estate Development Co., Ltd.	64	54		
Cathay Hospitality Management Co., Ltd.	4	23		
Cathay Life Insurance (Vietnam) Co., Ltd.	88,585	53,554		
Cathay Insurance (Vietnam) Co., Ltd.	12,812	6,652		
Cathay Dragon Fund etc.	3	2		
Symphox Information Co., Ltd.	771	668		
Conning Asia Pacific Ltd.	1,348	874		
Cathay Private Equity Co., Ltd.	13	18		
Cathay United Bank Foundation	5,611	5,604		
Cathay Life Insurance Employees' Welfare Committee	22,204	22,754		
Cathay Real Estate Development Employees' Welfare	•	,		
Committee	4,232	4,082		
Neo Cathay Power Co., Ltd.	34	97		
Lin Yuan (Shanghai) Real Estate Co., Ltd.	24,426	8,683		
Tailin Management Consulting Ltd.	53	-		
Hangzhou Kunning Health Consulting Co., Ltd.	1	_		
Others	73,234	63,281		
	294,639	237,967		
	\$ 295,545	\$ 238,693		
	<u> </u>	<u> </u>		
	Decem	ber 31		
Item/Related Parties	2019	2018		
<u>Due from commercial banks</u>				
Other related parties				
Vietinbank	\$ 5,216,825	\$ 5,309,375		
Vicundank	\$ 3,210,623	\$ 3,309,313		
Due to commercial banks				
Other related parties				
Vietinbank	5,265,818	5,360,670		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,203,010	2,200,070		

	Interest Income (Expense)				
		ded December 31			
Item/Related Parties	2019	2018			
Due from commercial banks					
Other related parties Vietinbank	\$ 4,994	\$ 5,228			
Due to commercial banks					
Other related parties Vietinbank	(5,346)	(5,205)			

Transactions terms with related parties are similar to those with third parties, expect for the preferential interest rates set by the employees' interest rates on deposits and loans within prescribed limits.

2) Guarantees

December 31, 2019

Related Parties	Highest Balance		Gu Ending Li		nce of rantee bility isions	Rate Interval	Collaterals
Other related party Yua-Yung Marketing (Taiwan) Co., Ltd.	\$ 54,440	\$	54,440	\$	5	0.65-0.8%	Securities

3) Derivatives

December 31, 2019

Related Parties	Derivative	Contract	Nominal	Evaluation	Balance Sheet	Amount
Related Farties	Contracts	Period	Principal	(Loss) Gain	Account	Balance
Cathay Life Insurance Co., Ltd.	SWAP - exchange between customers (USD)	2019.01.30- 2020.11.06	\$ 78,727,190	\$ 2,074,629	Valuation adjustment for FVTPL financial assets	\$ 25,148
					Valuation adjustment for FVTPL financial liabilities	(1,172,591)
Cathay Century Insurance Co., Ltd.	SWAP - exchange between customers (USD)	2019.02.12- 2020.11.16	2,790,826	24,314	Valuation adjustment for FVTPL financial assets	367
					Valuation adjustment for FVTPL financial liabilities	(32,862)
	SWAP - exchange between customers (EUR)	2019.08.20- 2020.02.24	25,312	(974)	Valuation adjustment for FVTPL financial assets	1
					Valuation adjustment for FVTPL financial liabilities	(859)

December 31, 2018

Dalada d Dandia	Derivative	Contract	Nominal	Evaluation	Balance Sheet	Amount
Related Parties	Contracts	Period	Principal	(Loss) Gain Account		Balance
Cathay Life Insurance Co., Ltd.	SWAP - exchange between customers (USD)	2018.01.18- 2019.12.09	\$ 115,310,216	\$ 3,885,814	Valuation adjustment for FVTPL financial assets	\$ 1,852,498
					Valuation adjustment for FVTPL financial liabilities	(64,937)
Cathay Century Insurance Co., Ltd.	SWAP - exchange between customers (USD)	2018.05.07- 2019.05.28	2,726,017	85,529	Valuation adjustment for FVTPL financial assets	21,757
					Valuation adjustment for FVTPL financial liabilities	(3,143)
	SWAP - exchange between customers (EUR)	2018.10.18- 2019.01.22	26,402	(1,011)	Valuation adjustment for FVTPL financial assets	-
					Valuation adjustment for FVTPL financial liabilities	(302)

4) Acquisitions of property and equipment

	Purchase Price				
	For the Year End	ded Decer	mber 31		
Related Parties	2019	20	18		
Parent company Cathay Financial Holding Co., Ltd.	\$ 26,681	\$	-		

5) Lease agreement - the Company as lessee

	Acquisition Of Right-Of-Use Assets				
	For the Year En	ded December 🤅	31		
Related Parties	2019	2018			
Other related parties					
Cathay Life Insurance Co., Ltd.	\$ 151,494	\$ -			
Cathay Real Estate Development Co., Ltd.	25,777	-			

The lease period and contract method are in accordance with the contract provisions, the general lease terms are two to five years and the payments are mainly made on a monthly basis.

	Lease Liabilities				
	Dece	mber 31			
Related Parties	2019	2	018		
Other related parties					
Cathay Life Insurance Co., Ltd.	\$ 1,956,803	\$	-		
Cathay Real Estate Development Co., Ltd.	20,954		-		

_	Rental Expense						
	For the Year Ended December 31						
Related Parties		2019 2018		2018	Payment Term		
Other related parties							
Cathay Life Insurance Co., Ltd.	\$	204,573	\$	681,206	Mon	thly	
Cathay Real Estate Development Co., Ltd.		2,502		19,706	Mon	thly	
				Refunda	ble Dep	osits	
				Dece	mber 3	1	
Related Parties				2019		2018	
Other related parties							
Cathay Life Insurance Co., Ltd.			\$	188,158	\$	189,738	
Cathay Real Estate Development Co., Ltd.				4,625		4,608	

6) Lease agreement - the Company as lessor

	Rental Income				
	For the Year Ended December 31				
Related Parties	2019		Payment Term		
Other related parties					
Cathay Life Insurance Co., Ltd.	\$ 48,998	\$ 53,239	Monthly		
Cathay Century Insurance Co., Ltd.	9,009	9,105	Monthly		
Cathay Securities Co., Ltd.	9,673	9,679	Monthly		
Cathay United Bank Foundation 4,		4,633	Monthly		
		Guarantee D	eposits Received		
		Dece	mber 31		
Related Parties		2019	2018		
Other related parties					
Cathay Life Insurance Co., Ltd.		\$ 12,019	\$ 12,019		
Cathay Century Insurance Co., Ltd.		2,196	2,247		
Cathay Securities Co., Ltd.		2,610	2,610		

The lease period and contract method are in accordance with the contract provisions, the general lease terms are one to three years and the payments are mainly made on a monthly basis.

7) Shares transactions - issuance of shares for cash by the Bank

		For the Year Ended December 3 2019 2018				
Related Parties	Items	2019	2018			
Parent company						
Cathay Financial Holdings Co., Ltd.	Ordinary shares	\$ 10,000,000	<u>\$</u>			

8) Others

	For the Year Ended December	
Item/Related Parties	2019	2018
Commissions and handling fees income		
Other related parties Cathay Life Insurance Co., Ltd. Cathay Century Insurance Co., Ltd. Cathay Securities Co., Ltd. Cathay Securities Investment Trust Co., Ltd. Cathay Securities Investment Consulting Co., Ltd. Cathay Real Estate Development Co., Ltd.	\$ 7,333,637 154,046 80,628 39,887 15,492 5,980	\$ 7,088,674 160,875 67,593 43,295 17,710 5,384
Miscellaneous income		
Other related parties Cathay Life Insurance Co., Ltd.	7,847	2,760
Insurance claims received		
Other related parties Cathay Century Insurance Co., Ltd.	25,322	436
Commissions and handling fees expense		
Other related parties Cathay Securities Co., Ltd	2,507	3,408
Other operating expenses		
Other related parties Cathay Life Insurance Co., Ltd. Cathay Securities Co., Ltd Cathay Securities Investment Trust Co., Ltd. Cathay Real Estate Development Co., Ltd Symphox Information Co., Ltd. Lin Yuan Property Management Co., Ltd. Cathay Healthcare Management Co., Ltd Seaward Card Co., Ltd	168,589 1,975 7,200 5,090 567,936 9,327 20,155 224,726	188,212 3,335 7,200 5,078 662,504 10,660 22,796 210,023
Insurance expenses paid		
Other related parties Cathay Life Insurance Co., Ltd. Cathay Century Insurance Co., Ltd.	67,136 178,060	51,299 178,718

	December 31 2019 2018		1	
Item/Related Parties			9 2018	
Receivable for allocation of integrated income tax systems				
Parent company Cathay Financial Holding Co., Ltd.	\$	-	\$	485,773
Receivables				
Other related parties Cathay Securities Investment Trust Co., Ltd.		4,342		3,356
Receivables for commission of collecting insurances				
Other related parties Cathay Life Insurance Co., Ltd.		43,208		89,605
Refundable deposit				
Other related parties Cathay Futures Co., Ltd.		508,694		78,095
Accrued expenses				
Other related parties Seaward Card Co., Ltd.		37,704		34,034
Accounts payable				
Other related parties Cathay Century Insurance Co., Ltd. Symphox Information Co., Ltd.		49,719 123,346		51,461 19,680
Payables for allocation of integrated income tax systems account				
Parent company Cathay Financial Holding Co., Ltd.		1,703,104		-

The Bank paid construction planning and design maintenance services fees to Lin Yuan Property Management and Maintenance Co., Ltd. in the amount of \$15,137 thousand and \$15,449 thousand for the years ended December 31, 2019 and 2018, respectively.

The Bank purchased bonus points from Symphox Information Co., Ltd. The bonus points can be earned by the Bank's customers and exchanged for merchandise. As of December 31, 2019 and 2018, the unconverted bonus points amounted to \$25,797 thousand and \$15,150 thousand, respectively.

The terms of the foregoing transactions with related parties are similar to those with third parties.

Combined disclosures have been made for transactions with related parties that are under a certain percentage of the total amount of all transactions with related parties and non-related parties.

c. Compensation of management personnel

Compensation of directors and other management personnel for the years ended December 31, 2019 and 2018 was as follows:

	For the Year Ended December 31		
	2019	2018	
Short-term employment benefits	\$ 314,949	\$ 283,440	
Post-employment benefits	8,258	4,984	
Others	54	26	
	<u>\$ 323,261</u>	\$ 288,450	

The key management personnel of the Company includes the chairman, vice chairman, directors, president and vice president.

45. PLEDGED ASSETS

The Company had been used as collaterals to apply for loans, Central Bank overdraft and apply for provisional seizure of certain assets were as follows:

	Decem	December 31		
	2019 2018			
Financial assets at FVTOCI	\$ 10,006,563	\$ 14,353		
Investments in debt instruments at amortised cost	47,521,950	64,423,052		

46. CONTINGENCIES AND COMMITMENTS

In addition to those mentioned in other notes, the contingencies and commitments were as follows:

a. The Bank

1) Entrusted items and guarantees:

	December 31		
	2019	2018	
Trust and security held for safekeeping	\$ 720,298,578	\$ 750,988,804	
Travelers checks for sale	257,286	299,765	
Collection and payment on behalf of customers	36,708,754	36,044,907	
Book-entry for government bonds and depository for			
short-term marketable securities under management	429,136,051	400,999,309	
Entrusted financial management business	8,205,335	21,016,659	
Guarantees on duties and contracts	12,957,304	13,534,956	
Unused commercial letters of credit	4,496,860	4,217,682	
Irrevocable loan commitments	189,579,513	154,605,389	
Unused credit card line commitments	623,899,000	591,612,472	
Underwritten securities	1,350,000	1,000,000	

2) As of December 31, 2019, the Bank's significant lawsuits and proceedings arising due to normal business relationships are as follows:

Lee & Li, Attorneys-at-Law and SanDisk Corporation of USA alleged that the embezzlement case of Liu Wei-Chieh (an employee of Lee & Li), which occurred in October 2003 was caused by the negligence of the Bank in its operation, and the plaintiffs claimed damages from the Bank in the amount of approximately \$991,002 thousand. The case has been pending in the court since July 2007, and the Bank won favorable decisions in both the first and second instances. The proceedings are currently pending in the Supreme Court. Both the Bank and its attorneys hold that this case will not have a material adverse effect on the financial position of the Bank.

b. Indovina Bank

Entrusted item and guarantees:

	December 31		
	2019	2018	
Financial guarantee contracts Unused commercial letters of credit	\$ 1,380,304 662,214	\$ 2,262,842 1,017,801	

c. CUBC Bank

Entrusted item and guarantees:

	December 31		
	2019	2018	
Financial guarantee contracts	\$ 23,652	\$ 78,161	
Credit card line commitments	280,881	447,040	
Irrevocable loan commitments	488,140	-	

d. CUBCN Bank

Entrusted item and guarantees:

	December 31		
	2019	2018	
Financial guarantee contracts	\$ 427,986	\$ 170,835	
Unused commercial letters of credit	95,593	773,078	
Irrevocable loan commitments	1,050,539	623,837	

47. ASSETS AND LIABILITIES MANAGED UNDER THE BANK'S TRUST IN ACCORDANCE WITH THE TRUST ENTERPRISE ACT

a. In accordance with Article 17 of "Enforcement Rules of the Trust Enterprise Act", the balance sheet and income statement based on trust and details of trust properties and equipment were as follows:

Balance Sheet of Trust Accounts

	Dece	December		
	2019	2018		
<u>Trust assets</u>				
Bank deposits	\$ 14,818,480	\$ 27,484,176		
Bonds	65,130,652	53,357,390		
Stocks	39,785,831	38,234,682		
Mutual funds	220,805,984	215,085,447		
Insurances	2,798,937	2,854,984		
Receivables	5,402	4,477		
Real estate				
Land	44,457,530	45,380,631		
Buildings (net)	30,180	37,127		
Construction in progress	1,789,404	829,976		
Custody securities	109,985,903	120,626,362		
Total trust assets	<u>\$ 499,608,303</u>	\$ 503,895,252		
<u>Trust liabilities</u>				
Payables	\$ 636	\$ 267		
Tax payable	55	80		
Custody securities payable	109,985,903	120,626,362		
Other liabilities	406	409		
Trust capital	389,831,160	383,385,057		
Provisions and accumulated losses				
Net income	358,359	192,056		
Accumulated losses	(568,216)	(308,979)		
Total trust liabilities	<u>\$ 499,608,303</u>	\$ 503,895,252		

Income Statement of Trust Accounts

For the Years Ended **December 31** 2019 2018 Trust revenue Interest income 31,156 30,456 3,461 Rent revenue 1,675 Cash dividends income 398,140 313,499 6,060 Realized capital income - stocks 9,245 Realized capital income - mutual funds 8,832 18,844 Unrealized capital income - stocks 10,880 14,314 Unrealized capital income - mutual funds 1,559 1,616 388,250 Total trust revenue 461,487 Trust expense Management fee 19,974 19,377 Supervisor fee 1,801 1,530 Taxes 1,083 1,225 Service fee 929 1,036 17,341 Realized capital loss - mutual funds 11,743 Unrealized capital loss - stocks 571 737 Unrealized capital loss - mutual funds 1,289 653 Others 60,776 159,257 Total trust expense 196,194 103,128 Income equalization Net income (loss) before tax 358,359 192,056 Income tax expense Net income (loss) \$ 192,056 \$ 358,359

Note: The above trust income statements were not included in the Bank's income statements.

Trust Property and Equipment Accounts

	Decem	ıber 31
Investment Portfolio	2019	2018
Bank deposits	\$ 14,818,480	\$ 27,484,176
Bonds	65,130,652	53,357,390
Stocks	39,785,831	38,234,682
Mutual funds	220,805,984	215,085,447
Insurances	2,798,937	2,854,984
Receivables	5,402	4,477
Real estate		
Land	44,457,530	45,380,631
Buildings (net)	30,180	37,127
Construction in progress	1,789,404	829,976
Custody securities	109,985,903	120,626,362
	\$ 499,608,303	\$ 503,895,252

b. The Bank conducts trust business by Trust Enterprise Act Article 3. The related trust business information as of December 31, 2019 and 2018 were as follows:

Trust Business

	December 31		
Item	2019	2018	
Special trust of money that invest in foreign securities	\$ 228,317,415	\$ 209,007,455	
Special trust of money that invest in domestic securities	56,636,782	58,425,310	
Trust of money - custody securities	109,985,903	120,626,362	
Trust of real estate	46,828,756	46,202,109	
Trust of real estate price	5,959,182	3,939,531	
Trust of insurance claims	200,996	212,007	
Personal and corporate trust	46,531,147	61,672,064	
Trust of business employee's savings	1,942,652	2,175,526	
Trust of securities	3,205,470	1,634,888	
	\$ 499,608,303	\$ 503,895,252	

48. IMPLEMENTATION OF CROSS-SELLING MARKETING STRATEGIES BETWEEN THE BANK, CATHAY FINANCIAL HOLDING CO., LTD., AND ITS SUBSIDIARIES

The Bank has entered into cross-selling marketing contracts with Cathay Life Insurance Co., Ltd., Cathay Century Insurance Co., Ltd. and Cathay Securities Co., Ltd. The contracts cover joint use of operation sites and facilities as well as cross-selling marketing personnel. Remuneration apportionment and expenses allocation for cross-selling marketing personnel follow the "Cathay Financial Company Scope of Cross-selling Marketing and Rules for Reward".

The Bank has entered into cooperation contracts with Cathay Financial Holding Co., Ltd., Cathay Life Insurance Co., Ltd., Cathay Century Insurance Co., Ltd., and Cathay Securities Co., Ltd. for the joint use of information equipment and the development, operation, maintenance and management of information systems. Calculation methodologies for expenses allocation have been established.

49. FINANCIAL INSTRUMENTS

a. Information on fair value hierarchy

Fair value is the price that a market participant can receive from selling an asset or charge from transferring a liability in an orderly transaction on a measurement date.

Financial instruments are accounted for at fair value when they are originally recognized, and in many cases, usually refer to the transaction price. After the measurement, except for some financial instruments that are measured by amortized cost, they are measured at fair value. The best evidence of fair value is the open quote for the active market. If the market for financial instruments is not active, the Bank uses an evaluation model or a reference to Bloomberg, Reuters or counterparty quotes to measure the fair value of financial instruments.

b. The definitions of each level of the fair value hierarchy are shown below:

1) Level 1

Level 1 financial instruments are traded in an active market in which there are quoted prices for identical assets and liabilities. An active market has the following characteristics:

- a) All financial instruments in the market are homogeneous.
- b) There are willing buyers and sellers in the market all the time.
- c) The public can access the price information easily.

The products in this level, such as listed stock and beneficial securities, usually have high liquidity or are traded in the futures market or exchanges.

2) Level 2

The products in this level have fair values that can be inferred from either directly or indirectly observable inputs other than quoted prices in an active market. The observation inputs were as follows:

- a) Quoted prices from similar products in an active market. This means the fair value can be derived from the current trading prices of similar products, and whether they are similar products should be judged on the characteristics and trading rules. The fair price valuation in this circumstance may be adjusted due to time differences, trading rule differences, interested parties' prices, and the correlation of price between itself and similar goods;
- b) Quoted prices for identical or similar financial instruments in inactive markets;
- c) For the marking-to-model method, the inputs to this model should be observable (such as interest rates, yield curves and volatilities). The observable inputs mean that they can be obtained from the market and can reflect the expectation of market participants;
- d) Inputs that are derived from observable market data through correlation or other means.

The fair values of products categorized in this level are usually calculated using a valuation model generally accepted by the market, such as forward contracts, cross-currency swap contracts, simple interest bearing bonds, convertible bonds and commercial paper.

3) Level 3

The fair values of the products in this level are typically based on management assumptions or expectations other than the direct market data. For example, historical volatility used in valuing options is an unobservable input because it cannot represent the entire market participants' expectation on future volatility.

The products in this level are complex derivate financial instruments or products with prices that are provided by brokers, such as complex foreign exchange options.

- c. Measured at fair value on a recurring basis
 - 1) The fair value hierarchies of the Company's financial instruments, which measured at fair value on a recurring basis, were as follows:

T	December 31, 2019			
Items	Total	Level 1	Level 2	Level 3
Measured at fair value on a recurring basis				
Non-derivative financial instruments				
Assets				
Financial assets at fair value through profit or loss				
Financial assets mandatorily classified as at fair				
value through profit or loss				
Stocks	\$ 308,796	\$ 292,533	\$ -	\$ 16,263
Bonds	56,905,516	4,293,184	52,612,332	-
Others	190,272,535	182,220	190,090,315	-
Financial assets at fair value through other				
comprehensive income				
Stocks	26,004,805	21,918,515	-	4,086,290
Bonds	227,871,992	63,235,736	164,182,408	453,848
Others	70,253,313	-	70,253,313	-
Liabilities				
Financial liabilities at fair value through profit or loss				
Designated as at fair value through profit or loss				
Bonds	57,604,294	-	57,604,294	-
Derivative financial instruments				
Assets				
Financial assets at fair value through profit or loss	51,387,906	123,118	40,583,609	10,681,179
Liabilities				
Financial liabilities at fair value through profit or loss	49,166,645	36,488	38,448,978	10,681,179

T.	December 31, 2018								
Items	Total	Level 1	Level 2	Level 3					
Measured at fair value on a recurring basis									
Non-derivative financial instruments									
Assets									
Financial assets at fair value through profit or loss									
Financial assets mandatorily classified as at fair									
value through profit or loss									
Stocks	\$ 3,657	\$ -	\$ -	\$ 3,657					
Bonds	38,630,552	10,621,146	28,009,406	-					
Others	162,575,301	-	162,575,301	-					
Financial assets at fair value through other									
comprehensive income									
Stocks	12,087,150	8,529,100	-	3,558,050					
Bonds	188,485,752	80,964,720	107,521,032	-					
Liabilities									
Financial liabilities at fair value through profit or loss									
Designated as at fair value through profit or loss									
Bonds	51,441,482	-	51,441,482	-					
Derivative financial instruments									
Assets									
Financial assets at fair value through profit or loss	49,475,706	43,421	37,348,068	12,084,217					
Liabilities		<u> </u>		. ,					
Financial liabilities at fair value through profit or loss	51,966,296	81,433	39,800,646	12,084,217					

2) Financial instruments measured at fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing market participants with full understanding of the sale or transfer transaction. The fair values of financial instruments at fair value, financial assets at fair value through other comprehensive income and hedging derivative financial instruments with quoted prices in an active market are based on their market prices; financial instruments with no quoted prices in an active market are estimated by valuation methods.

a) Marking to market

This method should be considered first when determining fair value. The following are the principles to follow when marking to market:

- i. Ensure the consistency and integrity of market data.
- ii. The source of market data should be transparent and easy to access and can be referred to by independent resources.
- iii. Listed securities with tradable prices should be valued at closing prices.
- iv. Evaluating unlisted securities that lack tradable closing prices should use quoted prices from independent brokers.

b) Marking to model

The use of marking to model is suggested if marking to market is infeasible. This valuation methodology is based upon model inputs that are used to derive the value of the trading positions. The Bank uses the same estimations and assumptions as those used by market participants to determine the fair value.

The Company uses the forward rates provided by Reuters to estimate the fair values of forward contracts, foreign exchange swap contracts, interest rate swap and cross-currency swap contacts and the discounted cash flow method to calculate the fair values of each contract. For foreign exchange option transactions, the Company uses the option pricing models which are generally used by other market participants (e.g., the Black-Scholes model) to calculate the fair value of the contracts.

3) Fair value adjustments

Credit risk valuation adjustments

Credit risk evaluation adjustment refers to the fair value of the Over The Counter (OTC) derivative financial commodity contracts, which also reflects the credit risk of both parties. It can be mainly divided into "credit evaluation adjustment" and "debit evaluation adjustment":

- a) Credit value adjustments (CVA): A transaction in a non-concentrated trading market, that is, the adjustment of the derivatives contract evaluation in the OTC transaction, which reflects the possibility that the Company may not be able to collect the full market value or the counterparty may default on the repayment on the fair value.
- b) Debit value adjustments (DVA): It refers to the transactions of the non-concentrated trading market, that is, the adjustment of the derivatives contract evaluation in the OTC transaction, which reflects the possibility that the Company may not be able to collect the full market value or the counterparty may default on the repayment of the fair value.

Both CVA and DVA are concepts of estimated loss, calculated as the probability of default (PD) multiplied by the default loss rate (LGD) and multiplied by the exposure at default (EAD).

For customers with external credit ratings, the default probability is based on the default probability corresponding to the external rating; for customers without external credit ratings, the impairment rate calculated according to the Bank's loan and receivable impairment assessment and the average incidence of impairment is taken as the default probability.

The Bank uses the fair value of OTC derivatives to calculate the amount of default risk (EAD).

The Bank uses 60% as the default loss rate based on the recommendation of "IFRS 13 CVA and DVA Related Disclosure Guidelines" of the Stock Exchange.

The Company incorporates the credit risk assessment adjustment into the fair value calculation of financial instruments to reflect the counterparty's credit risk and the Company's credit quality.

4) Transfers between Level 1 and Level 2 during the period

There were no transfers between Level 1 and Level 2 for the years ended December 31, 2019 and 2018.

- 5) Reconciliation of Level 3 fair value measurements
 - a) Reconciliation of Level 3 fair value measurements

For the year ended December 31, 2019

			Valuation G	ains (Losses)		Amount	of Increa	ise	Amount o	Decrease	•				
Items	Beginning Balance	In	Profit or Loss	In Other Comprehen Income	sive	rchase or nge in Fair Value		ferred to evel 3	or Change Fair Value	Transf from L		Effects Exchai			alance
Financial assets at fair value															
through profit or loss															
Stocks	\$ 3,657	\$	12,606	\$	-	\$ -	\$	-	\$ -	\$	-	\$	-	\$	16,263
Derivative financial															
instruments	12,084,217		(611,416)		-	23,000		-	814,622		-		-	10	0,681,179
Financial assets at fair value															
through other comprehensive															
income		1		ĺ											
Stocks	3,558,050		-	504,2	208	32,085		-	8,037		-		(16)	4	4,086,290
Bonds			-		-	453,848		-	-		-		-		453,848

For the year ended December 31, 2018

		Valuation G	ains (Losses)	Amount	f Increase	Amount o	f Decrease		
Items	Beginning Balance	In Profit or Loss	In Other Comprehensive Income	Purchase or Change in Fair Value	Transferred to Level 3	Sale or Change in Fair Value	Transferred from Level 3	Effects of Exchange	Ending Balance
Financial assets at fair value									
through profit or loss									
Stocks	\$ -	\$ 3,657	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,657
Derivative financial									
instruments	8,720,347	5,245,100	-	53,492	-	1,934,722	-	-	12,084,217
Financial assets at fair value									
through other comprehensive									
income									
Stocks	3,397,135	-	1,780,883	211,749	-	209,538	1,622,203	24	3,558,050

Total gains or losses recognized in the table above that contain unrealized gains and losses related to assets on hand as of December 31, 2019 and 2018 amounted to losses of \$598,810 thousand and gains of \$5,248,757 thousand, respectively.

b) Reconciliation of Level 3 fair value measurement of financial liabilities

For the year ended December 31, 2019

		Valuation G	Valuation Gains (Losses)		f Increase	Amount of		
Items	Beginning Balance	In Profit or Loss	In Other Comprehensive Income	Purchase or Change in Fair Value	Transfer to Level 3	Sale or Change in Fair Value	Transfer from Level 3	Ending Balance
Financial liabilities at fair value through								
profit or loss								
Derivative financial instruments	\$ 12,084,217	\$ (611,416)	\$ -	\$ 23,000	s -	\$ 814,622	s -	\$ 10,681,179

For the year ended December 31, 2018

		Valuation G	Valuation Gains (Losses)		f Increase	Amount of			
Items	Beginning Balance	In Profit or Loss	In Other Comprehensive Income	Purchase or Change in Fair Value	Transfer to Level 3	Sale or Change in Fair Value	Transfer from Level 3	Ending Balance	
Financial liabilities at fair value through profit or loss									
Derivative financial instruments	\$ 8,720,347	\$ 5,245,100	\$ -	\$ 53,492	\$ -	\$ 1,934,722	\$ -	\$ 12,084,217	

Total gains or losses recognized in the table above that contain unrealized gains and losses related to liabilities on hand as of December 31, 2019 and 2018 amounted to gains of \$611,416 thousand and losses of \$5,245,100 thousand, respectively.

6) Information on significant unobservable inputs for Level 3 fair value measurement

Description of significant unobservable inputs to valuation of recurring fair value measurements categorized within Level 3 of the fair value hierarchy was as follows:

December 31, 2019

Items	Product	Fair Value	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted Average)	Relationship between Inputs and Fair Value
Measured at fair value on						
a recurring basis						
Financial assets						
Financial assets at fair value through profit or loss	Stock	\$ 16,263	Market approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value of the stock
Financial assets at fair value through other comprehensive income	Stock	3,019,173	Market approach	Discount for lack of marketability	15%-30%	The higher the discount for lack of marketability, the lower the fair value of the stock
		45,437	Income approach	Cost of equity rate	6%-7%	The higher the cost of equity rate, the lower the fair value of the stock
		1,021,680	Value of net	Value of net assets	Not applicable	The higher the value of net assets, the higher the
			assets			fair value of the stock
	1		approach			

<u>December 31, 2018</u>

Items	Product	Fair Value	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted Average)	Relationship between Inputs and Fair Value
Measured at fair value on						
a recurring basis						
Financial assets						
Financial assets at fair value through profit or loss	Stock	\$ 3,657	Market approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value of the stock
Financial assets at fair value through other comprehensive income	Stock	2,616,122	Market approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value of the stock
		38,864	Income approach	Cost of equity rate	6%-7%	The higher the cost of equity rate, the lower the fair value of the stock
		903,064	Value of net assets approach	Value of net assets	Not applicable	The higher the value of net assets, the higher the fair value of the stock

7) Valuation process used for fair value measurements categorized within Level 3 of the fair value hierarchy

The Company's risk management department is responsible for validating the fair value measurements and ensuring that the results of the valuation are in line with market conditions, based on independent and reliable inputs which are consistent with other information, and represent exercisable prices. The department analyses the movements in the values of assets and liabilities which are required to be re-measured or re-assessed as per the Company's accounting policies at each reporting date.

d. Financial instrument that were not measured at fair value

1) Information on fair value

Except as detailed in the following table, the management considers the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values or that the fair values cannot be reasonably measured.

	December 31								
	20	19	20	18					
	Carrying Amount	Fair Value	Carrying Amount	Fair Value					
Financial assets									
Investments in debt instruments at amortised cost	\$ 444,934,985	\$ 444,630,239	\$ 421,022,506	\$ 417,858,953					

2) Information on fair value hierarchy

Itoma	December 31, 2019							
Items	Total	Level 1	Level 2	Level 3				
Financial assets								
Investments in debt instruments at amortised cost	\$ 444,630,239	\$ 2,008,127	\$ 438,282,248	\$ 4,339,864				

T4	December 31, 2018							
Items	Total	Level 1	Level 2	Level 3				
Financial assets								
Investments in debt instruments at amortised cost	\$ 417,858,953	\$ 46,326,059	\$ 365,471,606	\$ 6,061,288				

3) Valuation techniques

The methods and assumptions used by the Company to estimate financial instruments that are not measured at fair value are as follows:

a) Cash and cash equivalents, due from the Central Bank and call loans to other banks, securities purchased under resale agreements, receivables, other financial assets, due to the Central Bank and other banks, call loans from the Central Bank and other banks, securities sold under repurchase agreements, payables, deposits and remittances whose maturity date is very close or the future payment price is similar to the carrying amount, so the fair value of the book is calculated based on the amount of the book on the balance sheet date.

- b) Discounts and loans, deposits, financial debentures and structured commodity principals are all interest-bearing financial assets/liabilities whose book value is similar to the current fair value. The book value of the collection is deducted from the estimated recoverable amount after the allowance for bad debts, so the book value is the fair value.
- c) If an investment in a debt instrument at amortized cost has a public quoted price in an active market, the market price is the fair value; if no market price is available for reference, the evaluation method is used to estimate the fair value. The estimates and assumptions used by the Bank in the use of the valuation method are consistent with the information used by market participants in the estimation of financial products and the assumptions.

50. FINANCIAL RISK MANAGEMENT

The Bank's risk control and hedging strategy follows the requirement of customer service-oriented banking industry and regulatory environment. In order to comply with the above requirements, the Bank adopted different risk management methods to identify its risks and the Bank followed the spirit and regulation of the "Basel Accord" to keep strengthening its assets and the practices of capital management to maintain the best capital adequacy ratio.

The Bank setup the risk management committee, whose responsibilities are as follows:

- a. To amend the risk management policies, risk appetite or risk tolerance and report the above issues to board of directors for approval.
- b. To manage and decide the strategy about the Bank's credit risk, market risk and operational risk.
- c. To report the significant risk management issues, such as credit ratings, market assessment and risk indicators.
- d. To analyze the issues that the Bank's business unit brought up for discussion.
- e. Other issues.

The Bank organized a risk management group to monitor, lead, develop, and establish the integral risk management framework.

a. Credit risk

Credit risk represents the risk of loss that the Bank would incur if counterparty fails to perform its contractual obligations. Sources of credit risk cover both on and off balance sheet accounts.

The Bank, Indovina Bank and CUBCN Bank

To centralize risk management functions currently handled by different departments, the Bank, Indovina Bank and CUBCN Bank board of directors resolved that a risk management department would be established to manage the credit risk. The objectives of a credit risk management are to improve asset quality and to generate stable profits while reducing risk through a diversified and balanced loan portfolio. The Bank, Indovina Bank and CUBCN Bank board of directors sets the counterparty credit limits, which are then implemented by the credit committee. The credit committee also monitors current and potential credit exposure to individual counterparties and on an aggregate basis to counterparties and their affiliates. The Bank and Indovina Bank perform periodic and systematic detailed reviews of its lending portfolios to identify credit risks and to assess the overall collectability of those portfolios.

The Bank, Indovina Bank and CUBCN Bank maintain a strict policy to evaluate customers' credit ratings when providing loan commitments and commercial letters of credit transactions. Certain customers are required to provide appropriate collateral for the related loans, and the Bank, Indovina Bank and CUBCN Bank retains the legal right to foreclose on or liquidate the collateral. The disclosure of the maximum credit exposure shall not take account of any collateral held or other enhancements.

CUBC Bank

CUBC Bank board of directors resolved that a risk management department would be established to manage the credit risk. CUBC Bank board of directors sets the counterparty credit limits, which are then implemented by the credit committee.

Loan Committee is the top lending authority within CUBC Bank. It is in charged with approval of all credit in excess of CUBC Bank lending authorities. Certain customers are required to provide appropriate collateral for the related loans, and CUBC Bank retains the legal right to foreclose on or liquidate the collateral. The disclosure of the maximum credit exposure shall not take account of any collateral held or other enhancements.

The judgement of significant increase in credit risk after initial recognition

The Bank and CUBCN Bank

The Bank and CUBCN Bank assess the movement in default risk during the expected lifetime of various types of credit assets at each reporting date to determine if the credit risk has increased significantly since the initial recognition. To make this assessment, the Bank and CUBCN Bank have considered to show the reasonable and corroborative information (including prospective information) on the significant increase in credit risk after the initial recognition. The key indicators for consideration include:

1) Quantitative indicators

a) Changes on credit rating

When the credit rating at the reporting date has decreased to some extent compared with that on initial recognition and the credit rating has not met the investment grade, it is determined that the credit risk has increased significantly since the initial recognition.

b) Information on the overdue status of the contract

When the contract payment was overdue for more than 30 days as at the reporting date, it is determined that the credit risk has increased significantly since the initial recognition.

2) Qualitative indicators

When the information observed at the reporting date meets the following conditions, it is determined that the credit risk has increased significantly since the initial recognition.

- a) The refund records are reported.
- b) Accountants have expressed significant doubt on its ability to continue as a going concern.
- c) Other internal or external information on judging the credit quality changes.

Indovina Bank

Indovina Bank assesses the movement in default risk during the expected lifetime of various types of financial assets at each reporting date to determine if the credit risk has increased significantly since the initial recognition:

1) Notch downgrade

A notch downgrade of obligor's internal or external ratings between the current grade and the grade at initial recognition greater than specific threshold would be classified as a significant increase in credit risk since initial recognition.

2) Low credit risk criteria

An exposure rated below Moody's investment grade (i.e. the credit rating is lower than the credit rating Baa3 of Moody's, an international credit rating agency) at the reporting date would be classified as a significant increase in credit risk since initial recognition.

3) Past due information

The contract payment over 30 days past due would be classified as a significant increase in credit risk since initial recognition.

4) Internal credit assessment indicators

The indicators with credit quality information that is weaker than upon initial recognition would be classified as a significant increase in credit risk since initial recognition.

CUBC Bank

CUBC Bank assesses if the credit risk of financial assets at each reporting date has increased significantly since the initial recognition based on the following indicators:

1) Past due information

Contract payment is more than 30 days past due for long-term loans or 15 days past due for short-term loans would indicate a significant increase in credit risk since initial recognition.

2) Loan classification from National Bank of Cambodia

A loan contract with special mention position at reporting date would be classified as a loan with significant increase in credit risk since initial recognition.

3) Internal credit assessment indicators

Credit quality information at the reporting date that is weaker than upon initial recognition would be an indicator of a significant increase in credit risk since initial recognition.

Default and credit impairment of financial asset

The Bank and CUBCN Bank

The Bank and CUBCN Bank definition of default on financial assets is the same with the one of judging the credit impairment of financial assets. Where one or more of the following conditions are met, the Bank determines the financial assets to be subject to default and credit impairment.

1) Quantitative indicator

a) Changes on credit rating

When the credit rating at the reporting date fell into the default level, it is determined as credit impairment.

b) Information on the overdue status of the contract

When the contract payment was overdue for more than 90 days as at the reporting date, it is determined as credit impairment.

2) Qualitative indicator

When the information observed at the reporting date meets the following conditions, it is determined as credit impairment.

- a) Bailout, reorganization, individual agreement due to debtor's financial difficulties.
- b) Lawsuit action has been taken.
- c) Debt settlement, debt negotiation.
- d) Other internal or external information on judging the deterioration in credit quality.

The aforementioned definition of default and credit impairment applies to all financial assets held by the Bank, and is consistent with the definition applied on the significant financial assets for the purpose of internal credit risk management, and is also applied in the relevant impairment assessment model.

Indovina Bank

Indovina Bank assesses the movement in default risk during the expected lifetime of various types of financial assets at each reporting date to determine if the credit risk subjected to default:

1) Notch downgrade

An obligor who has failed to pay one or more of its financial obligations or is rated as default at the reporting date is considered to be credit-impaired.

2) Past due information

The contract payment over 90 days past due would be classified as a credit-impaired loan.

3) Internal credit assessment indicators

The indicators with credit deterioration information used for internal credit risk management purpose at the reporting date would be recognized as credit-impaired assets.

CUBC Bank

CUBC Bank assesses default risk during the expected lifetime of various types of financial assets based on the following indicators at each reporting date:

1) Past due information

Loan contract with payment more than 90 days past due for long-term loans or 30 days past due for short-term loans would be classified as a credit-impaired loan.

2) Loan classification from National Bank of Cambodia

A loan contract with specific positions, such as substandard, doubtful and loss, at reporting date would be classified as loan with a significant increase in credit risk since initial recognition.

3) Internal credit assessment indicators

The credit information used for internal credit risk management purpose that indicated credit deterioration at the reporting date would be recognized as indicator of credit-impaired assets.

The measurement of expected credit loss

The Bank and CUBCN Bank

For the purpose of assessing the expected credit losses, the Bank and CUBCN Bank classify the credit assets into the following groups based on credit category, credit rating, risk characteristics, enterprise size, product category and so on.

Credit Category	Definition
Enterprise loan	Grouped by risk characteristics, enterprise size and internal/external credit rating
Consumer loan	Grouped by product category and internal credit rating
Credit card	Grouped by product category and internal credit rating

When the credit risk of the financial instrument has not increased significantly after the initial recognition (Stage 1), the allowance for losses should be measured at the expected credit losses over 12 months by the Bank and CUBCN Bank. When the credit risk of the financial instrument has increased significantly (Stage 2) or the credit impairment has existed (Stage 3) after the initial recognition, the allowance for losses should be measured at the expected credit losses over the life time by the Bank and CUBCN Bank.

For the measurement of the expected credit losses, the Bank and CUBCN Bank calculate its expected credit losses over 12 months and the life time respectively by multiplying three factors, i.e. probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD") of the borrower over the next 12 months and the life time, also considering the effect of the life time value of money.

The PD and LGD applied in the impairment assessment of the credit business of the Bank and CUBCN Bank are adjusted and calculated based on the internal and external information of each group as well as the currently observable data and the forward-looking macroeconomic information (such as economic growth rate, etc.).

The Bank and CUBCN Bank assessed the EAD of loan at the reporting date. According to internal and external information, the Bank and CUBCN Bank consider the portion of the loan commitment that is expected to be drawn on over 12 months after the reporting date and the lifetime, to determine the EAD for calculating the expected credit losses.

The Bank and CUBCN Bank perform impairment assessment on debt instruments measured at FVTOCI and those measured at amortized cost in accordance with related requirements:

- i. The EAD is measured at the amortized cost of a financial asset plus its interest receivable.
- ii. The PD is based on the information regularly published by Taiwan Ratings and Moody's, and calculated on the basis of the adjusted historical data according to the currently observable data and the looking-forward macroeconomic information (e.g., gross domestic product and economic growth rate, etc.).
- iii. The LGD is based on the information regularly published by Moody's.

The valuation techniques or significant assumptions for assessing the expected credit losses have no significant change in 2019.

Indovina Bank

Indovina Bank has grouped their exposures on the basis of shared credit risk characteristic, including product category, counterparty type and enterprise size as follows:

Category	Description
Loan portfolio	Grouped by counterparty type and enterprise size, such as large corporate, SME
	and retail loans
Bond portfolio	Grouped by product category, external credit rating and payment ranks, such as sovereign and corporate bonds

1) Loan portfolio

The segmentation of Indovina Bank's loan portfolio is based on its risk characteristics, such as product class, counterparty type and enterprise size. The measurement of expected credit loss is estimated by three main parameters, including probability of default, loss given default and exposure at default. The probability of default and loss given default were built by the bank's historical delinquent information and recovery data and calibrated by selected macroeconomic factors for forward-looking adjustment. The estimated amounts of exposure at default were calculated by the amortized cost and interest receivable. At each financial reporting date, the above criteria for a significant increase in credit risk since initial recognition are not hit, the allowance loss shall be measured on the basis of the 12-month expected credit loss method. If financial assets meet the foregoing conditions of significant increases in credit risk or credit deterioration since initial recognition, the allowance losses shall be estimated according to the respective methods on the basis of lifetime expected credit losses.

2) Bond portfolio

The segmentation of Indovina Bank's bond portfolio is based on its product class, external rating and payment rank. The measurement of expected credit loss is estimated by three main parameters, including probability of default, loss given default and exposure at default. The probability of default and loss given default were built by external information with sufficient historical default data and recovery rates and calibrated by selected macroeconomic factors for forward-looking adjustment. The estimated amounts of exposure at default were calculated by the amortized cost and interest receivable. At each financial reporting date, the above criteria for a significant increase in credit risk since initial recognition are not hit, the allowance loss shall be measured on the basis of the 12-month expected credit loss method. If financial assets meet the foregoing conditions of significant increases in credit risk or credit deterioration since initial recognition, the allowance losses shall be estimated according to the respective methods on the basis of lifetime expected credit losses.

CUBC Bank

CUBC Bank has grouped their exposures on the basis of shared credit risk characteristic, including product category and counterparty types as follows:

Category	Description
Loan	Grouped by product characteristics, industry and counterparty type
Credit Card	Grouped by product characteristics

The segmentation of CUBC Bank's loan portfolio is based on its risk characteristics, such as product class, counterparty type and loan classification by NBC. The measurement of expected credit loss is estimated by three main parameters, including probability of default, loss given default and exposure at default. The probability of default and loss given default were built by the internal and external historical delinquent information, default rates and recovery amounts and calibrated by selected macroeconomic factors for forward-looking adjustment. The estimated amounts of exposure at default were calculated by the amortized cost and interest receivable. At each financial reporting date, the above criteria for a significant increase in credit risk since initial recognition are not hit, the allowance loss shall be measured on the basis of the 12-month expected credit loss method. If financial assets meet the foregoing conditions of significant increases in credit risk or credit deterioration since initial recognition, the allowance losses shall be estimated according to the respective methods on the basis of lifetime expected credit losses.

Write-off policy

If any of the following conditions apply, the Company writes off its non-performing and nonaccrual loans as uncollectible, less the estimated recoverable amount.

The Company can not expect reasonably to collected the financial assets that including the following index:

- 1) The recovery activity has stopped.
- 2) Assessed the borrower does not have sufficient assets or sources of income to pay the overdraft.

Financial assets have been written-off by the Company may still have ongoing recovery activity, and continue to follow the relevant policies to litigation proceedings.

The consideration of forward-looking information

The Bank and CUBCN Bank

The Bank and CUBCN Bank use historical data to analyze and identify the significant economic factors that affect the credit risks and expected credit losses of each group of assets, and use the regression model or imputation adjustment method to estimate the impairment parameter after the prospective adjustment. The significant economic factors and their impact on PD and LGD differ depending on the type of financial instruments.

The significant economic factors identified by the Bank and CUBCN Bank in 2019 were as follows:

Credit Category	Probability of Default (PD)	Loss Given Default (LGD)
	Consumer Price Index	
Entampias loss	Government Expenditures	
Enterprise loan	GDP %	
	Proportion of investment in GDP (%)	
	Proportion of investment in GDP (%)	GDP %
Congumenton	Proportion of savings in GDP (%)	GDF %
Consumer loan	Unemployment rate %	
	Price Index	
Credit Card	Price Index	
Cieuii Caiu	Proportion of government revenue in GDP (%)	

Indovina Bank

Based on the qualitative and quantitative analysis of historical default data and macroeconomic factors, Indovina Bank applies the selected local and global economic factors in different portfolios. Regression models and interpolation adjustment were used to estimate the forward-looking parameters complied with regulatory requirements. The selected economic factors and their effects on PDs and LGDs varied from different types of portfolios.

The macroeconomic factors selected by the bank for the forward-looking adjustments in 2019 were as follows:

Segment	Selected Factors
Loan portfolio	Vietnam GDP growth rate
Bond portfolio	Global GDP growth rate
	Global inflation index

CUBC Bank

Based on the qualitative and quantitative analysis of historical default data and regional macroeconomic factors, CUBC Bank chooses the local macroeconomic factor for parameter adjustments. The regression analysis was used to estimate the forward-looking parameters complied with regulatory requirements. The selected economic factors and their effects on PDs varied from different groups of products.

The macroeconomic factors selected by CUBC Bank for the forward-looking adjustments in 2019 were as follows:

Segment	Selected Factors		
	Change of inflation (%)		
Loan	Change of volume of imports (%)		
	Proportion of investment in GDP (%)		
	Change of volume of exports (%)		
Credit Card	Proportion of savings in GDP (%)		
	Proportion of current account balance in GDP (%)		

Credit risk management policy

The category of credit asset and the grade of credit quality were narrated as follow:

1) Category of credit risk

The credit risk of the Bank was classified into five categories. 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". For managing the default credits, the Bank established the regulations governing the procedure to deal with non-performing loans, non-accrual loans and bad debts.

2) Grade of credit quality

The Bank sets the level of credit quality based on the characteristics and scale of business (such as establishing the internal rating model of credit risk, setting the credit rating table or relevant rules to classify) to proceed with risk management.

In order to measure the credit risk of the clients, the Bank employs the statistic methods and the professional judgment from the experts. The Bank develops the rating model of business credit after considering the clients' relevant information. The model shall be reviewed periodically to verify if the calculated results conform to the reality and revise every parameter to optimize the results.

With respect to consumer credit assets such as mortgages, credit cards, and small-amount credit loans, the Bank also evaluates default risk of clients by using the credit rating scores developed by the Bank and the external due diligence services.

The credit quality of the Bank's corporate borrowers is classified as excellent, good, average, and bad.

To ensure the reasonable estimated values of credit rating system's design, process, and relevant risk factors, the Bank executes the relevant verification and tests the model according to the actual default every year so that the calculated results will be close to actual default.

The Bank evaluates the counterparties' credit quality before transactions and refers to the domestic and foreign credit rating agencies, when rendering different lines of credit based on the credit quality.

3) Hedge of credit risk and easing policy

a) Collateral

The Bank adopts a series of policies to lower the credit risk, and one of the frequently-used methods is requesting borrowers to provide collaterals. To ensure the creditor's rights, the Bank sets the scope available as collaterals and the procedures of appraising, managing, and disposing the collaterals. In addition, a credit contract is in place to provide the credit claim preservation, collaterals, and offset provisions to stipulate when a credit trigger event occurs, the Bank may reduce the limit, cut down the payback period, or deem all debts mature. Also, the Bank will use the deposits that the borrowers saved in the Bank to offset the liabilities to lower the credit risk.

Other non-credit business collaterals shall depend on the characteristics of the financial instruments. Only the asset-backed securities and other similar financial instruments are secured by an asset pool of financial instruments.

b) Limit of credit risk and control of credit risk concentration

To avoid the excessive risk concentration, the Bank limits the credit amounts of single counterparties and groups; the Bank also sets the investment guide and regulation of risk control of equity investment to restrict the investment limits of single person (company) or related company (group). Furthermore, the Bank establishes relevant regulations to control the concentration risk of assets, and sets the credit limits by industry, group, country, and stock types to monitor the credit concentration risk.

c) Net settlement agreement

The Bank usually settles by the gross balance, but signs contract with some counterparties to settle by net balance. If a default happens, the Bank will terminate all transactions with the counterparty and settle by net balance in order to lower the credit risk.

4) Maximum exposures to credit risk

Without taking into account the collateral or other credit enhancement instrument, the maximum credit risk exposure of on-balance-sheet financial assets equals their carrying values. The maximum credit risk exposure of off-balance-sheet items (without considering the collaterals or other credit enhancement is irrevocable) are as follows:

a) The Bank

Off Polonge Chest Itoms	-	Maximum Exposure to Credit Risk		
Off Balance Sheet Items	December 31, 2019	December 31, 2018		
Irrevocable loan commitments	\$ 189,579,513	\$ 154,605,389		
Credit card commitments	710,712,032	669,232,204		
Unused commercial letters of credit	4,496,860	4,217,682		
Guarantees on duties and contracts	12,957,304	13,534,956		

b) Indovina Bank

Off Balance Sheet Items	Maximum Exposure to Credit Risk		
On Dalance Sheet Items	December 31, 2019	December 31, 2018	
Financial guarantee contracts	\$ 1,380,304	\$ 2,262,842	
Unused commercial letters of credit	662,214	1,017,801	

c) CUBC Bank

Off Balance Sheet Items	Maximum Exposure to Credit Risk			
On balance sheet items	December 31, 2019	December 31, 2018		
Financial guarantee contracts	\$ 23,652	\$ 78,161		
Credit card commitments	280,881	447,040		
Irrevocable loan commitments	488,140	-		

d) CUBCN Bank

	Maximum Exposure to Credit Risk			
Off Balance Sheet Items	December 31,	December 31,		
	2019	2018		
Financial guarantee contracts	\$ 427,986	\$ 170,835		
Unused commercial letters of credit	95,593	773,078		
Irrevocable loan commitments	1,050,539	623,837		

To reduce the risk from any businesses, the Bank conducts an overall assessment and takes appropriate risk reduction measures, such as obtaining collateral and guarantors. For obtaining of collateral, the Bank has Guidelines Governing Collateral, to ensure that collateral meet the specific criteria and has the effect of reducing the business risk.

The management deems the Company is able to control and minimize the credit risk exposures in off-balance-sheet items as the Company uses more strict rating procedures when extending credits and conduct reviews regularly.

The carrying amount of the maximum credit risk exposure of on-balance-sheet items were as follow:

December 31, 2019

			Discounts and Loans		
	Stage 1	Stage 2	Stage 3	Difference of	
	12-month Expected	Lifetime Expected	Lifetime Expected	Impairment Loss	
	Credit Losses	Credit Losses	Credit Losses	under Regulations	Total
Total carrying amount Less: Allowance impairment Less: Differences of impairment loss under	\$ 1,500,192,488 (2,753,556)	\$ 68,503,519 (1,746,741)	\$ 11,866,187 (5,386,493)	\$ - -	\$ 1,580,562,194 (9,886,790)
regulations	=	=		(17,524,498)	(17,524,498)
	<u>\$ 1,497,438,932</u>	\$ 66,756,778	\$ 6,479,694	<u>\$ (17,524,498)</u>	<u>\$ 1,553,150,906</u>
			Receivable		
	Stage 1	Stage 2	Stage 3	Difference of	
	12-month Expected	Lifetime Expected	Lifetime Expected	Impairment Loss	
	Credit Losses	Credit Losses	Credit Losses	under Regulations	Total
Total carrying amount Less: Allowance impairment Less: Differences of impairment loss under	\$ 99,439,051 (509,882)	\$ 1,560,450 (154,306)	\$ 2,265,790 (1,660,104)	\$ - -	\$ 103,265,291 (2,324,292)
regulations	_	<u>=</u>	=	(52,976)	(52,976)
	\$ 98,929,169	\$ 1,406,144	\$ 605,686	<u>\$ (52,976)</u>	\$ 100,888,023

December 31, 2018

	Stage 1 12-month Expected	Stage 2 Lifetime Expected	Stage 3 Lifetime Expected	Difference of Impairment Loss	
	Credit Losses	Credit Losses	Credit Losses	under Regulations	Total
Total carrying amount Less: Allowance impairment Less: Differences of impairment loss under	\$ 1,549,705,049 (3,914,449)	\$ 59,275,734 (1,667,321)	\$ 11,769,709 (4,912,617)	\$ -	\$ 1,620,750,492 (10,494,387)
regulations	<u>-</u> _	<u>-</u> _	<u>_</u>	(14,932,854)	(14,932,854)
·	<u>\$ 1,545,790,600</u>	\$ 57,608,413	\$ 6,857,092	<u>\$ (14,932,854)</u>	<u>\$ 1,595,323,251</u>
			Receivable		
	Stage 1	Stage 2	Stage 3	Difference of	
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses	Impairment Loss under Regulations	Total
Total carrying amount Less: Allowance impairment Less: Differences of impairment loss under	\$ 83,956,813 (126,022)	\$ 1,660,989 (116,965)	\$ 2,422,873 (1,768,492)	\$ - -	\$ 88,040,675 (2,011,479)
regulations	_			(50,470)	(50,470)
	\$ 83,830,791	\$ 1,544,024	\$ 654,381	\$ (50,470)	\$ 85,978,726

Discounts and Loans

5) Concentration of credit risk

When the counterparties are obviously the same party, or there are several counterparties but engaging in similar business activities and sharing similar economic characteristics, and vulnerable to the same economic impacts or other changes, the credit concentration risk is apparent.

Credit concentration risk of the Company derives from the assets, liabilities and off-balance-sheet items, and arises from performing obligations or engaging in transactions or cross-line portfolio of risk exposures including credit extension, due from and call loans to other banks, securities investment, receivables and derivatives. The Company does not significantly concentrate on a single client or counterparty, and the transaction amount with a single client or counterparty relative to the Company's total bills discounts and loans and overdue receivables is not significant. Discounts and loans, including overdue loans, guarantees, bills purchased, and acceptances receivable of the Company according to industry and country are listed below:

	December 31				
Industry Type	2019		2018		
Items	Amount	%	Amount	%	
Manufacturing Financial institutions and	\$ 116,211,750	7.28	\$ 117,141,000	7.16	
insurance	79,217,724	4.96	74,995,593	4.58	
Leasing and real estate	144,353,511	9.04	140,808,012	8.60	
Individuals	904,288,042	56.65	900,573,664	55.03	
Others	352,249,142	22.07	403,005,618	24.63	
	\$ 1,596,320,169	100.00	\$ 1,636,523,887	100.00	

	December 31				
Geographic Region	2019		2018		
Items	Amount	%	Amount	%	
Domestic	\$ 1,308,219,217	81.95	\$ 1,360,278,586	83.12	
Asia	211,659,637	13.26	160,134,030	9.78	
America	53,564,188	3.36	31,418,258	1.92	
Others	22,877,127	1.43	84,693,013	5.18	
	<u>\$ 1,596,320,169</u>	100.00	<u>\$ 1,636,523,887</u>	100.00	

b. Liquidity risk

1) Source and definition of liquidity risk

Liquidity risk means banks cannot provide sufficient funding for asset size growth and for meeting obligations on matured liabilities or have to make late payments to counterparties or raise emergency funding to cover funding gaps.

2) Liquidity risk management strategy and principles

The purpose of liquidity risk management is to ensure the availability of funds to meet present and future financial obligations. The Asset and Liability Management Committee is responsible for the planning of liquidity risk management strategy and the Financial Trading Department is responsible for the implementation, including liquidity risk measurement, interest rate sensitivity analysis, stress testing and continuous contingency planning with quantitative management requirements and systems. The Bank adjusts its liquidity gap according to its daily funds and market changes to ensure appropriate liquidity. When the liquidity has or expects significant changes, the Bank immediately reports to the board of directors.

3) Analysis of financial assets and non-derivative financial liabilities by remaining contractual maturities

a) Financial assets were held to manage liquidity risk

The Bank holds highly marketable and diverse financial assets that are assumed to be easily liquidated in the event of an unforeseen interruption of cash flow. The financial assets were held to manage liquidity risk including cash and cash equivalents, due from the Central Bank and call loans to other banks, financial assets at FVTPL, financial assets at FVTOCI, investments in debt instruments at amortised cost, discounts and loans, and securities purchased under resell agreements.

b) Maturity analysis of non-derivative financial liabilities of the Bank

The table below shows the analysis of the cash outflow of non-derivative financial liabilities on time remaining until the contractual maturity date. The amount disclosed is based on the contractual cash flows and may be different from that included in the consolidated balance sheets.

	December 31, 2019				
	0-30 Days	31-180 Days	181 Days-1 Year	Over 1 Year	Total
Due to the Central Bank and call loans from banks Non-derivative financial liabilities at fair value through	\$ 22,576,316	\$ 25,750,616	\$ 22,544,961	\$ 25,038	\$ 70,896,931
profit or loss	-	506,683	91,623	51,704,655	52,302,961
Securities sold under agreements to repurchase	24,470,192	15,794,728	-	3,545,494	43,810,414
Payables	16,791,015	2,827,107	42,427	423,028	20,083,577
Deposits and remittances	356,619,761	916,163,370	881,024,339	125,375,198	2,279,182,668
Financial debentures payable	-	618,152	37,111	53,800,000	54,455,263
Lease liabilities	98,283	463,089	555,164	2,675,758	3,792,294
Other capital outflow at maturity	17,889,711	35,241,114	6,346,258	1,096,744	60,573,827

Additional information about the maturity analysis for lease liabilities:

					Dece	ember 31, 2019				
	Less	s than 1 Year		1-5 Years		5-10 Years	Ove	r 10 Years		Total
Lease liabilities	\$	1,116,536	\$	2,470,871	\$	204,253	\$	634	\$	3,792,294
					Dece	ember 31, 2018				
	(0-30 Days	3	1-180 Days	181	Days-1 Year	Ov	er 1 Year		Total
Due to the Central Bank and call loans from banks Non-derivative financial liabilities at fair value through	\$	33,388,821	\$	17,227,043	\$	17,187,533	\$	147,450	\$	67,950,847
profit or loss		-		-		610,767		51,992,332		52,603,099
Securities sold under agreements to repurchase		30,140,774		10,582,338		-		15,436,901		56,160,013
Payables		12,118,626		6,512,187		909,069		402,186		19,942,068
Deposits and remittances		353,788,658		872,227,988		834,010,982	1	16,509,145	2	2,176,536,773
Financial debentures payable		7,800		727,699		1,537,213		53,900,000		56,172,712
Other capital outflow at maturity		27,116,530		40,057,002		8,599,063		1,251,007		77,023,602

c) Maturity analysis of derivative financial liabilities

Net settled derivatives financial instruments engaged by the Bank include:

- i. Foreign exchange derivative instruments: Foreign exchange options, non-delivery forwards;
- ii. Interest rate derivative instruments: Swaptions, net settled interest rate swaps and other interest rate agreements.

The table below shows the net settled derivative financial instruments on time remaining until the contractual maturity date. Analysis of contractual maturity date helps to illustrate all derivative financial instruments listed in the consolidated balance sheet. The amount disclosed is based on contractual cash flow and may be different from that included in the consolidated balance sheet. Maturity analysis of net settled derivative financial liabilities was as follows:

	December 31, 2019				
	0-30 Days	31-180 Days	181 Days-1 Year	Over 1 Year	Total
Derivative financial liabilities at fair value through profit or loss Foreign exchange derivative instruments Interest rate derivative instruments	\$ 131,322 53,997 \$ 185,319	\$ 95,306 195,095 \$ 290,401	\$ 7,545 501,056 \$ 508,601	\$ 92 <u>20,153,630</u> <u>\$ 20,153,722</u>	\$ 234,265 20,903,778 \$ 21,138,043
			December 31, 2018		
	0-30 Days	31-180 Days	181 Days-1 Year	Over 1 Year	Total
Derivative financial liabilities at fair value through profit or loss Foreign exchange derivative instruments Interest rate derivative instruments	\$ 86,688 21,092	\$ 45,095 285,082	\$ 229,800 543,248	\$ 199 23,522,719	\$ 361,782 24,372,141
	<u>\$ 107,780</u>	\$ 330,177	<u>\$ 773,048</u>	\$ 23,522,918	<u>\$ 24,733,923</u>

Gross settled derivatives financial instruments engaged by the Bank include:

- i. Foreign exchange derivative instruments: Currency swaps;
- ii. Interest rate derivative instruments: Cross currency swaps;
- iii. Credit derivative instruments: All derivatives shown in gross pay a periodic fee in return for a payment by the protection seller upon the occurrence, if any, of such a credit event.

The contract maturity date is the basic element to understand the Bank's gross settled derivative instruments as at balance sheet dates. The disclosed amounts are based on contract cash flows and part of the disclosed are not in conformity with related items on consolidated balance sheet. Maturity analysis of gross settled derivative financial liabilities was as follows:

	December 31, 2019				
	0-30 Days	31-180 Days	181 Days-1 Year	Over 1 Year	Total
Derivative financial liabilities at fair value through profit or loss Foreign exchange derivative instruments					
Cash outflow	\$ (3,014,684)	\$ (7,300,980)	\$ (1,041,437)	\$ (110,918)	\$ (11,468,019)
Cash inflow	15,580	6,979	638	=	23,197
Interest rate derivative instruments					
Cash outflow	(40,869)	(156)	(6,949)	(337,556)	(385,530)
Cash inflow					
Cash outflow subtotal	(3,055,553)	(7,301,136)	(1,048,386)	(448,474)	(11,853,549)
Cash inflow subtotal	15,580	6,979	638		23,197
Net cash flow	<u>\$ (3,039,973)</u>	<u>\$ (7,294,157)</u>	<u>\$ (1,047,748)</u>	<u>\$ (448,474)</u>	<u>\$ (11,830,352)</u>
			December 31, 2018		
	0-30 Days	31-180 Days	181 Days-1 Year	Over 1 Year	Total
Derivative financial liabilities at fair value through profit or loss Foreign exchange derivative instruments					
Cash outflow	\$ (3,875,082)	\$ (4,718,572)	\$ (558,507)	\$ (296,855)	\$ (9,449,016)
Cash inflow	24,170	17,928	717	-	42,815
Interest rate derivative instruments					
Cash outflow	(10,384)	(56,742)	(107,229)	(423,860)	(598,215)
Cash inflow					
Cash outflow subtotal	(3,885,466)	(4,775,314)	(665,736)	(720,715)	(10,047,231)
Cash inflow subtotal	24,170	17,928	717		42,815
Net cash flow	\$ (3,861,296)	\$ (4,757,386)	\$ (665,019)	\$ (720,715)	\$ (10,004,416)

d) Maturity analysis of off-balance sheet items

- i. Irrevocable commitments: Include the Bank's irrevocable loan commitments and credit card commitments.
- ii. Financial guarantee contracts: The Bank acts as a guarantor or an issuer of credit line in a financing guarantee agreement.

Maturity analysis of off-balance sheet items are shown as follows:

	December 31, 2019					
	Not Later Than		Later Than 5			
	1 Year	1-5 Years	Years	Total		
Irrevocable loan commitments	\$ 138,846,179	\$ 41,654,205	\$ 9,079,129	\$ 189,579,513		
Credit card commitments	53,161,705	238,534,313	419,016,014	710,712,032		
Financial guarantee contracts	11,989,747	5,406,180	58,237	17,454,164		
	December 31, 2018					
	Not Later Than		Later Than 5			
	1 Year	1-5 Years	Years	Total		
Irrevocable loan commitments Credit card commitments Financial guarantee contracts	\$ 109,990,204 55,543,412 12,492,672	\$ 35,237,143 237,450,848 4,793,131	\$ 9,378,042 376,237,944 466,835	\$ 154,605,389 669,232,204 17,752,638		

c. Market risk

1) Source and definition of market risk

Market risk is the potential loss arising from adverse movements of market price, such as interest rates, foreign exchange rates and equity securities.

The Bank organized market risk management department and the committee of assets and liabilities management is responsible for monitoring the market risk management. The department and committee periodically examine the Bank's structure of assets and liabilities; plan the pricing principle of deposit and loan and financing and using scheme of medium and long term funding while executing the market risk management, the market risk management department periodically provides the related information of management and reports to the authorized managers of the Bank for the management system, such as valuating position, risk limit management, calculating of profit and loss, pricing model and risk analysis, in order to control the overall market risk.

2) Market risk management strategy and process

Market risk management process

a) Identification and measurement

The operations department and risk management department of the Bank identified the market risk factors of risk exposure position, and measured the market risk further. Market risk factors are the components that could have an impact on value of financial instrument, such as interest rates, foreign exchange rates, equity securities...etc., including position, gain and loss, the loss of stress test, sensitivity (DV01, Delta, Vega, Gamma) and Value at Risk (VaR) etc., to measure the extent of investment portfolio that is influenced by interest risk, foreign exchange risk and equity securities.

b) Monitoring and reporting

The risk management department periodically reports the execution of market risk management target, position and gain/loss control, sensitivity analysis, stress test, and VaR of equity securities to the board of directors, and helps the board of directors to fully understand the status of market risk management. The Bank also establishes a clear reporting process. Each transaction has the requirements about limitation and stop-loss points. If the transaction reaches its stop-loss limitation, stop-loss process will be implemented immediately. If the stop-loss process is not implemented, the transaction department should document the reason of non-implementing stop loss process and responding plan. Furthermore, the department shall report to the executive management for approval and report to the board of directors regularly.

3) Risk management policy of the trading book

The trading book is the portfolio of financial instruments and physical investment for the purpose of trading or the hedge on the trading book. Portfolio is held for trading, which is intended to earn the profit from bid-ask spread. Any positions aside from the above trading book will be in the banking book.

a) Strategy

In order to control market risk effectively and ensure flexibility in operating the transaction strategy, the Bank carries out various assessment and control. The portfolio of trading book has the risk limitation of each investment portfolio which is set according to the transaction strategy, category of investment and the annual profit target.

b) Policy and procedure

The Bank sets the "Rules of Market Risk Management" as the important regulation that should be complied with when holding trading portfolio.

c) Valuation policy

If the financial instruments of trading book have market values, they should be evaluated at least once each day by the information that is from an independent source and easily accessible. If it's evaluated by a model, a mathematical model should be used prudently, and the assumptions and parameters of the valuation model should be regularly reviewed and examined.

d) Method of measurement

- i. The assumption and calculation of VaR: See VaR section.
- ii. The Bank executes the stress test monthly with the following scenarios: The fluctuation of interest rate at 100bp, equity securities at 15% and foreign exchange rate at 3%, and reports to the risk management committee regularly.

4) Interest risk management of trading book

a) Definition of interest risk

Interest risk is the risk that the trading portfolios suffer losses or the change of its fair value which is caused by the fluctuation of interest rate. The main instruments include the securities and derivatives that relate to interest rates.

b) Interest risk management procedure of trading book

The Bank prudently choose its investment target by studying the credibility and financial position of the securities issuers, their sovereign risk and the trend of interest rates. According to the operating strategy and the circumstances of the market, the Bank sets the transaction limit and stop-loss limit (including the limits of dealing room, traders, and investment...etc.) of the trading book that are reported to the executive management or the board of directors for approval.

c) Method of measurement

- i. The assumption and calculation of VaR: See VaR section.
- ii. The Bank measures the investment portfolio's interest risk exposure monthly.

5) Interest risk management of banking book

The main objective of interest risk management of the banking book is to enhance the interest risk management, increase the operating efficiency of the fund and strengthen the business operation.

a) Strategy

Interest risk management enhances the Bank's ability to take responsive actions to measure, to manage and avoid the risk that the fluctuation of interest rate may cause on the profit and the economic value of assets/liabilities.

b) Management procedure

When undertaking the operations relating to interest rate instruments, the Bank identifies the repricing risk of interest rate, yield curve risk, basis risk and options risk characteristics. In additional, the Bank also measures the potential impact of interest rate changes on the profit and economic value of the Bank. The Bank analyzes and monitors the interest risk limits and each target of interest risk management monthly. The results of analysis and monitoring are regularly reported to not only the risk management committee but also the board of directors.

If any risk management targets is found to exceed the limit during the monitoring process, it will be reported to the risk management committee and a solution should be proposed.

c) Method of measurement

The interest risk of the Bank mainly measures the repricing risk that is caused by the difference between maturity date and repricing date of the assets, liabilities, and off balance sheet items in banking book. To stabilize long-term profitability and ensure business growth, the Bank sets the monitoring indicators of interest sensitivity in major terms and implements stress test. Each interest risk indicator and the result of stress test are reported to the executive management regularly for review.

6) Foreign exchange risk management

a) Definition of foreign exchange risk

Foreign exchange risk is the gain/loss caused by two currencies exchange at different times. The Bank's foreign exchange risk arises from the derivative instruments, such as spot exchange, forward exchange and foreign exchange option...etc. The Bank's foreign exchange transactions are implemented daily to offset clients' position. Thus, the Bank suffers little foreign exchange risk.

b) Policy, procedure and measurement methodology of foreign exchange risk management

In order to control foreign exchange risk, the Bank sets the limits of transaction and stop-loss limits for the dealing room and traders. Meanwhile, the Bank also sets the maximum annual loss limit to control the loss within the tolerable extent. Foreign exchange risk is controlled based on VaR. The assumption and calculation of VaR is described in VaR section.

For foreign exchange risk, the Bank sets the scenario at 3% fluctuation of interest rate of major currencies to execute the stress test quarterly, and reports to the risk management committee.

c) The significant portfolio of foreign currency financial assets and liabilities are as follows:

Unit: In Thousands of Foreign Currency

	December 31, 2019				
	Foreign Currency	Exchange Rate	New Taiwan Dollar		
Financial assets					
Monetary items					
USD	\$ 14,857,670	30.1060	\$ 447,305,013		
CNY	4,607,544	4.3231	19,918,873		
HKD	7,909,268	3.8660	30,577,230		
Non-monetary items					
USD	597,591	30.1060	17,991,075		
HKD	2,086,409	3.8660	8,066,057		
THB	3,473,375	1.0091	3,504,983		
Financial liabilities					
Monetary items					
USD	13,585,965	30.1060	409,019,062		
CNY	8,649,936	4.3231	37,394,538		
AUD	1,582,582	21.0998	33,392,164		
Non-monetary items					
USD	624,432	30.1060	18,799,150		
CNY	3,771	4.3231	16,302		
HKD	1,788,241	3.8660	6,913,340		

	December 31, 2018				
	Foreign		New Taiwan		
	Currency	Exchange Rate	Dollar		
Financial assets					
Monetary items					
USD	\$ 12,982,337	30.7330	\$ 398,986,163		
CNY	5,166,098	4.4742	23,114,156		
HKD	5,541,663	3.9240	21,745,486		
Non-monetary items					
USD	389,971	30.7330	11,984,979		
HKD	2,783,586	3.9240	10,922,791		
THB	3,473,375	0.9491	3,296,580		
Financial liabilities					
Monetary items					
USD	12,557,146	30.7330	385,918,768		
CNY	8,469,170	4.4742	37,892,760		
AUD	1,807,921	21.6775	39,191,207		
Non-monetary items					
USD	383,971	30.7330	11,800,581		
CNY	7,353	4.4742	32,899		
HKD	2,963,783	3.9240	11,629,884		

As the Company has a large variety of foreign currencies, it is not possible to disclose foreign currency exchange gain or loss based on each foreign currency's exposure to major impact. The foreign currency exchange gains were \$1,165,079 thousand and \$1,512,717 thousand for the years ended December 31, 2019 and 2018, respectively.

7) Risk management of equity securities price

a) Definition of risk of equity securities price

The market risk of equity securities held by the Bank includes the individual risk from the fluctuation of individual equity securities' market price and general market risk from the fluctuation of the overall price trend.

b) Purpose of risk management in equity securities prices

To avoid the massive fluctuation of equity securities price to worsen the Bank's financial situation or earnings. Also, to raise the operating efficiency of capital and strengthen the business operation.

c) Procedure of risk management of equity securities prices

The Bank sets investment limit on industries, using the β value to measure the investment portfolio affected by the systemic risk monthly. The stop-loss point must be authorized by the board of directors, and the equity investment should be authorized by the executives if the stop-loss point is reached but the investment is not going to be disposed of.

d) Measured methodology

The risk of equity securities prices in trading book is mainly controlled by VaR.

The Bank's risk of equity securities prices from its non-trading portfolio should be controlled by each bank according to its own business scale to develop a stress test under appropriate scenarios and report to the risk management committee.

The Bank adopts many methodologies to manage its market risk. Value-at-risk (VaR) is one of the methodologies. VaR is a statistical measure that assesses potential losses that might be caused by changes in risk factors over a specified period of time and at a specific level of statistical confidence. The Bank applies historical simulation with a statistic confidence of 99% to extrapolate the VaR of one-year fluctuations. The following form indicates the VaR which is the estimation of potential amount of loss within one day. While the statistic confidence of 99% represents the possible fluctuations that would be included in assumed adverse market changes. Base on the assumption, the VaR may exceed the amounts listed in 1 of 100 days due to the price changes in the market. The overall VaR in the market may be less than the aggregate VaR of individual market risk factors.

December 31, 2019								
Factors of Market Risk	Minimum	Ending						
Interest rate	\$ 92,619	\$ 212,043	\$ 40,550	\$ 119,090				
Foreign exchange	110,161	198,936	35,686	121,699				
Equity securities price	256,121	393,133	159,476	248,133				

December 31, 2018								
Factors of Market Risk	Average	Maximum	Minimum	Ending				
Interest rate	\$ 307,882	\$ 701,219	\$ 52,816	\$ 57,761				
Foreign exchange	147,353	202,948	104,364	136,066				
Equity securities price	318,530	424,067	230,176	282,533				

Note: Above information about factors of market risks is defined by risk management of the trading book.

The Bank enters into a variety of derivatives transactions for both trading and non-trading purposes. The objectives in using derivative instruments are to meet customers' needs, to manage the Bank's exposure to risks and to generate revenues through trading activities. The Bank trades derivative instruments on behalf of customers and for its own positions. The Bank provides derivative contracts to address customers' demands for customized derivatives and also takes proprietary positions for its own accounts.

8) Stress testing

The stress testing is used to measure the maximum losses of risk asset portfolio under the worst scenario. The Bank's stress testing considers various types of risk factors and the results will be reported to the executive management.

Stress Test							
Market/Product	Scenarios	December 31, 2019	December 31, 2018				
Stools mouleat	Major stock exchanges + 15%	\$ 2,275,627	\$ 990,610				
Stock market	Major stock exchanges - 15%	(2,275,627)	(935,918)				
Interest rate/bond market	Major interest rate + 100bp	(2,123,313)	(417,490)				
interest rate/bond market	Major interest rate - 100bp	1,761,718	701,613				
Foreign avahanga markat	Major currencies + 3%	232,248	245,686				
Foreign exchange market	Major currencies - 3%	(219,225)	(233,535)				
Composite	Major Stock Exchanges - 15%						
	Major Interest Rate + 100bp Major Currencies + 3%	(4,166,692)	(1,107,722)				

The information of stress test is defined by risk management policy of the trading book.

9) Sensitivity analysis

a) Interest rate risk

Interest rate factor sensitivities (the present value of one basis point, or "PVBP") represent the change in the net present value of the interest rate derivatives portfolios caused by a parallel unit shift of 0.01% (1 basis point) in the interest rates in various yield curves affecting the portfolio. The Bank's interest rate-sensitive portfolios include bonds, interest rate swaps and structured products composed of such products.

b) Foreign exchange risk

Foreign exchange rate factor sensitivities ("FX delta") represent the change of the foreign exchange portfolios caused by the underlying currency exchange rate fluctuation.

c) Equity securities price risk

Equity securities price factor sensitivities ("Equity delta") represent the change of the equity securities price portfolio caused by a parallel unit shift of 1% (100 basis points) in the underlying stocks prices fluctuation. The Bank's equity portfolios include stocks and equity index options.

		December	: 31, :	2019
Risk Factors	Changes (+/-)	ensitivity Profit or Loss		nsitivity Equity
Foreign exchange	USD+1%	\$ 78,082	\$	_
rate factor	HKD+1%	(26,787)		-
sensitivity	JPY+1%	(1,077)		-
(FX Delta)	AUD+1%	(926)		-
	CNY+1%	4,109		-
Interest rate factor	Yield curves (USD) parallel shift+1bp	(8,600)		-
sensitivity (PVBP)	Yield curves (HKD) parallel shift+1bp	70		-
	Yield curves (JPY) parallel shift+1bp	(1)		-
	Yield curves (AUD) parallel shift+1bp	(385)		-
	Yield curves (CNY) parallel shift+1bp	(1,097)		-
Equity securities price factor sensitivity (Equity Delta)	Equity securities price +1%	2,761		148,947

		December	31, 2018
Risk Factors	Changes (+/-)	Sensitivity of Profit or Loss	Sensitivity of Equity
Foreign exchange	USD+1%	\$ 108,556	\$ -
rate factor	HKD+1%	(6,980)	-
sensitivity	JPY+1%	(905)	-
(FX Delta)	AUD+1%	(354)	-
	CNY+1%	2,563	-
Interest rate factor	Yield curves (USD) parallel shift+1bp	1,347	-
sensitivity (PVBP)	Yield curves (HKD) parallel shift+1bp	183	-
	Yield curves (JPY) parallel shift+1bp	(1)	-
	Yield curves (AUD) parallel shift+1bp	(359)	-
	Yield curves (CNY) parallel shift+1bp	(210)	-
Equity securities price factor sensitivity (Equity Delta)	Equity securities price +1%	(1,011)	66,545

d. Transfers of financial assets

Financial assets transferred that have not been fully removed

Transferred financial assets that are part of the Bank daily operations that do not meet the criteria for full removal are mostly made up of debt securities used as counterparty collateral for repurchase agreements or equity securities lent out as part of securities lending agreement. The nature of these transactions are secured loans, and reflects the liability where the Bank are obligated to repurchase the transferred financial assets according to a fixed price in future periods. With respect to such transactions, the Bank will not be able to use, sell or pledge such transferred financial assets during the effective period. However the Bank is still exposed to interest rate risk and credit risk, hence they are not removed.

The following table analyses financial assets and financial liabilities that have not been fully removed:

December 31, 2019								
Category of Financial Assets	Transferred Financial Assets Carrying Value	Related Financial Liabilities Carrying Value	Transferred Financial Assets Fair Value	Related Financial Liabilities Fair Value	Net Fair Value			
Financial assets at fair value through other comprehensive income Repurchase agreements Investments in debt instruments measured at amortised cost	\$ 37,202,442	\$ 35,456,986	\$ 37,202,442	\$ 35,456,986	\$ 1,745,456			
Repurchase agreements	15,538,318	12,723,466	15,346,975	12,723,466	2,623,509			

December 31, 2018							
Category of Financial Assets	Transferred Financial Assets Carrying Value	Related Financial Liabilities Carrying Value	Transferred Financial Assets Fair Value	Related Financial Liabilities Fair Value	Net Fair Value		
Financial assets at fair value through profit or loss							
Repurchase agreements	\$ 581,159	\$ 523,342	\$ 581,159	\$ 523,342	\$ 57,817		
Financial assets at fair value through other comprehensive income							
Repurchase agreements	44,424,315	42,613,744	44,424,315	42,613,744	1,810,571		
Investments in debt instruments measured at amortised cost Repurchase agreements	14,649,885	11,447,258	13,056,317	11,447,258	1,609,059		
Securities purchased under resell agreements	11,049,003	11, 747,230	13,000,017	11,747,230	1,009,009		
Repurchase agreements	1,493,132	1,390,165	1,493,132	1,390,165	102,967		

e. Offsetting financial assets and liabilities

The Company own financial instruments that do not offset in accordance with IAS 32.42 but it executed enforceable master netting arrangement or other similar agreements with counterparties. Financial instruments subject to enforceable master netting arrangement or other similar agreements could be settled at net amount as chosen by the counterparties, or the financial instruments could be settled at gross amount if not. However, if one of the counterparty defaults, the other party could choose to settle the transaction at net amount.

Information related to offsetting of financial assets and financial liabilities was disclosed as follows:

	December 31, 2019						
	Financial Assets S	Subject to Offsettin	g, Master Netting A	Arrangement or Sin	nilar Agreement		
	Gross Amount Offset in the Off			Net Amount			
Item	of Recognized Financial Assets (a)	al Assets Balance Sheet	Balance Sheet (c)= (a)-(b)	Financial Instruments (Note)	Cash Collateral Received/Pledged	(e)=(c)-(d)	
Derivative financial							
instruments	\$ 51,387,906	\$ -	\$ 51,387,906	\$ 49,166,645	\$ 2,221,261	\$ -	

December 31, 2019 Financial Liabilities Subject to Offsetting, Master Netting Arrangement or Similar Agreement						
Gross Amount of Recognized		Gross Amount Offset in the		Amount Not Offset in the Balance Sheet (d)		Net Amount
Item	Financial Liabilities (a)	Balance Sheet (b)	Presented in the Balance Sheet (c)= (a)-(b)	Financial Instruments (Note)	Cash Collateral Received/Pledged	(e)=(c)-(d)
Derivative financial instruments	\$ 49,166,645	\$ -	\$ 49,166,645	\$ 49,166,645	\$ -	\$ -

		J	December 31, 2018			
	Financial Assets S	Subject to Offsettin	g, Master Netting A	Arrangement or Sin	nilar Agreement	
Item of Recognized Offset in	Gross Amount		Amount Not Offset in the Balance Sheet (d)		NT-4 A4	
	Financial Assets	s Balance Sheet	Presented in the Balance Sheet (c)= (a)-(b)	Financial Instruments (Note)	Cash Collateral Received/Pledged	Net Amount (e)=(c)-(d)
Derivative financial						
instruments	\$ 49,475,706	\$ -	\$ 49,475,706	\$ 49,475,706	\$ -	\$ -

December 31, 2018							
	Financial Liabilities Subject to Offsetting, Master Netting Arrangement or Similar Agreement						
	Gross Amount of Recognized Gross Amount Amount Offset in the Presented in the		Amount Not Offset in the Balance Sheet (d)		Net Amount		
Item	Financial Liabilities (a)	Offset in the Balance Sheet (b)	Presented in the Balance Sheet (c)= (a)-(b)	Financial Instruments (Note)	Cash Collateral Received/Pledged	(e)=(c)-(d)	
Derivative financial							
instruments	\$ 51,966,013	\$ -	\$ 51,966,013	\$ 49,475,706	\$ 2,490,307	\$ -	

Note: Master netting arrangement and non-cash collateral are included.

51. CAPITAL MANAGEMENT

a. Capital adequacy maintain strategy

The eligible capital of the Company must conform to the regulatory capital requirements and achieve the minimum adequacy ratio. The calculation of the eligible capital and regulatory capital should comply with the rules issued by the authorities.

b. Capital assessment procedure

To ensure the Company possesses sufficient capital to assume various risk, the Company assesses required capital for the portfolios and characteristics of risk and execute risk management through capital allocation to realize optimization of resources.

c. Information on the Bank's CAR was as follows:

Unit: In Thousands of New Taiwan Dollars, %

		Year	December	r 31, 2019
Items			Standalone	Consolidated
• н	Common equity		\$ 186,226,591	\$ 193,317,039
Eligible capital	Other Tier 1 capit	al	27,099,093	33,059,261
ibl	Tier 2 capital		48,554,797	61,447,606
(b	Eligible capital		261,880,481	287,823,906
		Standardized approach	1,458,022,891	1,546,548,347
\mathbb{R}	Credit risk Internal ratings-based approach		-	-
isk		Securitization	22,228,869	22,228,869
-W		Basic indicator approach	-	-
Risk-weighted assets	Operational risk	Standardized approach/alternative standardized approach	92,046,240	97,006,726
d a		Advanced measurement approach	-	-
sse	Market risk	Standardized approach	162,655,085	171,196,678
ts	Market 118K	Internal model approach	-	-
Risk-weighted assets			1,734,953,085	1,836,980,620
Capital adequacy ratio (%)			15.09%	15.67%
Ratio of common equity to risk-weighted assets (%)			10.73%	10.52%
Ratio of	Tier 1 capital to ris	sk-weighted assets (%)	12.30%	12.32%
Leverage	e ratio (%)		7.01%	7.18%

		Year	December 31, 2018			
Items			Standalone	Consolidated		
6 Н	Common equity		\$ 166,969,563	\$ 173,805,139		
Eligible capital	Other Tier 1 capit	al	28,371,343	34,304,206		
ibl ital	Tier 2 capital		51,801,638	64,789,659		
— е	Eligible capital		247,142,544	272,899,004		
		Standardized approach	1,445,220,093	1,525,409,836		
R	Credit risk	Internal ratings-based approach	-	-		
isk		Securitization	20,415,153	20,415,153		
W.	Operational risk	Basic indicator approach	-	-		
Risk-weighted assets		Standardized approach/alternative standardized approach	86,475,368	90,566,602		
d a		Advanced measurement approach	-	-		
sse	Market risk	Standardized approach	96,881,010	104,686,276		
ts	Market risk	Internal model approach	-	-		
Risk-weighted assets		1,648,991,624	1,741,077,867			
Capital adequacy ratio (%)		14.99%	15.67%			
Ratio of common equity to risk-weighted assets (%)		10.13%	9.98%			
Ratio of	Tier 1 capital to ris	k-weighted assets (%)	11.85%	11.95%		
Leverage	ratio (%)		6.59%	6.81%		

Note 1: Eligible capital and risk-weighted assets are calculated under the "Regulations Governing the Capital Adequacy Ratio of Banks" and "Explanation of Methods for Calculating the Eligible Capital and Risk-Weighted Assets of Banks."

Note 2: Formulas used were as follows:

- 1) Eligible capital = Common equity + Other Tier 1 capital + Tier 2 capital.
- 2) Risk-weighted assets = Risk-weighted asset for credit risk + Capital requirements for operational risk and market risk x 12.5.
- 3) Capital adequacy ratio = Eligible capital ÷ Risk-weighted assets.
- 4) Ratio of the common equity to risk-weighted assets = Common equity ÷ Risk-weighted assets.
- 5) Ratio of Tier 1 capital to risk-weighted assets = (Common equity + Other Tier 1 capital) ÷ Risk-weighted assets.
- 6) Leverage ratio = Tier 1 capital ÷ Exposure measurement.

The Banking Law and related regulations require the Bank to maintain its unconsolidated and consolidated CARs at a minimum of 10.5%, the Tier 1 Capital Ratio at a minimum of 8.5% and the Common Equity Tier 1 Ratio at a minimum of 7%. In addition, if the Bank's CAR falls below the minimum requirement, the authorities may impose certain restrictions on the amount of cash dividends that the Bank can declare or, in certain conditions, totally prohibit the Bank from declaring cash dividends.

52. UNCONSOLIDATED STRUCTURED ENTITIES

The Company does not provide financial support or other support to the unconsolidated structured entities. The Company's maximum exposure to loss from its interests in these structured entities is limited to the carrying amount of assets the Company recognized. The information of the recognized unconsolidated structured entities is disclosed as follows:

Type of Structured Entity	Nature and Purpose	Interests Owned
Securitization vehicle	Investment in asset-backed securities to receive returns	Investment in securitization vehicles issued by the entity

The carrying amount of assets recognized by company relating to its interests in unconsolidated structured entities is disclosed as follows:

	Decem	iber 31
	2019	2018
Financial assets at fair value through other comprehensive income Investments in debt instruments measured at amortised cost	\$ 27,942,654 <u>38,848,276</u>	\$ 3,191,683 47,970,374
	\$ 66,790,930	\$ 51,162,057

53. ASSET QUALITY, CONCENTRATION OF CREDIT EXTENSIONS, INTEREST RATE SENSITIVITY, PROFITABILITY AND MATURITY ANALYSIS OF ASSETS AND LIABILITIES

The Bank

- a. Credit risk
 - 1) Asset quality: Please refer to Table 3.
 - 2) Concentration of credit extensions

(In Thousands of New Taiwan Dollars, %)

	December 31, 2019						
Rank	Company Name	Credit Extension Balance	% of the Bank's Equity				
1	Group A- real estate development activities	\$ 30,945,120	13.60				
2	Group B - packaging and testing of semi-conductors	17,042,808	7.49				
3	Group C - ocean transportation	9,123,947	4.01				
4	Group D- other financial intermediation	8,563,610	3.76				
5	Group E - other	8,464,135	3.72				
6	Group F - real estate development activities	6,400,000	2.81				
7	Group G- other financial intermediation	4,740,141	2.08				
8	Group H- wired telecommunications activities	4,380,400	1.93				
9	Group I - international financial institution	4,314,942	1.90				
10	Group J - other financial intermediation	4,269,514	1.88				

	December 31, 2018						
Rank	Company Name	Credit Extension Balance	% of the Bank's Equity				
1	Group A- real estate development activities	25,830,822	12.80				
2	Group B - packaging and testing of semi-conductors	13,815,191	6.85				
3	Group C - air transport	9,874,541	4.89				
4	Group D- other	9,386,625	4.65				
5	Group E - other financial intermediation	8,282,950	4.11				
6	Group F - real estate development activities	6,600,000	3.27				
7	Group G- manufacture of computers	5,006,283	2.48				
8	Group H- wired telecommunications activities	4,668,713	2.31				
9	Group I - other financial intermediation	4,497,900	2.23				
10	Group J - other	3,963,056	1.96				

b. Market risk

Interest Rate Sensitivity (New Taiwan Dollar)

(In Thousands of New Taiwan Dollars, %)

December 31, 2019

Items	1 to 90 Days	91 to 180 Days	181 Days to One Year	Over One Year	Total	
Interest rate-sensitive assets	\$ 1,837,932,196	\$ 7,335,655	\$ 123,846,988	\$ 120,610,271	\$ 2,089,725,110	
Interest rate-sensitive liabilities	206,919,364	1,314,554,764	258,573,888	94,850,569	1,874,898,585	
Interest rate-sensitive gap	1,631,012,832	(1,307,219,109)	(134,726,900)	25,759,702	214,826,525	
Net worth						
Ratio of interest rate-sensitive assets to liabilities						
Ratio of interest rate sensitivity gap to net	worth		•		94.44%	

December 31, 2018

Items	1 to 90 Days	91 to 180 Days	181 Days to One Year	Over One Year	Total	
Interest rate-sensitive assets	\$ 1,870,199,137	\$ 13,593,852	\$ 54,020,269	\$ 107,243,806	\$ 2,045,057,064	
Interest rate-sensitive liabilities	201,956,305	1,214,221,810	254,655,405	94,382,693	1,765,216,213	
Interest rate-sensitive gap	1,668,242,832	(1,200,627,958)	(200,635,136)	12,861,113	279,840,851	
Net worth						
Ratio of interest rate-sensitive assets to liabilities						
Ratio of interest rate sensitivity gap to ne	worth	•	•		138.70%	

- Note 1: The above amounts included only New Taiwan dollar amounts held by the Bank (excluding foreign currency).
- Note 2: Interest rate-sensitive assets and liabilities mean the revenues or costs of interest-earning assets and interest-bearing liabilities are affected by interest rate changes.
- Note 3: Interest rate sensitivity gap = Interest rate-sensitive assets Interest rate-sensitive liabilities.
- Note 4: Ratio of interest rate-sensitive assets to liabilities = Interest rate-sensitive assets ÷ Interest rate-sensitive liabilities (in New Taiwan dollars).

Interest Rate Sensitivity (U.S. Dollars)

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

December 31, 2019

Items	1 to 90 Days	91 to 180 Days	181 Days to One Year	Over One Year	Total	
Interest rate-sensitive assets	\$ 7,944,502	\$ 417,969	\$ 1,052,742	\$ 7,468,062	\$ 16,883,275	
Interest rate-sensitive liabilities	10,852,355	2,762,903	3,020,304	3,717,138	20,352,700	
Interest rate-sensitive gap	(2,907,853)	(2,907,853) (2,344,934)		3,750,924	(3,469,425)	
Net worth						
Ratio of interest rate-sensitive assets to liabilities						
Ratio of interest rate sensitivity gap t	o net worth				(45.92%)	

December 31, 2018

Items	1 to 90 Days	91 to 180 Days	181 Days to One Year	Over One Year	Total	
Interest rate-sensitive assets	\$ 7,132,274	\$ 877,879	\$ 591,620	\$ 6,360,102	\$ 14,961,875	
Interest rate-sensitive liabilities	10,756,895	2,777,985	2,711,257	3,756,461	20,002,598	
Interest rate-sensitive gap	Interest rate-sensitive gap (3,624,621) (1,900,106) (2,119,637)					
Net worth						
Ratio of interest rate-sensitive assets to liabilities						
Ratio of interest rate sensitivity gap	to net worth				(76.78%)	

- Note 1: The above amounts included only U.S. dollar amounts held by the Bank and excluded contingent assets and contingent liabilities.
- Note 2: Interest rate-sensitive assets and liabilities mean the revenues or costs of interest-earning assets and interest-bearing liabilities are affected by interest rate changes.
- Note 3: Interest rate sensitivity gap = Interest rate-sensitive assets Interest rate-sensitive liabilities.
- Note 4: Ratio of interest rate-sensitive assets to liabilities = Interest rate-sensitive assets ÷ Interest rate-sensitive liabilities (in U.S. dollars)

c. Liquidity risk

1) Profitability (consolidated information)

Unit: %

Items		For the Ye	
		Decemb	oer 31
		2019	2018
Detum on total accets	Before income tax	0.91	0.88
Return on total assets	After income tax	0.77	0.76
Datum on aquity	Before income tax	12.09	12.51
Return on equity	After income tax	10.27	10.86
Net income ratio		35.62	34.92

- Note 1: Return on total assets = Income before (after) income tax ÷ Average total assets
- Note 2: Return on equity = Income before (after) income tax ÷ Average equity
- Note 3: Net income ratio = Income after income tax \div Total net revenues
- Note 4: Income before (after) income tax represents income for the years ended December 31, 2019 and 2018.

2) Maturity analysis of assets and liabilities

Maturity Analysis of Assets and Liabilities (New Taiwan Dollar)

(In Thousands of New Taiwan Dollars)

December 31, 2019

				Remaining Per	iod to Maturity		
	Total	0-10 Days	11-30 Days	31-90 Days	91-180 Days	181 Days to 1 Year	Over 1 Year
Main capital inflow on							
maturity	\$ 2,753,664,691	\$ 512,917,202	\$ 279,534,600	\$ 326,611,389	\$ 212,034,471	\$ 388,992,625	\$ 1,033,574,404
Main capital outflow on							
maturity	3,284,386,041	181,117,191	225,578,812	608,926,176	570,919,514	483,026,638	1,214,817,710
Gap	(530,721,350)	331,800,011	53,955,788	(282,314,787)	(358,885,043)	(94,034,013)	(181,243,306)

December 31, 2018

				Remaining Per	iod to Maturity		
	Total	0-10 Days	11-30 Days	31-90 Days	91-180 Days	181 Days to 1 Year	Over 1 Year
Main capital inflow on							
maturity	\$ 2,718,291,477	\$ 539,138,622	\$ 289,490,379	\$ 304,254,308	\$ 240,773,167	\$ 326,519,393	\$ 1,018,115,608
Main capital outflow on							
maturity	3,200,692,054	175,442,094	257,319,919	516,766,947	538,442,232	536,045,170	1,176,675,692
Gap	(482,400,577)	363,696,528	32,170,460	(212,512,639)	(297,669,065)	(209,525,777)	(158,560,084)

Note: The above amounts included only New Taiwan dollar amounts held by the Bank (excluding foreign currency).

Maturity Analysis of Assets and Liabilities (U.S. Dollars)

(In Thousands of U.S. Dollars)

December 31, 2019

			Remain	ing Period to M	laturity	
	Total	1-30 Days	31-90 Days	91-180 Days	181 Days- 1 Year	Over 1 Year
Main capital inflow on						
maturity	\$ 61,759,110	\$ 17,781,993	\$ 16,890,342	\$ 8,748,684	\$ 7,808,402	\$ 10,529,689
Main capital outflow						
on maturity	66,894,443	16,698,526	20,440,429	10,134,936	12,011,769	7,608,783
Gap	(5,135,333)	1,083,467	(3,550,087)	(1,386,252)	(4,203,367)	2,920,906

December 31, 2018

			Remaining Period to Maturity								
	Total	1-30 Days	31-90 Days	91-180 Days	181 Days- 1 Year	Over 1 Year					
Main capital inflow on											
maturity	\$ 63,719,960	\$ 19,395,558	\$ 12,804,626	\$ 10,573,356	\$ 11,043,349	\$ 9,903,071					
Main capital outflow											
on maturity	70,142,653	18,987,216	15,884,692	12,103,998	14,955,130	8,211,617					
Gap	(6,422,693)	408,342	(3,080,066)	(1,530,642)	(3,911,781)	1,691,454					

Note: The above amounts included only U.S. dollar amounts held by the Bank and excluded contingent assets and contingent liabilities.

54. OPERATING SEGMENTS

The information reported to the Company's chief operating decision maker for the assessment of segment performance focuses mainly on operation and profitability. The Company's reportable segments are as follows:

- a. Corporate banking unit: Corporate banking, foreign exchange business, debt management and public treasury business;
- b. Individual banking unit: Deposits and consumer loans, foreign exchange service, endorsement guarantees business, note discounting, safe deposits boxes, credit card related products, and trust business:
- c. International banking unit: Offshore banking units, overseas branches and representative office; and
- d. Other units: These parts contain the Bank's assets, liabilities, revenues and expenses that cannot be attributed to or allocated reasonably to certain operation segments.

Management monitors the operating results of its business units separately for the purpose of making decisions. Segment performance is evaluated based on operating profit or loss.

The analysis of the Company's operating revenue and results by reportable segment was as follows:

		For the Ye	ar Ended Decemb	er 31, 2019	
	Corporate Banking	Individual Banking	International Banking	Others	Total
Net interest (from external) Segment revenue	<u>\$ 8,457,851</u>	<u>\$ 11,645,341</u>	\$ 8,075,990	<u>\$ 8,266,598</u>	<u>\$ 36,445,780</u>
(expense)	<u>\$ (3,698,282)</u>	<u>\$ 12,302,670</u>	<u>\$ (825,865)</u>	<u>\$ (7,778,523)</u>	<u>\$</u>
Segment net income Income tax expense	\$ 3,224,721	<u>\$ 19,757,524</u>	<u>\$ 4,750,081</u>	<u>\$ (1,264,940</u>)	\$ 26,467,386 (3,980,972)
Income after income tax					\$ 22,486,414
		For the Ye	ar Ended Decemb	er 31, 2018	
	Corporate Banking	Individual Banking	International Banking	Others	Total
Net interest (from external) Segment revenue	\$ 8,703,277	<u>\$ 12,846,867</u>	\$ 6,934,418	<u>\$ 4,912,694</u>	<u>\$ 33,397,256</u>
(expense)	<u>\$ (3,393,889)</u>	<u>\$ 11,933,276</u>	<u>\$ (251,312)</u>	<u>\$ (8,288,075)</u>	<u>\$</u>
Segment net income Income tax expense	\$ 4,958,463	<u>\$ 19,691,327</u>	<u>\$ 1,586,649</u>	<u>\$ (1,753,084</u>)	\$ 24,483,355 (3,230,004)
Income after income tax					<u>\$ 21,253,351</u>

- Note 1: No revenue from transactions with a single external customer amounted to 10% or more of the Company total revenue.
- Note 2: Operating segments' profit are measured on a pre-tax income basis, the income taxes are not allocated to reporting segments for the purpose of making decisions about resource allocation and performance assessment.
- Note 3: As the Company provided the average amount of deposits and loans to measure assets and liabilities, the measured amount of assets and liabilities is not disclosed.

55. ADDITIONAL DISCLOSURES

- a. Related information of significant transactions and investees and b. Proportionate share in investees:
 - 1) Financing provided: The Bank not applicable; investee none
 - 2) Endorsement/guarantee provided: The Bank not applicable; investee none
 - 3) Marketable securities held: The Bank not applicable; investee none
 - 4) Marketable securities acquired or disposed of at costs or prices of at least \$300 million or 10% of the paid-in capital: The Bank not applicable; investee none
 - 5) Acquisition of individual real estate at costs of at least \$300 million or 10% of the paid-in capital: None

- 6) Disposal of individual real estate at costs of at least \$300 million or 10% of the paid-in capital: Table 1 (attached)
- 7) Allowance of service fees to related parties amounting to at least \$5 million: None
- 8) Receivables from related parties amounting to at least \$300 million or 10% of the paid-in capital: Table 2 (attached)
- 9) Sale of nonperforming loans: None
- 10) Asset securitization under the "Regulations for Financial Asset Securitization": None
- 11) Other significant transactions which may affect the decisions of users of financial reports: Table 3 (attached)
- 12) Related information of investees and proportionate share: Table 4 (attached)
- 13) Derivative transactions: Note 8
- c. Investments in mainland China: Table 5 (attached)
- d. Intercompany relationships and significant intercompany transactions.

For the detailed information of intercompany relationships and significant intercompany transactions, please refer to Table 6 (attached).

DISPOSAL OF INDIVIDUAL REAL ESTATE AT PRICES OF AT LEAST NT\$300 MILLION OR 10% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Seller	Property	Date of Occurrence	Original Acquisition Date	Carrying Amount	Transaction Amount	Collection	Gain (Loss) on Disposal	Counterparty	Relationship	Purpose of Disposal	Price Determination and Supporting Reference Materials	
Cathay United Bank Co., Ltd	Land No. 5-13, 17-27, Ankeng Section Subsection 5 Xindian District, New Taipei City	November 14, 2019	Acquired in succession from 1996 to 2009	\$ 541,000	\$ 560,001	Collect price according to the contract	\$ 19,001	Hong-Hui Plastic Co., Ltd.	Non-related party	Revitalization of assets	NT\$541,000 thousand, appraised by REPro KnightFrank Real Estate Appraiser Firm	None

- Note 1: The appraisal result of assets disposed of in accordance with the regulations is indicated in the "Price Determination and Supporting Reference Materials" column.
- Note 2: The paid-in capital refers to the paid-in capital of the Bank. If the issued stock has no par value or the par value is not NT\$10, the transaction amount requirement of 10% of the paid-in capital is calculated based on 10% of the equity attributable to the owner of the parent company on the balance sheet.
- Note 3: Date of occurrence refers to the date of contract signing, date of payment, date of consignment trade, date of transfer, date of board of directors resolution, or other date that can confirm the counterpart and monetary amount of the transaction, whichever date is earlier.

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$300 MILLION OR 10% OF THE PAID-IN CAPITAL DECEMBER 31, 2019 (In Thousands of New Taiwan Dollars)

						Overdue	Amounts Received	Allowance for
Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Amount	Actions Taken	in Subsequent Period	Impairment Loss
Cathay United Bank Co., Ltd.	Cathay United Bank (China) Corporation Limited (Note)	Subsidiary	\$ 429,798	-	\$ -	-	\$	\$ -

Note: Interest receivable.

ASSET QUALITY - NONPERFORMING LOANS AS OF DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars, %)

	Period]	December 31, 2019					December 31, 2018	}	
	Items		Nonperformin Loan (Note 1)	ıg	Loan	Ratio of Nonperforming Loan (Note 2)	Allowance for Credit Losses	Coverage Ratio (Note 3)	Nonperforming Loans (Note 1)	Loans	Ratio of Nonperforming Loans (Note 2)	Allowance for Credit Losses	Coverage Ratio (Note 3)
Corporate banking	Secured		\$ 106,44	13 \$	219,835,224	0.05%	\$ 2,799,559	2630.09%	\$ 592,658	\$ 233,463,729	0.25%	\$ 3,600,918	607.59%
Corporate banking	Unsecured		234,89	9	326,886,658	0.07%	8,132,940	3462.31%	321,166	372,650,615	0.09%	6,367,224	1982.53%
	Housing mortgage	e (Note 4)	652,83	32	351,141,817	0.19%	5,628,075	862.10%	594,249	358,859,786	0.17%	5,649,230	950.65%
	Cash card			-	-	-	-	-	-	-	-	-	-
Consumer banking	Small-scale credit	loans (Note 5)	211,67	73	87,272,712	0.24%	2,898,274	1369.22%	164,226	71,310,220	0.23%	1,876,794	1142.81%
	Other (Note 6)	Secured	995,45	51	502,473,730	0.20%	6,105,424	613.33%	780,457	498,067,264	0.16%	5,946,347	761.91%
	Other (Note 6)	Unsecured	84,86	57	26,291,790	0.32%	419,182	493.93%	110,551	23,068,954	0.48%	438,172	396.35%
Loan			2,286,16	55	1,513,901,931	0.15%	25,983,454	1136.55%	2,563,307	1,557,420,568	0.16%	23,878,685	931.56%
			Nonperformir Receivables	_	Receivables	Ratio of Nonperforming Receivables	Allowance for Credit Losses	Coverage Ratio	Nonperforming Receivables	Receivables	Ratio of Nonperforming Receivables	Allowance for Credit Losses	Coverage Ratio
Credit cards	edit cards		\$ 131,12	25 \$	89,442,948	0.15%	\$ 1,852,005	1412.39%	\$ 107,314	\$ 71,887,117	0.15%	\$ 1,466,464	1366.52%
Accounts receivabl (Note 7)	Accounts receivable factored without recourse (Note 7)			-	3,137,119	-	42,657	-	-	2,607,455	-	47,734	-

- 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.
- Note 6: Other consumer banking loans refer to secured or unsecured loans that exclude housing mortgage, 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), accounts receivable factored 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.

(Continued)

Not reported as nonperforming loans or nonperforming receivables

Itomo		Decembe	r 31, :	2019		December	r 31, 2	2018
Items	Not F	Reported as	Not 1	Reported as	Not R	Reported as	Not 1	Reported as
Types	Nonj	performing	Non	performing	Nonp	performing	Non	performing
Types		Loan	R	eceivable		Loan	Re	eceivable
Amounts of executed contracts on negotiated debts not reported as								
nonperforming loans and receivables (Note 1)	\$	2,032	\$	84,157	\$	2,721	\$	102,330
Amounts of discharged and executed contracts on clearance of consumer								
debts not reported as nonperforming loans and receivables (Note 2)		52,995		1,186,944		37,404		1,182,172
Total	\$	55,027	\$	1,271,101	\$	40,125	\$	1,284,502

Note 1: Amounts of executed contracts on negotiated debts that are not reported as nonperforming loans or receivables are reported in accordance with the Banking Bureau's letter dated April 25, 2006 (Ref. No. 09510001270).

Note 2: Amounts of discharged and executed contracts on clearance of consumer debts that are not reported as nonperforming loans or receivables are reported in accordance with the Banking Bureau's letter dated September 15, 2008 and September 20, 2016 (Ref. No. 09700318940 and No. 10500134790).

(Concluded)

INFORMATION ON AND PROPORTIONATE SHARE IN INVESTEES December 31, 2019

(In Thousands of New Taiwan Dollars)

g Corporation Taipei Taipei poration Ltd. Taipei	Centralized securities depository of enterprises Foreign exchange broker Securities finance industry Futures exchange Data processing services Bills financing	Percentage of Ownership (%) 0.17 4.04 2.45 0.62	\$ 45,437 51,416 33,164	\$ 2,199 4,800	Shares (Thousands)	Pro Forma Shares (Note 2)	Shares (Thousands)	Percentage of Ownership (%)	Note
g Corporation Taipei Taipei Taipei poration Taipei Ltd. Taipei Co., Ltd. Taipei Taipei Taipei Taipei	Centralized securities depository of enterprises Foreign exchange broker Securities finance industry Futures exchange Data processing services	0.17 4.04 2.45	\$ 45,437 51,416	\$ 2,199	(Thousands) 2,180		(Thousands)	Ownership (%)	Note
Taipei poration Taipei Ltd. Taipei Co., Ltd. Taipei Taipei Taipei Taipei	Foreign exchange broker Securities finance industry Futures exchange Data processing services	4.04 2.45	51,416	Ψ - ,		-	2 190	0 0.57	
Taipei poration Taipei Ltd. Taipei Co., Ltd. Taipei Taipei Taipei Taipei	Foreign exchange broker Securities finance industry Futures exchange Data processing services	4.04 2.45	51,416	Ψ - ,		_	2 190		1
Taipei poration Taipei Ltd. Taipei Co., Ltd. Taipei Taipei Taipei Taipei	Foreign exchange broker Securities finance industry Futures exchange Data processing services	4.04 2.45	51,416	Ψ - ,		- 1		0.57	
poration Taipei Ltd. Taipei Co., Ltd. Taipei Taipei Taipei Taipei	Securities finance industry Futures exchange Data processing services	2.45			900		800		
Ltd. Taipei Co., Ltd. Taipei Taipei Taipei Taipei	Futures exchange Data processing services			1,456	800 9,812	_	9,812	2.45	
Co., Ltd. Taipei Taipei Taipei	Data processing services	0.02	220,229	7,615	2,212	-	2,212	0.62	
Taipei Taipei		2.34	718,488	33,031	12,234	-	12,234	2.34	
Taipei		24.57	1,675,881	89,868	126,814	-	126,814	24.57	
	Integrated securities houses	10.32	554,956	906	95,227	-	95,227	12.29	
'iporation raiber	Financial institution's debt purchase, evaluation or	5.79	1,081,404	39,780	61,200	-	61,200	5.79	
	auction business	3.19	1,061,404	39,760	01,200	-	01,200	3.19	
e Corporation Taipei	Financial institution credit evaluation or auction services	5.88	95,400	700	10,000		10,000	5.88	
Taipei	Financial institution's debt purchase and other services	9.37	3,070	700	562	-	562	9.37	
Los Ange		0.02	2,633,468	15,130	1,073	-	1,073	0.05	
Vietnam	Commercial banking	50.00	4,409,575	663,761	(Note 3)	-	(Note 3)	50.00	
ia) Corporation Cambodia	Commercial banking Commercial banking	100.00	3,588,046	180,052	100,000	-	100,000	100.00	
•			, ,	180,032	,	-	,		
Taipei	Trust service manager (TSM)	4.00	11,736	-	2,400	-	2,400	4.00	
rporation (PCHC) Philippine		1.69	6,326	-	21	-	21	1.69	
Cayman I		7.70	35,585	-	2,515	-	2,515	7.70	
Limited China	Commercial banking	100.00	15,843,051	223,397	(Note 3)	-	(Note 3)	100.00	
Thailand	Holding industry	4.76	4,363,494	-	125,827		125,827	9.42	
Taipei	ATM bill supplement business	15.00	12,321	518	450	-	450	15.00	
ent Co., Ltd. Taipei	Real estate management	30.15	100,958	1,235	9,044	-	9,044	30.15	
ion Center Co., Ltd. Taipei	Acting as agent for exporting domestic manufacturers' products for export business	4.87	307	-	19	-	19	4.87	
vestment Co., Ltd. Taipei	Investment	4.95	941,426	21,600	108,000	_	108,000	9.90	
						_		6.28	
				385		_		1.38	
				-		_		12.95	
				_		_			
				562		_			
. Ltd. Tainei					66	_			
				-		_			
Co ora Ltd	., Ltd. Taipei tion Kaohsiung . Taipei Taipei td. Taipei	ment Co., Ltd. Taipei Investment Investment Investment Investment Investment Fublic rapid transit Venture capital Taipei Venture capital Taipei Venture capital Venture capital Taipei Venture capital Sco., Ltd. Taichung Machinery and equipment manufacturing	ment Co., Ltd. Taipei Investment 4.95 ., Ltd. Taipei Investment 4.91 tion Kaohsiung Public rapid transit 1.38 . Taipei Venture capital 12.95 Taipei Venture capital 5.00 td. Taipei Venture capital 3.35 s Co., Ltd. Taichung Machinery and equipment manufacturing 0.03	ment Co., Ltd. Taipei Investment 4.95 941,426 ., Ltd. Taipei Investment 4.91 141,745 tion Kaohsiung Public rapid transit 1.38 50,912 . Taipei Venture capital 12.95 74,710 Taipei Venture capital 5.00 4,557 td. Taipei Venture capital 3.35 216 ts Co., Ltd. Taichung Machinery and equipment manufacturing 0.03 1,279	ment Co., Ltd. Taipei Investment 4.95 941,426 21,600 ., Ltd. Taipei Investment 4.91 141,745 5,436 tion Kaohsiung Public rapid transit 1.38 50,912 385 . Taipei Venture capital 12.95 74,710 - Taipei Venture capital 5.00 4,557 - dd. Taipei Venture capital 3.35 216 562 s Co., Ltd. Taichung Machinery and equipment manufacturing 0.03 1,279 39	ment Co., Ltd. Taipei Investment 4.95 941,426 21,600 108,000 ., Ltd. Taipei Investment 4.91 141,745 5,436 6,538 tion Kaohsiung Public rapid transit 1.38 50,912 385 3,845 . Taipei Venture capital 12.95 74,710 - 7,092 Taipei Venture capital 5.00 4,557 - 450 dd. Taipei Venture capital 3.35 216 562 26 s Co., Ltd. Taichung Machinery and equipment manufacturing 0.03 1,279 39 66	Investment Co., Ltd. Taipei Investment	ment Co., Ltd. Taipei Investment	ment Co., Ltd. Taipei Investment

Note 1: Shares or pro forma shares held by the Bank, directors, president, vice president and affiliates have been included in accordance with the Company Act.

Note 2: a. Pro forma shares are shares that are assumed to be obtained through buying equity-based securities or entering into equity-linked derivative contracts for purposes defined in Article 74 of Banking Law. Equity-based securities, such as convertible bonds and warrants, are covered by Article 11 of "Securities and Exchange Law Enforcement Rules".

Derivative contracts, such as stock options, are those conforming to the definition of derivatives in IFRS 9.

Note 3: Unissued stock.

INVESTMENTS IN MAINLAND CHINA FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company Name Main Businesses and Products Total Amou Paid-in Cap		Accumulated Outflow of Investment from Taiwan as of January 1, 2019 (Note 1)	Outflow Inflow	Accumulated Outflow of Investment from Taiwan as of December 31, 2019 Accumulated Investee Net Income (Loss)	% Ownership of Direct or Indirect Investment	Investment Income	Carrying Value as of December 31, 2019	Accumulated Inward Remittance of Earnings as of December 31, 2019	Note
Cathay United Bank (China) Local government approved banking \$ 14,377 (CNY 3,000)	562 Direct	\$ 14,377,562 (CNY 3,000,000)		- \$ 14,377,562 (CNY 3,000,000) \$ 223,397	100	\$ 223,397	\$ 15,843,051	\$ -	

Accumulated Investment in Mainland China as of December 31, 2019	Investment Amount Approved by the Investment Commission, MOEA (Note 2)	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Note 3)
\$ 14,377,562 (CNY 3,000,000)	\$ 14,377,562 (CNY 3,000,000)	\$ 139,137,108

- Note 1: The registered capital of Cathay United Bank (China) Limited was CNY3,000,000, which was transferred to the working capital of Cathay United Bank (China) Limited Bank (C
- Note 2: The Investment Commission of the Ministry of Economic Affairs ("MOEAIC") authorized the Bank to remit US\$60,067,239 (CNY400,000,000). Based on the capital verification report issued by local accountants in mainland China, the Shanghai branch of the Bank was authorized to remit the total amount of working capital of US\$59,768,397.46, and the remaining amount of US\$298,841.54 was repatriated on November 5, 2010. The Bank reported to MOEAIC to revise the amount of the investment on January 18, 2011, and it was authorized by MOEAIC on January 24, 2011. Also, MOEAIC authorized the Bank to remit US\$95,024,128 (CNY600,000,000). Based on the capital verification report issued by local accountants in mainland China, Shanghai branch of the Bank was authorized to remit the total amount of working capital of US\$94,929,198.64, and the remaining amount of US\$94,929.36 was repatriated on February 1, 2012. The Bank reported to MOEAIC to revise the amount of the investment on March 20, 2012, and it was authorized by MOEAIC on March 26, 2012. MOEAIC agreed to the Bank to increase the working capital of Shanghai branch by US\$164,000,000 (CNY1,000,000,000) on February 27, 2014, and was authorized by MOEAIC on October 30, 2014. The Bank obtained approval from MOEAIC to increase the working capital of Shenzhen branch by US\$60,708,160.7 (CNY400,000,000) on January 5, 2015, and was authorized by MOEAIC on December 22, 2016.
- Note 3: Based on the Investment Commission's "Regulation on Examination of Investment or Technical Cooperation in Mainland China" investments are limited to the larger of 60% of the Bank's net asset value or 60% of the Company's consolidated net asset value.

BUSINESS RELATIONSHIP AND SIGNIFICANT TRANSACTIONS AMONG THE BANK AND SUBSIDIARIES FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

			Tel C	De	escription of Transaction		
No. (Note 1)	Transacting Company	1 0	Flow of Fransaction (Note 2)	Financial Statement Account	Amounts	Terms of Transaction	Percentage of Total Revenue or Total Assets (Note 3)
0	Cathay United Bank	Indovina Bank	a	Due from banks - interest revenue	\$ 306	Note 4	_
	Camay Chited Bank	Indovina Bank		Call loan to banks - interest revenue	160,251	Note 4	0.25
		Indovina Bank		Due to banks	23,671	Note 4	-
		Indovina Bank		Due from bank	39,972	Note 4	_
		Indovina Bank		Call loan to banks	5,991,094	Note 4	0.20
1	Indovina Bank	Cathay United Bank	b	Due to banks - interest expense	306	Note 4	-
		Cathay United Bank	b	Call loan from banks - interest expense	160,251	Note 4	0.25
		Cathay United Bank		Due from bank	23,671	Note 4	-
		Cathay United Bank	b	Due to banks	39,972	Note 4	-
		Cathay United Bank	b	Call loan from banks	5,991,094	Note 4	0.20
0	Cathay United Bank	CUBC Bank		Call loan to banks - interest revenue	4,399	Note 4	0.01
		CUBC Bank	a	Call loan from banks - interest expense	5,768	Note 4	0.01
		CUBC Bank		Other miscellaneous income	6,221	Note 4	0.01
		CUBC Bank		Due to banks	10,438	Note 4	-
		CUBC Bank		Due from bank	61,113	Note 4	-
		CUBC Bank		Call loan to banks	602,120	Note 4	0.02
		CUBC Bank	a	Interest receivable	38	Note 4	-
2	CUBC Bank	Cathay United Bank		Call loan from banks - interest expense	4,399	Note 4	0.01
		Cathay United Bank		Call loan to banks - interest revenue	5,768	Note 4	0.01
		Cathay United Bank	b	Other miscellaneous expense	6,221	Note 4	0.01
		Cathay United Bank		Due from bank	10,438	Note 4	-
		Cathay United Bank		Due to banks	61,113	Note 4	-
		Cathay United Bank		Call loan from banks	602,120	Note 4	0.02
		Cathay United Bank	b	Interest payable	38	Note 4	-
0	Cathay United Bank	CUBCN Bank		Call loans to banks - interest revenue	188,554	Note 4	0.30
		CUBCN Bank		Due to banks	39,067	Note 4	-
		CUBCN Bank		Due from bank	9,514,745	Note 4	0.32
		CUBCN Bank	a	Call loans to banks	5,317,401	Note 4	0.18
		CUBCN Bank	a	Interest receivable	429,798	Note 4	0.01
L							(0 :

(Continued)

No. (Note 1)	Transacting Company	Counterparty	Flow of Transaction (Note 2)	Description of Transaction			
				Financial Statement Account	Amounts	Terms of Transaction	Percentage of Total Revenue or Total Assets (Note 3)
3		Cathay United Bank	b b	Call loan from banks - interest expense Due from banks Due to banks Call loan from banks Interest payable	\$ 188,554 39,067 9,514,745 5,317,401 429,798	Note 4 Note 4 Note 4 Note 4 Note 4	0.30 - 0.32 0.18 0.01

Note 1: The transacting company is identified in the No. column as follows:

- a. 0 for parent company.
- b. Sequentially from 1 for subsidiaries.

Note 2: The flow of transactions is as follows:

- a. From parent company to subsidiary.
- b. From subsidiary to parent company.
- c. Between subsidiaries.

Note 3: The percentage is calculated as follows:

- a. Assets and liabilities: Ending balance divided by total consolidated assets.
- b. Income and expenses: The amount for the year ended divided by consolidated net income.

Note 4: The terms of the transactions between the Bank and related parties were similar to those for unrelated parties.

(Concluded)