

**Cathay Financial Holding Co., Ltd. and
Subsidiaries**

**Consolidated Financial Statements for the
Years Ended December 31, 2019 and 2018 and
Independent Auditors' Report**

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Cathay Financial Holding Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Cathay Financial Holding Co., Ltd. (the "Company") and its subsidiaries (collectively, the "Group"), which comprise the consolidated balance sheet as of December 31, 2019, 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 Group as of December 31, 2019, and 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 Financial Holding Companies, Regulations Governing the Preparation of Financial Reports by Insurance Enterprises, Regulations Governing the Preparation of Financial Reports by Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants, Regulations Governing the Preparation of Financial Reports by Public Banks 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 audits 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 Group 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 of the Group 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 Group's consolidated financial statements for the year ended December 31, 2019 are as follows:

Valuation of Policy Reserve and Liability Adequacy Test

Cathay Life Insurance Co., Ltd. is a subsidiary of Cathay Financial Holding Co., Ltd. Its management adopted the actuarial model and its related multiple significant assumptions for the estimation of the policy reserve and liability adequacy test. Significant assumptions in the measurement of the policy reserve include the mortality rate, discount rate, lapse rate, morbidity rate, etc. These assumptions are made based on legislation and regulations, taking into consideration its actual experience as well as industry-specific experience. The liability adequacy test on insurance contracts is performed in accordance with the requirements issued by the Actuarial Institute of Chinese Taipei, and the discount rates for future years used in the test are based on its best estimate scenario as well as the rate of the portfolio return under current information. Since any changes in the actuarial model and significant assumptions may lead to a material impact on the estimation results of the policy reserve and the liability adequacy test, the valuation of policy reserves and liability adequacy test was identified as a key audit matter. For the related accounting policies, accounting estimates, estimation uncertainty and relevant disclosure information, refer to Notes 4, 5 and 21 to the accompanying consolidated financial statements.

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

1. We understood the internal controls related to management's valuation of policy reserves and liability adequacy test as well as evaluated the operating effectiveness of these internal controls.
2. We obtained the actuarial report issued by the contracted actuary which was used as the basis for the management's valuation of policy reserves and liability adequacy test, and evaluated the contracted actuary's professional competence and capability.
3. The following procedures were performed by our actuarial specialist, and the results were compared to the results of the actuarial report published by the contracted actuary in order to assess the reasonableness of the actuarial model and its significant assumptions used by the management in the valuation of the policy reserve. The actuarial specialist:
 - a. Randomly sampled the insurance products to examine whether the calculations of the policy reserve were made in accordance with the requirements.
 - b. Evaluated the actuarial model and significant assumptions used in its valuation of policy reserve based on the sampled insurance policies and verified the recognized amount of the policy reserve.
 - c. Performed profiling tests on long-term insurance policies as of December 31, 2019 to identify any abnormalities on the recognized amounts of policy reserve on each individual insurance policy.
 - d. Assessed the reasonableness of the amount of provision for the policy reserve by considering the amount of policy reserve as of the end of the prior year and the business development for the year ended December 31, 2019.

4. The following procedures were performed by our actuarial specialist, and the results were compared to the results of the actuarial report published by the contracted actuary in order to assess the reasonableness of the actuarial model and its significant assumptions used by the management in the liability adequacy test. The actuarial specialist:
 - a. Tested on a sample basis the correctness of classification of the newly issued insurance products for the year ended December 31, 2019.
 - b. Sampled the significant assumptions provided by the management for our audits in order to examine whether the assumptions were consistent with the requirements and the important built-in assumptions in the information system.
 - c. Tested and assessed the actuarial model and its significant assumptions used by the management in its liability adequacy test on a sample basis and performed recalculations on the individual insurance policies.
 - d. Assessed the reasonableness of the calculation results of the liability adequacy test as a whole based on a comparative analysis of the previous year's results and taking into consideration the business development for the year ended December 31, 2019.

Assessment of the Fair values of Investment Properties

The investment properties of Cathay Life Insurance Co., Ltd. are measured at their fair values. To support the management in making reasonable estimates, Cathay Life Insurance Co., Ltd. used the fair values assessed by external independent appraisers. As the appraisal method and parameters used in the assessment of fair values involve significant judgments and estimates, we determined the assessment of the fair values of investment properties as a key audit matter. For the accounting policies, accounting estimates, assumption uncertainty and relevant disclosure information on the assessment of fair values of investment properties, refer to Notes 4, 5 and 14 to the accompanying consolidated financial statements.

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

1. We evaluated the professional competence, capability and objectivity of the external independent appraisers, and verified the qualification of the appraisers.
2. We appointed an internal valuation specialist to evaluate the reasonableness of the appraisal reports adopted by its management, including the appraisal methods, main parameters and discount rate of the appraisal reports.

Impairment assessment on Loans

Cathay United Bank Co., Ltd. is a subsidiary of Cathay Financial Holding Co., Ltd. Its domestic loans was considered material to the consolidated 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 11.

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

The consolidated financial statements of the Group as of and for the year ended December 31, 2018 were audited by other auditors, who expressed an unmodified opinion with an emphasis of matter section 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 Financial Holding Companies, Regulations Governing the Preparation of Financial Reports by Insurance Enterprises, Regulations Governing the Preparation of Financial Reports by Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants, Regulations Governing the Preparation of Financial Reports by Public Banks 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 Group'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 Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee/supervisors, are responsible for overseeing the Group'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 (including the financial reporting process) 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 Group'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 Group'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 Group 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 Group 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.

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the 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 Cheng-Hung Kuo and Li-Chi Chen.

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.

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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

	2019		2018	
	Amount	%	Amount	%
ASSETS				
CASH AND CASH EQUIVALENTS (Notes 4, 6 and 28)	\$ 413,405,471	4	\$ 206,576,054	2
DUE FROM THE CENTRAL BANK AND CALL LOANS TO OTHER BANKS	110,945,093	1	104,223,315	1
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (Notes 4, 5, 7, 28 and 29)	1,653,983,453	16	1,428,824,049	16
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (Notes 4, 5, 8 and 29)	1,182,534,102	12	1,127,810,270	12
FINANCIAL ASSETS MEASURED AT AMORTIZED COST (Notes 4, 5, 9 and 29)	3,068,838,014	31	2,688,221,788	29
FINANCIAL ASSETS FOR HEDGING (Notes 4 and 5)	548,075	-	216,611	-
SECURITIES PURCHASED UNDER RESALE AGREEMENTS (Note 4)	43,586,931	-	59,212,899	1
RECEIVABLES, NET (Notes 4, 5 and 10)	185,049,532	2	161,216,190	2
CURRENT TAX ASSETS	4,853,833	-	6,438,062	-
DISCOUNT AND LOANS, NET (Notes 4, 5, 11 and 28)	2,066,761,296	21	2,176,775,907	24
REINSURANCE CONTRACT ASSETS, NET	8,458,658	-	7,623,707	-
INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD, NET (Notes 4, 13 and 28)	48,145,672	-	44,932,006	-
OTHER FINANCIAL ASSETS, NET (Notes 4 and 23)	615,117,482	6	555,740,531	6
INVESTMENT PROPERTIES, NET (Notes 3, 4, 5, 14 and 29)	408,696,108	4	319,222,554	3
PROPERTY AND EQUIPMENT, NET (Notes 4 and 15)	101,855,371	1	166,458,327	2
RIGHT-OF-USE ASSETS, NET (Notes 3, 4, 16 and 28)	3,908,913	-	-	-
INTANGIBLE ASSETS, NET (Notes 4 and 17)	51,270,972	1	53,826,467	1
DEFERRED TAX ASSETS (Note 4)	40,595,612	-	40,806,934	-
OTHER ASSETS, NET (Notes 3, 28 and 29)	<u>56,924,753</u>	<u>1</u>	<u>76,357,835</u>	<u>1</u>
TOTAL	<u>\$ 10,065,479,341</u>	<u>100</u>	<u>\$ 9,224,483,506</u>	<u>100</u>
LIABILITIES AND EQUITY				
DUE TO THE CENTRAL BANK AND OTHER BANKS	\$ 84,108,128	1	\$ 81,432,233	1
FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS (Notes 4, 5 and 7)	111,526,387	1	129,698,896	1
FINANCIAL LIABILITIES FOR HEDGING (Notes 4 and 5)	30,894	-	-	-
NOTES AND BONDS SOLD UNDER REPURCHASE AGREEMENTS (Note 4)	50,278,533	-	59,307,037	-
COMMERCIAL PAPER PAYABLES, NET (Note 18)	54,018,845	-	62,989,367	1
PAYABLES (Notes 3 and 28)	66,934,725	1	66,727,399	1
CURRENT TAX LIABILITIES (Note 4)	3,274,828	-	2,543,689	-
DEPOSITS AND REMITTANCES (Notes 19 and 28)	2,303,443,816	23	2,187,203,086	24
BONDS PAYABLE (Note 20)	118,900,000	1	90,600,000	1
OTHER BORROWINGS	2,201,364	-	336,381	-
PROVISIONS (Notes 4, 21 and 22)	5,713,778,385	57	5,341,935,726	58
OTHER FINANCIAL LIABILITIES (Notes 4 and 23)	676,972,179	7	627,815,178	7
LEASE LIABILITIES (Notes 3, 4, 16 and 28)	12,720,337	-	-	-
DEFERRED TAX LIABILITIES (Note 4)	55,144,257	1	27,091,143	-
OTHER LIABILITIES (Note 28)	<u>30,119,484</u>	<u>-</u>	<u>17,514,376</u>	<u>-</u>
Total liabilities	<u>9,283,452,162</u>	<u>92</u>	<u>8,695,194,511</u>	<u>94</u>
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Notes 4 and 24)				
Share capital				
Ordinary shares	131,692,102	2	125,632,102	2
Preference shares	15,333,000	-	15,333,000	-
Capital surplus	177,256,976	2	165,449,364	2
Retained earnings				
Legal reserve	46,122,845	-	40,976,121	-
Special reserve	221,977,672	2	149,346,119	2
Unappropriated earnings	58,181,890	1	95,553,376	1
Other equity	<u>121,182,880</u>	<u>1</u>	<u>(72,558,752)</u>	<u>(1)</u>
Total equity attributable to owners of the Company	771,747,365	8	519,731,330	6
NON-CONTROLLING INTERESTS (Notes 4 and 24)	<u>10,279,814</u>	<u>-</u>	<u>9,557,665</u>	<u>-</u>
Total equity	<u>782,027,179</u>	<u>8</u>	<u>529,288,995</u>	<u>6</u>
TOTAL	<u>\$ 10,065,479,341</u>	<u>100</u>	<u>\$ 9,224,483,506</u>	<u>100</u>

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

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

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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	
	Amount	%	Amount	%
INTEREST INCOME (Notes 4 and 28)	\$ 220,258,661	39	\$ 202,714,029	43
INTEREST EXPENSE (Notes 4 and 28)	<u>(23,892,156)</u>	<u>(4)</u>	<u>(22,085,810)</u>	<u>(5)</u>
NET INTEREST INCOME	<u>196,366,505</u>	<u>35</u>	<u>180,628,219</u>	<u>38</u>
NET INCOME AND GAINS OTHER THAN INTEREST INCOME				
Net gain on service fee and commission fee (Notes 4, 23, 25 and 28)	2,345,518	1	7,311,850	2
Net income on insurance operations (Notes 4, 25 and 28)	265,817,609	48	208,155,213	44
Gain (loss) on financial assets and liabilities at fair value through profit or loss (Notes 4 and 7)	209,449,191	38	(120,944,083)	(26)
Gain on investment properties (Notes 4, 14 and 28)	12,139,659	2	9,763,523	2
Realized gain on financial assets at fair value through other comprehensive income (Note 4)	29,895,962	5	14,687,183	3
Net gain on derecognition of financial assets at amortized cost (Notes 4 and 9)	9,887,622	2	4,751,007	1
Foreign exchange (loss) gain (Note 4)	(52,147,418)	(9)	57,450,748	12
Reversal of impairment gain (loss) on assets (Note 4)	1,232,835	-	(1,150,946)	-
Share of gain of associates and joint ventures accounted for using the equity method (Notes 4 and 13)	1,149,021	-	1,003,585	-
(Loss) gain on reclassification using the overlay approach (Notes 4 and 7)	(120,836,755)	(22)	118,076,539	25
Net other non-interest gain (loss) (Note 28)	<u>587,449</u>	<u>-</u>	<u>(6,420,951)</u>	<u>(1)</u>
PROFIT FROM OPERATIONS	<u>555,887,198</u>	<u>100</u>	<u>473,311,887</u>	<u>100</u>
NET CHANGES IN INSURANCE LIABILITY RESERVE (Notes 21 and 25)	<u>(394,074,197)</u>	<u>(71)</u>	<u>(334,121,938)</u>	<u>(70)</u>
PROVISION FOR BAD DEBT, COMMITMENTS AND GUARANTEED LIABILITY RESERVE	<u>(2,205,393)</u>	<u>-</u>	<u>(4,599,086)</u>	<u>(1)</u>
OPERATING EXPENSES (Notes 25 and 28)				
Employee benefit expenses	(57,070,200)	(10)	(49,133,854)	(11)
Depreciation and amortization expenses	(7,098,010)	(1)	(5,674,622)	(1)
Other general and administrative expenses	<u>(24,882,224)</u>	<u>(5)</u>	<u>(24,183,613)</u>	<u>(5)</u>
Total operating expenses	<u>(89,050,434)</u>	<u>(16)</u>	<u>(78,992,089)</u>	<u>(17)</u>

(Continued)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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	
	Amount	%	Amount	%
PROFIT BEFORE INCOME TAX	\$ 70,557,174	13	\$ 55,598,774	12
INCOME TAX EXPENSE (Notes 4 and 26)	<u>(6,697,870)</u>	<u>(1)</u>	<u>(3,776,518)</u>	<u>(1)</u>
NET INCOME	<u>63,859,304</u>	<u>12</u>	<u>51,822,256</u>	<u>11</u>
OTHER COMPREHENSIVE INCOME (Notes 4 and 24)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans	(3,998)	-	274,469	-
Property revaluation surplus	926,919	-	-	-
Gain (loss) on equity instruments at fair value through other comprehensive income	10,470,705	2	(3,411,158)	(1)
Changes in the fair value attributable to changes in the credit risk of financial liabilities designated as at fair value through profit or loss	(3,280,741)	(1)	2,402,577	1
Share of other comprehensive loss of associates and joint ventures accounted for using equity the method for items that will not be reclassified subsequently to profit or loss	(159,190)	-	(37,030)	-
Income tax relating to items that will not be reclassified subsequently to profit or loss (Notes 4 and 26)	(359,323)	-	132,936	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating the financial statements of foreign operations	(1,661,389)	-	(1,188,305)	-
Gain (loss) on hedging instruments	206,220	-	(28,747)	-
Gain (loss) on debt instruments at fair value through other comprehensive income	89,900,568	16	(78,386,306)	(17)
Share of other comprehensive income (loss) of associates and joint ventures accounted for using equity method for items that may be reclassified subsequently to profit or loss	158,778	-	(418,549)	-
Other comprehensive income (loss) reclassified using the overlay approach	120,836,755	22	(118,076,539)	(25)
Income tax relating to items that may be reclassified subsequently to profit or loss (Notes 4 and 26)	<u>(27,653,395)</u>	<u>(5)</u>	<u>23,553,489</u>	<u>5</u>
Total other comprehensive income (loss) for the period, net of income tax	<u>189,381,909</u>	<u>34</u>	<u>(175,183,163)</u>	<u>(37)</u>

(Continued)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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	
	Amount	%	Amount	%
TOTAL COMPREHENSIVE INCOME (LOSS)	\$ 253,241,213	46	\$(123,360,907)	(26)
NET INCOME ATTRIBUTABLE TO:				
Owners of the Company	\$ 62,757,286	12	\$ 51,467,243	11
Non-controlling interests	<u>1,102,018</u>	-	<u>355,013</u>	-
	\$ 63,859,304	12	\$ 51,822,256	11
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:				
Owner of the Company	\$ 251,892,166	46	\$(123,867,466)	(26)
Non-controlling interests	<u>1,349,047</u>	-	<u>506,559</u>	-
	\$ 253,241,213	46	\$(123,360,907)	(26)
EARNINGS PER SHARE (Note 27)				
Basic earnings per share	\$ 4.76		\$ 3.95	

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

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

(Concluded)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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

	Equity Attributable to Owners of the Company											Other Equity			Non-controlling Interests	Total Equity	
	Share Capital		Capital Surplus	Retained Earnings			Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Gain (Loss) on Hedging Instruments	Changes in the Fair Value Attributable to Changes in the Credit Risk of Financial Liabilities Designated as at Fair Value Through Profit or Loss	Remeasurement of Defined Benefit Plans	Property Revaluation Surplus	Other Comprehensive Income (Loss) Reclassified Using the Overlay Approach			Total
	Ordinary Shares	Preference Shares		Legal Reserve	Special Reserve	Unappropriated Earnings											
BALANCE AT JANUARY 1, 2018	\$ 125,632,102	\$ 8,333,000	\$ 130,452,105	\$ 35,339,841	\$ 149,106,971	\$ 99,296,739	\$ (10,823,242)	\$ -	\$ 53,789,800	\$ 203,647	\$ (1,191,027)	\$ (1,449,679)	\$ 10,376,814	\$ -	\$ 599,067,071	\$ 9,403,472	\$ 608,470,543
Effect of retrospective application and restatement	-	-	-	-	-	(3,653,038)	-	37,343,476	(53,789,800)	-	-	-	-	55,941,777	35,842,415	8,904	35,851,319
BALANCE AT JANUARY 1 2018 AS RESTATED	125,632,102	8,333,000	130,452,105	35,339,841	149,106,971	95,643,701	(10,823,242)	37,343,476	-	203,647	(1,191,027)	(1,449,679)	10,376,814	55,941,777	634,909,486	9,412,376	644,321,862
Appropriation of earnings for the year 2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal reserve	-	-	-	5,636,280	-	(5,636,280)	-	-	-	-	-	-	-	-	-	-	-
Special reserve	-	-	-	-	234,146	(234,146)	-	-	-	-	-	-	-	-	-	-	-
Cash dividends on ordinary shares	-	-	-	-	-	(31,408,025)	-	-	-	-	-	-	-	-	(31,408,025)	-	(31,408,025)
Cash dividends on preferred shares	-	-	-	-	-	(1,899,924)	-	-	-	-	-	-	-	-	(1,899,924)	-	(1,899,924)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	-	(5,066)	-	-	-	-	-	-	-	-	-	-	-	(5,066)	-	(5,066)
Net income for the year ended December 31, 2018	-	-	-	-	-	51,467,243	-	-	-	-	-	-	-	-	51,467,243	355,013	51,822,256
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-	-	-	-	-	-	(1,326,629)	(67,359,757)	-	(30,358)	1,965,111	128,541	46,241	(108,757,858)	(175,334,709)	151,546	(175,183,163)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	51,467,243	(1,326,629)	(67,359,757)	-	(30,358)	1,965,111	128,541	46,241	(108,757,858)	(123,867,466)	506,559	(123,360,907)
Issuance of preferred shares	-	7,000,000	35,000,000	-	-	-	-	-	-	-	-	-	-	-	42,000,000	-	42,000,000
Share-based payment transactions	-	-	2,325	-	-	-	-	-	-	-	-	-	-	-	2,325	-	2,325
Disposal of equity instruments at fair value through other comprehensive income	-	-	-	-	-	(12,429,335)	-	12,429,335	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	5,002	50,142	-	-	-	-	-	-	(55,144)	-	-	-	-
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(361,270)	(361,270)
BALANCE AT DECEMBER 31, 2018	125,632,102	15,333,000	165,449,364	40,976,121	149,346,119	95,553,376	(12,149,871)	(17,586,946)	-	173,289	774,084	(1,321,138)	10,367,911	(52,816,081)	519,731,330	9,557,665	529,288,995
Appropriation of earnings for the year 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal reserve	-	-	-	5,146,724	-	(5,146,724)	-	-	-	-	-	-	-	-	-	-	-
Special reserve	-	-	-	-	72,631,553	(72,631,553)	-	-	-	-	-	-	-	-	-	-	-
Cash dividends on ordinary shares	-	-	-	-	-	(15,075,852)	-	-	-	-	-	-	-	-	(15,075,852)	-	(15,075,852)
Cash dividends on preferred shares	-	-	-	-	-	(2,667,891)	-	-	-	-	-	-	-	-	(2,667,891)	-	(2,667,891)
Cash dividends on capital surplus	-	-	(3,768,963)	-	-	-	-	-	-	-	-	-	-	-	(3,768,963)	-	(3,768,963)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	-	138,891	-	-	-	-	-	-	-	-	-	-	-	138,891	-	138,891
Net income for the year ended December 31, 2019	-	-	-	-	-	62,757,286	-	-	-	-	-	-	-	-	62,757,286	1,102,018	63,859,304
Other comprehensive income for the year ended December 31, 2019, net of income tax	-	-	-	-	-	-	(1,169,749)	81,300,147	-	158,641	(2,624,592)	(186,726)	872,403	110,784,756	189,134,880	247,029	189,381,909
Total comprehensive income for the year ended December 31, 2019	-	-	-	-	-	62,757,286	(1,169,749)	81,300,147	-	158,641	(2,624,592)	(186,726)	872,403	110,784,756	251,892,166	1,349,047	253,241,213
Issuance of ordinary shares for cash	6,060,000	-	15,150,000	-	-	-	-	-	-	-	-	-	-	-	21,210,000	-	21,210,000
Share-based payment transactions	-	-	287,684	-	-	-	-	-	-	-	-	-	-	-	287,684	-	287,684
Disposal of equity instruments at fair value through other comprehensive income	-	-	-	-	-	(4,606,752)	-	4,606,752	-	-	-	-	-	-	-	-	-
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(626,898)	(626,898)
BALANCE AT DECEMBER 31, 2019	\$ 131,692,102	\$ 15,333,000	\$ 177,256,976	\$ 46,122,845	\$ 221,977,672	\$ 58,181,890	\$ (13,319,620)	\$ 68,319,953	\$ -	\$ 331,930	\$ (1,850,508)	\$ (1,507,864)	\$ 11,240,314	\$ 57,968,675	\$ 771,747,365	\$ 10,279,814	\$ 782,027,179

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

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

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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 income tax	\$ 70,557,174	\$ 55,598,774
Adjustments for:		
Depreciation expenses	3,927,527	2,613,588
Amortization expenses	3,170,483	3,061,034
Bad debt expense	2,205,393	4,599,086
(Gain) loss on financial assets and liabilities at fair value through profit or loss	(186,470,119)	150,840,786
Interest expense	23,892,156	22,085,810
Gain on derecognition of financial assets measured at amortized cost	(9,887,622)	(4,751,007)
Interest income	(220,258,661)	(202,714,029)
Dividend income	(26,412,505)	(26,655,496)
Net change in insurance liabilities	370,212,741	364,185,579
Net changes in other - provisions	925,588	5,486,151
Compensation cost of share-based payments	287,684	2,325
Share of gain of associates accounted for using the equity method	(1,149,021)	(1,003,585)
Loss (gain) on reclassification using the overlay approach	120,836,755	(118,076,539)
Loss on disposal and retirement of property and equipment	1,656	31,906
Gain on disposal of investment properties	(11,304)	(28,263)
Loss on disposal of investments accounted for using the equity method	32,107	10,773
Gain on disposal of investments	(27,175,192)	(10,421,220)
Impairment loss (reversed) recognized on financial assets	(1,241,464)	1,150,946
Impairment loss recognized on non-financial assets	8,629	-
Unrealized loss on foreign currency exchange	-	45,334
(Gain) loss on changes in fair value of investment properties	(842,186)	998,435
Net changes in operating assets and liabilities		
Increase in due from the Central Bank and other banks	(5,546,911)	(4,155,043)
Decrease in financial assets at fair value through profit or loss	104,014,156	83,799,548
Decrease in financial assets at fair value through other comprehensive income	71,643,705	10,538,572
Increase in investments in debt instruments at amortized cost	(369,710,354)	(439,727,572)
(Increase) decrease in financial assets for hedging	(93,567)	1,087
(Increase) decrease in receivables	(23,744,060)	20,689,901
Decrease (increase) in loans	107,983,071	(141,377,587)
Increase in reinsurance assets	(506,849)	(384,386)
Decrease (increase) in other financial assets	1,201,820	(233,919)
Increase in other assets	(2,139,370)	(16,639,689)
Increase (decrease) in due to the Central Bank and other banks	2,675,895	(9,178,733)
Decrease in financial liabilities at fair value through profit or loss	(165,438,628)	(100,551,949)
Decrease in securities sold under repurchase agreements	(9,028,504)	(53,336,545)
Decrease in payables	(964,134)	(559,747)
Increase in deposits and remittances	116,240,730	123,020,644
Increase in reserve for employee benefits liabilities	250,167	238,063
Increase (decrease) in provisions	126,061	(246,726)

(Continued)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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

	2019	2018
(Decrease) increase in other financial liabilities	\$ (11,422,393)	\$ 10,558,949
Increase (decrease) in other liabilities	<u>10,768,698</u>	<u>(7,290,767)</u>
Cash used in operations	(51,080,648)	(277,775,511)
Interest received	224,071,626	197,642,031
Dividends received	26,940,617	27,398,355
Interest paid	(25,061,546)	(21,430,883)
Income tax paid	<u>(4,024,068)</u>	<u>(12,359,661)</u>
Net cash generated from (used in) operating activities	<u>170,845,981</u>	<u>(86,525,669)</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at fair value through other comprehensive income	(34,784,719)	(25,434,215)
Proceeds from disposal of financial assets at fair value through other comprehensive income	36,118,998	22,077,990
Acquisition of financial assets at fair value through profit or loss	(878,542)	(891,465)
Proceeds from disposal of financial assets at fair value through profit or loss	417,993	254,582
Acquisition of investments accounted for using equity method	(470,918)	(7,312,307)
Proceeds from disposal of investments accounted for using equity method	87,107	119,873
Proceeds from disposal of subsidiaries	9,329	-
Cash returned by capital deduction from investments accounted for using equity method	5,166	123,600
Acquisition of property and equipment	(2,447,794)	(3,507,295)
Proceeds from disposal of property and equipment	43,484	35,992
Acquisition of intangible assets	(765,439)	(386,589)
Acquisition of investment properties	(14,507,120)	(4,681,144)
Proceeds from disposal of investment properties	945,923	616,032
Decrease (increase) in other assets	17,210,853	(8,690,357)
Dividends received	<u>91,342</u>	<u>94,642</u>
Net cash generated from (used in) investing activities	<u>1,075,663</u>	<u>(27,580,661)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase (decrease) in short-term borrowings	1,911,436	(116,829)
(Decrease) increase in short-term borrowings	(8,970,000)	11,520,000
Issuance of corporate bonds	30,000,000	-
Repayment of financial debentures	(1,700,000)	(7,750,000)
Repayment of the principal portion of lease liabilities	(1,658,298)	-
Increase (decrease) in other liabilities	1,800,424	(1,855,319)
Proceeds from issuance of ordinary shares	21,210,000	42,000,000
Cash dividends paid	(21,512,706)	(33,307,949)
Changes in non-controlling interests	<u>(626,898)</u>	<u>(371,568)</u>
Net cash generated from financing activities	<u>20,453,958</u>	<u>10,118,335</u>

(Continued)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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

	2019	2018
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	\$ <u>40,200</u>	\$ <u>(431,676)</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	192,415,802	(104,419,671)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	<u>310,798,346</u>	<u>415,218,017</u>
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$ 503,214,148</u>	<u>\$ 310,798,346</u>
Reconciliation of cash and cash equivalents:		
	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Cash and cash equivalents presented in the consolidated balance sheets	\$ 413,405,471	\$ 206,576,054
Due from the Central Bank and call loans to other banks qualified for cash and cash equivalents under the definition of IAS 7	46,221,746	45,009,393
Securities purchased under resale agreements qualified for cash and cash equivalents under the definition of IAS 7	<u>43,586,931</u>	<u>59,212,899</u>
Cash and cash equivalents at the end of the years	<u>\$ 503,214,148</u>	<u>\$ 310,798,346</u>

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

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

(Concluded)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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

1. GENERAL INFORMATION

On December 31, 2001, Cathay Financial Holding Co., Ltd. (the “Company” or “Cathay Financial Holdings”) was incorporated through a share swap with Cathay Life Insurance Co., Ltd. (“Cathay Life”) pursuant to the Financial Holding Company Act, Company Act and related laws and regulations and Cathay Life became a wholly-owned subsidiary of the Company; meanwhile, Cathay Life’s shares were delisted and the Company’s shares have been listed on the Taiwan Stock Exchange since the same day.

On April 22, 2002, Cathay Century Insurance Co., Ltd. (“Cathay Century”) and Cathay Commercial Bank Co., Ltd. (“Cathay Bank”) became wholly-owned subsidiaries of the Company through share swaps. On December 18, 2002, United World Chinese Commercial Bank Co., Ltd. (“UWCCB”) also became a wholly-owned subsidiary of the Company through a share swap. On October 27, 2003, UWCCB was merged with Cathay Bank in accordance with the Financial Institutions Merger Act and related laws and regulations; UWCCB was the surviving company and was re-named to Cathay United Bank Co., Ltd. (“Cathay United Bank”). The Company acquired all issued shares of Lucky Bank Inc. through a share swap on August 25, 2006. To expand business scale and improve competitiveness, Cathay United Bank merged with Lucky Bank Inc. on January 1, 2007 and acquired specific assets, liabilities, and business of China United Trust & Investment Corporation on December 29, 2007.

On May 12, 2004, the Company incorporated Cathay Securities Corporation (“Cathay Securities”) as a wholly owned subsidiary. Cathay Venture Inc. (“Cathay Venture”) was incorporated on April 10, 2003; as resolved by the board of directors on August 10, 2009, Cathay Venture was merged with Cathay VC Inc., Cathay II NC Inc. and Cathay Capital Management Inc., and Cathay Venture was the surviving company. On June 13, 2011, the Company was approved to acquire Cathay Securities Investment Trust Co., Ltd. (“Cathay Securities Investment Trust”) by the Financial Supervisory Commission (“FSC”) and acquired all issued shares of Cathay Securities Investment Trust by cash on June 24, 2011.

Cathay Life participated in and won the bid, for the takeover of the assets, liabilities and operations of Global Life Insurance Co., Ltd. (“Global Life”) and Singfor Life Insurance Co., Ltd. (“Singfor Life”), which was held by the Taiwan Insurance Guaranty Fund. Cathay Life entered into the general assignment and assumption agreement on March 27, 2015. Cathay Life assumed all assets, liabilities and operations of Global Life and Singfor Life, except for their reserved assets and liabilities on July 1, 2015.

Since July 29, 2003, the Company has listed a portion of its ordinary shares on the Luxembourg Stock Exchange in the form of Global Depositary Shares (GDSs). The Company’s registered office and the main business location is at No. 296, Jen Ai Road, Section 4, Taipei, R.O.C. The Company is mainly engaged in the financial holding business.

The consolidated financial statements are presented in the Company’s functional currency, the New Taiwan dollars.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company’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 Financial Holding Companies, Regulations Governing the Preparation of Financial Reports by Insurance Enterprises, Regulations Governing the Preparation of Financial Reports by Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants, 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 FSC.

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Financial Holding Companies, Regulations Governing the Preparation of Financial Reports by Insurance Enterprises, Regulations Governing the Preparation of Financial Reports by Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants, Regulations Governing the Preparation of Financial Reports by Public Banks and the IFRSs endorsed and issued into effect by the FSC did not have any material impact on the accounting policies of the Company and its subsidiaries (“the Group”):

- 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 Group elects 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 Group as lessee

The Group recognizes right-of-use assets or investment properties if the right-of-use assets meet the definition of investment properties, and lease liabilities for all leases on the consolidated 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 consolidated statements of comprehensive income, The Group present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated 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, including property interest qualified as investment properties, were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the consolidated statements of cash flows.

The Group elects to apply IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized in retained earnings on January 1, 2019. Comparative information is not restated.

Lease liabilities were recognized on January 1, 2019 for leases previously classified as operating leases under IAS 17 and were measured at the present value of the remaining lease payments. Right-of-use assets are measured at an amount equal to the lease liabilities, adjusted by the amount of any prepaid or accrued lease payments, except for those that met the definition of investment properties and measured at fair value on that date. The Group applies IAS 36 to all right-of-use assets, except for those that met the definition of investment property.

The Group also applies the following practical expedients:

- a) The Group applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.
- b) The Group accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

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	\$ 24,039,821
Less: Recognition exemption for short-term leases	(506,897)
Less: Recognition exemption for leases of low-value assets	<u>(632,755)</u>
Undiscounted amount on January 1, 2019	<u>\$ 22,900,169</u>
Discounted lease liabilities recognized on January 1, 2019	<u>\$ 12,865,946</u>

The Group as lessor

The Group does not make any adjustments for leases in which it is a lessor, and it accounts for those 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
Right-of-use assets	\$ -	\$ 4,143,676	\$ 4,143,676
Investment properties	319,222,554	9,014,035	328,236,589
Other assets	<u>76,357,835</u>	<u>(362,993)</u>	<u>75,994,842</u>
Total effect on assets	<u>\$ 395,580,389</u>	<u>\$ 12,794,718</u>	<u>\$ 408,375,107</u>
Payables	\$ 66,727,399	\$ (71,228)	\$ 66,656,171
Lease liabilities	<u>-</u>	<u>12,865,946</u>	<u>12,865,946</u>
Total effect on liabilities	<u>\$ 66,727,399</u>	<u>\$ 12,794,718</u>	<u>\$ 79,522,117</u>

- b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2020

New IFRSs	Effective Date Announced by IASB
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 “Interest Rate Benchmark Reform”	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: The Group 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 Group 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.

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

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

New IFRSs	Effective Date Announced by IASB (Note)
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 Non-current”	January 1, 2022

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

- IFRS 17 “Insurance Contracts”

IFRS 17 sets out the accounting standards for insurance contracts that will supersede IFRS 4. The main standards of IFRS 17 are as follows:

Level of aggregation

IFRS 17 requires the Group to identify portfolios of insurance contracts, which comprises contracts that are subject to similar risks and managed together. Contracts within a product line would be expected to have similar risks and hence would be expected to be in the same portfolio if they are managed together. Each portfolio of insurance contracts issued shall be divided into a minimum of:

- 1) A group of contracts that are onerous at initial recognition;
- 2) A group of contracts that at initial recognition have no significant possibility of becoming onerous subsequently;

- 3) A group of the remaining contracts in the portfolio.

The Group is not permitted to include contracts issued more than one year apart in the same group, and a group of contracts which are decided to be issued should be applied to recognition and measurement of IFRS 17.

Recognition

The Group shall recognize a group of insurance contracts it issues from the earliest of the following:

- 1) The beginning of the coverage period of the group of contracts;
- 2) The date when the first payment from a policyholder in the group becomes due; and
- 3) For a group of onerous contracts, when the group becomes onerous.

Measurement at initial recognition

The Group shall include all the future cash flows within the boundary of each contract in the Group. The fulfilment cash flows comprises estimates of future cash flows, an adjustment to reflect the time value of money, and a risk adjustment for non-financial risk. The contractual service margin represents the unearned profit of the group of insurance contracts that the Group will recognize as it provides services in the future. This is measured on initial recognition of a group of insurance contracts at an amount that, unless the group of contracts is onerous, results in no income or expenses arising from:

- 1) The initial recognition of an amount for the fulfilment cash flows;
- 2) The derecognition at that date of any asset or liability recognized for insurance acquisition cash flows; and
- 3) Any cash flows arising from the contracts in the group at that date.

Subsequent measurement

On subsequent measurement, the carrying amount of a group of insurance contracts at the end of each reporting period shall be the sum of the liability for remaining coverage and the liability for incurred claims. The liability for remaining coverage comprises the fulfilment cash flows related to future services and the contractual service margin of the group at that date. On subsequent measurement, if a group of insurance contracts becomes onerous or more onerous, that excess shall be recognized in profit or loss.

Onerous contracts

An insurance contract is onerous at initial recognition if the total of the fulfilment cash flows, any previously recognized acquisition cash flows and any cash flows arising from the contract at that date is a net outflow. The Group shall recognize a loss in profit or loss for the net outflow, resulting in the carrying amount of the liability for the group being equal to the fulfilment cash flows and the contractual service margin of the group being zero. The contractual service margin cannot increase and no revenue can be recognized, until the onerous amount previously recognized has been reversed in profit or loss as part of a service expense.

Premium Allocation Approach (PAA)

The Group may simplify the measurement of the liability for remaining coverage of a group of insurance contracts using the Premium Allocation Approach (PAA) on the condition that, at the inception of the group:

- 1) The Group reasonably expects that this will be a reasonable approximation of the general model, or
- 2) The coverage period of each contract in the group is one year or less.

At the inception of the group, if the Group expects significant variances in the fulfilment cash flows during the period before a claim is incurred, such contracts are not eligible to apply the PAA.

When using the PAA, the liability for remaining coverage shall be initially recognized as the premiums, if any, received at initial recognition, minus any insurance acquisition cash flows. Subsequently the carrying amount of the liability is the carrying amount at the start of the reporting period plus the premiums received in the period, minus insurance acquisition cash flows, plus amortization of acquisition cash flows, minus the amount recognized as insurance revenue for coverage provided in that period, and minus any investment component paid or transferred to the liability for incurred claims.

Investment contracts with discretionary participation features

An investment contract with discretionary participation features is a financial instrument and it does not include a transfer of significant insurance risk. It is in the scope of the standard only if the issuer also issues insurance contracts. The requirements of the Standard are modified for such investment contracts.

Modification and derecognition

If the terms of an insurance contract are modified, the Group shall derecognize the original contract and recognize the modified contract as a new contract if there is a substantive modification, based on meeting any of the specified criteria.

The Group shall derecognize an insurance contract when it is extinguished, or if any of the conditions of a substantive modification of an insurance contract are met.

Transition

The Group shall apply the standard retrospectively unless impracticable, in which case entities have the option of using either the modified retrospective approach or the fair value approach.

Under the modified retrospective approach, an entity shall utilize reasonable and supportable information and maximize the use of information that would have been used to apply a full retrospective approach, but need only use information available without undue cost or effort. The Group shall utilize the fair value approach if reasonable and supportable information is unavailable.

Under the fair value approach, the Group determines the contractual service margin at the transition date as the difference between the fair value of a group of insurance contracts at that date and the fulfilment cash flows measured at that date.

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of other standards and interpretations will have on the Group'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

These consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Financial Holding Companies, Regulations Governing the Preparation of Financial Statements by Insurance Companies, Guidelines Governing the Preparation of Financial Reports by Public Banks, Guidelines Governing the Preparation of Financial Statements by Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants and IFRSs as endorsed and issued into effect by the FSC.

Basis of Preparation

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

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

- a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- b. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for 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

The consolidated financial statements incorporate the financial statements of the Company and the entities controlled by the Company (i.e. its subsidiaries).

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated statement of profit or loss and other comprehensive income from the effective dates of acquisitions up to the effective dates of disposals, as appropriate.

Adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Company.

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

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the interests of the Group 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 Company.

See Note 12 for the detailed information of subsidiaries, including the percentage of ownership and main business.

Foreign Currencies

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

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

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

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 purpose of presenting the consolidated financial statements, the functional currencies of the Company and the group entities (including subsidiaries and associates in other countries that use currencies which are different from the currency of the Company) are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income (attributed to the owners of the Company and non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e. a disposal of the Company's entire interest in a foreign operation, or a disposal involving the loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In relation to a partial disposal of a subsidiary that does not result in the Company losing control over the subsidiary, the proportionate share of accumulated exchange differences is re-attributed to the non-controlling interests of the subsidiary and is not recognized in profit or loss. For all other partial disposals, the proportionate share of the accumulated exchange differences recognized in other comprehensive income is reclassified to profit or loss.

Investments in Associates

An associate is an entity over which the Group has significant influence and which is neither a subsidiary nor an interest in a joint venture. The Group 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 Group's share of the profit or loss and other comprehensive income of the associate. The Group also recognizes the changes in the Group's share of the equity of associates.

Any excess of the cost of acquisition over the Group'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 Group's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When the Group 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 Group's proportionate interest in the associate. The Group 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 accounted for using the equity method. If the Group'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 Group'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 Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group 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 Group 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 Group 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 Group continues to apply the equity method and does not remeasure the retained interest.

When a group entity transacts with its associate, profits and losses resulting from the transactions with the associate and are recognized in the Group's consolidated financial statements only to the extent that interests in the associate are not related to the Group.

Property and Equipment

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

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

Depreciation of property and equipment is recognized using the straight-line method. Each significant part is depreciated separately. 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. Beginning January 1, 2019, investment properties include right-of-use assets and properties under construction if the definition of investment properties is met; before January 1, 2019, investment properties included properties under construction and properties held under finance leases if the definition of investment properties was met. Investment properties also include land held for a currently undetermined future use.

Freehold investment properties are measured initially at cost, including transaction costs. Beginning January 1, 2019, investment properties acquired through leases are initially measured at cost. All investment properties 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.

Investment properties under construction, of which their fair values are not reliably measurable, are measured at cost less accumulated impairment loss until such time as either the fair value becomes reliably measureable or the construction is completed (whichever comes earlier).

For a transfer of classification from investment properties to property and equipment, the deemed cost of the property for subsequent accounting is its fair value at the commencement of owner-occupation. For a transfer of classification from property and equipment to investment properties at the end of owner-occupation, any difference between the fair value of the property at the transfer date and its previous carrying amount is recognized in other comprehensive income.

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.

Goodwill

Goodwill arising from the acquisition of a business is measured 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 Group's cash-generating units or groups of cash-generating units (referred to as "cash-generating units") that is 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 for 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.

Intangible Assets

a. Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful 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. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

b. Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

c. Derecognition of intangible assets

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

Impairment of Tangible and Intangible Assets Other Than Goodwill

At the end of each reporting period, the Group 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. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the individual cash-generating units on a reasonable and consistent basis of allocation.

Intangible assets with indefinite useful lives are tested for impairment at least annually and whenever there is an indication that the assets may be impaired.

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

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

Financial Instruments

Financial assets and financial liabilities are recognized when an entity in the Group becomes a party to the contractual provisions of the instruments.

Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss (“FVTPL”)) are added to the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition.

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 fair value through other comprehensive income (“FVTOCI”).

a) Financial assets at FVTPL

Financial assets are classified as at FVTPL when such financial assets are mandatorily classified or designated as at FVTPL, including 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. Fair value is determined in the manner described in Note 36.

In addition, to reduce the fluctuations in profit or loss due to that IFRS 9 is applied earlier than IFRS 17, the Group elects to remove profit or loss arising from changes in fair value in subsequent measurement and present it in other comprehensive income based on overlay approach under IFRS 4. Overlay approach is applied to financial assets if all of the following conditions are met:

- i. The financial assets are held in respect of activities related to IFRS 4;
- ii. The financial assets are measured at FVTPL under IFRS 9, but would not have been measured at FVTPL under IAS 39; and
- iii. The financial assets are designated to apply overlay approach at the first application of IFRS 9, in the initial recognition of a new financial asset or when a financial asset starts to meet the conditions.

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 are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

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

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

Cash and cash equivalents include cash on hand, cash in banks and time deposits or investment which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. Time deposits with maturities within 12 months, which are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value are classified as cash equivalents.

c) Investments in debt instruments at FVTOCI

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

- i. The debt instrument is held within a business model which is achieved by both the collecting of contractual cash flows and the selling of such financial assets; and
- ii. The contractual terms of the debt instrument 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 Group 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, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group'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 Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including receivables and loans) and investments in debt instruments that are measured at FVTOCI.

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

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

The Group uses the total carrying amount of financial assets measured at amortized cost (including receivables and loans), investments in debt instruments at FVTOCI, and off balance sheet commitments to measure the amount of exposure at default (EAD).

The Group 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.

In addition, in accordance with the Regulations Governing the Procedures for Insurance Enterprises to Evaluate Assets and Deal with Non-performing/Non-accrual Loans, Cathay Life and Cathay Century classify their credit assets as normal (“First Category”), special mention (“Second Category”), substandard (“Third Category”), doubtful (“Fourth Category”) and losses (“Fifth Category”) based on the borrower’s financial conditions and the delay for payment of principal and interests as well as the status of the loan collaterals and the length of time overdue. The minimum amounts of allowance for bad debts are based upon each of the following category for allowance of uncollectible accounts:

- a) The sum of 0.5% of the first category loan assets excluding life insurance policy loans, premium loans and loans to government agencies, 2% of the second category of loan assets, 10% of the third category of loan assets, as well as 50% and 100% of the fourth and fifth category loan assets.
- b) 1% of the sum of all five categories of loan assets excluding life insurance policy loans, premium loans and loans to government agencies.
- c) Total unsecured portion of non-performing loans and non-accrual loans.

Besides, pursuant to Jin Guan Bao Tsai No. 10402506096, Cathay Life and Cathay Century shall keep the ratio of the allowance for bad debt over the loans at 1.5% or above to strengthen their ability against loss exposure to specific loan assets.

According to the Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans, Cathay United 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 R.O.C. government) and unsound assets which should be further classified by special mention, substandard, doubtful and losses, for which minimum provisions of 1%, 2%, 10%, 50% and 100% of the outstanding balance, respectively. Furthermore, the FSC stipulates that banks should recognize the provision by at least 1.5% of normal credit assets in the mainland China (including short-term advances for trade finance) and loans for the 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.

Cathay United Bank and its subsidiaries write 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 Group 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.

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

4) Offsetting of financial instruments

Financial assets and financial liabilities are offset and presented in net in the consolidated balance sheet only if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

b. Equity instruments

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

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

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

c. Financial liabilities

1) Subsequent measurement

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

Financial liabilities at FVTPL

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

Financial liabilities held for trading are stated at fair value, with any gain or loss arising on remeasurement recognized in profit or loss.

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

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

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

Fair value is determined in the manner described in Note 36.

Financial guarantee contracts

Financial guarantee contracts issued by the Group, if not designated as at FVTPL, are subsequently measured at the higher of the amount of the loss allowance reflecting expected credit losses and the amount after amortization.

2) Derecognition of financial liabilities

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

d. Derivative financial instruments

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

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

Derivatives embedded in hybrid contracts that contain financial asset hosts that is within the scope of IFRS 9 are not separated; instead, the classification is determined in accordance with the entire hybrid contract. Derivatives embedded in non-derivative host contracts that are not financial assets that is within the scope of IFRS 9 (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.

Hedge Accounting

The Group designates certain hedging instruments, which include derivatives, as either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations.

a. Fair value hedges

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

The Group discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised.

b. Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gains or losses relating to the ineffective portion are recognized immediately in profit or loss.

The associated gains or losses that were recognized in other comprehensive income are reclassified from equity to profit or loss as reclassification adjustments in the line items relating to the related hedged item in the same period in which the hedged item affects profit or loss. If a hedge of a forecasted transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, the associated gains and losses that were recognized in other comprehensive income are removed from equity and included in the initial cost of the non-financial asset or non-financial liability.

The Group discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised. The cumulative gain or loss on the hedging instrument that was previously recognized in other comprehensive income (from the period in which the hedge was effective) remains separately in equity until the forecasted transaction occurs. When a forecasted transaction is no longer expected to occur, the gains or losses accumulated in equity are recognized immediately in profit or loss.

c. Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized in other comprehensive income and accumulated under the heading of foreign currency translation reserve. The gains or losses relating to the ineffective portion are recognized immediately in profit or loss.

The gains and losses on the hedging instrument relating to the effective portion of the hedge, which were accumulated in the foreign currency translation reserve, are reclassified to profit or loss on the disposal or partial disposal of a foreign operation.

Securities Purchased/Sold Under Resale/Repurchase Agreements

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

Separate Accounts

The Group sells separate account insurance products. The insurance premiums according to agreed terms paid by proposers, net of the expenses incurred by the insurer, are invested in separate accounts at allocation agreed with or directed by the proposers. The separate account assets is measured at fair value on the valuation date and in compliance with the relevant regulations and Template of Accounting Systems for Life Insurance Enterprises.

In accordance with the Regulation Governing the Preparation of Financial Reports by Insurance Enterprises, the assets and liabilities of separate accounts, which are generated either from insurance contracts or from insurance contracts with features of financial instrument, are recorded in separate account insurance product assets and separate account insurance product liabilities. The revenue and expenses of separate accounts, pursuant to IFRS 4, are recorded in separate account insurance product revenue and separate account insurance product expenses.

Insurance Liability Reserves

a. Cathay Life

Funds reserved for insurance contracts and financial instruments with or without discretionary participation feature are determined in accordance with the Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises and validated by the certified actuarial professionals approved by the FSC. The provision of reserve for short-term group insurance is based upon the greater of the actual premium received or the premium calculated according to Tai-Tsai-Bao No. 10704504821. Provision of reserve for the other insurance liabilities is as follows:

Moreover, an insurance contract with discretionary participation feature is entirely classified as liability.

1) Unearned premium reserve

For an unexpired in-force contract with a policy period shorter than one year or an injury insurance policy with a policy period longer than one year, the calculation of unearned premium reserve is based on the unexpired risk of each insurance.

2) Loss reserve

Loss reserve is provided for claims filed but not yet paid and claims not yet filed. The reserve for claims filed but not yet paid is assessed based on the actual relevant information of each case and provided by insurance type. The reserve for claims not yet filed is provided based on the past experiences of actual claims and expenses in line with the actuarial principles for injury insurance and health or life insurance policies with a policy period shorter than one year.

3) Policy reserve

Based on the life table and projected interest rates in the manual reported to the authority for each insurance type, life insurance policy reserve is calculated and provided according to the modified calculation method in Article 12 of the Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises, the manual of each insurance product reported to the authority and the relevant calculation methods approved by the authority.

Starting from 2003 policy year, for in-force contracts whose bonus calculation is stipulated by Tai-Tsai-Bao No. 800484251, the downward adjustments of bonus due to the offset between mortality gain (loss) and gain (loss) from difference of interest rates should be calculated and recognized according to the regulations issued by the authorities.

In accordance with Jin Guan Bao Tsai No. 10102500530 issued on January 19, 2012, life insurance enterprises shall transfer a special reserve that equals to the unwritten allowance for doubtful account resulting from 3% business tax cut to life insurance policy reserve - allowance for doubtful account pertinent to 3% business tax cut from 2012. Besides, life insurance enterprises shall reclassify the recoverable special reserve for catastrophic events defined in Article 19 of the Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises to life insurance reserve - recover from catastrophic event reserve.

When an insurance enterprise elects to measure investment properties at fair value, it should also measure its insurance liabilities at fair value. If the results of the measurements indicate that the fair value of the insurance liabilities exceeds their book value, the insurance enterprise must set aside the difference to policy reserve and decrease retained earnings. Cathay Life changed its accounting policy for subsequent measurement of investment properties from the cost method to the fair value method starting from 2014. In accordance with Jin Guan Bao Tsai No. 10302501161 issued on March 21, 2014, the fair value of insurance liabilities measured did not exceed their book value and no additional insurance liabilities should be provided accordingly.

4) Special reserve

When selling participating life insurance policies, according to the Regulation for Allocation of Revenue and Expenses related to Participating/Nonparticipating Policy reported to the authority, Cathay Life is required to set aside a special reserve for dividend participation based on income before tax and dividend. On the date of declaration, dividend should be withdrawn from special reserve - participating policies dividends reserve. The excess dividends should be accounted as special reserve - provisions for risk of dividends.

According to Article 32 of the Regulations Governing the Preparation of Financial Reports by Insurance Enterprises, the increments due to measuring the property at fair value, except for the portion in offsetting adverse effects of the first-time adoption of IFRSs on other accounts, the excess should be set aside as special reserve for revaluation increments of property under insurance liabilities.

5) Premium deficiency reserve

For life insurance, health insurance and annuity insurance policies with policy periods longer than one year commencing from 2001, when the gross premium is less than the net premium used in the calculation of policy reserve, a deficiency reserve is required to set aside such deficiencies for remaining payment periods as a premium deficiency reserve. The premium deficiency reserve of each life insurance category should be calculated and recorded according to the specific method reported to the authorities.

In addition, for unexpired in-force contracts with policy periods shorter than one year and injury insurance policies with policy periods longer than one year, if the probable claims and expenses are greater than the aggregate of unearned premium reserves and estimated future premiums, the premium deficiency reserve is set aside based on the deficiencies by insurance type.

6) Other reserves

Pursuant to IFRS 3 “Business Combinations”, Cathay Life recognizes other reserves to reflect the fair value of the life insurance contracts assumed at the time when the identifiable assets and assumed liabilities acquired from the business combination are recognized at fair value.

7) Liability adequacy reserve

The liability adequacy reserve is set aside based on the adequacy test of liability required by IFRS 4.

b. Cathay Lujiazui Life Insurance Co., Ltd. (“Cathay Lujiazui Life”)

In accordance with the Insurance Act of the People’s Republic of China, the insurance liabilities (including unearned premium reserves, loss reserves and policy reserves) are required and calculated based on the actuarial reports approved by China Insurance Regulatory Commission.

c. Cathay Life Insurance (Vietnam) Co., Ltd. (“Cathay Life (Vietnam)”)

In accordance with the Insurance Act of Vietnam, the insurance liabilities (including unearned premium reserves, loss reserves and policy reserves) are required and calculated based on the actuarial reports approved by Vietnam government.

d. Cathay Century and its subsidiaries

Insurance liabilities provided for insurance contracts should be audited by the actuaries certified by the FSC and should also conform to the Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises, Regulations for the Management of the Various Reserves for Compulsory Automobile Liability Insurance, Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance and the Regulations for the Reserves for Nuclear Energy Insurance.

The descriptions of these reserves are as follows:

1) Unearned premium reserve

For an in-force contract with a remaining policy period or an unexpired insured risk, the calculation and the provision of unearned premium reserve are based on the unexpired risk of each insurance.

Unearned premium reserve for the compulsory insurance contract is provided in conformity with the Regulations for the Management of the Various Reserves for Compulsory Automobile Liability Insurance.

Unearned premium reserve for the policy-related residential earthquake insurance contracts is provided in conformity with the Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance.

Unearned premiums reserve for Nuclear Energy Insurance contracts is provided in conformity with the Regulations for the Reserves of Nuclear Energy Insurance.

Except as otherwise provided by regulations, the manners of provisions for unearned premium reserve are decided by actuaries according to the characteristics of each insurance, which cannot be changed without permission by the authorities, and the year-end balance of unearned premium reserve should be audited by actuaries.

2) Loss reserve

Loss reserve is provided for claims filed but not yet paid and claims not yet filed by insurance type based on the past experiences of actual claims and expenses in line with the actuarial principles. The reserve for claims filed but not yet paid is assessed based on the actual relevant information of each case and provided by insurance type.

Loss reserve for the compulsory automobile liability insurance contracts is provided in conformity with the Regulations for the Management of the Various Reserves for Compulsory Automobile Liability Insurance.

Loss reserve for policy-related residential earthquake insurance contracts is provided in conformity with the Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance.

Loss reserve for nuclear energy insurance contracts is provided in conformity with the Regulations for the Reserves for Nuclear Energy Insurance.

3) Special reserve

Special reserves are comprised of special reserves for catastrophic event, fluctuation of risk and other special purpose.

In accordance with the Regulations for the Management of the Various Reserves for Compulsory Automobile Liability Insurance, Cathay Century shall set aside the special reserves as liabilities which is calculated based on the sum of retained earned pure premiums, recovery of loss reserve and the interest accrued of the beginning balance of the special reserve, minus the retained claims and the provision of loss reserve; if the sum of retained earned pure premiums, recovery of loss reserve and the interest accrued of the beginning balance of the special reserve in the preceding fiscal year is less than the sum of the retained claims and the provision of loss reserve, the deficit shall be amended with the cumulative recovery of the special reserve in the previous years. If any deficit remains, the balance shall be recorded as a memorandum entry and amended with the recovery of the special reserves in the subsequent years.

Furthermore, according to the Notice for the improvement of the reserves of natural disaster insurances (commercial-business earthquake, typhoon and flood insurances enterprises) issued by the Financial Supervisory Commission on November 9, 2012, except for those special reserves of compulsory automobile insurances, nuclear energy insurances, residential earthquake insurances, commercial-business earthquake insurances and typhoon and flood insurances, the special reserves recognized as liabilities before December 31, 2012 were used to compensate the deficiencies of commercial-business earthquake insurances and typhoon and flood insurances to the required level and recognized as liabilities. The remaining special reserves were reclassified as equity, net of tax according to IAS 12 starting from January 1, 2013. The write off and recovery of special reserves

for catastrophic event and fluctuation of risk that provided under liabilities should be in conformity with the notice mentioned above.

4) Premium deficiency reserve

For unexpired in-force contracts or unterminated incurred risks of each insurance, if the estimated amounts of the future claims and expenses exceed the sum of the unearned premium reserves and the expected future premium income, the deficiencies should be set aside as premium deficiency reserve.

5) Policy reserve

The minimum provision for policy reserve for health insurance with policy periods longer than one year is determined by Full Preliminary Term method. However, the method of provision for health insurance with a special nature is regulated by the authorities.

6) Liability adequacy reserve

The liability adequacy reserve is set aside based on the adequacy test of liability required by IFRS 4.

Liability Adequacy Test

Liability adequacy test is based on all insurance contracts and related requirements of ASP of IFRS 4 - contract classification and liability adequacy test announced by Actuarial Institute of Chinese Taipei. In this test, the amount of insurance liabilities net of deferred acquisition costs and related intangible assets is compared with the estimated present values of insurance contract cash flow at each reporting date. If the net book values are lower than the estimated present values, all insufficient amounts should be recognized in profit or loss.

Reserve for Insurance Contracts with the Nature of Financial Products

For non-separate account insurance products classified as financial instruments without discretionary participation features, the reserve should be recognized in accordance with the Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises and depository accounting.

Reserve for Foreign Exchange Valuation

Cathay Life calculates foreign exchange volatility reserve of all its foreign investments in accordance with the Regulations Governing the Setting Aside of various Reserve by Insurance Enterprises and Direction for Foreign Exchange Volatility Reserve by Life Insurance Enterprises.

Revenue and the Related Expenses Recognition

a. Cathay Life and its subsidiaries

- 1) For Cathay Life's insurance contracts and financial instruments with discretionary participation features, the initial and renewal premium are only recognized as revenue collection and underwriting procedures finished, and subsequent collection on the appointed dates, respectively. The relevant acquisition costs, such as commission expenses and underwriting expenses, are recognized as current expenses when the insurance contracts become effective.

For non-separate account insurance products classified as financial instruments without discretionary participation features, the insurance premium collected is recognized as reserves for insurance contract with the nature of financial products on the balance sheet.

For separate account insurance products classified as financial instruments without discretionary participation features, the insurance premium collected net of preprocessing expense or investment management fees is entirely recognized as separate account insurance product liabilities on the balance sheet. The acquisition costs incurred due to investment management services for such insurance products, such as commissions and incremental costs directly attributable to the issue of new contracts, are deferred and recorded under deferred acquisition costs and amortized on a straight-line basis over the service period. The amortization is recognized under other operating costs.

2) Cathay Lujiazui Life

In accordance with the related accounting laws and regulations issued by the local government, Cathay Lujiazui Life records direct premiums as revenue at premium received and invoices issued. Related expenses, such as commissions and underwriting fees, are recognized on an accrual basis.

3) Cathay Life (Vietnam)

In accordance with the related accounting laws and regulations issued by the local government, Cathay Life (Vietnam) records direct premiums as revenue at premium received and invoices issued. Related expenses, such as commissions and underwriting fees, are recognized on an accrual basis.

b. Cathay United Bank and its subsidiaries

1) Recognition of interest revenue and expense

Except for the financial assets and liabilities at FVTPL, 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.

2) 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.

3) 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. 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.

c. Cathay Century and its subsidiaries

Direct premiums are recognized for all insurance policies underwritten and issued in current periods. Ceded reinsurance premiums are usually recognized as the billing statements delivered, and, on the balance sheet date, reinsurance premiums not yet received are accrued in a reasonable and systematic manner. Related acquisition costs are recognized in the same periods, including commission expenses, agency fees, service fees and reinsurance commission expenses.

Claims and payments (including claim expenses) filed and paid pertaining to the direct insurance business are recognized as paid claims in current periods. For claims filed but not yet paid with determined amounts and those without determined amounts are recognized as net changes in loss reserve based on relevant information of each case by insurance type.

For direct insurance and ceding reinsurance, claims not yet filed are estimated based on past experience according to actuarial principles and recognized as net changes in loss reserve.

For claims to be recovered from the reinsurer under the reinsurance contract, claims and payments (including claim expenses) recoverable from reinsurers are recognized as claims recovered from reinsurers. For those of filed but not yet paid and not yet filed cases, claims and payments (including claim expenses) are recognized as net changes in loss reserve.

d. Cathay Securities and its subsidiaries

Revenues are mainly generated from brokerage, underwriting and advisory services. The services are based on stand-alone or negotiated pricing and provided based on the number of times services are provided. These services belong to the category where performance obligations are fulfilled at a point in time; thus, revenue is recognized when performance obligations are fulfilled.

Classification of Insurance Products

An insurance contract refers to a contract where the insurer accepts the insurance policyholder's transfer of a significant insurance risk and agrees to compensate the policyholder for any damages caused by a particular uncertain future event (insured event). The Group's identification of a significant insurance risk refers to any insured event that occurs and causes the Group to incur additional significant payments.

Insurance contracts with features of financial instruments are contracts that transfer significant financial risks. Financial risks refer to the risks that the changes in one or more specific indicators may cause, including interest rates, financial commodity prices, product prices, exchange rates, price index, rate index, credit ratings and other indicators. If the above indicators are not financial, these indicators exist in both sides under the contracts.

For a policy that meets the definition of an insurance contract in the initial phase, it is treated as an insurance contract before the right of ownership and obligations expired or extinguished, even if the exposure to insurance risk during the policy period has significantly decreased. However, if an insurance contract with features of financial instruments transfers a significant insurance risk to the Group subsequently, the Group should reclassify the contract as an insurance contract.

Insurance contracts and those with features of financial instruments are further classified into separate categories depending on whether or not the contracts have discretionary participation features. Discretionary participation features refers to a contractual right to receive additional payments in addition to guaranteed payments from the contract. The contractual rights have the following characteristics:

- a. Additional payments as a percentage of total contractual payments may be significant.
- b. In accordance with the contract, the amount and date of payment for additional payments are at The Group's discretion.
- c. In accordance with the contract, additional payments are handed out based on one of the following matters:
 - 1) The performance of specific contracts or specific combination of contracts.
 - 2) Return on investment from a portfolio of specific assets held by The Group.

3) Profit and loss from the Group, funds, or other entities.

When the embedded derivative instrument has economic characteristics and risks not closely related to those of the primary contracts, it should be recorded separately from the primary contracts and measured at fair value with changes in fair values recognized in profit or loss when incurred. However, if the embedded derivative instrument meets the definition of an insurance contract or the whole contract is measured at fair value with changes in fair values recognized in profit or loss when incurred, the Group does not separately recognize the embedded derivative instrument and the insurance contract.

Reinsurance

In order to limit the possible losses caused by certain events, the Group arranges reinsurance business based on its business needs and related insurance regulations. For reinsurance of ceded businesses, the Group cannot refuse to fulfill its obligations to the insured because the reinsurer fails to fulfill its obligations.

The Group holds the rights over the reinsurer including reinsurance assets, claims and payments recoverable from reinsurers and net due from reinsurers and ceding companies, and regularly assesses if the rights are impaired or unrecoverable. If objective evidence, which occurred after initial recognition of reinsures assets, shows that the Group may not receive all amounts of receivables from the reinsurer and the unrecoverable amount can be reasonably estimated, the Group recognizes the difference between the recoverable amount of reinsurance assets and carrying value as an impairment loss.

For the classification of reinsurance contracts, the Group assesses whether or not such contracts transfer significant insurance risk to the reinsurer. If the reinsurance contract does not transfer a significant insurance risk to the reinsurer, the contract is recognized and measured in accordance with deposit accounting.

For a reinsurance contract that transfers a significant insurance risk, if the Group can measure its saving element separately, the insurance element and the saving element of the reinsurance contract are recognized separately. That is, the Group recognizes the contract premium received (or paid) less the amount of insurance as financial liabilities (or assets) rather than income (or expenses). The financial liabilities (or assets) are recognized at the fair values based on the present values of future cash flows.

Provisions

Provisions are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of each balance sheet date, taking into account the risks and uncertainty of the obligation.

Leases

2019

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

a. The Group 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 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 amortized on a straight-line basis over the lease terms.

b. The Group as lessee

The Group 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, and 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, except for those that meet the definition of investment properties. With respect to the recognition and measurement of right-of-use assets that meet the definition of investment properties, refer to the accounting policies for investment properties.

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. 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 Group 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, the Group 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.

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 Group as lessor

Rental income from operating leases is recognized on a straight-line basis over the terms of the relevant leases. 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.

b. The Group as lessee

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

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 expenses 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 net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period in which they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets, 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 Group's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plan 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 Group can no longer withdraw the offer of the termination benefit and when the Group recognizes any related restructuring costs.

d. Employee preferential interest deposits

Cathay United Bank offers its employees preferential interest deposits, including preferential interest deposits to current employees and those to retired employees and current employees after retirement in limited 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 inputted 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.

Taxation

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

a. Current tax

According to the Income Tax Law, an additional tax at 10% of unappropriated earnings is provided for in the year the shareholders approve to retain earnings.

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

In accordance with Article 49 of the Financial Holding Company Act, the Company and its subsidiaries jointly filed income tax returns and surtax on unappropriated retained earnings since 2002 under the consolidated income tax system with the Company as the tax payer. Such effects on current tax and deferred tax are accounted for as receivables or payables.

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit. If a temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized. In addition, a deferred tax liability is not recognized on taxable temporary differences arising from the initial recognition of goodwill.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all temporary differences and loss carryforwards which are probably deductible.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint arrangements, except where the Group is able to 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 are only recognized 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 they 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 assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the 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 reflects the tax consequences that would follow from the manner in which the Group expect, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. If investment properties measured using the fair value model are non-depreciable assets, or are held under a business model whose objective is not to consume substantially all of the economic benefits embodied in the assets over time, the carrying amounts of such assets are presumed to be recovered entirely through sale.

c. Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity; in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for the acquisition of a subsidiary, the tax effect is included in the accounting for the investments in the subsidiary.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, 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 estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

a. Estimated impairment of loans

The estimated impairment of loans is made with reference to the collateral status of the credit assets, the amount of the accumulated principal and interest due, and the length of the overdue period. The loans are classified after considering the changes in the credit of individual credit assets and the collection status. The Group uses judgment in making these assumptions and in selecting the inputs to the impairment assessment, based on the Group's historical experience, existing market conditions as well as forward looking estimates (i.e. probability of default and expected credit loss rates) as of the end of each reporting period. Refer to Note 36 for the key assumptions and inputs used.

b. Fair value measurements and valuation processes

Where some of the Group's assets and liabilities measured at fair value have no quoted prices in active markets, the Group, in accordance with relevant regulations or based on own judgment, determines the appropriate valuation techniques for the fair value measurements and whether to engage third party qualified valuers.

Where Level 1 inputs are not available, the Group or engaged valuers determine the appropriate inputs by referring to the analyses of the financial position and the operating results of the investees, recent transaction prices, prices of the same equity instruments not quoted in active markets, quoted prices of similar instruments in active markets, and valuation multiples of comparable entities/market prices or rates and specific features of derivatives, the existing lease contracts and rentals of similar properties in the vicinity of the Group's investment properties. If the actual changes of inputs in the future differ from expectation, the fair value might vary accordingly. The Group updates inputs every quarter to confirm the appropriateness of the fair value measurement.

Information about the valuation techniques and inputs used in determining the fair value of various assets and liabilities is disclosed in Notes 14 and 36.

c. Valuation of insurance contract liabilities

1) Cathay Life and its subsidiaries

Policy reserves for insurance contracts and investment contracts with discretionary participation features are based on actuarial models and assumptions made as the insurance contracts were established, which include the mortality rate, interest rate, lapse rate, morbidity rate, etc. The assumptions are made based on the related laws and regulations.

All insurance contracts are subject to a liability adequacy test, which reflects the best current estimate of future cash flows. Best estimates of future investment income from the assets backing such contracts are based on current market returns, as well as expectations about future economic developments. Assumptions on future expenses are based on current expense levels, adjusted using the expected expense inflation, if appropriate. Surrender rates are based on the Company's historical experience.

The management examines these estimates regularly and makes adjustments when necessary, but actual results may differ from these estimates.

2) Cathay Century and its subsidiaries

Loss reserves are estimated for possible claims of both filed but not yet paid and not yet filed of all insurance contracts. Such estimates are made based on historical data, actuarial analysis, financing modeling and other analytical techniques and are adjusted when necessary; however, the actual results may differ from these estimates.

6. CASH AND CASH EQUIVALENTS

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Cash on hand	\$ 24,024,132	\$ 17,257,240
Cash in banks	154,204,645	80,146,106
Time deposits	174,190,896	52,709,964
Checks for clearing	2,930,797	7,060,146
Cash equivalents	31,733,983	5,608,762
Due from banks	26,325,206	43,812,218
Less: Loss allowance	<u>(4,188)</u>	<u>(18,382)</u>
	<u>\$ 413,405,471</u>	<u>\$ 206,576,054</u>

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
<u>Financial assets mandatorily classified as at FVTPL</u>		
Non-derivative financial assets		
Stocks	\$ 495,159,801	\$ 673,969,471
Funds and beneficiary certificates	579,735,647	293,491,136
Government bonds	41,962,807	25,763,954
Corporate bonds	7,871,304	7,429,409
Financial debentures	23,968,427	25,818,154
Overseas bonds	231,492,155	188,524,736
Short-term notes	189,983,788	162,478,515
Futures trading margin	1,115,968	433,813
Structured time deposits	4,011,973	-
Derivative instruments	<u>78,681,583</u>	<u>50,914,861</u>
	<u>\$ 1,653,983,453</u>	<u>\$ 1,428,824,049</u>
<u>Financial liabilities at FVTPL</u>		
Designated as at FVTPL		
Bonds	\$ 57,604,294	\$ 51,441,482
Held for trading		
Derivative instruments	51,411,974	75,735,636
Security lending payable (non-hedging)	2,327,231	2,141,592
Security lending payable (hedging)	<u>182,888</u>	<u>380,186</u>
	<u>\$ 111,526,387</u>	<u>\$ 129,698,896</u>

- a. The Group elected to present the profit or loss of the designated financial assets using the overlay approach under IFRS 4 “Insurance Contracts”. Financial assets designated for the overlay approach by the Group for investing activities relating to insurance contracts issued by the Group are as follows:

	December 31	
	2019	2018
<u>Financial assets mandatorily classified as at FVTPL</u>		
Stocks	\$ 482,377,169	\$ 660,063,193
Funds and beneficiary certificates	543,218,427	277,643,018
Financial debentures	15,243,512	17,859,589
Overseas bonds	229,427,152	187,795,448
Structured time deposits	<u>4,011,973</u>	<u>-</u>
	<u>\$ 1,274,278,233</u>	<u>\$ 1,143,361,248</u>

Reclassification from profit or loss to other comprehensive income of the financial assets designated to apply overlay approach for the years ended December 31, 2019 and 2018 are as below:

	For the Years Ended December 31	
	2019	2018
Gain (loss) due to application of IFRS 9 to profit or loss	\$ 205,480,995	\$ (31,827,184)
Gain if applying IAS 39 to profit or loss	<u>(84,644,240)</u>	<u>(86,249,355)</u>
Loss (gain) reclassified due to application of overlay approach	<u>\$ 120,836,755</u>	<u>\$ (118,076,539)</u>

Due to application of overlay approach, the amount of gain and loss on financial assets and liabilities at the FVTPL for the years ended December 31, 2019 and 2018 decreased from gain of \$209,449,191 thousand to gain of \$88,612,436 thousand, and decreased from loss of \$120,944,083 thousand to loss of \$2,867,544 thousand, respectively.

- b. As of December 31, 2018, certain financial assets at FVTPL of Cathay United Bank and its subsidiaries 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.
- c. Financial liabilities designated as at FVTPL

In September 2014, Cathay United 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. Cathay United 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, Cathay United 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, Cathay United 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, Cathay United 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%.

Cathay United 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 to have a net gain of \$4,094,478 thousand and net loss of \$2,290,940 thousand, respectively.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Equity instruments		
Stocks	\$ 62,877,916	\$ 43,192,054
Debt instruments		
Government bonds	115,618,878	160,794,200
Corporate bonds	47,939,633	45,668,682
Financial debentures	80,267,723	76,406,003
Asset-backed securities	27,942,654	3,191,683
Negotiable certificates of deposits	70,253,313	-
Overseas bonds	778,747,472	800,838,518
Less: Litigation deposits	(45,748)	(1,720)
Less: Deposits to the Central Bank	(1,067,739)	(2,111,016)
Less: Derivative instrument collaterals	-	(168,134)
	<u>1,119,656,186</u>	<u>1,084,618,216</u>
	<u>\$ 1,182,534,102</u>	<u>\$ 1,127,810,270</u>

- a. These investments in equity instruments are not held for trading and thus were designated as financial assets at FVTOCI.
- b. Dividend income recognized relating to investments in equity instruments at FVTOCI for the years ended December 31, 2019 and 2018 were \$2,744,750 thousand and \$3,149,048 thousand, respectively. Those related to investment derecognized for the years ended December 31, 2019 and 2018 were \$1,120,993 thousand and \$1,416,819 thousand, respectively.
- c. In consideration of the investment strategy, the Group sold equity instrument investments at FVTOCI at fair value of \$50,433,053 thousand and \$70,623,416 thousand at the time of sale, and transferred unrealized loss of \$4,606,752 thousand and \$12,429,335 thousand from other equity to retained earnings for the years ended December 31, 2019 and 2018, respectively.

- d. As of December 31, 2019 and 2018, certain financial assets at FVTOCI of Cathay United Bank and its subsidiaries 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.
- e. As of December 31, 2019 and 2018, Cathay Securities and its subsidiaries sold certain debt instruments investments at FVTOCI under repurchase agreements with notional amounts of \$2,050,000 thousand and \$3,325,000 thousand, respectively.
- f. Refer to Note 29 for the financial assets at FVTOCI that were pledged as collateral.
- g. Refer to Note 36 for information relating to the credit risk management and impairment of debt instruments at FVTOCI.

9. FINANCIAL ASSETS MEASURED AT AMORTIZED COST

	December 31	
	2019	2018
Time deposits	\$ 1,776,929	\$ 611,285
Financial debentures	68,190,012	70,227,496
Corporate bonds	27,508,670	32,239,336
Government bonds	42,403,554	41,021,039
Overseas bonds	2,515,522,370	2,161,607,143
Asset-backed securities	1,189,350	1,143,199
Structured bonds	3,436,962	3,073,300
Asset-backed securities	38,850,385	47,973,170
Short-term notes	380,904,061	348,485,689
Less: Litigation deposits	(1,343,931)	(1,345,625)
Less: Deposits in the Central Bank	(8,371,801)	(8,383,555)
Less: Derivative instrument collateral	-	(6,075,419)
Less: Loss allowance (Note)	<u>(1,228,547)</u>	<u>(2,355,270)</u>
	<u>\$ 3,068,838,014</u>	<u>\$ 2,688,221,788</u>

Note: Loss allowance for guarantee deposits paid in bonds is not included. As of December 31, 2019 and 2018, the amounts were \$891 thousand and \$910 thousand, respectively.

- a. For the years ended December 31, 2019 and 2018, the Group disposed of bonds before maturity due to increase in credit risk, and the losses on disposal were \$3,071,753 thousand and \$1,027,382 thousand, respectively; bond disposal before maturity because of infrequent sales or sales insignificant in value (either individually or in aggregate) resulted in gains on disposal of \$11,598,209 thousand and \$5,906,106 thousand, respectively; bond disposal due to other situations such as repayments at maturities resulted in gain on disposal of \$1,361,166 thousand and loss on disposal of \$127,717 thousand, respectively.
- b. As of December 31, 2019 and 2018, certain financial assets measured at amortized cost of Cathay United Bank and its subsidiaries 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.

- c. Refer to Note 29 for information relating to financial assets at amortized cost pledged as collateral.
- d. Refer to Note 36 for information relating to the credit risk management and impairment of investments in debt instruments at amortized cost.

10. RECEIVABLES, NET

	December 31	
	2019	2018
Notes receivable	\$ 472,015	\$ 527,630
Accounts receivable	108,126,390	78,899,338
Interest receivables	53,456,596	54,509,930
Acceptances	896,898	1,591,399
Factoring receivables	3,137,119	2,607,455
Others	<u>21,496,994</u>	<u>25,424,903</u>
	187,586,012	163,560,655
Less: Loss allowance	<u>(2,536,480)</u>	<u>(2,344,465)</u>
	<u>\$ 185,049,532</u>	<u>\$ 161,216,190</u>

- a. The Group provided appropriate loss allowance for receivables and the moves in loss allowance for receivables were as follows:

For the year ended December 31, 2019

	12-month Expected- credit Losses	Lifetime Expected- credit Losses (Collectively Assessed)	Lifetime Expected- credit Losses (Neither Purchased nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Difference from Impairment Charged in Accordance with Applicable Laws and Regulations	Total
<u>Receivables</u>						
Balance at the beginning of the year	\$ 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 year						
Transferred to Lifetime ECLs	(2,703)	81,754	(3,647)	75,404	-	75,404
Transferred to credit-impaired 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 in current year	(90,495)	(56,968)	(231,366)	(378,829)	-	(378,829)
New financial assets purchased or originated	463,375	70,146	530,049	1,063,570	-	1,063,570
Difference from impairment charged in accordance with applicable laws and regulations	-	-	-	-	2,501	2,501
Written off as bad debt expense	-	-	(485,265)	(485,265)	-	(485,265)
Effects of exchange rate changes and others	<u>12,101</u>	<u>(10,301)</u>	<u>9,240</u>	<u>11,040</u>	<u>5</u>	<u>11,045</u>
Balance at the end of the year	<u>\$ 509,882</u>	<u>\$ 154,306</u>	<u>\$ 1,660,104</u>	<u>\$ 2,324,292</u>	<u>\$ 52,976</u>	<u>\$ 2,377,268</u>

For the year ended December 31, 2018

	12-month Expected- credit Losses	Lifetime Expected- credit Losses (Collectively Assessed)	Lifetime Expected- credit Losses (Neither Purchased nor Originated Credit- impaired Financial Assets)	Impairment Loss under IFRS 9	Difference from Impairment Charged in Accordance with Applicable Laws and Regulations	Total
<u>Receivables</u>						
Balance at the beginning of the year	\$ 78,157	\$ 63,923	\$ 2,106,749	\$ 2,248,829	\$ 14,830	\$ 2,263,659
Changes of financial instruments recognized at the beginning of the current reporting year						
Transferred to Lifetime ECLs	(1,861)	64,210	(1,634)	60,715	-	60,715
Transferred to credit-impaired financial assets	(377)	(637)	62,160	61,146	-	61,146
Transferred to 12-month ECLs	1,251	(19,979)	(2,667)	(21,395)	-	(21,395)
Derecognition of financial assets in current year	(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
Difference from impairment charged in accordance with applicable laws and regulations	-	-	-	-	37,522	37,522
Written off as bad debt expense	-	-	(442,217)	(442,217)	-	(442,217)
Effects of exchange rate changes and others	21,513	(7,027)	55,512	69,998	(1,882)	68,116
Balance at the end of the year	<u>\$ 126,022</u>	<u>\$ 116,965</u>	<u>\$ 1,768,492</u>	<u>\$ 2,011,479</u>	<u>\$ 50,470</u>	<u>\$ 2,061,949</u>

- b. Loss allowance for other receivable are provided by simplified approach and the reconciliation was as follows:

	For the Years Ended December 31	
	2019	2018
Beginning balance (IFRS 9)	\$ 282,516	\$ 200,522
(Reversal) provision for the year	(77,170)	126,987
Amounts written off	<u>(46,134)</u>	<u>(44,993)</u>
Ending balance	<u>\$ 159,212</u>	<u>\$ 282,516</u>

11. DISCOUNTS AND LOANS, NET

	December 31	
	2019	2018
Export negotiations	\$ 1,349,222	\$ 1,722,435
Loans	2,092,428,586	2,200,985,299
Overdrafts	1,695,073	2,031,672
Overdue loans	<u>3,528,482</u>	<u>3,275,233</u>
	2,099,001,363	2,208,014,639
Less: Loss allowance	<u>(32,240,067)</u>	<u>(31,238,732)</u>
	<u>\$ 2,066,761,296</u>	<u>\$ 2,176,775,907</u>

As of December 31, 2019, the gross amount of domestic discounts and loans and the related loss allowance belonging to Cathay United Bank amounted to \$1,399,537,914 thousand and \$24,940,626 thousand, respectively.

Refer to Note 36 for information relating to the credit risk management and impairment of discounts and loans.

12. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

Investors	Subsidiary	Nature of Business	Percentage of Ownership Interest (%)		Notes
			December 31		
			2019	2018	
The Company	Cathay Life	Life Insurance	100.00	100.00	
The Company	Cathay United Bank	Banking	100.00	100.00	
The Company	Cathay Century	Property insurance	100.00	100.00	
The Company	Cathay Securities	Security	100.00	100.00	
The Company and Cathay Life	Cathay Venture	Venture capital	100.00	100.00	
The Company	Cathay Securities Investment Trust	Entrusted investments	100.00	100.00	
Cathay Life	Cathay Lujiazui Life	Life insurance	50.00	50.00	
Cathay Life	Cathay Life (Vietnam)	Life insurance	100.00	100.00	
Cathay Life	Lin Yuan (Shanghai) Real Estate Co., Ltd. ("Lin Yuan")	Office leasing	100.00	100.00	
Cathay Life	Cathay Woolgate Exchange Holding 1 Limited	Real estate investment and management	100.00	100.00	
Cathay Life	Cathay Woolgate Exchange Holding 2 Limited	Real estate investment and management	100.00	100.00	
Cathay Life	Cathay Walbrook Holding 1 Limited	Real estate investment and management	100.00	100.00	
Cathay Life	Cathay Walbrook Holding 2 Limited	Real estate investment and management	100.00	100.00	
Cathay Life	Conning Holdings Limited ("CHL")	Holding company	100.00	100.00	
CHL	Conning U.S. Holdings, Inc.	Holding company	100.00	100.00	
CHL	Conning Asset Management Ltd.	Asset management services	100.00	100.00	
CHL	Conning (Germany) GmbH	Risk management software services	100.00	100.00	
The Company and CHL	Conning Asia Pacific Ltd.	Asset management services	100.00	100.00	
CHL	Conning Japan Ltd.	Asset management services	100.00	100.00	
Conning U.S. Holdings, Inc.	Conning Holdings Corp.	Holding company	100.00	100.00	
Conning Holdings Corp.	Conning & Company ("C&C")	Holding company	100.00	100.00	

(Continued)

Investors	Subsidiary	Nature of Business	Percentage of Ownership Interest (%)		Notes
			December 31		
			2019	2018	
C&C	Conning Inc.	Asset management services	100.00	100.00	
C&C	Goodwin Capital Advisers, Inc.	Asset management services	100.00	100.00	
C&C	Conning Investment Products, Inc.	Securities services	100.00	100.00	
C&C	Octagon Credit Investors, LLC (“Octagon”)	Fund management services	81.89	81.89	
Octagon	Octagon Multi-Strategy Corporate Credit GP, LLC	Fund management services	100.00	100.00	
Octagon	Octagon Funds GP LLC	Fund management services	100.00	100.00	
Octagon	Octagon Funds GP II LLC	Fund management services	100.00	100.00	
Octagon	Octagon Funding I, LLC	Fund management services	-	100.00	Note 1
Octagon	Octagon Funding II, LLC	Fund management services	-	100.00	Note 1
Octagon	Octagon Funding III, LLC	Fund management services	-	100.00	Note 1
Cathay Century	Cathay Insurance (Vietnam) Co., Ltd. (“Cathay Insurance (Vietnam)”)	Property insurance services	100.00	100.00	
Cathay United Bank	Indovina Bank Limited (“Indovina Bank”)	Banking	50.00	50.00	
Cathay United Bank	Cathay United Bank (Cambodia) Corporation Limited (“CUBC Bank”)	Banking	100.00	100.00	
Cathay United Bank	Cathay United Bank (China) Co., Ltd. (“CUBCN Bank”)	Banking	100.00	100.00	
Cathay Securities	Cathay Futures Co., Ltd. (“Cathay Futures”)	Futures services	99.99	99.99	
Cathay Securities	Cathay Securities (Hong Kong) Co., Ltd. (“Cathay Securities (Hong Kong)”)	Securities services	100.00	100.00	
Cathay Venture	Cathay Investment Inc. (“Cathay Investment”)	Venture capital	100.00	-	Note 2
Cathay Securities Investment Trust	Cathay Private Equity Co., Ltd. (“Cathay Private Equity”)	Venture capital services	100.00	100.00	

(Concluded)

Note 1: As of December 31, 2019, Octagon Funding I, LLC, Octagon Funding II, LLC and Octagon Funding III, LLC were dissolved.

Note 2: It was established by Cathay Venture on November 5, 2019.

b. Subsidiaries excluded from the consolidated financial statements

Investors	Subsidiary	Nature of Business	Percentage of Ownership Interest (%)		Notes
			December 31		
			2019	2018	
Cathay Life	Cathay Securities Investment Consulting Co., Ltd. (“Cathay Securities Investment Consulting”)	Security investment consulting services	100.00	100.00	
Cathay Securities	Cathay Investment Consulting (Shanghai) Co., Ltd.	Investment advisory services	-	100.00	*

* On November 7, 2017, it was dissolved by the board of directors, and the liquidation was completed on February 26, 2019.

The consolidated financial statements did not include the above-mentioned subsidiaries because their total assets and operating revenue were insignificant to the total assets and operating revenue of the Group.

13. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	<u>December 31</u>	
	2019	2018
Investments in unconsolidated subsidiaries	\$ 333,089	\$ 288,073
Investments in associates	<u>47,812,583</u>	<u>44,643,933</u>
	<u>\$ 48,145,672</u>	<u>\$ 44,932,006</u>

a. Investments in unconsolidated subsidiaries

	<u>December 31</u>	
	2019	2018
Cathay Securities Investment Consulting	\$ 333,089	\$ 278,780
Cathay Investment Consulting (Shanghai) Co., Ltd.	<u>-</u>	<u>9,293</u>
	<u>\$ 333,089</u>	<u>\$ 288,073</u>

b. Investments in associates

	<u>December 31</u>	
	2019	2018
Rizal Commercial Banking Corporation	\$ 15,893,473	\$ 15,743,568
PT Bank Mayapada Internasional Tbk	14,176,087	13,733,069
Cathay Insurance Company Limited (China)	4,462,182	2,346,424
Global Evolution Holding ApS	2,774,628	2,711,173
Dasheng Venture Capital Co., Ltd.	1,679,260	1,763,971
Taiwan Finance Corp.	1,675,881	1,665,689
PSS Co., Ltd.	833,568	782,943
Dasheng IV Venture Capital Co., Ltd.	782,762	791,667
Ding Teng Co., Ltd.	791,192	765,935
Cathay Sunrise Corporation	689,074	696,378
Neo Cathay Power Corp.	684,724	697,801
CMG International One Corp.	675,965	676,108
CMG International Two Corp.	674,106	675,088
CDBS Cathay Asset Management Co., Ltd.	421,059	458,070
Symphox Information Co., Ltd.	402,615	429,450
Greenhealth Water Resources Co., Ltd.	469,726	-
CM Energy Co., Ltd.	281,396	274,352
Tien-Tai Optronics Corporation	136,988	136,778
Taiwan Real-estate Management Corp.	100,958	103,185
WK Technology Fund VI Co., Ltd.	69,162	50,014
RI-Zhao Energy Corp.	46,460	46,051
Dun-Yang Energy Corp.	43,810	45,551
Yong-Chang Energy Corp.	42,522	47,248
Tien-Tai Management Consulting Co., Ltd.	<u>4,985</u>	<u>3,420</u>
	<u>\$ 47,812,583</u>	<u>\$ 44,643,933</u>

Aggregate information of associates that are not individually material

	For the Years Ended December 31	
	2019	2018
The Group's share of:		
Net income	\$ 992,462	\$ 885,498
Other comprehensive loss	<u>(1,160)</u>	<u>(437,898)</u>
Total comprehensive income (loss) for the period	<u>\$ 991,302</u>	<u>\$ 447,600</u>

As the individual associates are not significant, the related financial information is disclosed aggregately. The amount of the share of profit or loss and other comprehensive loss of associates were based on non-audited financial statements.

The investments in associates were not pledged.

14. INVESTMENT PROPERTY

	Investment Property		Investment Property Under Construction	Prepayments for Buildings and Land -	Total
	Land	Buildings		Investments	
January 1, 2018	\$ 226,503,504	\$ 87,366,614	\$ 3,546,004	\$ 690,203	\$ 318,106,325
Additions	38,074	6,926	3,927,795	708,349	4,681,144
Disposals	(148,769)	(439,000)	-	-	(587,769)
Transfers to property and equipment	-	(764,214)	-	-	(764,214)
Other reclassification	348,277	5,011,205	(4,683,656)	(675,866)	(40)
Gain (loss) on changes in fair value of investment property	(186,345)	(812,090)	-	-	(998,435)
Exchange differences	<u>(419,677)</u>	<u>(794,780)</u>	<u>-</u>	<u>-</u>	<u>(1,214,457)</u>
December 31, 2018	<u>\$ 226,135,064</u>	<u>\$ 89,574,661</u>	<u>\$ 2,790,143</u>	<u>\$ 722,686</u>	<u>\$ 319,222,554</u>
January 1, 2019	\$ 226,135,064	\$ 89,574,661	\$ 2,790,143	\$ 722,686	\$ 319,222,554
Adjustment on initial application of IFRS 16	9,014,035	-	-	-	9,014,035
Additions	-	-	3,959,386	10,547,734	14,507,120
Disposals	(837,820)	(96,799)	-	-	(934,619)
Transfers from property and equipment	53,045,893	11,709,682	-	-	64,755,575
Other reclassification	9,969,169	2,334,986	(2,202,812)	(10,118,057)	(16,714)
Gain (loss) on changes in fair value of investment property	1,763,604	(921,418)	-	-	842,186
Changes in revaluation surplus	(1,096,163)	2,023,082	-	-	926,919
Exchange differences	<u>212,020</u>	<u>167,032</u>	<u>-</u>	<u>-</u>	<u>379,052</u>
December 31, 2019	<u>\$ 298,205,802</u>	<u>\$ 104,791,226</u>	<u>\$ 4,546,717</u>	<u>\$ 1,152,363</u>	<u>\$ 408,696,108</u>

	For the Years Ended December 31	
	2019	2018
Rental income from investment property	\$ 11,315,269	\$ 10,740,853
Less: Direct operating expense from investment properties that generate rental income	(703,000)	(668,312)
Less: Direct operating expense from investment properties that do not generate rental income	<u>(137,975)</u>	<u>(147,154)</u>
	<u>\$ 10,474,294</u>	<u>\$ 9,925,387</u>

- a. Certain parts of properties are held to earn rental or for capital appreciation, and the other parts are held for owner occupation. If each component of a property could be sold separately, it is classified as investment property or property and equipment individually. If each component couldn't be sold separately, it would be classified as investment property only when owner occupation is lower than 5% of the property.
- b. As of December 31, 2019, the investment properties (excluding investment property under construction and prepayment for buildings and land - investments) belonging to Cathay Life amounted to \$363,601,688 thousand. Investment properties are held mainly for lease purposes. All the lease agreements are operating leases and the primary terms of the lease agreements are the same as general lease agreements. Rents from investment property are received annually, semi-annually, quarterly, monthly or in one lump sum. Investment properties held by the Group were not pledged.
- c. The ownership of the Group's investment properties are not subject to restrictions other than the restriction associated with being furnished as security for other's debt; the ownership of its trust property are not subject to restrictions. Besides, the Group are not involved in any situations that violate Subparagraph 2, Paragraph 3 of Article 11-2 of the Regulations Governing Foreign Investments by Insurance Companies.
- d. Valuation on the investment property of Cathay Life and its subsidiaries has been performed by the following appraisers of the joint appraisal firms meeting R.O.C.'s qualification requirements for real estate appraiser, with valuation dates at December 31, 2019 and 2018:

Name of Appraisal Firms	December 31, 2019	December 31, 2018
DTZ Real Estate Appraiser Firm	Chang-d, Yang; Gen-yuan, Li	Chang-d, Yang; Gen-yuan, Li; Chun-chun, Hu
Savills plc Real Estate Appraiser Firm	Gunag-ping, Dai; Yu-fen, Ye; Yi-zhi, Zhang; Hong-kai, Zhang	Gunag-ping, Dai; Yu-fen, Ye; Yi-zhi, Zhang; Hong-kai, Zhang
REPro Knight Frank Real Estate Appraiser Firm	Hong-xu, Wu; Yu-hsiang, Tsai	Hong-xu, Wu; Zhi-hao, Wu; Fu-xue, Shi
V-LAND Real Estate Appraiser Firm	Xi-zhong, Wang; You-qi, Liang	Xi-zhong, Wang; You-qi, Liang
Shang-shang Real Estate Appraiser Firm	Hong-yuan, Wang	Hong-yuan, Wang
Sinyi Real Estate Appraiser Firm	Wei-xin, Chi; Liang-an, Ji; Wen-zhe, Cai; Shi-ming, Wang	Wei-xin, Chi; Liang-an, Ji; Wen-zhe, Cai; Shi-ming, Wang
Elite Real Estate Appraiser Firm	Yu-lin, Chen	Yu-lin, Chen
CBRE Real Estate Appraiser Firm	Fu-xue, Shi; Chih-wei, Li	-

The fair value is supported by observable evidence in the market. The main appraisal approaches applied include the sales comparison approach, income approach - direct capitalization method, income approach - discounted cash flow method, cost approach and the method of land development analysis. Commercial office buildings and residences are mainly valued by the sales comparison approach and income approach because of the market liquidity and comparable sales and rental cases in the neighboring areas. Hotels, department stores and marketplaces are mainly valued by the income approach - direct capitalization method and income approach - discounted cash flow method because of the stable rental income in the long term. Industrial plants for lease are valued by the sales comparison approach and cost approach. Wholesale stores located in industrial districts are valued by the cost approach since the buildings are constructed for specific purposes because fewer similar transactions

could be referred to in the market. Vacant land and buildings under construction of logistics parks located in industrial and commercial integrated district are valued by cost approach. Land under construction with building permit is mainly valued by comparison approach and land development analysis. Urban renewal land under construction with building permit is valued based by comparison approach and income approach based on the allocated real estates (office buildings, hotels, etc.) under the urban renewal program. The real estate rights may include but are not limited to the rights for buildings and hotels held for the long term.

The main inputs used are as follows:

	December 31	
	2019	2018
Direct capitalization rates (net)	0.62%-6.30%	0.62%-4.39%
Discount rates	3.14%-4.23%	3.14%-4.23%

External appraisers use the market extraction method, search several comparable properties which are identical with or similar to the subject property, consider the liquidity risk and risk premium when disposed of in the future, to decide the direct capitalization rate and discount rate.

Cathay Life and its subsidiaries recognized their investment property at fair value subsequent to initial recognition and related fair value are categorized as level 3 of fair value hierarchy. The fair value of investment property will decrease as either one of the main inputs, direct capitalization rate and discount rate, of the direct capitalization method increases. On the contrary, the fair value of investment property will increase if any of the main input decreases.

Refer to Table 4 for the acquisition of individual real estate at costs at least NT\$300 million or 20% of the paid-in capital for Cathay Life and its subsidiaries.

- e. Cathay United 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:

Name of Appraiser Office	December 31, 2019	December 31, 2018
REPro Knight Frank Real Estate Appraiser Firm	Hong-xu, Wu; Yu-hsiang, Tsai	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 neighboring areas, their fair values have been mainly determined using comparison approach and 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 R.O.C. Real Estate Appraisers Association Gazette No.5, the house tax is determined based on the reference tables of current house values assessed for each city/county to estimate the total current house value assessed. House tax is calculated based on the tax rates in the House Tax Act and the actual payment data.

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

According to the R.O.C. 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 inputs used are as follows:

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

- 2) For reserved areas in hillside land, scenic land site and areas for agriculture, animal husbandry and forestry, there are few market transactions due to laws and regulations limit their purpose and related development effectiveness is low as well as there is no significant change that would affect related property market recently, their fair values are determined by the method of land development analysis and comparison approach.

	December 31	
	2019	2018
Rate of return	-	15%
Overall capital interest rate	-	2.11%

Refer to Table 5 for the disposal of individual real estate at prices of at least NT\$300 million or 10% of the paid-in capital for Cathay United Bank and its subsidiaries.

- f. Valuation on the investment property of Cathay Securities and its subsidiaries has been performed by the appraiser from Elite Real Estate Appraiser Firm (Yu-lin Chen), meeting R.O.C.'s qualification requirements for real estate appraiser, respectively, with valuation dates at December 31, 2019 and 2018.

The fair value of investment property is determined by income approach with significant assumptions as follows. If estimated future cash inflows increase or discount rate decreases, the fair value will increase.

	December 31	
	2019	2018
Estimated future cash inflows	\$ 435,307	\$ 436,792
Estimated future cash outflows	<u>(16,601)</u>	<u>(18,314)</u>
Estimated net cash inflows	<u>\$ 418,706</u>	<u>\$ 418,478</u>
Discount rate	2.045%	2.045%
Direct capitalization rate	2.56%	2.56%

The market rentals ranged from \$4,000 to \$6,000 per ping in the areas where the investment property is located.

All of the investment property are leased by operating leases, generating rental income of \$7,160 thousand and \$7,158 thousand, respectively, for the years ended December 31, 2019 and 2018.

The estimated future cash inflows consist of rental income, interest of deposit and value of disposal at the end of the period. Rental income is estimated for the current rent and the annual growth rate of the rent. The period of benefit analysis is estimated for 10 years. Interest of deposit is estimated based on the interest rate on a 1-year time deposit of the 5 largest banks for the past five years. The value of disposal at the end of the period is estimated using the direct capitalization method. The estimated future cash outflows consist of land tax, property tax, and replacement allowance, which are estimated on the basis of current expenditures, adjustments to the future announced land value, and tax rates in accordance with the House Tax Act.

The discount rate is determined based on the interest rate on a 2-year time deposit of petty cash plus 3 quarters percentage points as posted by Chunghwa Post Co., Ltd., plus the risk premium.

- g. Reconciliations for Level 3 fair value measurements are as follows:

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 310,083,727	\$ 307,190,424
Adjustment on initial application of IFRS 16	9,014,035	-
Amount recognized in profit or loss		
Gain (loss) from investment property	842,186	(998,435)
Amount recognized in other comprehensive income		
Property revaluation surplus	926,919	-
Exchange differences resulting from translating the financial statements of foreign operations	379,052	(1,214,457)
Acquisition	-	45,000
Disposals	(903,352)	(587,692)
Transfers from property and equipment	64,755,575	(764,214)
Transfers from investment property under construction	2,187,474	5,359,482
Transfers from prepayment for buildings and land	716,272	-
Transfers from investment property measured by costs	2,874,260	1,053,619
Transfers to property and equipment	<u>(2,104)</u>	<u>-</u>
Ending balance	<u>\$ 390,874,044</u>	<u>\$ 310,083,727</u>

The above amount excludes the part measured by costs.

15. PROPERTY AND EQUIPMENT

	Land	Buildings and Construction	Computer Equipment	Leased Assets	Leasehold Improvements	Transportation Equipment	Other Equipment	Construction in Progress and Prepayment for Real Estate Equipment	Total
<u>Cost</u>									
Balance at January 1, 2018	\$ 123,888,389	\$ 57,812,084	\$ 6,885,863	\$ 276,131	\$ 712,137	\$ 120,132	\$ 12,439,403	\$ 708,564	\$ 202,842,703
Additions	84	-	1,399,371	-	166,964	3,006	460,506	1,495,034	3,524,965
Disposals	(6,126)	(4,896)	(663,154)	-	(15,541)	(4,622)	(732,402)	-	(1,426,741)
Reclassification	432,542	855,796	134,234	-	580	-	444,076	(1,255,698)	611,530
Others	(2,400)	-	-	-	-	-	-	-	(2,400)
Exchange differences	3,837	(41,921)	13,281	4	5,184	3,013	11,590	2,574	(2,438)
Balance at December 31, 2018	<u>124,316,326</u>	<u>58,621,063</u>	<u>7,769,595</u>	<u>276,135</u>	<u>869,324</u>	<u>121,529</u>	<u>12,623,173</u>	<u>950,474</u>	<u>205,547,619</u>

(Continued)

	Land	Buildings and Construction	Computer Equipment	Leased Assets	Leasehold Improvements	Transportation Equipment	Other Equipment	Construction in Progress and Prepayment for Real Estate Equipment	Total
Depreciation and impairment									
Balance at January 1, 2018	\$ 103,134	\$ 21,459,719	\$ 5,252,487	\$ 275,877	\$ 418,285	\$ 83,011	\$ 10,154,500	\$ -	\$ 37,747,013
Depreciation	-	1,181,675	651,538	81	94,137	9,556	676,601	-	2,613,588
Disposals	-	(3,168)	(645,767)	-	(15,541)	(4,201)	(690,082)	-	(1,358,759)
Reclassification	-	(551)	-	-	-	-	(182)	-	(733)
Exchange differences	-	(1,427)	85,237	2	(2,330)	2,256	4,445	-	88,183
Balance at December 31, 2018	<u>103,134</u>	<u>22,636,248</u>	<u>5,343,495</u>	<u>275,960</u>	<u>494,551</u>	<u>90,622</u>	<u>10,145,282</u>	<u>-</u>	<u>39,089,292</u>
Carrying amount at December 31, 2018	\$ 124,213,192	\$ 35,984,815	\$ 2,426,100	\$ 175	\$ 374,773	\$ 30,907	\$ 2,477,891	\$ 950,474	\$ 166,458,327
Cost									
Balance at January 1, 2019	\$ 124,316,326	\$ 58,621,063	\$ 7,769,595	\$ 276,135	\$ 869,324	\$ 121,529	\$ 12,623,173	\$ 950,474	\$ 205,547,619
Additions	-	-	977,752	-	45,580	10,599	420,062	993,801	2,447,794
Disposals	(12,249)	(20,320)	(547,194)	-	(1,439)	(12,545)	(460,261)	-	(1,054,008)
Reclassification	(52,598,050)	(11,917,520)	514,754	(276,135)	206,700	10,366	(71,545)	(1,149,473)	(65,280,903)
Exchange differences	(13,841)	(76,615)	(41,612)	-	(21,684)	(2,566)	(7,740)	(3,073)	(167,131)
Balance at December 31, 2019	<u>71,692,186</u>	<u>46,606,608</u>	<u>8,673,295</u>	<u>-</u>	<u>1,098,481</u>	<u>127,383</u>	<u>12,503,689</u>	<u>791,729</u>	<u>141,493,371</u>
Depreciation and impairment									
Balance at January 1, 2019	103,134	22,636,248	5,343,495	275,960	494,551	90,622	10,145,282	-	39,089,292
Depreciation	-	979,629	783,488	-	101,598	8,837	675,588	-	2,549,140
Disposals	-	(12,897)	(538,021)	-	(1,353)	(12,193)	(444,404)	-	(1,008,868)
Reclassification	-	(659,220)	333,374	(275,960)	86,935	1,242	(422,212)	-	(935,841)
Exchange differences	-	(11,279)	(39,042)	-	4,226	(1,673)	(7,955)	-	(55,723)
Balance at December 31, 2019	<u>103,134</u>	<u>22,932,481</u>	<u>5,883,294</u>	<u>-</u>	<u>685,957</u>	<u>86,835</u>	<u>9,946,299</u>	<u>-</u>	<u>39,638,000</u>
Carrying amount at December 31, 2019	\$ 71,589,052	\$ 23,674,127	\$ 2,790,001	\$ -	\$ 412,524	\$ 40,548	\$ 2,557,390	\$ 791,729	\$ 101,855,371

(Concluded)

The above items of property and equipment are depreciated on a straight-line basis over their estimated useful lives as follows:

Buildings and construction	5-70 years
Computer equipment	3-10 years
Leased assets	3 years
Leasehold improvements	3-6 years or lease term
Transportation equipment	3-7 years
Other equipment	2-15 years

Property and equipment were not pledged.

16. LEASE AGREEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
<u>Carrying amounts</u>	
Buildings	\$ 3,807,403
Office equipment	14,247
Machine equipment	3,082
Transportation equipment	<u>84,181</u>
	<u>\$ 3,908,913</u>
The right-of-use assets presented as investment properties	<u>\$ 8,781,429</u>

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2019**

Additions to right-of-use assets	<u>\$ 1,306,612</u>
Depreciation expense for right-of-use assets	
Buildings	\$ 1,320,665
Office equipment	5,013
Machine equipment	1,364
Transportation equipment	<u>51,345</u>
	<u>\$ 1,378,387</u>

b. Lease liabilities - 2019

Carrying amounts	<u>\$ 12,720,337</u>
------------------	----------------------

Range of discount rates for lease liabilities was as follows:

	December 31, 2019
Buildings	0.35%-8.57%
Office equipment	0.71%-4.76%
Transportation equipment	0.70%-4.15%
Machine equipment	0.70%-5.38%
Investment property-superficies right	2.82%-3.71%

17. INTANGIBLE ASSETS

	Computer Software	Franchises	Trademarks	Customer Relationships	Goodwill	Other Intangible Assets	Total
<u>Cost</u>							
Balance at January 1, 2018	\$ 4,562,898	\$ 37,659,600	\$ 391,576	\$ 3,518,004	\$ 18,867,219	\$ 230,114	\$ 65,229,411
Addition - acquired separately	385,053	-	-	-	-	1,536	386,589
Disposal	(128,121)	-	-	-	-	-	(128,121)
Reclassification	382,466	-	-	-	-	-	382,466
Others	-	-	-	-	-	-	-
Exchange differences	<u>(6,717)</u>	<u>-</u>	<u>11,610</u>	<u>104,310</u>	<u>227,623</u>	<u>6,764</u>	<u>343,590</u>
Balance at December 31, 2018	<u>\$ 5,195,579</u>	<u>\$ 37,659,600</u>	<u>\$ 403,186</u>	<u>\$ 3,622,314</u>	<u>\$ 19,094,842</u>	<u>\$ 238,414</u>	<u>\$ 66,213,935</u>
<u>Amortization and impairment</u>							
Balance at January 1, 2018	\$ 3,317,139	\$ 5,198,458	\$ -	\$ 795,546	\$ -	\$ 115,292	\$ 9,426,435
Amortization	548,587	2,079,383	-	391,108	-	41,956	3,061,034
Disposal	(128,121)	-	-	-	-	-	(128,121)
Exchange differences	<u>(7,334)</u>	<u>-</u>	<u>-</u>	<u>31,217</u>	<u>-</u>	<u>4,237</u>	<u>28,120</u>
Balance at December 31, 2018	<u>\$ 3,730,271</u>	<u>\$ 7,277,841</u>	<u>\$ -</u>	<u>\$ 1,217,871</u>	<u>\$ -</u>	<u>\$ 161,485</u>	<u>\$ 12,387,468</u>
Carrying amount at December 31, 2018	<u>\$ 1,465,308</u>	<u>\$ 30,381,759</u>	<u>\$ 403,186</u>	<u>\$ 2,404,443</u>	<u>\$ 19,094,842</u>	<u>\$ 76,929</u>	<u>\$ 53,826,467</u>

(Continued)

	Computer Software	Franchises	Trademarks	Customer Relationships	Goodwill	Other Intangible Assets	Total
<u>Cost</u>							
Balance at January 1, 2019	\$ 5,195,579	\$ 37,659,600	\$ 403,186	\$ 3,622,314	\$ 19,094,842	\$ 238,414	\$ 66,213,935
Addition - acquired separately	761,562	-	-	-	-	3,877	765,439
Disposal	(238,160)	-	-	-	(8,629)	-	(246,789)
Reclassification	101,369	-	-	-	-	(26,145)	75,224
Exchange differences	(23,911)	-	(8,225)	(73,902)	(161,265)	(4,256)	(271,559)
Balance at December 31, 2019	\$ 5,796,439	\$ 37,659,600	\$ 394,961	\$ 3,548,412	\$ 18,924,948	\$ 211,890	\$ 66,536,250
<u>Amortization and impairment</u>							
Balance at January 1, 2019	\$ 3,730,271	\$ 7,277,841	\$ -	\$ 1,217,871	\$ -	\$ 161,485	\$ 12,387,468
Amortization	671,049	2,079,383	-	400,501	-	19,550	3,170,483
Impairment loss	-	-	-	-	8,629	-	8,629
Disposal	(238,160)	-	-	-	(8,629)	-	(246,789)
Exchange differences	(15,989)	-	-	(34,746)	-	(3,778)	(54,513)
Balance at December 31, 2019	\$ 4,147,171	\$ 9,357,224	\$ -	\$ 1,583,626	\$ -	\$ 177,257	\$ 15,265,278
Carrying amount at December 31, 2019	\$ 1,649,268	\$ 28,302,376	\$ 394,961	\$ 1,964,786	\$ 18,924,948	\$ 34,633	\$ 51,270,972

(Concluded)

- a. Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Computer software	2-10 years
Franchises	6.5 or 20 years
Customer relationships	5-15 years
Other intangible assets	3-6 years

- b. The acquisition and primary movements in goodwill were as follows:

1) Cathay Life

As of December 31, 2019 and 2018, the book values of goodwill were \$10,343,445 thousand and \$10,498,082 thousand, respectively. The goodwill arose from the acquisition of which Cathay life assumed all assets, liabilities and operations of Global Life Insurance Co., Ltd. and Singfor Life Insurance Co., Ltd. except for their reserved assets and liabilities on July 1, 2015, the acquisition of 100% of Conning Holdings Limited on September 18, 2015 and 81.89% of Octagon Credit Investors, LLC through Conning & Company, a 100% subsidiary of Cathay life on February 1, 2016.

An annual impairment test for goodwill is performed regularly. Cathay Life and its subsidiaries estimated the recoverable amount of the cash-generating unit that the goodwill is allocated to for the purpose of impairment testing. The recoverable amount is calculated by applying a proper discount rate. Since the recoverable amount is higher than the book value of the cash-generating unit that the goodwill was allocated to, no impairment is recognized for goodwill.

2) Cathay United Bank

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

Cathay United 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 for goodwill, Cathay United 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.

3) Cathay Securities

After Cathay Securities acquired 100% of the equity of Hongyuan Securities (Hong Kong) on September 4, 2015 and completed changing its name, the Group announced the official opening of Cathay Securities (Hong Kong) Co., Ltd. on September 9, 2015. Goodwill of \$8,629 thousand related to the acquisition was mainly due to the benefits on the expected growth in operating income in Hong Kong. In 2019, the assessed recoverable amount of Cathay Securities (Hong Kong) was less than its carrying amount, and an impairment loss on goodwill of \$8,629 thousand was recognized accordingly (recorded as other gains and losses).

The recoverable amount of Cathay Securities (Hong Kong) is determined on the basis of value in use, and is estimated based on the cash flow from the financial budget approved by the management of Cathay Securities for the next 5 years, using an annual discount rate of 7.6%. Cash flow after five years is extrapolated with a zero growth rate. Other key assumptions include the estimated operating income and net operating profit. These assumptions are made with reference to the past operating conditions of the cash-generating unit and the management's expectations of the market.

18. COMMERCIAL PAPER PAYABLE, NET

	December 31	
	2019	2018
Nominal amount	\$ 54,020,000	\$ 62,990,000
Less: Discount on short-term bills payable	<u>(1,155)</u>	<u>(633)</u>
	<u>\$ 54,018,845</u>	<u>\$ 62,989,367</u>
Interest rate range	0.51%-0.69%	0.46%-0.86%

19. DEPOSITS AND REMITTANCES

	December 31	
	2019	2018
Checking deposits	\$ 14,533,346	\$ 15,781,941
Demand deposits	505,115,127	499,861,928
Demand savings deposits	931,589,893	847,465,305
Time deposits	465,200,743	450,145,909
Time savings deposits	382,673,168	367,920,662
Negotiable certificates of deposit	2,931,000	4,313,300
Outward remittances and remittances payable	<u>1,400,539</u>	<u>1,714,041</u>
	<u>\$ 2,303,443,816</u>	<u>\$ 2,187,203,086</u>

20. BONDS PAYABLE

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Subordinated financial debentures	\$ 53,900,000	\$ 55,600,000
Cumulative perpetual subordinated corporate bonds	45,000,000	35,000,000
Unsecured corporate bonds	<u>20,000,000</u>	<u>-</u>
	<u>\$ 118,900,000</u>	<u>\$ 90,600,000</u>

a. Subordinated financial debentures

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
First issue of subordinated financial debentures in 2009; fixed rate at 2.6%; maturity: July 2019	\$ -	\$ 1,500,000
First issue of subordinated financial debentures in 2011; fixed rate at 1.72%; maturity: March 2021	1,500,000	1,500,000
First issue of subordinated financial debentures in 2011; fixed rate at 1.72%; maturity: June 2021	2,500,000	2,500,000
First issue of subordinated financial debentures in 2012; fixed rate at 1.48%; maturity: June 2019	-	200,000
First issue of subordinated financial debentures in 2012; fixed rate at 1.65%; maturity: June 2022	4,200,000	4,200,000
First issue of subordinated financial debentures in 2012; fixed rate at 1.65%; maturity: August 2022	5,600,000	5,600,000
First issue of subordinated financial debentures in 2013; fixed rate at 1.55%; maturity: April 2020	100,000	100,000
First issue of subordinated financial debentures in 2013; fixed rate at 1.7%; maturity: April 2023	9,900,000	9,900,000
First issue of subordinated financial debentures in 2014; fixed rate at 1.7%; maturity: May 2021	3,000,000	3,000,000
First issue of subordinated financial debentures in 2014; fixed rate at 1.85%; maturity: May 2024	12,000,000	12,000,000
First issue of subordinated financial debentures in 2017; fixed rate at 1.85%; maturity: April 2027	12,700,000	12,700,000
First issue of subordinated financial debentures in 2017; fixed rate at 1.5%; maturity: April 2024	<u>2,400,000</u>	<u>2,400,000</u>
	<u>\$ 53,900,000</u>	<u>\$ 55,600,000</u>

b. Cumulative perpetual subordinated corporate bonds

- 1) Pursuant to Order No. Securities-TPEX-Bond-10600099421 of the Taipei Exchange, Cathay life issued its first perpetual cumulative subordinated corporate bonds on May 12, 2017 through public offering. Key terms and conditions are as follows:
 - a) Issue amount: \$35,000,000 thousand.
 - b) Principal amount and issue price: The face value is \$1,000 thousand each, and is issued at par.
 - c) Years to maturity: Perpetual.

- d) Coupon rate: Fixed rate of 3.3% from the issue date to the tenth year, plus 1% if the bonds are not redeemed after the tenth year from the issue date.
 - e) Terms of interest payments: The interest payments are calculated and paid at coupon rate every year from the issue date.
 - f) Right of early redemption: If the Cathy Life's risk-based capital ratio is greater than twice the minimum risk-based capital ratio required for insurance companies, the Cathy Life may, with the approval of the authorities, redeem the bonds in whole after 10 years of the issuance, at a redemption price equal to 100% of the principal amount of the bonds to be redeemed, plus accrued and unpaid interest.
 - g) Form of bonds: Book-entry securities
- 2) Pursuant to Order No. Securities-TPEX-Bond-10800055731 of the Taipei Exchange, Cathay life issued its first perpetual cumulative subordinated corporate bonds on June 26, 2019 through public offering. Key terms and conditions are as follows:
- a) Issue amount: \$10,000,000 thousand.
 - b) Principal amount and issue price: The face value is \$1,000 thousand each, and is issued at par.
 - c) Years to maturity: Perpetual.
 - d) Coupon rate: Fixed rate of 3%.
 - e) Terms of interest payments: The interest payments are calculated and paid at coupon rate every year from the issue date.
 - f) Right of early redemption: If the Cathy Life's risk-based capital ratio is greater than twice the minimum risk-based capital ratio required for insurance companies, the Cathy Life may, with the approval of the authorities, redeem the bonds in whole after 10 years of the issuance, at a redemption price equal to 100% of the principal amount of the bonds to be redeemed, plus accrued and unpaid interest.
 - g) Form of bonds: Book-entry securities.
- c. Unsecured Corporate bonds
- Pursuant to Order No. Securities-TPEX-Bond-10800038242 of the Taipei Exchange, Cathay Financial Holdings issued its first unsecured corporate bonds on May 8, 2019 through public offering. Key terms and conditions are as follows:
- 1) Issue amount: \$20,000,000 thousand, which is divided into A Note of \$4,000,000 thousand, B Note of \$4,000,000 thousand and C Note of \$12,000,000 thousand by issue periods.
 - 2) Principal amount and issue price: The face value is \$1,000 thousand each, and is issued at par.
 - 3) Years to maturity: A Note is 5 years, B Note is 7 years and C Note is 10 years.
 - 4) Coupon rate: Fixed rate of 0.83% for A Note, 0.93% for B Note and 1.04% for C Note.
 - 5) Terms of interest payments: The interest payments are calculated and paid at coupon rate every year from the issue date.
 - 6) Form of bonds: Book-entry securities.

21. PROVISIONS

	December 31	
	2019	2018
Insurance liability		
Unearned premium reserve	\$ 30,569,073	\$ 28,779,799
Loss reserve	20,400,362	17,377,650
Policy reserve	5,592,979,146	5,225,589,934
Special reserve	13,982,681	14,356,733
Premium deficiency reserve	19,681,482	22,559,651
Reserve for insurance contracts with the nature of financial products	10,932,008	9,318,713
Reserve for foreign exchange valuation	18,000,877	17,075,289
Other reserve	<u>1,873,141</u>	<u>1,894,570</u>
	5,708,418,770	5,336,952,339
Provisions for employee benefits	3,947,500	3,697,333
Other reserves	<u>1,412,115</u>	<u>1,286,054</u>
	<u>\$ 5,713,778,385</u>	<u>\$ 5,341,935,726</u>

As of December 31, 2019, policy reserve belonging to Cathay Life amounted to \$5,567,592,302 thousand.

a. Cathay Life and its subsidiaries

The details and changes of Cathay Life and its subsidiaries' insurance contracts and financial instruments with discretionary participation features are summarized below:

1) Unearned premium reserve

	December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Individual life insurance	\$ 81,756	\$ -	\$ 81,756
Individual injury insurance	6,872,182	-	6,872,182
Individual health insurance	9,403,665	-	9,403,665
Group insurance	1,360,369	-	1,360,369
Investment-linked insurance	<u>114,231</u>	<u>-</u>	<u>114,231</u>
	17,832,203	-	17,832,203
Less ceded unearned premium reserve			
Individual life insurance	713,629	-	713,629
Individual injury insurance	17,678	-	17,678
Individual health insurance	<u>163,571</u>	<u>-</u>	<u>163,571</u>
	<u>894,878</u>	<u>-</u>	<u>894,878</u>
	<u>\$ 16,937,325</u>	<u>\$ -</u>	<u>\$ 16,937,325</u>

	December 31, 2018		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Individual life insurance	\$ 73,117	\$ -	\$ 73,117
Individual injury insurance	6,497,571	-	6,497,571
Individual health insurance	8,843,583	-	8,843,583
Group insurance	1,225,893	-	1,225,893
Investment-linked insurance	<u>112,153</u>	-	<u>112,153</u>
	<u>16,752,317</u>	-	<u>16,752,317</u>
Less ceded unearned premiums reserve			
Individual life insurance	509,092	-	509,092
Individual injury insurance	9,703	-	9,703
Individual health insurance	<u>105,542</u>	-	<u>105,542</u>
	<u>624,337</u>	-	<u>624,337</u>
	<u>\$ 16,127,980</u>	<u>\$ -</u>	<u>\$ 16,127,980</u>

The changes in unearned premium reserve are summarized below:

	For the Year Ended December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 16,752,317	\$ -	\$ 16,752,317
Provision	17,865,667	-	17,865,667
Recovery	(16,774,327)	-	(16,774,327)
Foreign exchange	<u>(11,454)</u>	-	<u>(11,454)</u>
Ending balance	<u>17,832,203</u>	-	<u>17,832,203</u>
Less ceded unearned premium reserve			
Beginning balance	624,337	-	624,337
Increase	<u>270,541</u>	-	<u>270,541</u>
Ending balance	<u>894,878</u>	-	<u>894,878</u>
Net ending balance	<u>\$ 16,937,325</u>	<u>\$ -</u>	<u>\$ 16,937,325</u>

For the Year Ended December 31, 2018

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 15,978,199	\$ -	\$ 15,978,199
Provision	16,748,750	-	16,748,750
Recovery	(15,967,880)	-	(15,967,880)
Foreign exchange	<u>(6,752)</u>	<u>-</u>	<u>(6,752)</u>
Ending balance	<u>16,752,317</u>	<u>-</u>	<u>16,752,317</u>
Less ceded unearned premium reserve			
Beginning balance	300,568	-	300,568
Increase	<u>323,769</u>	<u>-</u>	<u>323,769</u>
Ending balance	<u>624,337</u>	<u>-</u>	<u>624,337</u>
Net ending balance	<u>\$ 16,127,980</u>	<u>\$ -</u>	<u>\$ 16,127,980</u>

2) Loss reserve

December 31, 2019

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Individual life insurance			
Filed but not paid	\$ 2,440,972	\$ 31,200	\$ 2,472,172
Not yet filed	42,394	-	42,394
Individual injury insurance			
Filed but not paid	40,780	-	40,780
Not yet filed	1,860,397	-	1,860,397
Individual health insurance			
Filed but not paid	1,292,145	-	1,292,145
Not yet filed	3,110,262	-	3,110,262
Group insurance			
Filed but not paid	68,608	-	68,608
Not yet filed	1,972,976	-	1,972,976
Investment-linked insurance			
Filed but not paid	182,401	-	182,401
Not yet filed	<u>477</u>	<u>-</u>	<u>477</u>
	<u>11,011,412</u>	<u>31,200</u>	<u>11,042,612</u>
Less ceded loss reserve			
Individual life insurance	3,737	-	3,737
Individual injury insurance	1,063	-	1,063
Individual health insurance	19,157	-	19,157
Group insurance	<u>57</u>	<u>-</u>	<u>57</u>
	<u>24,014</u>	<u>-</u>	<u>24,014</u>
	<u>\$ 10,987,398</u>	<u>\$ 31,200</u>	<u>\$ 11,018,598</u>

	December 31, 2018		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Individual life insurance			
Filed but not paid	\$ 1,482,412	\$ 9,145	\$ 1,491,557
Not yet filed	78,293	-	78,293
Individual injury insurance			
Filed but not paid	27,845	-	27,845
Not yet filed	1,781,854	-	1,781,854
Individual health insurance			
Filed but not paid	867,032	-	867,032
Not yet filed	2,813,866	-	2,813,866
Group insurance			
Filed but not paid	51,463	-	51,463
Not yet filed	1,572,121	-	1,572,121
Investment-linked insurance			
Filed but not paid	218,680	-	218,680
Not yet filed	620	-	620
	<u>8,894,186</u>	<u>9,145</u>	<u>8,903,331</u>
Less ceded loss reserve			
Individual life insurance	8,479	-	8,479
Individual injury insurance	-	-	-
Individual health insurance	14,030	-	14,030
Group insurance	-	-	-
	<u>22,509</u>	<u>-</u>	<u>22,509</u>
	<u>\$ 8,871,677</u>	<u>\$ 9,145</u>	<u>\$ 8,880,822</u>

The changes in loss reserve are summarized below:

	For the Year Ended December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 8,894,186	\$ 9,145	\$ 8,903,331
Provision	11,113,301	31,200	11,144,501
Recovery	(8,974,299)	(9,145)	(8,983,444)
Foreign exchange	(21,776)	-	(21,776)
Ending balance	<u>11,011,412</u>	<u>31,200</u>	<u>11,042,612</u>
Less ceded loss reserve:			
Beginning balance	22,509	-	22,509
Increase	62,944	-	62,944
Decrease	(60,713)	-	(60,713)
Foreign exchange differences	(726)	-	(726)
Ending balance	<u>24,014</u>	<u>-</u>	<u>24,014</u>
Net ending balance	<u>\$ 10,987,398</u>	<u>\$ 31,200</u>	<u>\$ 11,018,598</u>

For the Year Ended December 31, 2018

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 7,573,219	\$ 2,678	\$ 7,575,897
Provision	8,906,122	9,145	8,915,267
Recovery	(7,582,459)	(2,678)	(7,585,137)
Foreign exchange	<u>(2,696)</u>	<u>-</u>	<u>(2,696)</u>
Ending balance	<u>8,894,186</u>	<u>9,145</u>	<u>8,903,331</u>
Less ceded loss reserve:			
Beginning balance, net	9,684	-	9,684
Increase	13,120	-	13,120
Decrease	-	-	-
Foreign exchange differences	<u>(295)</u>	<u>-</u>	<u>(295)</u>
Ending balance	<u>22,509</u>	<u>-</u>	<u>22,509</u>
Net ending balance	<u>\$ 8,871,677</u>	<u>\$ 9,145</u>	<u>\$ 8,880,822</u>

3) Policy reserve

December 31, 2019

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Life insurance (Note 1)	\$ 4,835,786,827	\$ 3,747	\$ 4,835,790,574
Injury insurance	7,268,700	-	7,268,700
Health insurance	726,959,954	-	726,959,954
Annuity insurance	1,388,012	20,476,035	21,864,047
Investment-limited insurance	<u>622,699</u>	<u>-</u>	<u>622,699</u>
Total (Note 2)	5,572,026,192	20,479,782	5,592,505,974
Less ceded policy reserve			
Life insurance	<u>421,465</u>	<u>-</u>	<u>421,465</u>
	<u>\$ 5,571,604,727</u>	<u>\$ 20,479,782</u>	<u>\$ 5,592,084,509</u>

December 31, 2018			
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Life insurance (Note 1)	\$ 4,536,368,929	\$ 8,236	\$ 4,536,377,165
Injury insurance	7,446,584	-	7,446,584
Health insurance	653,629,984	-	653,629,984
Annuity insurance	1,395,567	25,839,454	27,235,021
Investment-limited insurance	<u>440,541</u>	<u>-</u>	<u>440,541</u>
Total (Note 2)	5,199,281,605	25,847,690	5,225,129,295
Less ceded policy reserve			
Life insurance	<u>365,409</u>	<u>-</u>	<u>365,409</u>
	<u>\$ 5,198,916,196</u>	<u>\$ 25,847,690</u>	<u>\$ 5,224,763,886</u>

Note 1: Allowance for doubtful account pertinent to 3% of business tax cut and recovery of reserve for catastrophic event are included.

Note 2: Total policy reserve after including policy reserve-payables to the insured amounted to \$5,592,979,067 thousand and \$5,225,589,886 thousand as of December 31, 2019 and 2018, respectively.

The changes in policy reserve are summarized below:

For the Year Ended December 31, 2019			
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 5,199,281,605	\$ 25,847,690	\$ 5,225,129,295
Provision	680,883,508	1,043,751	681,927,259
Recovery	(281,855,942)	(6,411,621)	(288,267,563)
Foreign exchange	<u>(26,282,979)</u>	<u>(38)</u>	<u>(26,283,017)</u>
Ending balance	<u>5,572,026,192</u>	<u>20,479,782</u>	<u>5,592,505,974</u>
Less ceded policy reserve			
Beginning balance	365,409	-	365,409
Increase	71,881	-	71,881
Foreign exchange	<u>(15,825)</u>	<u>-</u>	<u>(15,825)</u>
Ending balance	<u>421,465</u>	<u>-</u>	<u>421,465</u>
Net ending balance	<u>\$ 5,571,604,727</u>	<u>\$ 20,479,782</u>	<u>\$ 5,592,084,509</u>

For the Year Ended December 31, 2018

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 4,828,234,670	\$ 32,918,998	\$ 4,861,153,668
Provision	635,630,693	374,465	636,005,158
Recovery	(290,898,770)	(7,420,310)	(298,319,080)
Foreign exchange	<u>26,315,012</u>	<u>(25,463)</u>	<u>26,289,549</u>
Ending balance	<u>5,199,281,605</u>	<u>25,847,690</u>	<u>5,225,129,295</u>
Less ceded policy reserve			
Beginning balance	301,806	-	301,806
Increase	73,160	-	73,160
Foreign exchange	<u>(9,557)</u>	<u>-</u>	<u>(9,557)</u>
Ending balance	<u>365,409</u>	<u>-</u>	<u>365,409</u>
Net ending balance	<u>\$ 5,198,916,196</u>	<u>\$ 25,847,690</u>	<u>\$ 5,224,763,886</u>

4) Special reserve

December 31, 2019

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Others	Total
Participating policies dividends reserve	\$ (56,900)	\$ -	\$ -	\$ (56,900)
Dividend risk reserve	58,200	-	-	58,200
Special reserve for revaluation increments of property	<u>-</u>	<u>-</u>	<u>11,083,324</u>	<u>11,083,324</u>
	<u>\$ 1,300</u>	<u>\$ -</u>	<u>\$ 11,083,324</u>	<u>\$ 11,084,624</u>

December 31, 2018

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Others	Total
Participating policies dividends reserve	\$ (62,254)	\$ -	\$ -	\$ (62,254)
Dividend risk reserve	63,184	-	-	63,184
Special reserve for revaluation increments of property	<u>-</u>	<u>-</u>	<u>11,083,324</u>	<u>11,083,324</u>
	<u>\$ 930</u>	<u>\$ -</u>	<u>\$ 11,083,324</u>	<u>\$ 11,084,254</u>

The changes of special reserve are summarized below:

	For the Year Ended December 31, 2019			
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Others	Total
Beginning balance	\$ 930	\$ -	\$ 11,083,324	\$ 11,084,254
Effects of retrospective application and restatement of IFRS 9	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Beginning balance, as adjusted	930	-	11,083,324	11,084,254
Provision for participating policies dividends reserve	17,100	-	-	17,100
Provision for participating policies dividends recovery	(11,746)	-	-	(11,746)
Provision for dividend risk reserve	<u>(4,984)</u>	<u>-</u>	<u>-</u>	<u>(4,984)</u>
Ending balance	<u>\$ 1,300</u>	<u>\$ -</u>	<u>\$ 11,083,324</u>	<u>\$ 11,084,624</u>
	For the Year Ended December 31, 2018			
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Others	Total
Beginning balance	\$ 889	\$ -	\$ 11,083,324	\$ 11,084,213
Effects of retrospective application and restatement of IFRS 9	<u>(395)</u>	<u>-</u>	<u>-</u>	<u>(395)</u>
Beginning balance, as adjusted	494	-	11,083,324	11,083,818
Provision for participating policies dividends reserve	5,488	-	-	5,488
Provision for participating policies dividends recovery	(7,990)	-	-	(7,990)
Provision for dividend risk reserve	<u>2,938</u>	<u>-</u>	<u>-</u>	<u>2,938</u>
Ending balance	<u>\$ 930</u>	<u>\$ -</u>	<u>\$ 11,083,324</u>	<u>\$ 11,084,254</u>

5) Premium deficiency reserve

	December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Individual life insurance	\$ 18,282,478	\$ -	\$ 18,282,478
Individual injury insurance	1,078	-	1,078
Individual health insurance	1,347,284	-	1,347,284
Group insurance	<u>48,617</u>	<u>-</u>	<u>48,617</u>
	<u>\$ 19,679,457</u>	<u>\$ -</u>	<u>\$ 19,679,457</u>

	December 31, 2018		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Individual life insurance	\$ 20,966,673	\$ -	\$ 20,966,673
Individual injury insurance	1,229	-	1,229
Individual health insurance	1,508,079	-	1,508,079
Group insurance	<u>72,323</u>	<u>-</u>	<u>72,323</u>
	<u>\$ 22,548,304</u>	<u>\$ -</u>	<u>\$ 22,548,304</u>

The changes in premium deficiency reserve are summarized below:

	For the Year Ended December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 22,548,304	\$ -	\$ 22,548,304
Provision	148,615	-	148,615
Recovery	(2,893,265)	-	(2,893,265)
Foreign exchange	<u>(124,197)</u>	<u>-</u>	<u>(124,197)</u>
Ending balance	<u>\$ 19,679,457</u>	<u>\$ -</u>	<u>\$ 19,679,457</u>

	For the Year Ended December 31, 2018		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 26,232,317	\$ -	\$ 26,232,317
Provision	172,966	-	172,966
Recovery	(3,984,323)	-	(3,984,323)
Foreign exchange	<u>127,344</u>	<u>-</u>	<u>127,344</u>
Ending balance	<u>\$ 22,548,304</u>	<u>\$ -</u>	<u>\$ 22,548,304</u>

6) Other reserve

	December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Others	<u>\$ 1,873,141</u>	<u>\$ -</u>	<u>\$ 1,873,141</u>

	December 31, 2018		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Others	<u>\$ 1,894,570</u>	<u>\$ -</u>	<u>\$ 1,894,570</u>

The changes in other reserve are summarized below:

	For the Year Ended December 31, 2019		
	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 1,894,570	\$ -	\$ 1,894,570
Recovery	<u>(21,429)</u>	<u>-</u>	<u>(21,429)</u>
Ending balance	<u>\$ 1,873,141</u>	<u>\$ -</u>	<u>\$ 1,873,141</u>

For the Year Ended December 31, 2018

	Insurance Contracts	Financial Instruments with Discretionary Participation Features	Total
Beginning balance	\$ 1,916,570	\$ -	\$ 1,916,570
Recovery	<u>(22,000)</u>	<u>-</u>	<u>(22,000)</u>
Ending balance	<u>\$ 1,894,570</u>	<u>\$ -</u>	<u>\$ 1,894,570</u>

7) Liability adequacy reserve

	Insurance Contracts and Financial Instruments with Discretionary Participation Features December 31	
	2019	2018
Unearned premium reserve	\$ 17,832,203	\$ 16,752,317
Policy reserve	5,592,979,067	5,225,129,295
Premium deficiency reserve	19,679,457	22,548,304
Other reserve	<u>1,873,141</u>	<u>1,894,570</u>
Book value of insurance liabilities	<u>\$ 5,632,363,868</u>	<u>\$ 5,266,324,486</u>
Estimated present value of cash flows	<u>\$ 4,535,490,841</u>	<u>\$ 4,244,307,094</u>
Balance of liability adequacy reserve	<u>\$ -</u>	<u>\$ -</u>

Note 1: Shown by liability adequacy test range (integrated contracts).

Note 2: Loss reserve and special reserve are not included in the liability adequacy test. Loss reserve is determined based on claims incurred before the valuation date and is therefore not included in the test.

Note 3: Cathay Life has settled the acquisition of Global Life and Singfor Life. Thus, the value of the acquired business, i.e. other reserve, shall be considered when calculating the book value of insurance liability included in the liability adequacy test.

Note 4: There is no merger or transfer of insurance contracts for Cathay Lujiazui Life and Cathay Life (Vietnam). Thus, the book value of related intangible assets shall not be deducted from the book value of insurance liability for liability adequacy reserve test.

Cathay Life's liability adequacy testing methodology is listed as follows:

	December 31, 2019	December 31, 2018
Test method	Gross premium valuation method (GPV)	Gross premium valuation method (GPV)
Groups	Integrated testing	Integrated testing
Significant assumptions		
a. Policy information	Includes insurance contracts and financial instruments with discretionary participation features as of the valuation date.	Includes insurance contracts and financial instruments with discretionary participation features as of the valuation date.
b. Discount rate	Under the asset allocation situation on September 30, 2019, the discount rate is calculated using the overall return on investment for the Company under the best estimate scenario in the actuarial report for 2018; with neutral assumptions for the discount rate after 30 years.	Under the asset allocation situation on September 30, 2018, the discount rate is calculated using the overall return on investment for the Company under the best estimate scenario in the actuarial report for 2017; with neutral assumptions for the discount rate after 30 years.

Cathay Lujiazui Life's liability adequacy testing methodology is listed as follows:

	December 31, 2019	December 31, 2018
Test method	Gross premium valuation method (GPV)	Gross premium valuation method (GPV)
Groups	Integrated testing	Integrated testing
Significant assumptions		
a. Policy information	Includes insurance contracts and financial instruments with discretionary participation features as of the valuation date.	Includes insurance contracts and financial instruments with discretionary participation features as of the valuation date.
b. Discount rate	The discount rate is calculated using the overall return on investment for the Company under the best estimate scenario in the actuarial report for 2018; with neutral assumptions for the discount rate after 30 years.	The discount rate is calculated using the overall return on investment for the Company under the best estimate scenario in the actuarial report for 2017; with neutral assumptions for the discount rate after 30 years.

8) Reserve for insurance contracts with the nature of financial products

Cathay Life and its subsidiaries issued financial instruments without discretionary participation features and recognized a reserve for insurance contracts with the nature of financial products. As of December 31, 2019 and 2018, the details of the balance and reconciliation changes in the reserve for insurance contracts with the nature of financial products are summarized below:

	December 31	
	2019	2018
Life insurance	\$ 10,005,021	\$ 8,475,663
Investment-linked insurance	<u>926,987</u>	<u>843,050</u>
	<u>\$ 10,932,008</u>	<u>\$ 9,318,713</u>
	For the Years Ended	
	December 31	
	2019	2018
Beginning balance	\$ 9,318,713	\$ 8,761,609
Premiums received	3,853,105	2,442,568
Claims and payments	(2,578,088)	(309,262)
Net provision (recovery) of statutory reserve	698,222	(1,381,439)
Foreign exchange	<u>(359,944)</u>	<u>(194,763)</u>
Ending balance	<u>\$ 10,932,008</u>	<u>\$ 9,318,713</u>

9) Reserve for foreign exchange valuation

a) The hedging strategy and risk exposure

Based on the principle of risk control and to maintain the consistent level of reserve for foreign exchange valuation, Cathay Life consistently adjusts the hedge ratios and risk exposure position under the risk control.

b) Reconciliation for reserve for foreign exchange valuation

	For the Years Ended	
	December 31	
	2019	2018
Beginning balance	\$ 17,075,289	\$ 11,589,138
Provision:		
Compulsory reserve	8,765,999	5,712,886
Additional reserve	<u>12,174,679</u>	<u>6,990,539</u>
	20,940,678	12,703,425
Recovery	<u>(20,015,090)</u>	<u>(7,217,274)</u>
Ending balance	<u>\$ 18,000,877</u>	<u>\$ 17,075,289</u>

c) Effects due to reserve for foreign exchange valuation

Item	For the Year Ended December 31, 2019		
	Inapplicable Amount (1)	Applicable Amount (2)	Effects (3)=(2)-(1)
Net income	\$ 64,599,774	\$ 63,859,304	\$ (740,470)
Earnings per share	4.82	4.76	(0.06)
Reserve for foreign exchange valuation	-	18,000,877	18,000,877
Equity	792,824,983	782,027,179	(10,797,804)

Item	For the Year Ended December 31, 2018		
	Inapplicable Amount (1)	Applicable Amount (2)	Effects (3)=(2)-(1)
Net income	\$ 56,211,177	\$ 51,822,256	\$ (4,388,921)
Earnings per share	4.29	3.95	(0.34)
Reserve for foreign exchange valuation	-	17,075,289	17,075,289
Equity	539,346,329	529,288,995	(10,057,334)

b. Century Insurance and its subsidiaries

1) Unearned insurance premium reserve

a) Details of unearned premium reserve and ceded unearned premium reserve

Insurance by Type	December 31, 2019			
	Unearned Premium Reserve		Ceded Unearned Premium Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
Fire insurance	\$ 1,810,023	\$ 140,335	\$ 996,120	\$ 954,238
Marine insurance	159,082	12,788	108,487	63,383
Land and air insurance	5,316,571	7,769	185,167	5,139,173
Liability insurance	799,822	684	257,398	543,108
Financial guarantee insurance	42,170	2,579	25,346	19,403
Other property insurance	1,074,161	47,203	795,157	326,207
Accident insurance	1,519,503	7,657	79,478	1,447,682
Health insurance	72,356	1,345	-	73,701
Compulsory auto liability insurance	<u>1,253,418</u>	<u>469,404</u>	<u>752,051</u>	<u>970,771</u>
	<u>\$ 12,047,106</u>	<u>\$ 689,764</u>	<u>\$ 3,199,204</u>	<u>\$ 9,537,666</u>

December 31, 2018				
Insurance by Type	Unearned Premium Reserve		Ceded Unearned Premium Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
	Fire insurance	\$ 1,876,580	\$ 202,282	
Marine insurance	160,920	7,893	105,301	63,512
Land and air insurance	4,958,232	1,117	207,212	4,752,137
Liability insurance	741,928	998	266,606	476,320
Financial guarantee insurance	51,296	680	36,484	15,492
Other property insurance	676,105	76,291	387,989	364,407
Accident insurance	1,463,714	5,146	74,007	1,394,853
Health insurance	62,309	9,562	-	71,871
Compulsory auto liability insurance	<u>1,261,457</u>	<u>470,972</u>	<u>756,874</u>	<u>975,555</u>
	<u>\$ 11,252,541</u>	<u>\$ 774,941</u>	<u>\$ 2,965,729</u>	<u>\$ 9,061,753</u>

b) Reconciliation of unearned premium reserve and ceded unearned premium reserve

	For the Years Ended December 31			
	2019		2018	
	Unearned Premium Reserves	Ceded Unearned Premium Reserve	Unearned Premium Reserves	Ceded Unearned Premium Reserve
Beginning balance	\$ 12,027,482	\$ 2,965,729	\$ 11,502,792	\$ 2,889,339
Provision	12,738,608	3,202,866	12,026,512	2,965,186
Recovery	(12,029,422)	(2,966,816)	(11,503,079)	(2,889,475)
Foreign exchange	<u>202</u>	<u>(2,575)</u>	<u>1,257</u>	<u>679</u>
Ending balance	<u>\$ 12,736,870</u>	<u>\$ 3,199,204</u>	<u>\$ 12,027,482</u>	<u>\$ 2,965,729</u>

2) Loss reserve

a) Loss reserve and ceded loss reserve

December 31, 2019				
Items	Loss Reserve		Ceded Loss Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Underwriting Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
	Filed not yet paid	\$ 4,097,036	\$ 680,547	
Not yet filed	<u>4,122,117</u>	<u>458,050</u>	<u>1,208,831</u>	<u>3,371,336</u>
	<u>\$ 8,219,153</u>	<u>\$ 1,138,597</u>	<u>\$ 2,450,072</u>	<u>\$ 6,907,678</u>

December 31, 2018

Items	Loss Reserve		Ceded Loss Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Underwriting Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
	Filed not yet paid	\$ 3,670,166	\$ 330,733	
Not yet filed	<u>4,026,955</u>	<u>446,465</u>	<u>1,113,251</u>	<u>3,360,169</u>
	<u>\$ 7,697,121</u>	<u>\$ 777,198</u>	<u>\$ 2,345,027</u>	<u>\$ 6,129,292</u>

b) Net changes in loss reserve and ceded loss reserve

For the year ended December 31, 2019

Items	Direct Underwriting Business		Reinsurance Inward Business		Net Change in Loss Reserves
	Provision (1)	Recovery (2)	Provision (3)	Recovery (4)	(5)=(1)-(2)+(3)-(4)
Filed not yet paid	\$ 4,114,894	\$ 3,688,405	\$ 680,547	\$ 330,733	\$ 776,303
Not yet filed	<u>4,106,345</u>	<u>4,011,028</u>	<u>458,050</u>	<u>446,465</u>	<u>106,902</u>
	<u>\$ 8,221,239</u>	<u>\$ 7,699,433</u>	<u>\$ 1,138,597</u>	<u>\$ 777,198</u>	<u>\$ 883,205</u>

Items	Ceded Reinsurance Business		Net Change in Loss Reserves
	Provision (6)	Recovery (7)	(8)=(6)-(7)
Filed not yet paid	\$ 1,250,626	\$ 1,241,976	\$ 8,650
Not yet filed	<u>1,200,933</u>	<u>1,105,134</u>	<u>95,799</u>
	<u>\$ 2,451,559</u>	<u>\$ 2,347,110</u>	<u>\$ 104,449</u>

For the year ended December 31, 2018

Items	Direct Underwriting Business		Reinsurance Inward Business		Net Change in Loss Reserves
	Provision (1)	Recovery (2)	Provision (3)	Recovery (4)	(5)=(1)-(2)+(3)-(4)
Filed not yet paid	\$ 3,669,107	\$ 3,557,618	\$ 330,733	\$ 286,595	\$ 155,627
Not yet filed	<u>4,026,858</u>	<u>3,796,287</u>	<u>446,465</u>	<u>442,692</u>	<u>234,344</u>
	<u>\$ 7,695,965</u>	<u>\$ 7,353,905</u>	<u>\$ 777,198</u>	<u>\$ 729,287</u>	<u>\$ 389,971</u>

Items	Ceded Reinsurance Business		Net Change in
	Provision (6)	Recovery (7)	Loss Reserves (8)=(6)-(7)
Filed not yet paid	\$ 1,230,864	\$ 1,342,737	\$ (111,873)
Not yet filed	<u>1,113,202</u>	<u>1,132,273</u>	<u>(19,071)</u>
	<u>\$ 2,344,066</u>	<u>\$ 2,475,010</u>	<u>\$ (130,944)</u>

c) Details of liability for claims filed but not yet paid and claim not yet filed of policyholders

Insurance by Type	December 31, 2019		
	Liability		
	Filed Not Yet Paid	Not Yet Filed	Total
Fire insurance	\$ 1,154,505	\$ 22,971	\$ 1,177,476
Marine insurance	220,538	36,835	257,373
Land and air insurance	1,657,568	1,362,640	3,020,208
Liability insurance	536,470	702,702	1,239,172
Financial guarantee insurance	69,074	53,566	122,640
Other property insurance	507,124	127,213	634,337
Accident insurance	111,467	537,695	649,162
Health insurance	3,125	60,533	63,658
Compulsory automobile liability insurance	<u>517,712</u>	<u>1,676,012</u>	<u>2,193,724</u>
	<u>\$ 4,777,583</u>	<u>\$ 4,580,167</u>	<u>\$ 9,357,750</u>

Insurance by Type	December 31, 2018		
	Liability		
	Filed Not Yet Paid	Not Yet Filed	Total
Fire insurance	\$ 801,557	\$ 15,818	\$ 817,375
Marine insurance	238,811	2,757	241,568
Land and air insurance	1,385,474	1,329,879	2,715,353
Liability insurance	432,229	737,982	1,170,211
Financial guarantee insurance	70,043	67,414	137,457
Other property insurance	414,592	155,267	569,859
Accident insurance	131,876	557,243	689,119
Health insurance	2,058	48,746	50,804
Compulsory automobile liability insurance	<u>524,259</u>	<u>1,558,314</u>	<u>2,082,573</u>
	<u>\$ 4,000,899</u>	<u>\$ 4,473,420</u>	<u>\$ 8,474,319</u>

- d) Details of ceded loss reserve for claims filed but not yet paid and claims not yet filed of policyholders

Insurance by Type	December 31, 2019		
	Liability		
	Filed Not Yet Paid	Not Yet Filed	Total
Fire insurance	\$ 268,711	\$ 9,362	\$ 278,073
Marine insurance	110,945	19,978	130,923
Land and air insurance	51,712	39,188	90,900
Liability insurance	345,774	271,171	616,945
Financial guarantee insurance	31,591	24,672	56,263
Other property insurance	236,296	51,775	288,071
Accident insurance	7,878	35,908	43,786
Health insurance	-	-	-
Compulsory automobile liability insurance	<u>188,334</u>	<u>756,777</u>	<u>945,111</u>
	<u>\$ 1,241,241</u>	<u>\$ 1,208,831</u>	<u>\$ 2,450,072</u>
Insurance by Type	December 31, 2018		
	Liability		
	Filed Not Yet Paid	Not Yet Filed	Total
Fire insurance	\$ 354,864	\$ 7,644	\$ 362,508
Marine insurance	146,021	675	146,696
Land and air insurance	75,958	38,139	114,097
Liability insurance	259,524	258,328	517,852
Financial guarantee insurance	32,831	40,365	73,196
Other property insurance	151,157	51,462	202,619
Accident insurance	4,764	34,967	39,731
Health insurance	-	-	-
Compulsory automobile liability insurance	<u>206,657</u>	<u>681,671</u>	<u>888,328</u>
	<u>\$ 1,231,776</u>	<u>\$ 1,113,251</u>	<u>\$ 2,345,027</u>

- e) Reconciliation of loss reserve and ceded loss reserve

	For the Years Ended December 31			
	2019		2018	
	Loss Reserve	Ceded Loss Reserve	Loss Reserve	Ceded Loss Reserve
Beginning balance	\$ 8,474,319	\$ 2,345,027	\$ 8,082,584	\$ 2,474,474
Provision	9,359,675	2,451,398	8,473,163	2,344,066
Recovery	(8,476,631)	(2,347,110)	(8,083,192)	(2,475,010)
Foreign exchange	<u>387</u>	<u>757</u>	<u>1,764</u>	<u>1,497</u>
Ending balance	<u>\$ 9,357,750</u>	<u>\$ 2,450,072</u>	<u>\$ 8,474,319</u>	<u>\$ 2,345,027</u>

3) Special reserve

a) Special reserve for compulsory automobile liability insurance

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 1,478,016	\$ 1,575,128
Provision	47,322	116,093
Recovery	<u>(403,017)</u>	<u>(213,205)</u>
Ending balance	<u>\$ 1,122,321</u>	<u>\$ 1,478,016</u>

b) Special reserve for all insurances other than compulsory automobile liability insurance

	For the Year Ended December 31, 2019		
	Liability		
	Catastrophic Event	Fluctuation of Risk	Total
Beginning balance	\$ 449,446	\$ 1,345,017	\$ 1,794,463
Provision	-	-	-
Recovery	<u>(18,727)</u>	<u>-</u>	<u>(18,727)</u>
Ending balance	<u>\$ 430,719</u>	<u>\$ 1,345,017</u>	<u>\$ 1,775,736</u>

	For the Year Ended December 31, 2018		
	Liability		
	Catastrophic Event	Fluctuation of Risk	Total
Beginning balance	\$ 468,172	\$ 1,345,017	\$ 1,813,189
Provision	-	-	-
Recovery	<u>(18,726)</u>	<u>-</u>	<u>(18,726)</u>
Ending balance	<u>\$ 449,446</u>	<u>\$ 1,345,017</u>	<u>\$ 1,794,463</u>

If the Notice for the improvement of the reserves of natural disaster insurances (commercial-business earthquake, typhoon and flood insurances) for property insurance enterprises, Notice for enhancing the reserves of residential earthquake insurance pool members and Regulations governing the reserves of nuclear energy insurance were not applied, there is no material impact on Cathay Century and its subsidiaries' net income and earnings per share, special reserve under liabilities would decrease by \$1,467,236 thousand and special reserve under equity would increase by \$439,872 thousand.

4) Premium deficiency reserve

a) Premium deficiency reserve and ceded premium deficiency reserve

December 31, 2019				
Insurance by Type	Premium Deficiency Reserve		Ceded Premium Deficiency Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
	Fire insurance	\$ -	\$ -	
Marine insurance	12	613	-	625
Land and air insurance	-	1,400	-	1,400
Liability insurance	-	-	-	-
Financial guarantee insurance	-	-	-	-
Other property insurance	-	-	-	-
Accident insurance	-	-	-	-
Health insurance	-	-	-	-
Compulsory auto liability insurance	-	-	-	-
	<u>\$ 12</u>	<u>\$ 2,013</u>	<u>\$ -</u>	<u>\$ 2,025</u>

December 31, 2018				
Insurance by Type	Premium Deficiency Reserve		Ceded Premium Deficiency Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
	Fire insurance	\$ -	\$ -	
Marine insurance	2,253	714	-	2,967
Land and air insurance	7,512	868	-	8,380
Liability insurance	-	-	-	-
Financial guarantee insurance	-	-	-	-
Other property insurance	-	-	-	-
Accident insurance	-	-	-	-
Health insurance	-	-	-	-
Compulsory auto liability insurance	-	-	-	-
	<u>\$ 9,765</u>	<u>\$ 1,582</u>	<u>\$ -</u>	<u>\$ 11,347</u>

b) Net loss recognized for premium deficiency reserve - Net change for premium deficiency reserve and ceded premium deficiency reserve

For the Year Ended December 31, 2019									
	Direct Underwriting Business		Reinsurance Inward Business		Net Changes in Premium Deficiency Reserve (5)=(1)-(2)+ (3)-(4)	Ceded Reinsurance Business		Net Changes in Ceded Premium Deficiency Reserve (8)=(6)-(7)	Net Loss Recognized for Premium Deficiency Reserve (9)=(5)-(8)
	Provision (1)	Recovery (2)	Provision (3)	Recovery (4)		Provision (6)	Recovery (7)		
Fire insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marine insurance	12	2,253	613	714	(2,342)	-	-	-	(2,342)
Land and air insurance	-	7,512	1,400	868	(6,980)	-	-	-	(6,980)
Liability insurance	-	-	-	-	-	-	-	-	-
Financial guarantee insurance	-	-	-	-	-	-	-	-	-
Other property insurance	-	-	-	-	-	-	-	-	-
Accident insurance	-	-	-	-	-	-	-	-	-
Health insurance	-	-	-	-	-	-	-	-	-
Compulsory automobile liability insurance	-	-	-	-	-	-	-	-	-
	<u>\$ 12</u>	<u>\$ 9,765</u>	<u>\$ 2,013</u>	<u>\$ 1,582</u>	<u>\$ (9,322)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (9,322)</u>

For the Year Ended December 31, 2018									
	Direct Underwriting Business		Reinsurance Inward Business		Net Changes in Premium Deficiency Reserve (5)=(1)-(2)+ (3)-(4)	Ceded Reinsurance Business		Net Changes in Ceded Premium Deficiency Reserve (8)=(6)-(7)	Net Loss Recognized for Premium Deficiency Reserve (9)=(5)-(8)
	Provision (1)	Recovery (2)	Provision (3)	Recovery (4)		Provision (6)	Recovery (7)		
Fire insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marine insurance	2,253	1,144	714	103	1,720	-	-	-	1,720
Land and air insurance	7,512	8,446	868	2,932	(2,998)	-	2,578	(2,578)	(420)
Liability insurance	-	-	-	-	-	-	-	-	-
Financial guarantee insurance	-	-	-	-	-	-	-	-	-
Other property insurance	-	-	-	-	-	-	-	-	-
Accident insurance	-	-	-	-	-	-	-	-	-
Health insurance	-	-	-	-	-	-	-	-	-
Compulsory automobile liability insurance	-	-	-	-	-	-	-	-	-
	<u>\$ 9,765</u>	<u>\$ 9,590</u>	<u>\$ 1,582</u>	<u>\$ 3,035</u>	<u>\$ (1,278)</u>	<u>\$ -</u>	<u>\$ 2,578</u>	<u>\$ (2,578)</u>	<u>\$ 1,300</u>

c) Reconciliation of premium deficiency reserve and ceded premium deficiency reserve

	For the Years Ended December 31			
	2019		2018	
	Premium Deficiency Reserve	Ceded Premium Deficiency Reserve	Premium Deficiency Reserve	Ceded Premium Deficiency Reserve
Beginning balance	\$ 11,347	\$ -	\$ 12,625	\$ 2,578
Provision	2,025	-	11,347	-
Recovery	(11,347)	-	(12,625)	(2,578)
Ending balance	<u>\$ 2,025</u>	<u>\$ -</u>	<u>\$ 11,347</u>	<u>\$ -</u>

5) Policy reserve

a) Details of policy reserve and ceded policy reserve

December 31, 2019

Insurance by Type	Policy Reserve		Ceded Policy Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Underwriting Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
Health insurance	\$ 79	\$ -	\$ -	\$ 79

December 31, 2018

Insurance by Type	Policy Reserve		Ceded Policy Reserve	Retained Business (4)=(1)+(2)-(3)
	Direct Underwriting Business (1)	Reinsurance Inward Business (2)	Ceded Reinsurance Business (3)	
Health insurance	\$ 48	\$ -	\$ -	\$ 48

b) Net changes in policy reserve and ceded policy reserve

For the year ended December 31, 2019

Insurance by Type	Direct Underwriting Business		Reinsurance Inward Business		Net Changes in Policy Reserve
	Provision (1)	Recovery (2)	Provision (3)	Recovery (4)	(5)=(1)-(2)+(3)-(4)
Health insurance	\$ 69	\$ 38	\$ -	\$ -	\$ 31

Insurance by Type	Ceded Reinsurance Business		Net Changes in Ceded Policy Reserve (8)=(6)-(7)
	Provision (6)	Recovery (7)	
Health insurance	\$ -	\$ -	\$ -

For the year ended December 31, 2018

Insurance by Type	Direct Underwriting Business		Reinsurance Inward Business		Net Changes in Policy Reserve
	Provision (1)	Recovery (2)	Provision (3)	Recovery (4)	(5)=(1)-(2)+(3)-(4)
Health insurance	\$ 21	\$ 28	\$ -	\$ -	\$ (7)

Insurance by Type	Ceded Reinsurance Business		Net Changes in
	Provision (6)	Recovery (7)	Ceded Policy Reserve (8)=(6)-(7)
Health insurance	\$ -	\$ -	\$ -

22. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The Company and its domestic subsidiaries of the Group adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under the LPA, the Company and its domestic subsidiaries make monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages. Subsidiaries in mainland China and other foreign countries of the Group adopted pension plans which are defined contribution plans and make contributions in accordance with local government regulations.

b. Defined benefit plans

The defined benefit plans adopted by the Company, Cathay Life, Cathay United Bank, Cathay Century, Cathay Securities, Cathay Futures, Cathay Securities Investment Trust and Cathay Venture in accordance with the Labor Standards Law are operated by the government of the R.O.C. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% 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 Group 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 Group 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 Group has no right to influence the investment policy and strategy.

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

	December 31	
	2019	2018
Present value of defined benefit obligation	\$ 20,564,339	\$ 19,952,668
Fair value of plan assets	<u>(23,663,947)</u>	<u>(22,543,674)</u>
Net defined benefit assets	\$ <u>(3,099,608)</u>	\$ <u>(2,591,006)</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)
Balance at January 1, 2018	\$ 19,097,445	\$ (20,513,261)	\$ (1,415,816)
Service cost			
Current service cost	472,769	-	472,769
Past service cost	440	-	440
Interest expense (income)	<u>194,084</u>	<u>(209,811)</u>	<u>(15,727)</u>
Recognized in profit or loss	<u>667,293</u>	<u>(209,811)</u>	<u>457,482</u>
Return on plan assets (excluding amounts included in net interest)	-	(1,626,917)	(1,626,917)
Actuarial loss			
Changes in demographic assumptions	381	-	381
Changes in financial assumptions	930,330	-	930,330
Experience adjustments	<u>337,946</u>	<u>-</u>	<u>337,946</u>
Recognized in other comprehensive income	<u>1,268,657</u>	<u>(1,626,917)</u>	<u>(358,260)</u>
Contributions from the employer	-	(1,276,817)	(1,276,817)
Benefits paid	(1,080,715)	1,083,132	2,417
Exchange differences	<u>(12)</u>	<u>-</u>	<u>(12)</u>
Balance at December 31, 2018	<u>19,952,668</u>	<u>(22,543,674)</u>	<u>(2,591,006)</u>
Service cost			
Current service cost	491,089	-	491,089
Interest expense (income)	<u>179,556</u>	<u>(203,746)</u>	<u>(24,190)</u>
Recognized in profit or loss	<u>670,645</u>	<u>(203,746)</u>	<u>466,899</u>
Return on plan assets (excluding amounts included in net interest)	-	(1,224,675)	(1,224,675)
Actuarial gain (loss)			
Changes in demographic assumptions	(124)	-	(124)
Changes in financial assumptions	543,690	-	543,690
Experience adjustments	<u>590,785</u>	<u>-</u>	<u>590,785</u>
Recognized in other comprehensive income	<u>1,134,351</u>	<u>(1,224,675)</u>	<u>(90,324)</u>
Contributions from the employer	-	(885,728)	(885,728)
Contributions from the plan participants	3,818	-	3,818
Benefits paid	(1,197,159)	1,193,876	(3,283)
Exchange differences	<u>16</u>	<u>-</u>	<u>16</u>
Balance at December 31, 2019	<u>\$ 20,564,339</u>	<u>\$ (23,663,947)</u>	<u>\$ (3,099,608)</u>

Through the defined benefit plan under the labor standards law, the Group is exposed to the following risks:

- 1) Investment risk: The discount rate for determining the present value of the defined benefit obligation is based on the government bond yield. If the actual return on investment of the retirement fund assets is lower than the yield, the insufficient balance of defined benefit liabilities will increase. The retirement fund assets which are managed by the Bureau of Labor Funds, Ministry of Labor are deposited in the labor retirement fund accounts, whose investment management and operations are all managed by the government. Therefore, the Company has little control over the investment content of the retirement fund assets.
- 2) Interest rate risk: A decrease in the government bond yield will increase the present value of the defined benefit obligation. The interest rate risk is the main source of risk in the retirement benefit plan.

- 3) Longevity risk: In the calculation of the present value of the defined benefit obligation, the estimated mortality rate during the employee service period is based on 100% of the fifth life table (2011TSO) of the life insurance industry. If the actual mortality rate is lower than the estimated rate, the present value of the defined benefit obligation will increase.
- 4) Salary adjustment risk: In the calculation of the present value of the defined benefit obligation, the salary of an employee at the time of retirement is based on the assumed annual salary increase rate. If the actual adjustment to the employee's salary is higher than the assumed rate in the future, the present value of the defined benefit obligation will increase.

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 are as follows:

	December 31	
	2019	2018
Discount rates	0.69%-0.81%	0.90%-1.36%
Expected rates of salary increase	1.50%-3.00%	1.50%-3.50%

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 will increase (decrease) as follows:

	December 31	
	2019	2018
Discount rates		
0.5% increase	<u>\$ (952,446)</u>	<u>\$ (963,074)</u>
0.5% decrease	<u>\$ 1,023,024</u>	<u>\$ 1,044,937</u>
Expected rates of salary increase		
0.5% increase	<u>\$ 994,440</u>	<u>\$ 1,004,863</u>
0.5% decrease	<u>\$ (930,714)</u>	<u>\$ (943,104)</u>

The sensitivity analysis previously presented 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>\$ 985,968</u>	<u>\$ 823,491</u>
Average duration of the defined benefit obligation	8.8-16 years	9.3-16 years

c. Employee preferential interest deposit plan

Cathay United Bank's obligations on preferential interest deposits for current employees and those retired employees and current employees after retirement are handled in accordance with Cathay United Bank's internal rules. Under the Regulations Governing the Preparation of Financial Reports by Public Banks, the excess interest generated from the post-employment preferential deposit interest rate over the market rate should be actuarially determined.

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

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

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

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

	December 31	
	2019	2018
Discount rate	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 increase (decrease) as follows:

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Discount rates		
0.5% increase	<u>\$ (29,761)</u>	<u>\$ (29,192)</u>
0.5% decrease	<u>\$ 32,241</u>	<u>\$ 31,575</u>
Mortality rates		
Adjusted to 105%	<u>\$ (6,200)</u>	<u>\$ (5,958)</u>
Adjusted to 95%	<u>\$ 6,200</u>	<u>\$ 5,958</u>
Excess interest rates 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 a 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 the obligations on the post-employment preferential interest deposits because it is unlikely that the change in assumptions would occur independently of each other as some of the assumptions might be correlated.

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

23. OTHER FINANCIAL ASSETS AND LIABILITIES

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
<u>Other financial assets</u>		
Separate account insurance product assets	\$ 607,542,434	\$ 546,964,261
Structured time deposits	-	2,000,000
Others	7,575,048	6,776,864
Less: Loss allowance	<u>-</u>	<u>(594)</u>
	<u>\$ 615,117,482</u>	<u>\$ 555,740,531</u>
<u>Other financial liabilities</u>		
Separate account insurance product liabilities	\$ 607,542,434	\$ 546,964,261
Principal received from the sale of structured products	65,671,401	76,615,204
Others	<u>3,758,344</u>	<u>4,235,713</u>
	<u>\$ 676,972,179</u>	<u>\$ 627,815,178</u>

- a. The related accounts of Cathay Life's separate account insurance products were summarized as follow:

	December 31	
	2019	2018
<u>Separate account insurance product assets</u>		
Cash in bank	\$ 518,576	\$ 888,274
Financial assets at FVTPL	600,237,158	539,874,109
Other receivables	<u>6,668,998</u>	<u>6,090,351</u>
	<u>\$ 607,424,732</u>	<u>\$ 546,852,734</u>
<u>Separate account insurance product liabilities</u>		
Other payables	\$ 467,361	\$ 743,442
Reserve for separate accounts - insurance contracts	244,601,804	220,038,873
Reserve for separate accounts - investment contracts	<u>362,355,567</u>	<u>326,070,419</u>
	<u>\$ 607,424,732</u>	<u>\$ 546,852,734</u>
	For the Years Ended	
	December 31	
	2019	2018
<u>Separate account insurance product income</u>		
Premium income	\$ 34,766,303	\$ 43,335,095
Interest income	1,593	2,500
Gains (losses) from financial assets at FVTPL	33,575,852	(19,148,899)
Foreign exchange (losses) gains	<u>(4,712,309)</u>	<u>3,907,175</u>
	<u>\$ 63,631,439</u>	<u>\$ 28,095,871</u>
<u>Separate account insurance product expenses</u>		
Claims and payments	\$ 9,064,671	\$ 19,184,402
Cash surrender value	26,020,768	29,582,214
Payment of life insurance policy dividends	5	4
Provision (reversal) of separate account reserve	24,989,146	(24,332,150)
Administrative expenses	3,696,556	3,781,782
Non-operating income and expenses	<u>(139,707)</u>	<u>(120,381)</u>
	<u>\$ 63,631,439</u>	<u>\$ 28,095,871</u>

The commission earned from counterparties due to the sale of separate account insurance products which was recorded under service fee income was \$913,947 thousand and \$1,039,335 thousand for the years ended December 31, 2019 and 2018, respectively.

- b. The related accounts of Cathay Lujiazui Life's separate account insurance products were summarized as follows:

	December 31	
	2019	2018
<u>Separate account insurance product assets</u>		
Cash in bank	\$ 5,231	\$ 17,902
Financial assets at FVTPL	112,315	94,126
Interest receivable	1	55
Others	<u>155</u>	<u>(556)</u>
	<u>\$ 117,702</u>	<u>\$ 111,527</u>
<u>Separate account insurance product liabilities</u>		
Other payables	\$ (134)	\$ 8
Reserve for separate accounts - insurance contracts	117,836	98,690
Others	<u>-</u>	<u>12,829</u>
	<u>\$ 117,702</u>	<u>\$ 111,527</u>
	For the Years Ended	
	December 31	
	2019	2018
<u>Separate account insurance product income</u>		
Premium income	\$ 230	\$ 464
Gains (losses) from financial assets and liabilities at FVTPL	20,839	(13,722)
Interest income	145	178
Tax expense	<u>-</u>	<u>1,517</u>
	<u>\$ 21,214</u>	<u>\$ (11,563)</u>
<u>Separate account insurance product expenses</u>		
Cash surrender value	\$ 9,846	\$ 9,456
(Reversal) provision of separate account reserve	8,660	(22,722)
Administrative expenses	1,503	1,703
Tax expense	<u>1,205</u>	<u>-</u>
	<u>\$ 21,214</u>	<u>\$ (11,563)</u>

24. EQUITY

a. Share capital

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Number of shares authorized (in thousands)	<u>18,000,000</u>	<u>18,000,000</u>
Shares authorized	<u>\$ 180,000,000</u>	<u>\$ 180,000,000</u>
Number of shares issued and fully paid (in thousands)		
Ordinary shares	<u>13,169,210</u>	<u>12,563,210</u>
Preference shares	<u>1,533,300</u>	<u>1,533,300</u>
Shares issued	<u>\$ 147,025,102</u>	<u>\$ 140,965,102</u>

Fully paid ordinary shares, which have a par value of \$10, carry one vote per share and carry a right to dividends.

On August 15, 2019, the board of directors resolved the capital increase through issuance of 606,000 thousand ordinary shares and the issue price was \$35 per share. On September 24, 2019, the above transaction was approved by the FSC Jin Guan Zheng Fa No. 1080331065, and the subscription base date was determined by the board of directors to be November 29, 2019.

Issuance of preference shares

- 1) On September 9, 2016, the board of directors resolved the capital raising through issuance of Series A Preference Shares. The Company issued 833,300 thousand preference shares, with a par value of \$10 per share and total amount of \$8,333,000 thousand, and the issue price was \$60 per share. The capital raising was approved by the FSC Jin Guan Zheng Fa No. 1050041628 on October 25, 2016. The base date of capital increase was December 8, 2016. All issued shares were registered and recognized as equity. The rights and obligations of Series A Preference Shares are as follows:
 - a) 3.8% per annum for Series A Preference Shares (7-year IRS 1.06%+2.74%) calculated pursuant to the issue price per share. Interest rate per annum will be reset on the day after the 7th year from the issue date (“Issue Date”) and the day after each subsequent 7-year period hereafter. The record date for reset of interest rate shall be 2 business days before the interest reset day for financial institutions in Taipei. The 7-year IRS rate shall be the arithmetic mean of 7-year IRS quotations as published by Reuters, PYTWDFIX and COSMOS3 at 11:00 a.m. of the day of the record date for reset of interest rate (must be a business day for Taipei’s financial institutions). If the above quotations cannot be obtained on the record date for reset of interest rate, the interest rate shall be decided by the issuer in good faith, taking into account the reasonable market trends.
 - b) Dividends for Series A Preference Shares are distributed once a year in cash. After shareholders’ approval of the issuer’s financial statements at its annual shareholders’ meeting, the board of directors may set the record date for distribution of available dividends from the previous year. Dividend distribution for the years of issuance and redemption (such as the shareholders’ approval of dividends declaration on shareholders meeting) shall be calculated pursuant to the actual issued days of the given year.
 - c) If there are retained earnings, before the issuer can distribute dividends for Series A Preference Shares, the Company shall first: (i) pay all taxes and dues (ii) offset its losses in previous years (iii) set aside statutory reserve, or set aside or reverse special reserve and (iv) the distribution of the remaining portion, if any, will first be distributed as preference share dividends.

- d) The Company has the sole discretion to distribute dividends of Series A Preference Shares, including its discretion to not declare dividends when no profit is recorded, or insufficient profit is recorded for Series A Preference Share dividends, or preference share dividend distribution would render the Company's CAR ratio below the level required by law or by the authorities. The Company's cancellation of preference share dividend distribution shall not be deemed an event of default. Series A Preference Shares are non-cumulative. Undeclared or under-declared dividends are not cumulative, and are not paid in subsequent years with profit.
 - e) Except for receipt of dividends at the aforementioned dividend rate in Paragraph (1), holders of Preference Shares cannot participate in the distribution of cash or stock dividends to holders of common shares from profit or additional paid-in capital.
 - f) Holders of Series A Preference Shares shall have the same priority as holders of all subsequently issued preference shares in liquidation, which are prior to holders of ordinary shares but subordinated to general creditors, to the extent of the issuance amount.
 - g) Holders of Series A Preference Shares have no voting rights at the annual shareholders' meeting, and cannot elect directors. However, holders of Series A Preference Shares have voting rights at the meeting of Series A Preference Shareholders, and at the annual shareholders' meeting on items relating to the rights of Series A Preference Shareholders.
 - h) Holders of Series A Preference Shares cannot convert the said preference shares to ordinary shares, and have no right to request the Company for redemption of Series A Preference Shares.
 - i) Through issuance of perpetual preferred stock, on the day after the 7th year from the issue date, the Company may redeem all or part of the outstanding Series A Preference Shares at the issue price. Rights and obligations of the unredeemed Series A Preference Shares shall remain the same as mentioned above.
- 2) On February 9, 2018, the board of directors resolved the capital raising through issuance of Series B Preference Shares. The Company issued 700,000 thousand preference shares, with a par value of \$10 per share and total amount of \$7,000,000 thousand, and the issue price was \$60 per share. The capital raising was approved by the FSC Jin Guan Zheng Fa No. 1070313814 on May 10, 2017. The base date of capital increase was June 27, 2018. All issued shares were registered and recognized as equity. The rights and obligations of Series B Preference Shares are as follows:
- a) 3.55% per annum for Series B Preference Shares (7-year IRS 1.1675%+2.3825%) calculated pursuant to the issue price per share. The interest rate per annum will be reset on the day after the 7th year from the issue date ("Issue Date") and the day after each subsequent 7-year period hereafter. The record date for interest reset shall be 2 business days before the interest reset day for financial institutions in Taipei. The 7-year IRS rate shall be the arithmetic mean of 7-year IRS quotations as published by Reuters, TAIFXIRS and COSMOS3 at 11:00 a.m. of the day of reset record date (must be a business day for Taipei's financial institutions). If the above quotations cannot be obtained on the record date for reset of interest rate, the interest rate shall be decided by the issuer in good faith, taking into account the reasonable market trends.
 - b) If there are retained earnings, before the issuer can distribute dividends for Series B Preference Shares, the Company shall first: (i) pay all taxes and dues (ii) offset its losses in previous years (iii) set aside statutory reserve, or set aside or reverse special reserve and (iv) the distribution of the remaining portion, if any, will first be distributed as preference share dividend.

- c) The Company has the sole discretion to distribute dividend of the Series B Preference Shares, including its discretion to not declare dividends when no profit is recorded, or insufficient profit is recorded for Series B Preference Share dividends, or preference share dividend distribution would render the Company's CAR ratio below the level required by law or by the authorities. The Company's cancellation of preference share dividend distribution shall not be deemed an event of default. Series B Preference Shares are non-cumulative. Undeclared or under-declared dividends are not cumulative, and are not paid in subsequent years with profit.
- d) Except for receipt of dividends at the aforementioned dividend rate in Paragraph (1), holders of Preference Shares cannot participate in the distribution of cash or stock dividends to holders of common shares from the profit or additional paid-in capital.
- e) Holders of Series B Preference Shares shall have the same priority as holders of all subsequently issued preference share in liquidation, which are prior to holders of ordinary shares but subordinated to general creditors, to the extent of the issuance amount.
- f) Holders of Series B Preference Shares have no voting rights at the annual shareholders' meeting, and cannot elect directors. However, holders of Series B Preference Shares have voting rights at the shareholders' meeting of Series B Preference Shareholders, and at the annual shareholders' meeting on items relating to rights of Series B Preference Shareholders.
- g) Holders of Series B Preference Shares cannot convert the said preference shares to ordinary shares, and have no right to request the Company for redemption of Series B Preference Shares.
- h) Through the issuance of perpetual preferred stock, on the day after the 7th year from the issue date, the Company may redeem all or part of the outstanding Series B Preference Shares at the issue price. Rights and obligations of the unredeemed Series B Preference Shares shall remain the same as mentioned above.

Issuance of overseas depositary receipts

The Company's shares have been listed on the Taiwan Stock Exchange in accordance with relevant regulations since the Company was incorporated on December 31, 2001. Since July 29, 2003, the Company has listed a portion of its ordinary shares on the Luxembourg Stock Exchange in the form of Global Depositary Shares (GDSs).

b. Capital surplus

- 1) Capital surplus are comprised as follows:

	December 31	
	2019	2018
Additional paid-in capital	\$ 172,905,009	\$ 161,523,972
Treasury share transactions	2,539,377	2,539,377
Additional paid-in capital - employee stock options	497,629	209,945
Conversion of convertible bonds	1,144,486	1,144,486
Others	<u>170,475</u>	<u>31,584</u>
	<u>\$ 177,256,976</u>	<u>\$ 165,449,364</u>

- 2) The capital surplus recorded during the conversion of shares of financial institutions may be distributed as cash dividends according to the fourth paragraph of Article 47 of the Financial Holding Company Act and other related requirements if not restricted by other regulations or may be transferred to capital in the year of conversion with the proportion of the transfer not limited by Article 72-1 of the Regulations Governing the Offering and Issuance of Securities by Securities Issuers. The unrestricted retained earnings of the financial institution presents the remaining balance after the appropriation of legal reserve or special reserve as required by law.

c. Retained earnings and dividends policy

In order for the Company to continue to expand and increase profitability in line with its long-term financial strategy and future demand for capital, the Company adopted a dividend policy in framing a proposal for the distribution of annual earnings for the purpose of sustainable development.

Under the dividends policy as set forth in the Company’s articles (“Articles”), where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as a legal reserve of the remaining profit, setting aside a special reserve in accordance with the laws and regulations, the payment of preferred dividends, and then any remaining profit (earning of current year) together with any undistributed retained earnings shall be used by the Company’s board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders’ meeting. When declaring the distribution of dividends, the Company should retain the funds for distribution of stock dividends, and the excess may be distributed in the form of cash dividends. However, the total distribution shall be no less than 30% of annual earnings, and the cash dividends shall be no less than 10% of the total dividends declared for the year. For the policies on the distribution of employees’ compensation and remuneration of directors in the Articles, refer to employees’ compensation and remuneration of directors in Note 25 e.

Legal reserve should be appropriated until the legal reserve equals the Company’s paid-in capital. The legal reserve may be used to offset deficits. If the Company has no deficit and the legal reserve has exceeded 25% of the Company’s paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of earnings for 2018 and 2017 which were approved in the shareholders’ meeting on June 14, 2019 and June 8, 2018, respectively, were as follows:

	Appropriation of Earnings	
	For the Years Ended	
	December 31	
	2018	2017
Legal reserve	\$ 5,146,724	\$ 5,636,280
Special reserve	72,631,553	184,004
Cash dividends of ordinary shares (Note)	18,844,815	31,408,025
Cash dividends of preference shares	2,667,891	1,899,924

Note: Cash dividends of ordinary shares included \$15,075,852 thousand from retained earnings and \$3,768,963 thousand from capital surplus.

d. Special reserves

	December 31	
	2019	2018
Special reserve transferred from reserve for trading default and for trading loss (1)	\$ 333,598	\$ 333,598
Special reserve reclassified from liability (2)	3,744,467	3,744,467
Special reserve appropriated at the first-time adoption of IFRSs (3)	2,994,565	2,994,565
Recovery of special reserve for appreciation of investment properties (4)	107,581,979	107,509,178
Special reserve transferred from insurance liabilities (5)	34,764,311	34,764,311
Special reserve appropriated following other equity's deduction (6)	<u>72,558,752</u>	<u>-</u>
	<u>\$ 221,977,672</u>	<u>\$ 149,346,119</u>

- 1) Cathay United Bank, Cathay Securities and Cathay Futures reclassified the appropriated default losses reserve and trading losses reserve as of December 31, 2010 as special reserve according to the relevant regulations. The special reserve can only be used to offset the accumulated deficit or be transferred to capital stock (limited to 50% of the special reserve) once the legal reserve reaches one-half of the paid-in capital. The Company set aside a special reserve of \$333,598 thousand for the year ended December 31, 2011.
- 2) According to the Regulation Governing the Setting Aside of Various Reserves by Insurance Enterprises, for the special reserves for catastrophic event and for fluctuation of risk as of January 1, 2012, amounting to \$9,022,812 thousand, Cathay Life transferred half of the reserves amounting to \$4,511,405 thousand, net of tax effect, to special reserve under retained earnings amounting to \$3,744,467 thousand; half of the reserves were kept as the initial amount of reserve for foreign exchange valuation. The Company set aside a special reserve of \$3,744,467 thousand for the year ended December 31, 2013.
- 3) At the first-time adoption of IFRSs, Cathay Life chose to use fair values as the deemed costs of investment properties in accordance with Article 32 of Regulations Governing the Preparation of Financial Reports by Insurance Enterprises, and the increments on property revaluation should be offset by other negative effects on the first-time adoption of IFRSs. The remaining increments on property revaluation should be recovered as special reserve under liabilities and the portion of increments on property revaluation used for offsetting other negative effects is recognized as retained earnings. In accordance with Bao (Tsai) No. 10202508140, the abovementioned adjustments of retained earnings amounting to \$2,994,565 thousand should be set aside as special reserve under equity following Jin Guan Bao Tsai No. 10102508861. The Company set aside a special reserve of \$2,994,565 thousand for the year ended December 31, 2013.
- 4) In 2014, the Group changed the subsequent measurement of investment properties from the cost model to the fair value model. According to Jin-Guan-Zheng-Fa No. 1030006415, in order to maintain a sound and robust financial structure of a publicly issued company, the Group appropriated a special reserve at the amount that was the same as the net increase arising the first-time application of subsequent measurement for investment property in fair value and transferred it to retained earnings.
- 5) Cathay Life transferred insurance liabilities of \$34,764,311 thousand to special reserve in accordance with Jin Guan Bao Tsai No. 10402029590. The Company set aside a special reserve of \$34,764,311 thousand for the year ended December 31, 2015.

- 6) The Group appropriated and reversed special reserves according to Jin Guan Zheng Fa No. 1010012865. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses and is thereafter distributed.

e. Other equity

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

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ (12,149,871)	\$ (10,823,242)
Recognized for the year	(1,375,643)	(1,196,816)
Share of associates accounted for using the equity method	120,377	(412,796)
Tax effects	<u>85,517</u>	<u>282,983</u>
Other comprehensive income (loss) recognized for the year	<u>(1,169,749)</u>	<u>(1,326,629)</u>
Ending balance	\$ (13,319,620)	\$ (12,149,871)

- 2) Unrealized gain (loss) on financial assets at FVTOCI

	For the Years Ended December 31	
	2019	2018
Beginning balance (IFRS 9)	\$ (17,586,946)	\$ 37,343,476
Recognized for the year	127,364,821	(70,379,686)
Share of associates accounted for using the equity method	109,837	134,541
Reclassification adjustments		
Disposal of investments in debt instruments	(27,175,192)	(11,555,684)
Tax effects	<u>(18,999,319)</u>	<u>14,441,072</u>
Other comprehensive income (loss) recognized for the year	81,300,147	(67,359,757)
Cumulative unrealized gain (loss) of equity instruments transferred to retained earnings due to disposal	<u>4,606,752</u>	<u>12,429,335</u>
Ending balance	\$ 68,319,953	\$ (17,586,946)

- 3) Gain (loss) on hedging instruments

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 173,289	\$ 203,647
Recognized for the year	272,121	54,891
Reclassification adjustments		
Hedged item that affects profit or loss	(65,901)	(83,638)
Tax effects	<u>(47,579)</u>	<u>(1,611)</u>
Other comprehensive income (loss) recognized for the year	<u>158,641</u>	<u>(30,358)</u>
Ending balance	\$ 331,930	\$ 173,289

- 4) Changes in the fair value attributable to changes in the credit risk of financial liabilities designated as at FVTPL

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 774,084	\$ (1,191,027)
Recognized for the year	(3,280,741)	2,402,577
Tax effects	<u>656,149</u>	<u>(437,466)</u>
Other comprehensive income (loss) recognized for the year	<u>(2,624,592)</u>	<u>1,965,111</u>
Ending balance	<u>\$ (1,850,508)</u>	<u>\$ 774,084</u>

- 5) Remeasurement of defined benefit plans

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ (1,321,138)	\$ (1,449,679)
Recognized for the year	(3,998)	274,469
Share of associate accounted for using the equity method	(230,626)	(177,324)
Tax effects	<u>47,898</u>	<u>31,396</u>
Other comprehensive income (loss) recognized for the year	<u>(186,726)</u>	<u>128,541</u>
Ending balance	<u>\$ (1,507,864)</u>	<u>\$ (1,321,138)</u>

- 6) Property revaluation surplus

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 10,367,911	\$ 10,376,814
Recognized for the year	926,919	-
Tax effects	<u>(54,516)</u>	<u>46,241</u>
Other comprehensive income recognized for the year	<u>872,403</u>	<u>46,241</u>
Transferred to retained earnings	<u>-</u>	<u>(55,144)</u>
Ending balance	<u>\$ 11,240,314</u>	<u>\$ 10,367,911</u>

- 7) Other comprehensive income (loss) on reclassification using the overlay approach

	For the Years Ended December 31	
	2019	2018
Beginning balance (IFRS 9)	\$ (52,816,081)	\$ 55,941,777
Recognized for the year		
Unrealized gain	157,934,001	(65,929,591)
Reclassification adjustments		
Disposal of investments in financial instruments	(37,448,377)	(52,152,077)
Tax effects	<u>(9,700,868)</u>	<u>9,323,810</u>
Other comprehensive income (loss) recognized for the year	<u>110,784,756</u>	<u>(108,757,858)</u>
Ending balance	<u>\$ 57,968,675</u>	<u>\$ (52,816,081)</u>

f. Non-controlling interests

	For the Years Ended December 31	
	2019	2018
Beginning balance (IFRS 9)	\$ 9,557,665	\$ 9,412,376
Net income attributed to non-controlling interest		
Net profit for the year	1,102,018	355,013
Other comprehensive income for the year		
Exchange differences on translating financial statements of foreign operations	(285,746)	8,511
Unrealized gain on investments in equity instruments at FVTOCI	19	-
Unrealized gain on investments in debt instruments at FVTOCI	181,625	137,906
Other comprehensive income (loss) on reclassification using the overlay approach	351,131	5,129
Others	<u>(626,898)</u>	<u>(361,270)</u>
Ending balance	<u>\$ 10,279,814</u>	<u>\$ 9,557,665</u>

25. NET PROFIT FOR THE PERIOD

a. Net gain on service fee and commission fee

	For the Years Ended December 31	
	2019	2018
Service fee revenue	\$ 27,484,216	\$ 23,755,841
Commission fee revenue	<u>6,451,883</u>	<u>8,330,158</u>
	<u>33,936,099</u>	<u>32,085,999</u>
Service fee expense	(7,990,465)	(5,429,463)
Commission fee expense	<u>(23,600,116)</u>	<u>(19,344,686)</u>
	<u>(31,590,581)</u>	<u>(24,774,149)</u>
	<u>\$ 2,345,518</u>	<u>\$ 7,311,850</u>

b. Net income on insurance operations

	For the Years Ended December 31	
	2019	2018
Retained premiums earned	\$ 626,508,216	\$ 575,906,513
Separate account insurance product income	<u>63,652,653</u>	<u>28,084,308</u>
	<u>690,160,869</u>	<u>603,990,821</u>
Claims and payments	(359,479,846)	(366,635,309)
Separate account insurance product expenses	(63,652,653)	(28,084,308)
Others	<u>(1,210,761)</u>	<u>(1,115,991)</u>
	<u>(424,343,260)</u>	<u>(395,835,608)</u>
	<u>\$ 265,817,609</u>	<u>\$ 208,155,213</u>

c. Net changes in insurance liability reserves

	For the Years Ended December 31	
	2019	2018
Net change in loss reserve	\$ (2,937,582)	\$ (1,800,754)
Net change in policy reserve	(393,587,846)	(337,650,083)
Net change in premium deficiency reserve	2,753,972	3,810,057
Net change in special reserve	374,052	115,403
Net change in other reserves	21,429	22,000
Net change in reserve for insurance contracts with the nature of financial products	<u>(698,222)</u>	<u>1,381,439</u>
	<u>\$ (394,074,197)</u>	<u>\$ (334,121,938)</u>

d. Employee benefit expenses

	For the Years Ended December 31	
	2019	2018
Short-term benefits		
Salaries	\$ 64,252,998	\$ 52,700,922
Labor and health insurance expenses	4,634,295	4,243,110
Post-employment benefits	2,267,591	2,074,130
Remuneration of directors	212,894	189,665
Others	<u>1,700,016</u>	<u>1,559,819</u>
	<u>\$ 73,067,794</u>	<u>\$ 60,767,646</u>
An analysis of employee benefit expenses by function		
Profit from operations	\$ 15,997,594	\$ 11,633,792
Operating expenses	<u>57,070,200</u>	<u>49,133,854</u>
	<u>\$ 73,067,794</u>	<u>\$ 60,767,646</u>

As of December 31, 2019 and 2018, the total number of employees in the Group was 56,764 and 54,520, respectively.

For the years ended December 31, 2019 and 2018, the average number of the Group's employees was 55,525 and 53,612, respectively, including 37 and 36 directors not concurrently serving as employees, respectively.

For the years ended December 31, 2019 and 2018, the average employee benefits expense (Note 1) was \$1,313 thousand and \$1,131 thousand, respectively, and the average employee salary expense (Note 2) was \$1,158 thousand and \$984 thousand, respectively, with the adjustment in the average employee salary expense (Note 3) at 18%.

Note 1: Average employee benefits expense = (Total employee benefits expense - Total remuneration of directors)/(Total number of employees - Number of directors not concurrently serving as employees).

Note 2: Average employee salary expense = Total salary expense/(Total number of employees - Number of directors not concurrently serving as employees).

Note 3: Average salary expense adjustments = (Average employee salary expense for the current year – Average employee salary expense for the prior year)/Average employee salary expense for the prior year.

e. Employees' compensation and remuneration of directors

According to the Articles of the Company, if there is a profit in the current year, the Company should distribute 0.01% to 0.05% of the profit in the current year as employees' compensation, and no more than 0.05% of the profit in the current year as remuneration of directors. However, in the case of accumulated deficit, the Company's accumulated deficit needs to be offset first.

The Company accrued employees' compensation and remuneration of directors at the rates of 0.01% and no higher than 0.05%, respectively.

The employees' compensation and remuneration of directors for 2019 and 2018 which were resolved by the Company's board of directors on March 11, 2020 and March 21, 2019, respectively, are as follows:

	For the Years Ended	
	December 31	
	2018	2017
	Cash	Cash
Employees' compensation	\$ 6,270	\$ 5,307
Remuneration of directors	2,700	2,700

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

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

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

f. Depreciation and amortization

	For the Years Ended	
	December 31	
	2019	2018
Right-of-use assets	\$ 1,378,387	\$ -
Property and equipment	2,549,140	2,613,588
Intangible assets	<u>3,170,483</u>	<u>3,061,034</u>
	<u>\$ 7,098,010</u>	<u>\$ 5,674,622</u>
An analysis of depreciation by function		
Operating expenses	<u>\$ 3,927,527</u>	<u>\$ 2,613,588</u>
An analysis of amortization by function		
Operating expenses	<u>\$ 3,170,483</u>	<u>\$ 3,061,034</u>

26. INCOME TAXES

a. Income tax recognized in profit or loss

Major components of tax income (expense) were as follows:

	For the Years Ended December 31	
	2019	2018
Current tax		
In respect of the current year	\$ 5,240,022	\$ 247,269
Adjustments for prior years	187,963	(50,202)
Income tax on unappropriated earnings	-	1,717,850
Others	1,757,891	539,478
Deferred tax		
In respect of the current year	(494,605)	4,882,330
Effect of changes in tax rate	-	(3,569,694)
Adjustments for prior years	6,599	-
Deferred tax assets written off	-	9,487
Income tax (expense) benefits recognized in profit or loss	<u>\$ 6,697,870</u>	<u>\$ 3,776,518</u>

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

	For the Years Ended December 31	
	2019	2018
Profit before tax	<u>\$ 70,557,174</u>	<u>\$ 55,598,774</u>
Income tax calculated at the parent company's statutory rate (20%)	\$ 14,111,433	\$ 11,119,757
Tax-exempt income	(10,561,381)	(11,030,061)
Nondeductible expenses in determining taxable income	103,869	530,377
Withholding tax on foreign investments	3,040	1,532,721
Effect of tax on investment properties measured at fair value	485,947	(709,737)
Additional income tax under the Alternative Minimum Tax Act	1,961,280	-
Effect of different tax rates of group entities operating in other jurisdictions	70,924	84,868
Adjustments for prior years' tax	194,562	325,064
Income tax on unappropriated earnings	-	1,717,850
Others	<u>328,196</u>	<u>205,679</u>
Income tax expense recognized in profit or loss	<u>\$ 6,697,870</u>	<u>\$ 3,776,518</u>

The Income Tax Act in the R.O.C. was amended in 2018 and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. The effect of the change in tax rate on deferred tax income/expense to be recognized in profit or loss is recognized in full in the period in which the change in tax rate occurs. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings had been reduced from 10% to 5%.

b. Income tax recognized directly in equity

	For the Years Ended December 31	
	2019	2018
Current tax		
Derecognition of investments in equity instruments at FVTOCI	\$ 427,818	\$ 792,993
Deferred tax		
Effect of changes in tax rate	-	(26,633)
Capital surplus	(32,121)	(3)
Derecognition of investments in equity instruments at FVTOCI	<u>(427,818)</u>	<u>(792,993)</u>
Income tax recognized directly in equity	<u>\$ (32,121)</u>	<u>\$ (26,636)</u>

c. Income tax recognized in other comprehensive income

	For the Years Ended December 31	
	2019	2018
<u>Deferred tax</u>		
Changes in the fair value attributable to changes in the credit risk of financial liabilities designated as at FVTPL	\$ 656,149	\$ (437,466)
Exchange differences on the translation of financial statements of foreign operations	165,496	143,104
Unrealized (gain) loss on financial assets at FVTOCI	(18,998,090)	14,420,493
Gain on hedging instruments	(47,579)	(1,611)
Property revaluation surplus	(54,516)	46,241
Remeasurement of defined benefit plans	1,342	(3,493)
Shares of associates accounted for using the equity method	(34,652)	195,347
Other comprehensive (income) loss on reclassification using the overlay approach	<u>(9,700,868)</u>	<u>9,323,810</u>
Income tax (expense) benefit recognized in other comprehensive income	<u>\$ (28,012,718)</u>	<u>\$ 23,686,425</u>

d. Deferred tax assets and liabilities

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

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized Directly in Equity	Others	Closing Balance
<u>Deferred tax assets</u>						
Temporary differences						
Property and equipment	\$ 905,786	\$ 73,830	\$ -	\$ -	\$ -	\$ 979,616
Investment properties	(22,069,356)	(961,593)	(54,516)	-	14,083	(23,071,382)
Financial assets at FVTPL	(1,740,313)	(4,548,503)	656,149	-	-	(5,632,667)
Financial assets at FVTPL reclassified using the overlay approach	4,423,650	-	(11,225,977)	-	-	(6,802,327)
Equity instruments at FVTOCI	115,909	-	(989,847)	(406,470)	-	(1,280,408)
Debt instruments at FVTOCI	6,227,976	(29,709)	(17,988,667)	-	-	(11,790,400)
Financial assets at amortized cost	(167,189)	73,291	-	-	-	(93,898)
Financial liabilities at FVTPL	5,480,945	(4,908,086)	-	-	-	572,859

(Continued)

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized Directly in Equity	Others	Closing Balance
Goodwill and franchises	\$ (678,681)	\$ (36,615)	\$ -	\$ -	\$ -	\$ (715,296)
Defined benefit assets	(513,954)	(84,419)	(17,505)	-	-	(615,878)
Preferential savings deposits	119,149	(14,013)	18,865	-	-	124,001
Investments accounted for using the equity method	(1,167,432)	(110,220)	(34,652)	(32,121)	594	(1,343,831)
Lease liabilities	-	1,839,673	-	-	-	1,839,673
Right-of-use assets	-	(1,790,340)	-	-	-	(1,790,340)
Unrealized foreign exchange losses (gains)	14,887,863	10,669,947	1,671,029	(21,348)	3	27,207,494
Allowance for doubtful accounts	1,168,201	472,906	-	-	-	1,641,107
Others	353,291	(226,253)	(47,597)	-	(202,859)	(123,418)
Unused benefit of tax loss	6,369,946	68,110	-	-	(91,606)	6,346,450
Net deferred tax assets (liabilities)	\$ 13,715,791	\$ 488,006	\$ (28,012,718)	\$ (459,939)	\$ (279,785)	\$ (14,548,645)
Deferred tax assets	\$ 40,806,934					\$ 40,595,612
Deferred tax liabilities	\$ (27,091,143)					\$ (55,144,257)

(Concluded)

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized Directly in Equity	Others	Closing Balance
<u>Deferred tax assets</u>						
Temporary differences						
Property and equipment	\$ 640,114	\$ 265,672	\$ -	\$ -	\$ -	\$ 905,786
Investment properties	(21,553,513)	(570,602)	46,241	-	8,518	(22,069,356)
Financial assets at FVTPL	(2,604,654)	1,301,807	(437,466)	-	-	(1,740,313)
Financial assets at FVTPL reclassified using the overlay approach	(7,054,662)	(1,655)	11,479,967	-	-	4,423,650
Equity instruments at FVTOCI	423,489	-	462,112	(769,692)	-	115,909
Debt instruments at FVTOCI	(7,727,132)	6,802	13,948,306	-	-	6,227,976
Financial assets at amortized cost	(151,856)	(15,333)	-	-	-	(167,189)
Financial liabilities at FVTPL	171,747	5,309,198	-	-	-	5,480,945
Goodwill and franchises	(544,049)	(134,632)	-	-	-	(678,681)
Defined benefit assets	(237,554)	(250,892)	(25,508)	-	-	(513,954)
Preferential savings deposits	98,440	(1,058)	21,767	-	-	119,149
Investments accounted for using the equity method	(996,116)	(349,253)	195,347	(26,636)	9,226	(1,167,432)
Unrealized foreign exchange losses (gains)	24,974,869	(8,060,974)	(2,002,730)	(23,301)	(1)	14,887,863
Allowance for doubtful accounts	836,729	331,472	-	-	-	1,168,201
Others	(4,408)	262,601	(1,611)	-	96,709	353,291
Unused benefit of tax loss	3,154,638	3,228,819	-	-	(13,511)	6,369,946
Net deferred tax assets (liabilities)	\$ (10,573,918)	\$ 1,321,972	\$ 23,686,425	\$ (819,629)	\$ 100,941	\$ 13,715,791
Deferred tax assets	\$ 32,209,863					\$ 40,806,934
Deferred tax liabilities	\$ (42,783,781)					\$ (27,091,143)

- e. Deductible temporary differences, unused loss carryforwards and unused investment credits for which no deferred tax assets have been recognized in the consolidated balance sheets

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Loss carryforwards		
Expiry in 2019	\$ 15,129	\$ 170,595
Expiry in 2023	<u>1,908,009</u>	<u>1,908,009</u>
	<u>\$ 1,923,138</u>	<u>\$ 2,078,604</u>
Deductible temporary differences	<u>\$ 3,731,189</u>	<u>\$ 4,514,525</u>
Investment credits		
Promotion of private participation in infrastructure projects	\$ 124,952	\$ -
Biotech and new pharmaceuticals industry	7,975	-
Research and development expenses	<u>1,156</u>	<u>-</u>
	<u>\$ 134,083</u>	<u>\$ -</u>

The unrecognized investment credits will expire starting from 2020 to 2022.

f. Information about unused investment credits, unused loss carryforwards and tax exemptions

As of December 31, 2019, investment tax credits comprised:

<u>Laws and Statutes</u>	<u>Tax Credit Source</u>	<u>Remaining Creditable Amount</u>	<u>Expiry Year</u>
Act for Promotion of Private Participation in Infrastructure Projects	Promote private participation in infrastructure projects	\$ 124,952	2022
Act for the Development of Biotech and New Pharmaceuticals Industry	Biotech and new pharmaceuticals industry	20	2020
		7,910	2021
		45	2022
Regulations Governing the Application of Investment Credits of Research and Development Expenses for a Company or Limited Partnership	Research and development expenses	<u>1,156</u>	2020
		<u>\$ 134,083</u>	

Loss carryforwards as of December 31, 2019 comprised:

<u>Unused Amount</u>	<u>Expiry Year</u>
\$ 15,129	2019
2,128,136	2023
18,581,951	2024
122	2027
12,796,365	2028
<u>12,631</u>	2029
<u>\$ 33,534,334</u>	

g. The aggregate amount of temporary differences associated with investments for which deferred tax liabilities have not been recognized

As of December 31, 2019 and 2018, the taxable temporary differences associated with investments in subsidiaries for which no deferred tax liabilities have been recognized were \$1,930,898 thousand and \$730,310 thousand, respectively.

h. Income tax assessments

The income tax returns of the Group assessed by the tax authorities were as follows:

	<u>Year of Assessment</u>	<u>Note</u>
The Company	2014	-
Cathay Life	2014	Cathay Life was in the process of administrative remedy for 2011 and 2012.
Cathay United Bank	2014	Cathay United Bank was in the process of administrative remedy for 2011, 2012 and 2014.
Cathay Century	2014	-
Cathay Securities	2014	Cathay Securities was in the process of administrative remedy from 2011 to 2014.
Cathay Venture	2014	-
Cathay Securities Investment Trust	2014	-
Cathay Futures	2015	-
Cathay Private Equity	2017	-

In accordance with Article 49 of the Financial Holding Company Act, the Company and all subsidiaries which has existed for the entire 12 months of a tax year elected to jointly file income tax return and surtax on undistributed retained earnings with the Company as the tax payer.

27. EARNINGS PER SHARE

Unit: NT\$ Per Share

	For the Years Ended December 31	
	2019	2018
Basic earnings per share	<u>\$ 4.76</u>	<u>\$ 3.95</u>

The earnings and weighted average number of ordinary shares outstanding used in the computation of earnings per share were as follows:

Net Income for the Year

	For the Years Ended December 31	
	2019	2018
Net income for the period attributable to owners of the Company	\$ 62,757,286	\$ 51,467,243
Less: Dividends on preference shares	<u>(2,667,891)</u>	<u>(1,899,924)</u>
Earnings used in the computation of basic earnings per share	<u>\$ 60,089,395</u>	<u>\$ 49,567,319</u>

Weighted Average Number of Ordinary Shares Outstanding (In Thousands of Shares)

	For the Years Ended December 31	
	2019	2018
Weighted average number of ordinary shares used in the computation of basic earnings per share	<u>12,617,999</u>	<u>12,563,210</u>

28. RELATED-PARTY TRANSACTIONS

- a. The name and the category of related parties who engaged transactions with the Group in the reporting periods are as follows:

Related Party Name	Related Party Category
Cathay Life	Subsidiary of the Company
Cathay United Bank	Subsidiary of the Company
Cathay Century	Subsidiary of the Company
Cathay Securities	Subsidiary of the Company
Cathay Securities Investment Trust	Subsidiary of the Company
Cathay Venture	Subsidiary of the Company
Cathay Lujiazui Life	Subsidiary of the Company
Cathay Life (Vietnam)	Subsidiary of the Company
Conning Asia Pacific Ltd.	Subsidiary of the Company
Cathay Securities Investment Consulting	Subsidiary of the Company
Cathay Investment	Subsidiary of the Company
Lin Yuan	Subsidiary of the Company
Cathay Insurance (Vietnam)	Subsidiary of the Company
Indovina Bank	Subsidiary of the Company
Cathay Futures	Subsidiary of the Company
Cathay Private Equity	Subsidiary of the Company
Cathay Insurance Company Limited (China)	Associate
Taiwan Real-estate Management Corp.	Associate
Symphox Information Co., Ltd.	Associate
Neo Cathay Power Corp.	Associate
Rizal Commercial Banking Corporation	Associate
PT Bank Mayapada Internasional Tbk	Associate
Global Evolution Holding ApS	Associate
PSS Co., Ltd.	Associate
Greenhealth Water Resources Co., Ltd.	Associate
Seaward Card Co., Ltd.	Other related party
Vietinbank	Other related party
Cathay Medical Care Corp.	Other related party
Cathay Real Estate Development Co., Ltd.	Other related party
Cathay Healthcare Management Co., Ltd.	Other related party
Cathay Hospitality Management Co., Ltd.	Other related party
Cathay Hospitality Consulting Co., Ltd.	Other related party
Fund managed by Cathay Securities Investment Trust	Other related party
Cathay Private Equity's Private Equity Fund	Other related party
Global Evolution Holding ApS's Fund	Other related party
San Ching Engineering Co., Ltd.	Other related party
Ally Logistic Property Co., Ltd.	Other related party
Lin Yuan Property Management Co., Ltd.	Other related party
ThinkPower Information Co., Ltd.	Other related party
Tailin Management Consulting Limited	Other related party
Yua-Yung Marketing (Taiwan) Co., Ltd.	Other related party
Cathay Charity Foundation	Other related party
Cathay Cultural Foundation	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
Others	Other related party

b. Significant transactions with related parties were as follows:

All intercompany transactions among the Group have been eliminated in the consolidated financial statements.

1) Transactions with banks

	Name	December 31	
		2019	2018
<u>Due from commercial banks</u>			
Other related party			
Vietinbank		\$ 5,216,825	\$ 5,309,375
<u>Due to commercial banks</u>			
Other related party			
Vietinbank		\$ 5,265,818	\$ 5,360,670

	Name	Interest Income (Expense) For the Years Ended December 31	
		2019	2018
<u>Due from commercial banks</u>			
Other related party			
Vietinbank		\$ 4,994	\$ 5,228
<u>Due to commercial banks</u>			
Other related party			
Vietinbank		\$ (5,346)	\$ (5,205)

2) Financial assets at FVTPL

	Name	December 31	
		2019	2018
Other related party			
Cathay Healthcare Management Co., Ltd.		\$ 229,103	\$ 180,180

3) Receivable

	Name	December 31	
		2019	2018
Other related party			
Fund managed by Cathay Securities Investment Trust		\$ 221,014	\$ 154,280

4) Loans

Name	December 31	
	2019	2018
Associate		
Taiwan Real-estate Management Corp.	\$ 33,000	\$ 30,000
Other related parties		
Cathay Real Estate Development Co., Ltd.	250,000	210,000
Yua-Yung Marketing (Taiwan) Co., Ltd.	10,000	-
Others	<u>2,764,157</u>	<u>2,456,817</u>
	<u>\$ 3,057,157</u>	<u>\$ 2,696,817</u>

Name	Interest Income For the Years Ended December 31	
	2019	2018
Associate		
Taiwan Real-estate Management Corp.	\$ 588	\$ 562
Other related parties		
Cathay Real Estate Development Co., Ltd.	1,449	61
Yua-Yung Marketing (Taiwan) Co., Ltd.	108	-
Others	<u>43,174</u>	<u>39,211</u>
	<u>\$ 45,319</u>	<u>\$ 39,834</u>

5) Deposits

Name	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Securities Investment Consulting	\$ 204,526	\$ 187,533
Associates		
Symphox Information Co., Ltd.	154,446	122,139
Neo Cathay Power Corp.	11	137,979
Other related parties		
Cathay Real Estate Development Co., Ltd.	257,587	199,127
Cathay Hospitality Management Co., Ltd.	6,203	16,523
Fund managed by Cathay Securities Investment Trust	84,784	137,823
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
Tailin Management Consulting Limited	31,074	-
Others	<u>7,614,151</u>	<u>7,457,000</u>
	<u>\$ 11,425,511</u>	<u>\$ 11,408,206</u>

Name	Interest Expense	
	For the Years Ended	
	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Securities Investment Consulting	\$ 581	\$ 633
Associates		
Symphox Information Co., Ltd.	771	668
Neo Cathay Power Corp.	34	97
Other related parties		
Cathay Real Estate Development Co., Ltd.	64	54
Cathay Hospitality Management Co., Ltd.	4	23
Fund managed by Cathay Securities Investment Trust	3	2
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
Tailin Management Consulting Limited	53	-
Others	<u>73,234</u>	<u>63,281</u>
	<u>\$ 106,791</u>	<u>\$ 97,198</u>

6) Property transactions

- a) Cathay Life and its subsidiaries' significant transactions of contracted projects undertaken with related parties are listed below:

Name	For the Years Ended December 31			
	2019		2018	
	Items	Amount	Items	Amount
Other related parties				
Ally Logistic Property Co., Ltd.	Yangmei Logistics Park, etc.	\$ 830,027	Wuri E-commerce Building, etc.	\$ 869,331
Lin Yuan Property Management Co., Ltd.	Cathay Life Head Office Building, etc.	13,602	Cathay Land Mark, etc.	17,910
San Ching Engineering Co., Ltd.	THSR Taoyuan Commercial Park, etc.	2,204,548	THSR Taoyuan Commercial Park, etc.	1,351,132
Cathay Real Estate Development Co., Ltd.	Minsheng Jingguo Building, etc.	306,419	Minsheng Jingguo Building, etc.	586,426
		<u>\$ 3,354,596</u>		<u>\$ 2,824,799</u>

The total amounts of contracted projects for real estate as of December 31, 2019 and 2018, between Cathay Life and its subsidiaries and Ally Logistic Property Co., Ltd. were \$1,130,238 thousand and \$3,383,783 thousand, respectively.

The total amounts of contracted projects for real estate as of December 31, 2019 and 2018, between Cathay Life and its subsidiaries and San Ching Engineering Co., Ltd. were \$4,196,448 thousand and \$1,838,045 thousand, respectively.

The total amounts of contracted projects for real estate as of December 31, 2019 and 2018, between Cathay Life and its subsidiaries and Cathay Real Estate Development Co., Ltd. were \$0 thousand and \$1,742,250 thousand, respectively.

b) Real-estate rental income of Cathay Life and its subsidiaries

Name	Rental Income	
	For the Years Ended	
	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Securities Investment Consulting	\$ 9,245	\$ 8,944
Associates		
Symphox Information Co., Ltd.	49,833	41,126
Cathay Insurance Company Limited (China)	10,733	30,353
	<u>60,566</u>	<u>71,479</u>
Other related parties		
Cathay Medical Care Corp.	186,848	186,308
Cathay Real Estate Development Co., Ltd.	18,097	18,466
San Ching Engineering Co., Ltd.	5,658	5,610
Cathay Healthcare Management Co., Ltd.	68,812	56,574
Cathay Hospitality Management Co., Ltd.	193,976	218,778
Cathay Hospitality Consulting Co., Ltd.	98,896	-
Ally Logistic Property Co., Ltd.	588,833	499,776
Lin Yuan Property Management Co., Ltd.	5,648	-
	<u>1,166,768</u>	<u>985,512</u>
	<u>\$ 1,236,579</u>	<u>\$ 1,065,935</u>

Name	Guarantee Deposits Received	
	December 31	
	2019	2018
Associates		
Symphox Information Co., Ltd.	\$ 13,070	\$ 10,363
Cathay Insurance Company Limited (China)	-	7,030
	<u>13,070</u>	<u>17,393</u>
Other related parties		
Cathay Medical Care Corp.	11,393	11,260
Cathay Real Estate Development Co., Ltd.	3,959	3,803
Cathay Healthcare Management Co., Ltd.	16,505	15,628
Cathay Hospitality Management Co., Ltd.	184,944	206,166
Ally Logistic Property Co., Ltd.	123,085	57,040
	<u>339,886</u>	<u>293,897</u>
	<u>\$ 352,956</u>	<u>\$ 311,290</u>

Lease periods are usually between 2 to 5 years and rental incomes are collected on a monthly basis.

c) Lease arrangements of Cathay Life and its subsidiaries

Name	Rental Expense	
	For the Years Ended	
	December 31	
	2019	2018
Other related party		
Cathay Real Estate Development Co., Ltd.	\$ -	\$ 7,413

According to contracts, lease periods are generally 1 to 2 years, and rentals are usually paid on a monthly basis.

d) Disposal of building decoration equipment of Cathay Life and its subsidiaries

Name	For the Years Ended December 31	
	2019	2018
Other related party Cathay Hospitality Management Co., Ltd.	\$ _____	\$ <u>452,540</u>

Gain on disposal of building decoration equipment to Cathay Hospitality Management Co., Ltd. for the year ended December 31, 2018 was \$13,540 thousand.

e) Acquisition of computer equipment of Cathay Life and its subsidiaries

Name	For the Years Ended December 31	
	2019	2018
Other related party ThinkPower Information Co., Ltd.	\$ <u>11,349</u>	\$ _____

f) Real-estate rental income of Cathay United Bank and its subsidiaries

Name	Rental Income December 31	
	2019	2018
Other related party Cathay United Bank Foundation	\$ <u>4,247</u>	\$ <u>4,633</u>

g) Lease arrangements of Cathay United Bank and its subsidiaries

Name	Acquisition of Right-of-use Assets For the Years Ended December 31	
	2019	2018
Other related party Cathay Real Estate Development Co., Ltd.	\$ <u>25,777</u>	\$ _____

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.

Name	Lease Liabilities December 31	
	2019	2018
Other related party Cathay Real Estate Development Co., Ltd.	\$ <u>20,954</u>	\$ _____

	Name	Rental Expense	
		For the Years Ended December 31	
		2019	2018
Other related party			
	Cathay Real Estate Development Co., Ltd.	\$ <u>2,502</u>	\$ <u>19,706</u>
	Name	Guarantee Deposits Paid	
		December 31	
		2019	2018
Other related party			
	Cathay Real Estate Development Co., Ltd.	\$ <u>4,625</u>	\$ <u>4,608</u>
7) Prepayments for long-term investments			
	Name	December 31	
		2019	2018
Associate			
	Cathay Insurance (China)	\$ _____ -	\$ <u>2,200,394</u>
8) Guarantee deposits received			
	Name	December 31	
		2019	2018
Other related parties			
	Lin Yuan Property Management Co., Ltd.	\$ 5,000	\$ 5,000
	San Ching Engineering Co., Ltd.	453,225	440,700
	Cathay Hospitality Management Co., Ltd.	51,000	256,883
	Ally Logistic Property	151,275	139,386
	Cathay Hospitality Consulting Co., Ltd.	<u>108,145</u>	<u>107,074</u>
		\$ <u>768,645</u>	\$ <u>949,043</u>
9) Payables			
	Name	December 31	
		2019	2018
Subsidiary of the Company			
	Cathy Securities Investment Consulting	\$ 30,164	\$ -
Associate			
	Symphox Information Co., Ltd.	136,661	30,398
Other related party			
	Seaward Card Co., Ltd.	<u>37,704</u>	<u>34,034</u>
		\$ <u>204,529</u>	\$ <u>64,432</u>

10) Balances of beneficiary certificates purchased from related parties

Name	December 31	
	2019	2018
Other related parties		
Fund managed by Cathay Securities Investment Trust	\$ 62,603,933	\$ 710,207
Cathay Private Equity's Private Equity Fund	496,760	-
Global Evolution Holdings ApS	<u>2,874,903</u>	<u>2,138,492</u>
	<u>\$ 65,975,596</u>	<u>\$ 2,848,699</u>

11) Investment balances of related parties' discretionary accounts

Name	December 31	
	2019	2018
Other related parties		
Cathay Charity Foundation	\$ 87,128	\$ 68,993
Cathay Real Estate Development Cultural Foundation	<u>55,667</u>	<u>47,019</u>
	<u>\$ 142,795</u>	<u>\$ 116,012</u>

12) Discretionary account balances managed by related parties

Name	December 31	
	2019	2018
Associate		
Global Evolution Holdings ApS	<u>\$ 22,215,022</u>	<u>\$ 6,494,247</u>

13) Service fee income

Name	For the Years Ended December 31	
	2019	2018
Subsidiary of the Company		
Cathay Securities Investment Consulting	\$ 15,492	\$ 17,710
Other related party		
Cathay Real Estate Development Co., Ltd.	<u>5,980</u>	<u>5,384</u>
	<u>\$ 21,472</u>	<u>\$ 23,094</u>

14) Premium income

Name	For the Years Ended December 31	
	2019	2018
Associate		
Symphox Information Co., Ltd.	\$ 3,459	\$ 2,398
Other related parties		
Cathay Real Estate Development Co., Ltd.	9,989	10,255
Cathay Medical Care Corp.	49,359	47,062
San Ching Engineering Co., Ltd.	6,126	8,793
Lin Yuan Property Management Co., Ltd.	3,142	3,184
Others	<u>369,504</u>	<u>259,323</u>
	<u>\$ 441,579</u>	<u>\$ 331,015</u>

15) Insurance claim payments

Name	For the Years Ended December 31	
	2019	2018
Other related party		
San Ching Engineering Co., Ltd.	<u>\$ 157</u>	<u>\$ 5,500</u>

16) Net other non-interest income

Name	For the Years Ended December 31	
	2019	2018
<u>Net other non-interest income</u>		
Associate		
Symphox Information Co., Ltd.	\$ 3,358	\$ 2,926
Other related parties		
Cathay Healthcare Management Co., Ltd.	5,554	4,938
Cathay Medical Care Corp.	3,719	3,702
Cathay Securities Investment Trust	2,310,677	1,825,974
Cathay Private Equity's Private Equity Fund	<u>16,045</u>	<u>-</u>
	<u>\$ 2,339,353</u>	<u>\$ 1,837,540</u>
<u>Net other non-interest expense</u>		
Associate		
Global Evolution Holding ApS	<u>\$ 5,219</u>	<u>\$ -</u>

17) Operating expenses

Name	For the Years Ended December 31	
	2019	2018
Subsidiary of the Company		
Cathay Securities Investment Consulting	\$ 39,566	\$ -
Associate		
Symphox Information Co., Ltd.	899,793	999,381
Other related parties		
Seaward Card Co., Ltd.	311,445	306,607
ThinkPower Information Co., Ltd.	8,315	-
Lin Yuan Property Management Co., Ltd.	776,336	804,376
Cathay Healthcare Management Co., Ltd.	61,336	55,971
Cathay Charity Foundation	5,300	5,300
Cathay Real Estate Development Co., Ltd.	8,947	9,796
Cathay Medical Care Corp.	5,071	14,847
San Ching Engineering Co., Ltd.	<u>3,950</u>	<u>3,672</u>
	<u>\$ 2,120,059</u>	<u>\$ 2,199,950</u>

18) Acquisition of shares issued by related parties

Name	Items	For the Years Ended December 31	
		2019	2018
Associates			
Rizal Commercial Banking Corporation	Ordinary shares	\$ -	\$ 1,992,264
PT Bank Mayapada Internasional Tbk	Ordinary shares	-	1,628,071
PSS Co., Ltd.	Ordinary shares	-	407,671
Greenhealth Water Resources Co., Ltd.	Ordinary shares	<u>470,916</u>	<u>-</u>
		<u>\$ 470,916</u>	<u>\$ 4,028,006</u>

19) Guarantees on duties and contracts

Name	Maximum	Ending Balance	Guarantee Liability Provision Balance	Rate	Collateral Item
Other related party					
Yua-Yung Marketing (Taiwan) Co., Ltd.	<u>\$ 54,440</u>	<u>\$ 54,440</u>	<u>\$ 5</u>	0.65-0.8%	Securities

20) Key management personnel compensation

Name	For the Years Ended December 31	
	2019	2018
Short-term employee benefits	\$ 1,038,823	\$ 926,477
Post-employment benefits	22,388	17,951
Other long-term employee benefits	<u>54</u>	<u>26</u>
	<u>\$ 1,061,265</u>	<u>\$ 944,454</u>

The management of the Group includes the chairman, directors, president, senior executive vice president, senior vice general managers and vice general managers.

c. The Company

1) Cash in banks

Name	Items	December 31	
		2019	2018
Subsidiary of the Company			
Cathay United Bank	Cash in bank	<u>\$ 79,099</u>	<u>\$ 139,920</u>

Interest income from Cathay United Bank for the years ended December 31, 2019 and 2018 were \$906 thousand and \$726 thousand, respectively.

2) Receivables

Name	Items	December 31	
		2019	2018
Subsidiary of the Company			
Cathay Life	Interest	\$ 65,589	\$ 65,589
Cathay Century	Consolidated income tax	362,812	64,901
Cathay United Bank	Consolidated income tax	1,703,104	-
Cathay Securities	Consolidated income tax	74,712	24,916
Cathay Securities Investment Trust	Consolidated income tax	176,613	82,083
Cathay Venture	Consolidated income tax	<u>4,345</u>	<u>29,331</u>
		<u>\$ 2,387,175</u>	<u>\$ 266,820</u>

3) Guarantee deposits paid

Name	For the Years Ended December 31	
	2019	2018
Subsidiary of the Company		
Cathay Life	<u>\$ 30,071</u>	<u>\$ 12,588</u>

4) Financial assets at FVTPL

	Name	December 31	
		2019	2018
Subsidiary of the Company			
Cathay Life		\$ 35,000,000	\$ 35,000,000

5) Lease agreements

a) Lease liabilities

	Name	December 31	
		2019	2018
Subsidiary of the Company			
Cathay Life		\$ 47,191	\$ 58,613

b) Lease expense

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
Cathay Life		\$ 46,311	\$ 58,613

6) Disposal of property and equipment

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
Cathay United Bank		\$ 26,681	\$ -

7) Payables

	Name	Items	December 31	
			2019	2018
Subsidiary of the Company				
Cathay Life		Consolidated income tax, etc.	\$ 10,147,500	\$ 8,998,563
Cathay United Bank		Consolidated income tax	-	485,773
			\$ 10,147,500	\$ 9,484,336

8) Interest income

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
	Cathay Life	\$ 1,260,000	\$ 1,310,704
	Cathay Century	<u>-</u>	<u>10,192</u>
		<u>\$ 1,260,000</u>	<u>\$ 1,320,896</u>

9) Operating expenses

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
	Cathay Life	\$ 13,647	\$ 7,577
	Cathay Securities	7,300	700
Other related parties			
	Seaward Card Co., Ltd.	<u>5,980</u>	<u>5,510</u>
		<u>\$ 26,927</u>	<u>\$ 13,787</u>

10) Subscription of shares issued by related parties

	Name	Items	December 31	
			2019	2018
Subsidiary of the Company				
	Cathay Life	Ordinary shares	\$ 10,000,000	\$ 42,000,000
	Cathay United Bank	Ordinary shares	<u>10,000,000</u>	<u>-</u>
			<u>\$ 20,000,000</u>	<u>\$ 42,000,000</u>

d. Significant transactions between subsidiaries and related parties that are more than \$100 million

Significant intercompany transactions within the Group have been eliminated upon consolidation.

1) Cathay Life and its subsidiaries

a) Property transactions

Property transactions between Cathay Life and related parties are mainly contracted projects, trade, lease, and software appliance transactions. The terms of such transactions are based on market surveys, the contracted terms of both parties and public bidding.

- i. Significant transactions of contracted projects undertaken with related parties are listed below:

Name	For the Years Ended December 31			
	2019		2018	
	Items	Amount	Items	Amount
Other related parties				
Ally Logistic Property Co., Ltd.	Yangmei Logistics Park, etc.	\$ 830,027	Wuri E-commerce Building, etc.	\$ 869,331
San Ching Engineering Co., Ltd.	THSR Taoyuan Commercial Park, etc.	2,204,548	THSR Taoyuan Commercial Park, etc.	1,351,132
Cathay Real Estate Development Co., Ltd.	Minsheng Jingguo Building, etc.	306,419	Minsheng Jingguo Building, etc.	586,426
		<u>\$ 3,340,994</u>		<u>\$ 2,806,889</u>

The total amounts of contracted projects for real estate as of December 31, 2019 and 2018, between Cathay Life and its subsidiaries and Ally Logistic Property Co., Ltd. were \$1,130,238 thousand and \$3,383,783 thousand, respectively.

The total amounts of contracted projects for real estate as of December 31, 2019 and 2018, between Cathay Life and its subsidiaries and San Ching Engineering Co., Ltd. were \$4,196,448 thousand and \$1,838,045 thousand, respectively.

The total amounts of contracted projects for real estate as of December 31, 2019 and 2018, between Cathay Life and its subsidiaries and Cathay Real Estate Development Co., Ltd. were \$0 thousand and \$1,742,250 thousand, respectively.

- ii. Real-estate rental income

Name	Rental Income	
	For the Years Ended	
	December 31	
	2019	2018
The Company		
Cathay Financial Holdings	\$ 100,535	\$ 58,613
Subsidiary of the Company		
Cathay United Bank	651,615	681,206
Cathay Century	107,625	108,092
Other related parties		
Ally Logistic Property Co., Ltd.	588,833	499,776
Cathay Hospitality Management Co., Ltd.	193,976	218,778
Cathay Medical Care Corp.	<u>186,848</u>	<u>186,308</u>
	<u>\$ 1,829,432</u>	<u>\$ 1,752,773</u>

Name	Guarantee Deposits Received	
	December 31	
	2019	2018
Subsidiary of the Company		
Cathay United Bank	\$ 188,158	\$ 189,738
Other related parties		
Ally Logistic Property Co., Ltd.	123,085	57,040
Cathay Hospitality Management Co., Ltd.	<u>184,944</u>	<u>206,166</u>
	<u>\$ 496,187</u>	<u>\$ 452,944</u>

Lease periods are usually between 2 and 5 years and rental incomes are collected on a monthly basis.

b) Shares transactions

i. Issuance of shares for cash by Cathay Life

Name	Item	For the Years Ended	
		December 31	
		2019	2018
The Company			
Cathay Financial Holdings	Ordinary shares	<u>\$ 10,000,000</u>	<u>\$ 42,000,000</u>

ii. Acquisition of shares issued by related parties

Name	Items	For the Years Ended	
		December 31	
		2019	2018
Subsidiary of the Company			
Cathay Venture Inc.	Ordinary shares	<u>\$ 1,567,574</u>	<u>\$ -</u>
Associates			
Rizal Commercial Banking Corporation	Ordinary shares	-	1,992,264
PT Bank Mayapada Internasional Tbk	Ordinary shares	-	1,628,071
PSS Co., Ltd.		-	407,671
Greenhealth Water Resources Co., Ltd.	Ordinary shares	470,916	-
		<u>470,916</u>	<u>4,028,006</u>
		<u>\$ 2,038,490</u>	<u>\$ 4,028,006</u>

c) Cash in banks

Item	Name	December 31	
		2019	2018
Subsidiary of the Company			
Cathay United Bank	Time deposits	\$ 864,340	\$ 2,715,620
	Demand deposits	23,881,382	28,726,895
	Checking deposits	240,154	268,337
	Securities deposits	6	6
Indovina Bank	Time deposits	485,177	1,536,338
	Demand deposits	<u>12,042</u>	<u>8,344</u>
		<u>\$ 25,483,101</u>	<u>\$ 33,255,540</u>

d) Loans

Name	For the Year Ended December 31, 2019		
	Maximum	Rate	Ending Balance
Other related party	<u>\$ 1,042,084</u>	1.03%-3.44%	<u>\$ 971,199</u>

Name	For the Year Ended December 31, 2018		
	Maximum	Rate	Ending Balance
Other related party	<u>\$ 1,085,539</u>	1.03%-3.74%	<u>\$ 973,182</u>

e) Balance of beneficiary certificates purchased from related parties

Item	Name	December 31	
		2019	2018
Associate			
Global Evolution Holding ApS	Market value	<u>\$ 2,874,903</u>	<u>\$ 2,138,492</u>
	Cost	<u>\$ 2,642,230</u>	<u>\$ 2,142,144</u>
Subsidiary of the Company			
Cathy Securities Investment Trust	Market value	<u>\$ 61,234,575</u>	<u>\$ -</u>
	Cost	<u>\$ 59,796,572</u>	<u>\$ -</u>
Cathay Private Equity	Market value	<u>\$ 490,168</u>	<u>\$ -</u>
	Cost	<u>\$ 494,150</u>	<u>\$ -</u>

f) Discretionary account management balance

Name	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Securities Investment Trust	\$ 213,072,442	\$ 210,965,710
Associate		
Global Evolution Holding ApS	<u>22,215,022</u>	<u>6,494,247</u>
	<u>\$ 235,287,464</u>	<u>\$ 217,459,957</u>

g) Other receivables

Name	December 31	
	2019	2018
The Company		
Cathay Financial Holdings (Note)	\$ <u>10,147,500</u>	\$ <u>8,998,563</u>

Note: Receivables are mainly the refundable taxes under the consolidated income tax system.

h) Prepayments for investments

Name	December 31	
	2019	2018
Associate		
Cathay Insurance (China)	\$ <u>-</u>	\$ <u>1,100,344</u>

i) Guarantee deposits paid

Name	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Futures Co., Ltd.	\$ <u>3,078,757</u>	\$ <u>1,511,584</u>

j) Guarantee deposits received

Name	December 31	
	2019	2018
Other related parties		
Ally Logistic Property Co., Ltd.	\$ 151,275	\$ 139,386
San Ching Engineering Co., Ltd.	453,225	440,700
Cathay Hospitality Management Co., Ltd.	51,000	256,883
Cathay Hospitality Consulting Co., Ltd.	<u>108,145</u>	<u>107,074</u>
	\$ <u>763,645</u>	\$ <u>944,043</u>

k) Bonds payable

Name	December 31	
	2019	2018
The Company		
Cathay Financial Holdings	\$ <u>35,000,000</u>	\$ <u>35,000,000</u>

l) Premium income

Name	For the Years Ended December 31	
	2019	2018
Other related party		
Others	\$ <u>369,504</u>	\$ <u>259,323</u>

m) Premium expense

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
	Cathay Century	\$ <u>105,568</u>	\$ <u>107,023</u>

n) Other operating income

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
	Cathay Securities Investment Trust	\$ <u>138,776</u>	\$ <u>130,908</u>

o) Other operating costs

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
	Cathay United Bank	\$ 1,163,173	\$ 1,024,363
	Cathay Securities Investment Trust	<u>182,830</u>	<u>402,183</u>
		\$ <u>1,346,003</u>	\$ <u>1,426,546</u>

p) Finance costs

	Name	For the Years Ended December 31	
		2019	2018
The Company			
	Cathay Financial Holdings	\$ <u>1,260,000</u>	\$ <u>1,260,000</u>

Finance costs consist of interest expenses accrued from bond payable.

q) Operating expenses

	Name	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
	Cathay United Bank	\$ 6,178,311	\$ 6,067,566
Associate			
	Symphox Information Co., Ltd.	238,252	248,531
Other related party			
	Lin Yuan Property Management Co., Ltd.	<u>767,009</u>	<u>793,716</u>
		\$ <u>7,183,572</u>	\$ <u>7,109,813</u>

r) Non-operating income

Name	For the Years Ended December 31	
	2019	2018
Subsidiary of the Company		
Cathay United Bank	\$ 168,589	\$ 188,212
Cathay Century	<u>677,314</u>	<u>629,342</u>
	<u>\$ 845,903</u>	<u>\$ 817,554</u>

Non-operating income is mainly generated from Cathay Life and its subsidiaries' integrated marketing activities.

s) Other

As of December 31, 2019 and 2018, the nominal amounts (in thousands) of the financial instrument transactions between Cathay Life and Cathay United Bank are summarized below:

Name	December 31	
	2019	2018
SWAP	<u>US\$2,615,000</u>	<u>US\$3,752,000</u>

2) Cathay United Bank and its subsidiaries

a) Loans

December 31, 2019

Type	Account Volume or Name of Related Part	Highest Balance	Ending Balance	Loan Classification		Collaterals	Differences in Terms of Transaction with Those for Unrelated Parties	Bad debt Expense 01.01-12.31	Allowance for Bad Debt Expense - Ending Balance
				Normal Loans	Nonperforming Loans				
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

December 31, 2018

Type	Account Volume or Name of Related Party	Highest Balance	Ending Balance	Loan Classification		Collaterals	Differences in Terms of Transaction with Those for Unrelated Parties	Bad debt Expense 01.01-12.31	Allowance for Bad Debt Expense - Ending Balance
				Normal Loans	Nonperforming Loans				
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	Cathay Securities	423,000	-	V	-	Securities	None	-	-

Deposits

Name	December 31	
	2019	2018
The Company		
Cathay Financial Holdings	\$ 79,099	\$ 139,920
Subsidiary of the Company		
Cathay Life	23,917,315	30,744,095
Cathay Century	2,474,304	2,724,193
Cathay Securities	2,034,207	2,550,090
Cathay Futures	1,429,607	1,345,519
Cathay Venture	25,405	113,380
Cathay Securities Investment Trust	143,714	149,076
Cathay Securities Investment Consulting	204,526	187,533
Cathay Life (Vietnam)	497,313	1,809,689
Cathay Insurance (Vietnam)	168,057	147,705
Lin Yuan	990,004	623,035
Associates		
Symphox Information Co., Ltd.	154,446	122,139
Neo Cathay Power Corp.	11	137,979
Other related parties		
Cathay United Bank Foundation	532,486	541,888
Cathay Life Insurance Employees' Welfare Committee	2,142,876	2,221,665
Cathay Real Estate Employees' Welfare Committees	397,367	386,529
Cathay Real Estate Development Co., Ltd.	257,587	199,127
Fund managed by Cathay Securities Investment Trust	84,784	137,823
Others	7,614,151	7,457,000
	<u>\$ 43,147,259</u>	<u>\$ 51,738,385</u>
 <u>Due from commercial banks</u>		
Other related party		
Vietinbank	<u>\$ 5,216,825</u>	<u>\$ 5,309,375</u>
 <u>Due to commercial banks</u>		
Other related party		
Vietinbank	<u>\$ 5,265,818</u>	<u>\$ 5,360,670</u>

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

b) Derivatives

December 31, 2019

Name of Related Party	Name of Derivative Contract	Contract Period	Nominal Principal	Valuation (Loss) Gain	Balance Sheet Amount	
					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 financial assets at FVTPL	\$ 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 financial assets at FVTPL	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 financial assets at FVTPL	-
					Valuation adjustment for FVTPL financial liabilities	(859)

December 31, 2018

Name of Related Party	Name of Derivative Contract	Contract Period	Nominal Principal	Valuation (Loss) Gain	Balance Sheet Amount	
					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 financial assets at FVTPL	\$ 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 financial assets at FVTPL	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 financial assets at FVTPL	-
					Valuation adjustment for FVTPL financial liabilities	(302)

c) Lease agreements

Acquisition of Right-of-use Assets

December 31

2019 2018

Subsidiary of the Company
Cathay Life

\$ 151,494 \$ -

Lease Liabilities

December 31

2019 2018

Subsidiary of the Company
Cathay Life

\$ 1,956,803 \$ -

**For the Years Ended
December 31**

2019 2018 Payment Terms

Rental expense

Subsidiary of the Company
Cathay Life

\$ 204,573 \$ 681,206 Monthly

Refundable Deposits Paid

December 31

2019 2018

Subsidiary of the Company
Cathay Life

\$ 188,158 \$ 189,738

d) Shares transactions - issuance of shares for cash

	Name	Items	For the Years Ended	
			December 31	
			2019	2018
	The Company			
	Cathay Financial Holdings	Ordinary shares	\$ 10,000,000	\$ -

e) Others

	Item	For the Years Ended	
		December 31	
		2019	2018
<u>Commission and handling fee income</u>			
	Subsidiary of the Company		
	Cathay Life	\$ 7,333,637	\$ 7,088,674
	Cathay Century	154,046	160,875
<u>General expenses</u>			
	Subsidiary of the Company		
	Cathay Life	168,589	188,212
	Associate		
	Symphox Information Co., Ltd.	567,936	662,504
	Other related party		
	Seaward Card Co., Ltd.	224,726	210,023
<u>Payment of insurance expenses for the year</u>			
	Subsidiary of the Company		
	Cathay Century	178,060	178,718
	Item	2019	2018
<u>Related party receivables from linked tax system</u>			
	The Company		
	Cathay Financial Holdings	\$ -	\$ 485,773
<u>Guarantee deposits paid</u>			
	Subsidiary		
	Cathay Futures	508,694	78,095
<u>Accounts payable</u>			
	Associate		
	Symphox Information Co., Ltd.	123,346	19,680
<u>Related party payables from linked tax system</u>			
	The Company		
	Cathay Financial Holdings	1,703,104	-

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

3) Cathay Century and its subsidiaries

a) Trading transactions

Item	Name	For the Years Ended	
		December 31	
		2019	2018
Net premium income	Subsidiary of the Company		
	Cathay Life	\$ 105,568	\$ 107,023
	Cathay United Bank	<u>178,060</u>	<u>178,718</u>
		<u>\$ 283,628</u>	<u>\$ 285,741</u>
Operating costs			
Marketing costs	Subsidiary of the Company		
	Cathay Life	<u>\$ 667,546</u>	<u>\$ 612,624</u>
Operating costs	Subsidiary of the Company		
Integrative marketing costs	Cathay United Bank	<u>\$ 123,796</u>	<u>\$ 133,544</u>

b) Payables to related parties

Item	Name	December 31	
		2019	2018
Other payables	The Company		
	Cathay Financial Holdings	<u>\$ 362,812</u>	<u>\$ 64,901</u>

c) Cash in bank

Item	Name	December 31	
		2019	2018
Checking deposits and demand deposits	Subsidiary of the Company		
	Cathay United Bank	\$ 1,906,704	\$ 2,100,993
	Indovina Bank	8,180	3,018
Time deposits	Subsidiary of the Company		
	Cathay United Bank	567,600	623,200
	Indovina Bank	<u>150,726</u>	<u>144,687</u>
		<u>\$ 2,633,210</u>	<u>\$ 2,871,898</u>

d) Financial assets at FVTPL (beneficiary certificate)

		December 31	
		2019	2018
Other related party			
Fund managed by Cathay Securities Investment Trust		<u>\$ 712,949</u>	<u>\$ 359,128</u>

e) Discretionary account management balance

December 31	
2019	2018

Subsidiary of the Company Cathay Securities Investment Trust	\$ <u>1,081,258</u>	\$ <u>848,925</u>
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f) Prepayments for investment

December 31	
2019	2018

Subsidiary of the Company Cathay Insurance Co., Ltd. (China)	\$ <u>-</u>	\$ <u>1,100,050</u>
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g) Lease agreements

Acquisition of Right-of-use Assets	
For the Years Ended	
December 31	
2019	2018

Name		
Subsidiary of the Company Cathay Life	\$ <u>210,625</u>	\$ <u>-</u>

Lease Liabilities	
For the Years Ended	
December 31	
2019	2018

Name		
Subsidiary of the Company Cathay Life	\$ <u>176,326</u>	\$ <u>-</u>

Rental Expense	
For the Years Ended	
December 31	
2019	2018

Name		
Subsidiary of the Company Cathay Life	\$ <u>1,245</u>	\$ <u>108,092</u>

h) SWAP

The nominal amount of the derivative instruments between Cathay Century and related parties are listed below:

December 31	
2019	2018

Subsidiary of the Company Cathay United Bank	US\$ 92,700	US\$ 88,700
	EUR\$ 750	EUR\$ 750

4) Cathay Securities and its subsidiaries

a) Cash in bank

	December 31	
	2019	2018
Subsidiary of the Company		
Cathay United Bank	<u>\$ 2,399,307</u>	<u>\$ 3,836,853</u>

Cash in bank includes cash and cash equivalents, and receivable for underwriting of securities, pending settlement money and restricted assets recorded under other current assets. Refer to Note 29 for the time deposits that were pledged as collateral.

The terms of the foregoing transactions are similar to those unrelated parties.

b) Customer's margin accounts

	December 31	
	2019	2018
Subsidiary of the Company		
Cathay United Bank	<u>\$ 1,064,570</u>	<u>\$ 910,355</u>

c) Futures trader's equity

	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Life	\$ 3,078,757	\$ 1,511,584
Cathay United Bank	508,694	78,095
Cathay Securities Investment Trust (Note)	<u>1,218,446</u>	<u>994,480</u>
	<u>\$ 4,805,897</u>	<u>\$ 2,584,159</u>

Note: The balances include those of investment trusts managed by Cathay Securities Investment Trust.

d) Brokerage service fee income

	For the Years Ended December 31	
	2019	2018
Subsidiary of the Company		
Cathay Life	<u>\$ 213,844</u>	<u>\$ 152,341</u>

5) Cathay Securities Investment Trust

a) Cash and cash equivalents

	December 31	
	2019	2018
Subsidiary of the Company		
Cathay United Bank	<u>\$ 88,704</u>	<u>\$ 101,890</u>

b) Accounts receivable

	December 31	
	2019	2018
Other related party		
Fund managed by Cathay Securities Investment Trust	\$ <u>221,014</u>	\$ <u>154,280</u>

c) Accounts payable

	December 31	
	2019	2018
The Company		
Cathay Financial Holdings (Note)	\$ <u>176,613</u>	\$ <u>82,083</u>

Note: The payables consist of tax payable under the consolidated income tax system and dividend payable.

d) Discretionary account management balance

	December 31	
	2019	2018
Subsidiary of the Company		
Cathay Life	\$ 213,072,442	\$ 210,965,710
Cathay Century	<u>1,081,258</u>	<u>848,925</u>
	<u>\$ 214,153,700</u>	<u>\$ 211,814,635</u>

e) Operating income

	For the Years Ended December 31	
	2019	2018
Subsidiary of the Company		
Cathay Life	\$ 182,830	\$ 402,183
Other related party		
Fund managed by Cathay Securities Investment Trust	<u>2,310,677</u>	<u>1,825,974</u>
	<u>\$ 2,493,507</u>	<u>\$ 2,228,157</u>

		For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
Conning Asia Pacific Ltd.	Consulting fee	\$ <u>128,022</u>	\$ <u>120,304</u>

6) Cathay venture

a) Cash and cash equivalents

Name	Items	December 31	
		2019	2018
Subsidiary of the Company			
Cathay United Bank	Cash in bank	\$ 50,330	\$ 1,021
	Security deposits	<u>10,021</u>	<u>112,359</u>
		<u>\$ 60,351</u>	<u>\$ 113,380</u>

b) Financial assets at FVTPL

Name	Items	December 31	
		2019	2018
Other related party			
Fund managed by Cathay Securities Investment Trust		\$ 539,043	\$ 49,875
Cathay Healthcare Management Co., Ltd.		<u>229,103</u>	<u>180,180</u>
		<u>\$ 768,146</u>	<u>\$ 230,055</u>

c) Shares transactions - issuance of shares for cash

Name	Items	For the Years Ended December 31	
		2019	2018
Subsidiary of the Company			
Cathay Life	Ordinary shares	\$ <u>1,567,574</u>	\$ <u>-</u>

29. PLEDGED ASSETS

The Group's assets pledged as collateral or with limited use are summarized below:

Item	Description	December 31	
		2019	2018
Time deposits and guarantee deposits paid	Capital guarantee, serving as deposits paid, settlement accounts, overdraft guarantee, government bonds, collateral for court guarantees, provisions for business and collateral	\$ 14,879,748	\$ 16,515,144
Financial assets at FVTPL	Collateral for securities lending and guarantee for future transactions	1,190,059	1,179,454
Financial assets at FVTOCI	Provisions for business and collateral	10,006,563	14,353
Financial assets at amortized cost	Provisions for business and collateral	47,521,950	64,423,052
Investment properties	Short-term loans	<u>293,341</u>	<u>290,341</u>
		<u>\$ 73,891,661</u>	<u>\$ 82,422,344</u>

30. COMMITMENTS AND CONTINGENT LIABILITIES

a. Cathay United Bank

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 Cathay United Bank in its operation, and the plaintiffs claimed damages from Cathay United Bank in the amount of approximately \$991,002 thousand. The case has been pending in the court since July 2007, and Cathay United Bank won favorable decisions in both the first and second instances. The proceedings are currently pending in the Supreme Court. Both Cathay United Bank and its attorneys hold that this case will not have a material adverse effect on the financial position of the Bank.

b. As of December 31, 2019 and 2018 Cathay United Bank and its subsidiaries had the following entrusted item 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	5,254,667	6,008,561
Irrevocable loan commitments	191,118,192	155,887,022
Unused credit card lines commitments	624,179,881	592,059,512
Underwritten securities	1,350,000	1,000,000
Financial guarantee contracts	1,831,942	2,511,838

c. As of December 31, 2019, the remaining capital commitments for the contracted private equity fund of Cathay Life was NT\$1,701,800 thousand, US\$2,825,760 thousand, EUR405,339 thousand and GBP1,558 thousand.

31. FINANCIAL STATEMENTS OF CATHAY FINANCIAL HOLDING CO., LTD.

Cathay Financial Holding Co., Ltd.

Balance Sheets
(In Thousands of New Taiwan Dollars)

ASSETS	December 31		LIABILITIES AND EQUITY	December 31	
	2019	2018		2019	2018
CASH AND CASH EQUIVALENTS	\$ 84,693	\$ 445,353	COMMERCIAL PAPER PAYABLE, NET	\$ 48,480,000	\$ 59,260,000
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	35,269,500	35,444,500	PAYABLES	10,666,489	9,894,697
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	106,704	102,304	CURRENT TAX LIABILITIES	2,243,784	1,719,191
SECURITIES PURCHASED UNDER RESALE AGREEMENTS	310,000	-	BONDS PAYABLE	20,000,000	-
RECEIVABLES, NET	2,388,041	266,902	PROVISIONS	832,997	739,257
CURRENT TAX ASSETS	4,853,833	6,428,841	LEASE LIABILITIES	55,369	-
INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD, NET	810,998,796	548,662,186	DEFERRED TAX LIABILITIES	266,714	266,714
PROPERTY AND EQUIPMENT, NET	54,192	11,767	OTHER LIABILITIES	<u>163,891</u>	<u>164,069</u>
RIGHT-OF-USE ASSETS	54,891	-	Total liabilities	<u>82,709,244</u>	<u>72,043,928</u>
INTANGIBLE ASSETS, NET	-	1,330	EQUITY		
DEFERRED TAX ASSETS	262,855	352,601	Share capital		
OTHER ASSETS	<u>73,104</u>	<u>59,474</u>	Ordinary shares	131,692,102	125,632,102
			Preference shares	15,333,000	15,333,000
			Capital surplus	177,256,976	165,449,364
			Retained earnings		
			Legal reserve	46,122,845	40,976,121
			Special reserve	221,977,672	149,346,119
			Unappropriated earnings	58,181,890	95,553,376
			Other equity	<u>121,182,880</u>	<u>(72,558,752)</u>
			Total equity	<u>771,747,365</u>	<u>519,731,330</u>
TOTAL	<u>\$ 854,456,609</u>	<u>\$ 591,775,258</u>	TOTAL	<u>\$ 854,456,609</u>	<u>\$ 591,775,258</u>

Cathay Financial Holding Co., Ltd.

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

	For the Years Ended December 31	
	2019	2018
REVENUE		
Share of gain of subsidiaries, associates and joint ventures accounted for using the equity method	\$ 63,442,641	\$ 52,652,017
Other operating income	<u>1,284,585</u>	<u>1,826,183</u>
Total revenue	<u>64,727,226</u>	<u>54,478,200</u>
EXPENSES AND LOSSES		
Operating expenses	(1,368,200)	(1,106,414)
Other expenses and losses	<u>(668,023)</u>	<u>(310,465)</u>
Total expenses and losses	<u>(2,036,223)</u>	<u>(1,416,879)</u>
INCOME BEFORE TAX	62,691,003	53,061,321
INCOME TAX BENEFIT (EXPENSE)	<u>66,283</u>	<u>(1,594,078)</u>
NET INCOME	<u>62,757,286</u>	<u>51,467,243</u>
OTHER COMPREHENSIVE INCOME		
Items that will not be reclassified subsequently to profit or loss:		
Remeasurement of defined benefit plans	715	(2,507)
Gain on equity instruments at fair value through other comprehensive income	4,400	11,167
Share of other comprehensive income of subsidiaries, associates and joint ventures accounted for using the equity method for items that will not be reclassified subsequently to profit or loss	7,589,382	(648,367)
Income tax relating to items that will not be reclassified subsequently to profit or loss	(143)	1,502
Items that may be reclassified subsequently to profit or loss:		
Share of other comprehensive income (loss) of subsidiaries, associates and joint ventures accounted for using the equity method for items that may be reclassified subsequently to profit or loss	<u>181,540,526</u>	<u>(174,696,504)</u>
Other comprehensive income (loss) for the year, net of income tax	<u>189,134,880</u>	<u>(175,334,709)</u>
TOTAL COMPREHENSIVE INCOME (LOSS) FOR THE YEAR	<u>\$ 251,892,166</u>	<u>\$ (123,867,466)</u>
EARNINGS PER SHARE		
Basic	<u>\$4.76</u>	<u>\$3.95</u>

Cathay Financial Holding Co., Ltd.

Statements of Changes in Equity
(In Thousands of New Taiwan Dollars)

	Share Capital		Capital Surplus	Retained Earnings			Other Equity							Total Equity	
	Ordinary Shares	Preference Shares		Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value through Other Comprehensive Income	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Gain (Loss) on Hedging Instruments	Changes in the Fair Value Attributable to Changes in the Credit Risk of Financial Liabilities Designated as at Fair Value Through Profit or Loss	Remeasurement Using the Overlay Benefit Plans	Gains on Property Revaluation		Other Comprehensive Income (Loss) on Reclassification Using Overlay Approach
BALANCE AT JANUARY 1, 2018	\$ 125,632,102	\$ 8,333,000	\$ 130,452,105	\$ 35,339,841	\$ 149,106,971	\$ 99,296,739	\$ (10,823,242)	\$ -	\$ 53,789,800	\$ 203,647	\$ (1,191,027)	\$ (1,449,679)	\$ 10,376,814	\$ -	\$ 599,067,071
Effect of retrospective application and retrospective restatement	-	-	-	-	-	(3,653,038)	-	37,343,476	(53,789,800)	-	-	-	-	55,941,777	35,842,415
BALANCE, AT JANUARY 1, 2018 AS RESTATED	125,632,102	8,333,000	130,452,105	35,339,841	149,106,971	95,643,701	(10,823,242)	37,343,476	-	203,647	(1,191,027)	(1,449,679)	10,376,814	55,941,777	634,909,486
Appropriation of 2017 earnings															
Legal reserve	-	-	-	5,636,280	-	(5,636,280)	-	-	-	-	-	-	-	-	-
Special reserve	-	-	-	-	234,146	(234,146)	-	-	-	-	-	-	-	-	-
Cash dividends on ordinary shares	-	-	-	-	-	(31,408,025)	-	-	-	-	-	-	-	-	(31,408,025)
Cash dividends on preferred shares	-	-	-	-	-	(1,899,924)	-	-	-	-	-	-	-	-	(1,899,924)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	-	(5,066)	-	-	-	-	-	-	-	-	-	-	-	(5,066)
Net income for the year ended December 31, 2018	-	-	-	-	-	51,467,243	-	-	-	-	-	-	-	-	51,467,243
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-	-	-	-	-	-	(1,326,629)	(67,359,757)	-	(30,358)	1,965,111	128,541	46,241	(108,757,858)	(175,334,709)
Total comprehensive income (loss) for year ended December 31, 2018	-	-	-	-	-	51,467,243	(1,326,629)	(67,359,757)	-	(30,358)	1,965,111	128,541	46,241	(108,757,858)	(123,867,466)
Issuance of preference shares	-	7,000,000	35,000,000	-	-	-	-	-	-	-	-	-	-	-	42,000,000
Shared-based payment transactions	-	-	2,325	-	-	-	-	-	-	-	-	-	-	-	2,325
Disposals of equity instruments at fair value through other comprehensive income	-	-	-	-	-	(12,429,335)	-	12,429,335	-	-	-	-	-	-	-
Other	-	-	-	-	5,002	50,142	-	-	-	-	-	-	(55,144)	-	-
BALANCE AT DECEMBER 31, 2018	125,632,102	15,333,000	165,449,364	40,976,121	149,346,119	95,553,376	(12,149,871)	(17,586,946)	-	173,289	774,084	(1,321,138)	10,367,911	(52,816,081)	519,731,330
Appropriation of 2018 earnings															
Legal reserve	-	-	-	5,146,724	-	(5,146,724)	-	-	-	-	-	-	-	-	-
Special reserve	-	-	-	-	72,631,553	(72,631,553)	-	-	-	-	-	-	-	-	-
Cash dividends on ordinary shares	-	-	-	-	-	(15,075,852)	-	-	-	-	-	-	-	-	(15,075,852)
Cash dividends on preferred shares	-	-	-	-	-	(2,667,891)	-	-	-	-	-	-	-	-	(2,667,891)
Issuance of cash dividends from capital surplus	-	-	(3,768,963)	-	-	-	-	-	-	-	-	-	-	-	(3,768,963)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	-	138,891	-	-	-	-	-	-	-	-	-	-	-	138,891
Net income for the year ended December 31, 2019	-	-	-	-	-	62,757,286	-	-	-	-	-	-	-	-	62,757,286
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	-	-	(1,169,749)	81,300,147	-	158,641	(2,624,592)	(186,726)	872,403	110,784,756	189,134,880
Total comprehensive income (loss) for year ended December 31, 2019	-	-	-	-	-	62,757,286	(1,169,749)	81,300,147	-	158,641	(2,624,592)	(186,726)	872,403	110,784,756	251,892,166
Issuance of ordinary shares for cash	6,060,000	-	15,150,000	-	-	-	-	-	-	-	-	-	-	-	21,210,000
Shared-based payment transactions	-	-	287,684	-	-	-	-	-	-	-	-	-	-	-	287,684
Disposals of equity instruments at fair value through other comprehensive income	-	-	-	-	-	(4,606,752)	-	4,606,752	-	-	-	-	-	-	-
BALANCE AT DECEMBER 31, 2019	\$ 131,692,102	\$ 15,333,000	\$ 177,256,976	\$ 46,122,845	\$ 221,977,672	\$ 58,181,890	\$ (13,319,620)	\$ 68,319,953	\$ -	\$ 331,930	\$ (1,850,508)	\$ (1,507,864)	\$ 11,240,314	\$ 57,968,675	\$ 771,747,365

Cathay Financial Holding Co., Ltd.

Statements of Cash Flows
(In Thousands of New Taiwan Dollars)

	For the Years Ended	
	December 31	
	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	\$ 62,691,003	\$ 53,061,321
Adjustments for:		
Depreciation expenses	64,610	2,621
Amortization expenses	1,330	5,319
Loss (gain) on of financial assets and liabilities at fair value through profit or loss	175,000	(469,000)
Interest income	(1,261,857)	(1,322,284)
Dividend income	(5,378)	(4,872)
Interest expenses	455,258	271,859
Compensation cost of share-based payments	3,856	2,325
Share of gain of subsidiaries, associates and joint ventures accounted for using the equity method	(63,442,641)	(52,652,017)
Loss on disposal of property and equipment	11	88
Reversal of impairment loss on financial assets	-	(2,888)
Unrealized foreign exchange gain	-	(3,084)
Changes in operating assets and liabilities		
Other assets	(6,154)	(60)
Payables	43,998	106,369
Provisions	11,144	(196,716)
Other liabilities	(178)	267
Cash used in operations	(1,269,998)	(1,200,752)
Interest received	1,261,860	1,433,990
Dividend received	5,378	4,872
Interest paid	(317,970)	(299,475)
Income tax refunded	818,169	-
Income taxes paid	-	(1,434,143)
Net cash generated from (used in) operating activities	497,439	(1,495,508)
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from maturities of financial assets measured at amortized cost	-	6,000,000
Acquisition of investments accounted for using the equity method	(20,000,000)	(42,000,000)
Acquisition of property and equipment	(74,061)	(3,229)
Proceeds from disposal of property and equipment	24,854	-
Increase in other assets	(17,483)	-
Dividends received	10,658,658	11,716,278
Net cash flows used in investing activities	(9,408,032)	(24,286,951)

(Continued)

	For the Years Ended December 31	
	2019	2018
CASH FLOWS FROM FINANCING ACTIVITIES		
(Decrease) increase in commercial paper payable	\$ (10,780,000)	\$ 16,320,000
Issuance of corporate bonds	20,000,000	-
Repayments of the principal portion of lease liabilities	(57,361)	-
Proceeds from issuance of ordinary shares	21,210,000	42,000,000
Cash dividends paid	<u>(21,512,706)</u>	<u>(33,307,949)</u>
Net cash flows generated from financing activities	<u>8,859,933</u>	<u>25,012,051</u>
EFFECTS OF EXCHANGE RATE CHANGES ON CASH HELD IN FOREIGN CURRENCIES	<u>-</u>	<u>3,084</u>
NET DECREASE IN CASH AND CASH EQUIVALENTS	(50,660)	(767,324)
CASH AND CASH EQUIVALENTS AT THE BEGINNINGS OF THE YEAR	<u>445,353</u>	<u>1,212,677</u>
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$ 394,693</u>	<u>\$ 445,353</u>

Reconciliation of cash and cash equivalents:

	December 31	
	2019	2018
Cash and cash equivalents presented in the balance sheets	\$ 84,693	\$ 445,353
Securities purchased under resale agreements qualified for cash and cash equivalents under the definition of IAS 7	<u>310,000</u>	<u>-</u>
Cash and cash equivalents at the end of the years	<u>\$ 394,693</u>	<u>\$ 445,353</u>

(Concluded)

32. INFORMATION OF THE COMPANY'S SUBSIDIARIES

a. Condensed balance sheets and condensed statements of comprehensive income

Cathay Life Insurance Co., Ltd.

Condensed Balance Sheets (In Thousands of New Taiwan Dollars)

Assets	December 31	
	2019	2018
Cash and cash equivalents	\$ 392,341,567	\$ 164,504,001
Receivables	78,031,177	70,860,435
Financial assets at fair value through profit or loss	1,280,235,253	1,128,633,727
Financial assets at fair value through other comprehensive income	854,336,862	921,964,604
Financial assets for hedging	548,075	216,611
Investments accounted for using the equity method	103,774,796	97,135,294
Financial assets measured at amortized cost	2,613,943,901	2,258,061,756
Other financial assets	-	1,999,406
Right-of-use assets	465,801	-
Investment property	451,323,302	427,098,786
Loans	526,098,622	594,129,442
Reinsurance assets	1,677,797	1,480,860
Property and equipment	29,653,823	29,848,752
Intangible assets	31,478,209	33,545,574
Deferred tax assets	36,056,344	38,165,870
Other assets	27,469,277	36,918,943
Separate account insurance product assets	<u>607,424,732</u>	<u>546,852,734</u>
Total	<u>\$ 7,034,859,538</u>	<u>\$ 6,351,416,795</u>
Liabilities		
Payables	\$ 25,554,039	\$ 27,799,042
Current tax liabilities	261,305	-
Financial liabilities at fair value through profit or loss	2,974,334	27,499,106
Bonds payable	80,000,000	70,000,000
Insurance liabilities	5,628,299,012	5,267,978,184
Reserve for insurance contracts with the nature of financial products	1,001,991	930,654
Reserve for foreign exchange valuation	18,000,877	17,075,289
Provisions	56,245	56,245
Lease liabilities	9,198,368	-
Deferred tax liabilities	54,951,648	28,476,919
Other liabilities	18,518,204	8,155,913
Separate account insurance product liabilities	<u>607,424,732</u>	<u>546,852,734</u>
Total liabilities	<u>6,446,240,755</u>	<u>5,994,824,086</u>
Equity		
Capital	58,515,274	57,265,274
Capital surplus	60,607,456	51,535,925
Retained earnings	364,423,657	331,036,962
Other equity	<u>105,072,396</u>	<u>(83,245,452)</u>
Total equity	<u>588,618,783</u>	<u>356,592,709</u>
Total	<u>\$ 7,034,859,538</u>	<u>\$ 6,351,416,795</u>

Cathay Life Insurance Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended	
	December 31	
	2019	2018
Operating revenue	\$ 906,585,211	\$ 799,466,715
Operating costs	(846,503,873)	(751,709,190)
Operating expenses	<u>(22,141,294)</u>	<u>(21,472,697)</u>
Operating income	37,940,044	26,284,828
Non-operating income and expenses	<u>1,663,036</u>	<u>1,310,502</u>
Profit before income tax	39,603,080	27,595,330
Income tax (expense) benefit	<u>(1,757,127)</u>	<u>2,593,990</u>
Net income	37,845,953	30,189,320
Other comprehensive income (loss)	<u>183,858,590</u>	<u>(173,807,449)</u>
Total comprehensive income (loss)	<u>\$ 221,704,543</u>	<u>\$(143,618,129)</u>
Basic earnings per share	<u>\$6.60</u>	<u>\$5.47</u>

Cathay Lujiazui Life Insurance Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Cash and cash equivalents	\$ 3,107,701	\$ 1,388,582
Receivables	804,061	832,546
Financial assets at fair value through profit or loss	36,611,278	29,502,960
Financial assets measured at amortized cost	129,651	134,286
Loans	861,990	460,032
Reinsurance assets	66,135	38,050
Property and equipment	119,310	143,339
Right-of-use assets	283,100	-
Intangible assets	30,957	38,541
Other assets	2,642,612	3,187,274
Separate account insurance product assets	<u>117,702</u>	<u>111,527</u>
Total	\$ 44,774,497	\$ 35,837,137
Liabilities		
Payables	\$ 1,644,255	\$ 1,478,177
Current tax liabilities	78,150	444,535
Insurance liabilities	21,919,965	15,555,689
Reserve for insurance contracts with the nature of financial instruments	9,930,017	8,388,059
Lease liabilities	289,529	-
Other liabilities	80,636	76,453
Separate account insurance product liabilities	<u>117,702</u>	<u>111,527</u>
Total liabilities	34,060,254	26,054,440
Equity		
Capital	13,497,155	13,497,155
Retained earnings	(2,890,408)	(3,502,959)
Other equity	<u>107,496</u>	<u>(211,499)</u>
Total equity	10,714,243	9,782,697
Total	\$ 44,774,497	\$ 35,837,137

Cathay Lujiazui Life Insurance Co., Ltd.

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 13,940,061	\$ 12,027,156
Operating costs	(11,371,423)	(9,773,603)
Operating expenses	(1,991,655)	(1,725,984)
Operating income	576,983	527,569
Non-operating income and expenses	43,505	(1,976)
Profit before income tax	620,488	525,593
Income tax expense	(7,937)	(505,910)
Net income	612,551	19,683
Other comprehensive income (loss)	318,995	(224,084)
Total comprehensive income (loss)	\$ 931,546	\$ (204,401)
Basic earnings per share	Note	Note

Note: Cathay Lujiazui Life is a limited company; therefore there is no information about its earnings per share.

Cathay Life Insurance Company (Vietnam)

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Cash and cash equivalents	\$ 1,135,950	\$ 2,903,659
Receivables	608,253	502,968
Financial assets at fair value through profit or loss	13,125,255	8,881,532
Financial assets measured at amortized cost	220,181	477,000
Loans	65,804	45,374
Property and equipment	26,167	10,781
Right-of-use assets	112,826	-
Intangible assets	4,562	388
Other assets	81,391	85,851
Total	\$ 15,380,389	\$ 12,907,553
Liabilities		
Payables	\$ 170,964	\$ 103,318
Insurance liabilities	4,272,128	3,238,790
Lease liabilities	111,342	-
Other liabilities	62	195
Total liabilities	4,554,496	3,342,303
Equity		
Capital	9,090,730	9,090,730
Retained earnings	198,367	124,494
Other equity	1,536,796	350,026
Total equity	10,825,893	9,565,250
Total	\$ 15,380,389	\$ 12,907,553

Cathay Life Insurance Company (Vietnam)

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 2,295,247	\$ 1,622,136
Operating costs	(1,498,381)	(1,445,934)
Operating expenses	(726,347)	(533,033)
Operating income (loss)	70,519	(356,831)
Non-operating income and expenses	3,354	3,899
Profit (loss) before income tax	73,873	(352,932)
Income tax expense	-	(1,016)
Net income (loss)	73,873	(353,948)
Other comprehensive income	1,186,770	273,839
 Total comprehensive loss	 \$ 1,260,643	 \$ (80,109)
 Basic earnings per share	 Note	 Note

Note: Cathay Life (Vietnam) is a limited company; therefore, there is no information about its earnings per share.

Lin Yuan (Shanghai) Real Estate Co., Ltd.

**Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)**

	December 31	
	2019	2018
Assets		
Current assets	\$ 1,289,778	\$ 1,065,285
Investment property	6,992,510	7,175,348
Property and equipment	2	4
Other non-current assets	<u>908</u>	<u>-</u>
Total	<u>\$ 8,283,198</u>	<u>\$ 8,240,637</u>
 Liabilities		
Current liabilities	\$ 1,617	\$ 1,621
Deferred tax liabilities	456,715	410,120
Other liabilities	<u>89,778</u>	<u>91,550</u>
Total liabilities	<u>548,110</u>	<u>503,291</u>
 Equity		
Capital	7,223,435	7,223,435
Retained earnings	1,164,592	890,272
Other equity	<u>(652,939)</u>	<u>(376,361)</u>
Total equity	<u>7,735,088</u>	<u>7,737,346</u>
Total	<u>\$ 8,283,198</u>	<u>\$ 8,240,637</u>

Lin Yuan (Shanghai) Real Estate Co., Ltd.

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 381,097	\$ 393,131
Operating expenses	<u>(43,843)</u>	<u>(44,346)</u>
Operating income	337,254	348,785
Non-operating income and expenses	<u>-</u>	<u>(64)</u>
Profit before income tax	337,254	348,721
Income tax expense	<u>(62,934)</u>	<u>(73,040)</u>
Net income	274,320	275,681
Other comprehensive loss	<u>(276,578)</u>	<u>(66,191)</u>
Total comprehensive (loss) income	<u>\$ (2,258)</u>	<u>\$ 209,490</u>
Basic earnings per share	Note	Note

Note: Lin Yuan is a limited company; therefore, there is no information about its earnings per share.

Cathay Woolgate Exchange Holding 1 Limited

**Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)**

	December 31	
	2019	2018
Assets		
Current assets	\$ 1,747,778	\$ 2,431,476
Financial assets measured at amortized cost	1,285,580	-
Investment property	<u>11,019,398</u>	<u>10,658,651</u>
Total	<u>\$ 14,052,756</u>	<u>\$ 13,090,127</u>
 Liabilities		
Current liabilities	<u>\$ 105,432</u>	<u>\$ 104,856</u>
Total liabilities	<u>105,432</u>	<u>104,856</u>
 Equity		
Capital	16,654,013	16,654,013
Retained earnings	1,236,211	495,404
Other equity	<u>(3,942,900)</u>	<u>(4,164,146)</u>
Total equity	<u>13,947,324</u>	<u>12,985,271</u>
Total	<u>\$ 14,052,756</u>	<u>\$ 13,090,127</u>

Cathay Woolgate Exchange Holding 1 Limited

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 891,925	\$ (285,888)
Operating expenses	<u>(733)</u>	<u>(728)</u>
Profit (loss) before income tax	891,192	(286,616)
Income tax expense	<u>(150,385)</u>	<u>(118,505)</u>
Net income (loss)	740,807	(405,121)
Other comprehensive income (loss)	<u>221,246</u>	<u>(435,729)</u>
Total comprehensive income (loss)	<u>\$ 962,053</u>	<u>\$ (840,850)</u>
Basic earnings per share	Note	Note

Note: Cathay Woolgate Exchange Holding 1 Limited is a limited company; therefore, there is no information about its earnings per share.

Cathay Woolgate Exchange Holding 2 Limited

**Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)**

	December 31	
	2019	2018
Assets		
Current assets	\$ 17,971	\$ 24,448
Financial assets measured at amortized cost	11,867	-
Investment property	<u>111,307</u>	<u>107,663</u>
Total	<u>\$ 141,145</u>	<u>\$ 132,111</u>
Liabilities		
Current liabilities	\$ 998	\$ 973
Total liabilities	<u>998</u>	<u>973</u>
Equity		
Capital	168,222	168,222
Retained earnings	11,770	4,994
Other equity	<u>(39,845)</u>	<u>(42,078)</u>
Total equity	<u>140,147</u>	<u>131,138</u>
Total	<u>\$ 141,145</u>	<u>\$ 132,111</u>

Cathay Woolgate Exchange Holding 2 Limited

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 8,989	\$ (2,890)
Operating expenses	<u>(733)</u>	<u>(729)</u>
Profit (loss) before income tax	8,256	(3,619)
Income tax expense	<u>(1,480)</u>	<u>(1,010)</u>
Net income (loss)	6,776	(4,629)
Other comprehensive income (loss)	<u>2,233</u>	<u>(4,399)</u>
Total comprehensive income (loss)	<u>\$ 9,009</u>	<u>\$ (9,028)</u>
Basic earnings per share	Note	Note

Note: Cathay Woolgate Exchange Holding 2 Limited is a limited company; therefore, there is no information about its earnings per share.

Cathay Walbrook Holding 1 Limited

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
	2019	2018
Assets		
Current assets	\$ 1,075,425	\$ 715,710
Investment property	<u>21,096,505</u>	<u>20,859,540</u>
Total	<u>\$ 22,171,930</u>	<u>\$ 21,575,250</u>
 Liabilities		
Current liabilities	\$ 168,356	\$ 97,272
Non-current liabilities	<u>12,964,577</u>	<u>12,748,557</u>
Total liabilities	<u>13,132,933</u>	<u>12,845,829</u>
 Equity		
Capital	10,189,090	10,189,090
Retained earnings	621,234	459,840
Other equity	<u>(1,771,327)</u>	<u>(1,919,509)</u>
Total equity	<u>9,038,997</u>	<u>8,729,421</u>
Total	<u>\$ 22,171,930</u>	<u>\$ 21,575,250</u>

Cathay Walbrook Holding 1 Limited

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 718,077	\$ 156,638
Operating costs	(486,503)	(474,491)
Operating expenses	<u>(756)</u>	<u>(1,492)</u>
Profit (loss) before income tax	230,818	(319,345)
Income tax expense	<u>(69,424)</u>	<u>(27,985)</u>
Net income (loss)	161,394	(347,330)
Other comprehensive income (loss)	<u>148,182</u>	<u>(292,865)</u>
Total comprehensive income (loss)	<u>\$ 309,576</u>	<u>\$ (640,195)</u>
Basic earnings per share	Note	Note

Note: Cathay Walbrook Holding 1 Limited is a limited company; therefore, there is no information about its earnings per share.

Cathay Walbrook Holding 2 Limited

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

Assets	December 31	
	2019	2018
Current assets	\$ 53,025	\$ 34,867
Investment property	<u>1,110,342</u>	<u>1,097,871</u>
Total	<u>\$ 1,163,367</u>	<u>\$ 1,132,738</u>
Liabilities		
Current liabilities	\$ 8,567	\$ 4,953
Non-current liabilities	<u>682,346</u>	<u>670,977</u>
Total liabilities	<u>690,913</u>	<u>675,930</u>
Equity		
Capital	536,268	536,268
Retained earnings	29,179	21,286
Other equity	<u>(92,993)</u>	<u>(100,746)</u>
Total equity	<u>472,454</u>	<u>456,808</u>
Total	<u>\$ 1,163,367</u>	<u>\$ 1,132,738</u>

Cathay Walbrook Holding 2 Limited

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)

	For the Years Ended	
	December 31	
	2019	2018
Operating revenue	\$ 37,759	\$ 8,244
Operating costs	(25,605)	(24,973)
Operating expenses	<u>(758)</u>	<u>(929)</u>
Profit (loss) before income tax	11,396	(17,658)
Income tax expense	<u>(3,503)</u>	<u>(1,303)</u>
Net income (loss)	7,893	(18,961)
Other comprehensive income (loss)	<u>7,753</u>	<u>(15,323)</u>
Total comprehensive income (loss)	<u>\$ 15,646</u>	<u>\$ (34,284)</u>
Basic earnings per share	Note	Note

Note: Cathay Walbrook Holding 2 Limited is a limited company; therefore, there is no information about its earnings per share.

Conning Holdings Limited
Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Current assets	\$ 5,635,194	\$ 5,211,249
Financial assets at fair value through profit or loss	1,056,370	732,967
Financial assets at fair value through other comprehensive income	4,409	3,642
Investments accounted for using the equity method	2,774,628	2,711,174
Property and equipment	770,358	555,709
Right-of-use assets	790,993	-
Intangible assets	9,833,170	10,460,456
Deferred tax assets	100,422	86,585
Other non-current assets	270,618	276,065
Total	\$ 21,236,162	\$ 20,037,847
Liabilities		
Current liabilities	\$ 3,940,693	\$ 3,589,885
Provisions	177,625	169,031
Financial liabilities for hedging	30,894	-
Lease liabilities	859,735	-
Deferred tax liabilities	385,259	382,176
Other non-current liabilities	509,103	424,208
Total liabilities	5,903,309	4,565,300
Equity		
Capital	99,343	99,343
Capital surplus	15,624,196	15,624,196
Retained earnings	448,451	151,020
Other equity	(1,392,103)	(1,047,381)
Non-controlling interests	552,966	645,369
Total equity	15,332,853	15,472,547
Total	\$ 21,236,162	\$ 20,037,847

Conning Holdings Limited

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 7,305,508	\$ 6,314,239
Operating costs	(922,886)	(715,813)
Operating expenses	<u>(5,771,884)</u>	<u>(5,368,382)</u>
Profit before income tax	610,738	230,044
Income tax expense	<u>(172,464)</u>	<u>(101,187)</u>
Net income	438,274	128,857
Other comprehensive (loss) income	<u>(344,487)</u>	<u>410,288</u>
Total comprehensive income	<u>\$ 93,787</u>	<u>\$ 539,145</u>
Basic earnings per share	Note	Note

Note: CHL is a limited company; therefore, there is no information about its earnings per share.

Cathay Century Insurance Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Cash and cash equivalents	\$ 10,501,223	\$ 10,045,082
Receivables	2,631,288	2,256,600
Financial assets at fair value through profit or loss	9,697,413	5,887,384
Financial assets at fair value through other comprehensive income	1,343,814	1,451,444
Financial assets measured at amortized cost	7,644,009	8,017,014
Investments accounted for using the equity method	2,737,905	1,684,638
Loans	229,849	236,816
Reinsurance assets	6,560,871	5,859,867
Property and equipment	166,902	115,426
Right-of-use assets	203,598	-
Intangible assets	63,203	65,246
Deferred tax assets	134,204	147,546
Other assets	<u>624,601</u>	<u>1,760,175</u>
Total	<u>\$ 42,538,880</u>	<u>\$ 37,527,238</u>
Liabilities		
Payables	\$ 3,230,479	\$ 2,556,850
Financial liabilities at fair value through profit or loss	367	50,041
Lease liabilities	204,118	-
Insurance liabilities	24,718,953	23,433,602
Provisions	432,909	440,082
Deferred tax liabilities	300,739	298,914
Other liabilities	<u>994,858</u>	<u>722,673</u>
Total liabilities	<u>29,882,423</u>	<u>27,502,162</u>
Equity		
Ordinary shares	3,057,052	3,057,052
Capital surplus	518,326	502,500
Retained earnings	9,273,299	7,278,171
Other equity	<u>(192,220)</u>	<u>(812,647)</u>
Total equity	<u>12,656,457</u>	<u>10,025,076</u>
Total	<u>\$ 42,538,880</u>	<u>\$ 37,527,238</u>

Cathay Century Insurance Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended	
	December 31	
	2019	2018
Operating revenue	\$ 20,465,597	\$ 18,370,972
Operating costs	(14,039,182)	(12,784,200)
Operating expenses	<u>(3,935,900)</u>	<u>(3,702,149)</u>
Operating profit	2,490,515	1,884,623
Non-operating income and expenses	<u>4,481</u>	<u>(25,802)</u>
Profit before income tax	2,494,996	1,858,821
Income tax expense	<u>(388,710)</u>	<u>(348,985)</u>
Net income	2,106,286	1,509,836
Other comprehensive income (loss)	<u>620,427</u>	<u>(659,438)</u>
Total comprehensive income	<u>\$ 2,726,713</u>	<u>\$ 850,398</u>
Basic earnings per share	<u>\$6.89</u>	<u>\$4.94</u>

Cathay Insurance Co., Ltd. (Vietnam)

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

Assets	December 31	
	2019	2018
Cash and cash equivalents	\$ 184,376	\$ 140,839
Receivables	144,928	102,179
Financial assets measured at amortized cost	538,189	509,226
Reinsurance assets	154,292	249,311
Property and equipment	5,180	6,759
Right-of-use assets	5,900	-
Intangible assets	4,104	149
Other assets	<u>48,069</u>	<u>38,543</u>
Total	<u>\$ 1,085,038</u>	<u>\$ 1,047,006</u>
Liabilities		
Payables	\$ 173,768	\$ 70,307
Insurance liabilities	275,828	352,073
Deferred tax liabilities	134	134
Lease liabilities	6,035	-
Other liabilities	<u>13,844</u>	<u>10,668</u>
Total liabilities	<u>469,609</u>	<u>433,182</u>
Equity		
Capital	845,585	845,585
Retained earnings	(83,292)	(97,383)
Other equity	<u>(146,864)</u>	<u>(134,378)</u>
Total equity	<u>615,429</u>	<u>613,824</u>
Total	<u>\$ 1,085,038</u>	<u>\$ 1,047,006</u>

Cathay Insurance Co., Ltd. (Vietnam)

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Operating income	\$ 260,339	\$ 236,756
Operating costs	(85,720)	(73,657)
Operating expenses	<u>(161,396)</u>	<u>(145,881)</u>
Operating income	13,223	17,218
Non-operating income and expenses	<u>871</u>	<u>2,022</u>
Profit before income tax	14,094	19,240
Income tax expense	<u>(3)</u>	<u>(26)</u>
Net income	14,091	19,214
Other comprehensive (loss) income	<u>(12,486)</u>	<u>5,052</u>
 Total comprehensive income	 <u>\$ 1,605</u>	 <u>\$ 24,266</u>
 Basic earnings per share	 Note	 Note

Note: Cathay Insurance (Vietnam) is a limited company; therefore, there is no information about its earnings per share.

Cathay United Bank Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Cash and cash equivalents	\$ 48,515,201	\$ 66,762,454
Due from the Central Bank and call loans to other banks	111,420,796	102,596,003
Financial assets at fair value through profit or loss	294,191,635	246,407,565
Financial assets at fair value through other comprehensive income	293,510,005	180,253,805
Financial assets measured at amortized cost	443,835,161	419,828,413
Securities purchased under resale agreements	9,780,448	40,462,461
Receivables	99,115,885	85,277,180
Loans	1,487,889,877	1,533,747,366
Investments accounted for using the equity method	25,617,511	25,501,114
Other financial assets	909	1,271
Property and equipment	24,554,606	24,755,100
Right-of-use assets	3,717,597	-
Investment property	857,504	1,439,686
Intangible assets	7,628,450	7,509,044
Deferred tax assets	3,860,039	1,861,573
Other assets	<u>28,401,262</u>	<u>34,418,482</u>
Total	<u>\$ 2,882,896,886</u>	<u>\$ 2,770,821,517</u>
Liabilities		
Due to the Central Bank and other banks	\$ 70,709,191	\$ 67,728,200
Financial liabilities at fair value through profit or loss	106,531,886	102,960,537
Securities sold under repurchase agreements	43,710,339	55,974,509
Payables	23,858,296	23,816,109
Current tax liabilities	241,436	87,061
Deposits and remittances	2,276,606,769	2,174,157,863
Financial debentures payable	53,900,000	55,600,000
Other financial liabilities	60,218,085	76,509,334
Provisions	3,682,517	3,389,976
Lease liabilities	3,739,711	-
Deferred tax liabilities	3,046,972	1,645,038
Other liabilities	<u>9,166,080</u>	<u>7,187,344</u>
Total liabilities	<u>2,655,411,282</u>	<u>2,569,055,971</u>
Equity		
Ordinary shares	101,658,353	91,197,623
Capital surplus	38,687,276	33,610,983
Retained earnings	81,794,948	75,580,519
Other equity	<u>5,345,027</u>	<u>1,376,421</u>
Total equity	<u>227,485,604</u>	<u>201,765,546</u>
Total	<u>\$ 2,882,896,886</u>	<u>\$ 2,770,821,517</u>

Cathay United Bank Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended December 31	
	2019	2018
Interest income	\$ 51,391,239	\$ 49,156,871
Interest expense	<u>(18,742,159)</u>	<u>(18,330,503)</u>
Net interest income	32,649,080	30,826,368
Non-interest income	<u>27,464,942</u>	<u>27,659,677</u>
Total income	60,114,022	58,486,045
Bad debt expense, commitment and guarantee liability provision	(2,871,227)	(4,341,281)
Operating expenses	<u>(31,940,142)</u>	<u>(30,118,732)</u>
Profit before income tax	25,302,653	24,026,032
Income tax expense	<u>(3,480,000)</u>	<u>(3,005,700)</u>
Net income	21,822,653	21,020,332
Other comprehensive income (loss)	<u>3,821,112</u>	<u>(917,206)</u>
Total comprehensive income	<u>\$ 25,643,765</u>	<u>\$ 20,103,126</u>
Basic earnings per share	<u>\$2.25</u>	<u>\$2.17</u>

Indovina Bank Limited
Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

Assets	December 31	
	2019	2018
Cash and cash equivalents	\$ 11,305,750	\$ 7,227,395
Due from the Central Bank and call loans to other banks	2,919,836	5,987,001
Financial assets at fair value through profit or loss	4,370,584	3,517,852
Financial assets at fair value through other comprehensive income	9,707,639	6,751,075
Financial assets measured at amortized cost	647,735	1,194,094
Securities purchased under resale agreements	2,117,861	3,711,200
Receivables	212,052	236,705
Loans	38,616,595	35,458,419
Property and equipment	805,364	358,040
Intangible assets	22,650	16,095
Deferred tax assets	-	10,969
Right-of-use assets	138,194	-
Other assets	<u>112,558</u>	<u>537,864</u>
Total	<u>\$ 70,976,818</u>	<u>\$ 65,006,709</u>
 Liabilities		
Due to the Central Bank and other banks	\$ 16,758,923	\$ 17,064,034
Payables	1,847,465	803,520
Current tax liabilities	6,873	15,349
Deposits and remittances	43,198,199	38,981,124
Provisions	2,986	15,349
Lease liabilities	115,370	-
Deferred tax liabilities	196,322	-
Other liabilities	<u>31,529</u>	<u>44,371</u>
Total liabilities	<u>62,157,667</u>	<u>56,923,747</u>
 Equity		
Capital	6,094,911	6,094,911
Retained earnings	2,212,659	1,671,965
Other equity	<u>511,581</u>	<u>316,086</u>
Total equity	<u>8,819,151</u>	<u>8,082,962</u>
Total	<u>\$ 70,976,818</u>	<u>\$ 65,006,709</u>

Indovina Bank Limited

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Interest income	\$ 4,561,969	\$ 3,659,132
Interest expense	<u>(2,403,384)</u>	<u>(1,923,480)</u>
Net interest income	2,158,585	1,735,652
Non-interest income	<u>224,217</u>	<u>129,098</u>
Total income	<u>2,382,802</u>	<u>1,864,750</u>
Bad debt expense, commitment and guarantee liability provision	47,757	(616,298)
Operating expenses	<u>(720,548)</u>	<u>(683,495)</u>
Profit before income tax	1,710,011	564,957
Income tax expense	<u>(382,490)</u>	<u>(98,920)</u>
Net income	1,327,521	466,037
Other comprehensive income	<u>195,495</u>	<u>491,832</u>
 Total comprehensive income	 <u>\$ 1,523,016</u>	 <u>\$ 957,869</u>
 Basic earnings per share	 Note	 Note

Note: Indovina Bank is a limited company; therefore, there is no information about its earnings per share.

Cathay United Bank (Cambodia) Corporation Limited

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Cash and cash equivalents	\$ 1,447,614	\$ 1,915,910
Due from the Central Bank and call loans to other banks	2,066,824	3,330,578
Financial assets at fair value through other comprehensive income	770	786
Current tax assets	10,496	-
Receivables	84,675	134,914
Loans	7,692,289	6,787,997
Property and equipment	161,191	159,357
Right-of-use assets	113,859	-
Intangible assets	51,698	63,118
Other assets	50,766	57,197
Total	\$ 11,680,182	\$ 12,449,857
Liabilities		
Due to the Central Bank and other banks	\$ 1,090,474	\$ -
Payables	114,892	127,987
Current tax liabilities	66,623	53,237
Deposits and remittances	7,084,625	8,952,862
Provisions	1,617	430
Deferred tax liabilities	7,417	9,902
Lease liabilities	117,006	-
Other liabilities	11,640	20,383
Total liabilities	8,494,294	9,164,801
Equity		
Ordinary shares	3,020,769	3,020,769
Retained earnings	191,555	223,500
Other equity	(26,436)	40,787
Total equity	3,185,888	3,285,056
Total	\$ 11,680,182	\$ 12,449,857

Cathay United Bank (Cambodia) Corporation Limited

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended December 31	
	2019	2018
Interest income	\$ 685,762	\$ 579,306
Interest expense	<u>(110,665)</u>	<u>(105,072)</u>
Net interest income	575,097	474,234
Non-interest income	<u>51,117</u>	<u>105,073</u>
Total income	<u>626,214</u>	<u>579,307</u>
Bad debt expense, commitment and guarantee liability provision	(39,429)	(63,543)
Operating expenses	<u>(344,922)</u>	<u>(303,176)</u>
Profit before income tax	241,863	212,588
Income tax expense	<u>(61,811)</u>	<u>(50,564)</u>
Net income	180,052	162,024
Other comprehensive (loss) income	<u>(67,223)</u>	<u>92,444</u>
Total comprehensive income	<u>\$ 112,829</u>	<u>\$ 254,468</u>
Basic earnings per share	<u>\$1.80</u>	<u>\$1.61</u>

Cathay United Bank (China) Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

Assets	December 31	
	2019	2018
Cash and cash equivalents	\$ 1,408,000	\$ 2,510,637
Due from the Central Bank and call loans to other banks	6,458,690	5,483,627
Financial assets at fair value through profit or loss	312,534	759,799
Financial assets at fair value through other comprehensive income	20,911,695	13,567,235
Financial assets measured at amortized cost	452,089	-
Securities purchased under resale agreements	2,397,041	438,471
Receivables	3,633,987	465,933
Loans	18,952,145	19,329,468
Property and equipment	169,334	82,396
Right-of-use assets	256,447	-
Intangible assets	132,157	107,821
Deferred tax assets	4,884	-
Other assets	60,669	47,706
Total	\$ 55,149,672	\$ 42,793,093
Liabilities		
Due to the Central Bank and other banks	\$ 17,149,161	\$ 20,372,825
Financial liabilities at fair value through profit or loss	239,053	447,241
Notes and bonds sold under repurchase agreements	4,470,114	-
Payables	3,202,724	301,361
Current tax liabilities	91,125	29,171
Deposits and remittances	8,441,516	5,569,841
Other financial liabilities	5,386,138	-
Provisions	11,231	15,672
Lease liabilities	274,294	-
Deferred tax liabilities	-	2,828
Other liabilities	41,265	58,985
Total liabilities	39,306,621	26,797,924
Equity		
Capital	14,377,562	14,377,562
Capital surplus	2,522,670	2,522,670
Retained earnings	358,821	135,424
Other equity	(1,416,002)	(1,040,487)
Total equity	15,843,051	15,995,169
Total	\$ 55,149,672	\$ 42,793,093

Cathay United Bank (China) Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)

	For the Year Ended December 31, 2019	From September 3 to December 31, 2018
Interest income	\$ 1,846,576	\$ 635,948
Interest expense	<u>(783,558)</u>	<u>(274,946)</u>
Net interest income	1,063,018	361,002
Non-interest income	<u>7,000</u>	<u>119,529</u>
Total income	1,070,018	480,531
Bad debt expense, commitment and guarantee liability provision	10,119	(10,419)
Operating expenses	<u>(800,069)</u>	<u>(234,745)</u>
Profit before income tax	280,068	235,367
Income tax expense	<u>(56,671)</u>	<u>(74,821)</u>
Net income	223,397	160,546
Other comprehensive (loss) income	<u>(375,515)</u>	<u>284,165</u>
Total comprehensive (loss) income	<u>\$ (152,118)</u>	<u>\$ 444,711</u>
Basic earnings per share	Note 2	Note 2

Note 1: CUBCN BANK has been included in the consolidated financial statements as a subsidiary since September 3, 2018.

Note 2: CUBCN BANK is a limited company; therefore, there is no information about its earnings per share.

Cathay Securities Corporation
Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Current assets	\$ 23,688,567	\$ 20,551,688
Financial assets at fair value through other comprehensive income - non-current	175	106
Investments accounted for using the equity method	2,074,725	1,923,564
Property and equipment	114,147	126,491
Right-of-use assets	99,339	-
Intangible assets	66,624	52,757
Deferred tax assets	27,842	37,894
Other non-current assets	705,031	602,950
Total	\$ 26,776,450	\$ 23,295,450
Liabilities		
Current liabilities	\$ 18,084,695	\$ 15,537,861
Deferred tax liabilities	-	1,129
Other non-current liabilities	75,105	30,471
Total liabilities	18,159,800	15,569,461
Equity		
Ordinary shares	6,000,000	5,700,086
Capital surplus	498,167	491,766
Retained earnings	1,658,864	1,258,708
Other equity	459,619	275,429
Total equity	8,616,650	7,725,989
Total	\$ 26,776,450	\$ 23,295,450

Cathay Securities Corporation

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended December 31	
	2019	2018
Revenues	\$ 3,511,143	\$ 3,170,391
Service fee expenses	(113,725)	(116,540)
Employee benefit expenses	(1,283,634)	(1,070,928)
Operating expenses	(1,336,058)	(1,434,388)
Share of the profit of associates accounted for using the equity method	8,792	(9,649)
Non-operating income and expenses	18,567	23,677
Profit before income tax	805,085	562,563
Income tax expense	(105,015)	(101,212)
Net income	700,070	461,351
Other comprehensive income	184,190	19,606
Total comprehensive income	\$ 884,260	\$ 480,957
Basic earnings per share	\$1.17	\$0.77

Cathay Futures Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Current assets	\$ 8,611,191	\$ 7,515,226
Financial assets at fair value through other comprehensive income - non-current	537,790	326,429
Property and equipment	64,209	68,306
Investment property	290,341	290,341
Right-of-use assets	4,547	-
Intangible assets	22,031	26,461
Other non-current assets	148,919	148,795
 Total	 \$ 9,679,028	 \$ 8,375,558
 Liabilities		
Current liabilities	\$ 8,235,094	\$ 7,159,143
Deferred tax liabilities	6,833	6,821
Other non-current liabilities	2,174	1,675
Total liabilities	8,244,101	7,167,639
 Equity		
Ordinary shares	667,000	667,000
Capital surplus	680	-
Retained earnings	259,583	245,263
Other equity	507,664	295,656
Total equity	1,434,927	1,207,919
 Total	 \$ 9,679,028	 \$ 8,375,558

Cathay Futures Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended December 31	
	2019	2018
Revenues	\$ 284,517	\$ 317,407
Operating expenses	<u>(320,708)</u>	<u>(331,931)</u>
Operating loss	(36,191)	(14,524)
Non-operating income and expenses	<u>101,998</u>	<u>82,637</u>
Profit before income tax	65,807	68,113
Income tax expense	<u>(9,776)</u>	<u>(7,494)</u>
Net income	56,031	60,619
Other comprehensive income (loss)	<u>212,008</u>	<u>(1,911)</u>
 Total comprehensive income	 <u>\$ 268,039</u>	 <u>\$ 58,708</u>
 Basic earnings per share	 <u>\$0.84</u>	 <u>\$0.91</u>

Cathay Securities (Hong Kong) Limited

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
	2019	2018
Assets		
Current assets	\$ 2,581,950	\$ 1,334,030
Property and equipment	11,026	17,811
Intangible assets	1,901	1,937
Other non-current assets	<u>81,026</u>	<u>35,216</u>
 Total	 <u>\$ 2,675,903</u>	 <u>\$ 1,388,994</u>
 Liabilities		
Current liabilities	\$ 2,029,395	\$ 691,159
Non-current liabilities	<u>6,576</u>	<u>-</u>
Total liabilities	<u>2,035,971</u>	<u>691,159</u>
 Equity		
Capital	1,108,244	1,108,244
Retained earnings	(420,389)	(373,892)
Other equity	<u>(47,923)</u>	<u>(36,517)</u>
Total equity	<u>639,932</u>	<u>697,835</u>
 Total	 <u>\$ 2,675,903</u>	 <u>\$ 1,388,994</u>

Cathay Securities (Hong Kong) Limited

**Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars)**

	For the Years Ended December 31	
	2019	2018
Revenues	\$ 101,419	\$ 71,274
Service fee expenses	(3,168)	(4,028)
Employee benefit expenses	(47,467)	(42,377)
Operating expenses	(103,780)	(97,238)
Non-operating income and expenses	<u>6,499</u>	<u>3,605</u>
Loss before income tax	(46,497)	(68,764)
Income tax expense	<u>-</u>	<u>-</u>
Net loss	(46,497)	(68,764)
Other comprehensive (loss) income	<u>(11,406)</u>	<u>19,714</u>
 Total comprehensive loss	 <u>\$ (57,903)</u>	 <u>\$ (49,050)</u>
 Basic earnings per share	 Note	 Note

Note: Cathay Securities (Hong Kong) is a limited company, therefore there is no information about earnings per share.

Cathay Securities Investment Trust Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
Assets	2019	2018
Current assets	\$ 2,669,528	\$ 2,265,450
Financial assets at fair value through other comprehensive income - non-current	9,138	9,318
Investments accounted for using the equity method	458,614	506,230
Property and equipment	43,078	45,880
Right-of-use assets	5,428	-
Intangible assets	22,648	13,735
Deferred tax assets	23,543	23,303
Other non-current assets	254,839	304,793
Total	\$ 3,486,816	\$ 3,168,709
Liabilities		
Current liabilities	\$ 660,093	\$ 471,774
Non-current liabilities	128,869	137,156
Total liabilities	788,962	608,930
Equity		
Ordinary shares	1,500,000	1,500,000
Capital surplus	16,453	13,908
Retained earnings	1,270,570	1,116,659
Other equity	(89,169)	(70,788)
Total equity	2,697,854	2,559,779
Total	\$ 3,486,816	\$ 3,168,709

Cathay Securities Investment Trust Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 2,672,983	\$ 2,411,578
Operating expenses	<u>(1,791,623)</u>	<u>(1,549,993)</u>
Operating profit	881,360	861,585
Non-operating income and expenses	<u>(1,798)</u>	<u>(48,656)</u>
Profit before income tax	879,562	812,929
Income tax expense	<u>(178,151)</u>	<u>(171,152)</u>
Net income	701,411	641,777
Other comprehensive (loss) income	<u>(18,381)</u>	<u>(26,522)</u>
 Total comprehensive income	 <u>\$ 683,030</u>	 <u>\$ 615,255</u>
 Basic earnings per share	 <u>\$4.68</u>	 <u>\$4.28</u>

Cathay Private Equity Co., Ltd.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
	2019	2018
Assets		
Current assets	\$ 31,119	\$ 48,145
Other non-current assets	<u>10,106</u>	<u>626</u>
 Total	 <u>\$ 41,225</u>	 <u>\$ 48,771</u>
 Liabilities		
Current liabilities	<u>\$ 3,669</u>	<u>\$ 611</u>
Total liabilities	<u>3,669</u>	<u>611</u>
 Equity		
Ordinary shares	50,000	50,000
Capital surplus	63	-
Retained earnings	<u>(12,507)</u>	<u>(1,840)</u>
Total equity	<u>37,556</u>	<u>48,160</u>
 Total	 <u>\$ 41,225</u>	 <u>\$ 48,771</u>

Cathay Private Equity Co., Ltd.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Loss Per Share)

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 3,086	\$ -
Operating expenses	<u>(15,703)</u>	<u>(2,212)</u>
Operating loss	(12,617)	(2,212)
Non-operating income and expenses	<u>(570)</u>	<u>39</u>
Loss before income tax	(13,187)	(2,173)
Income tax benefit	<u>2,520</u>	<u>435</u>
Net loss	<u>(10,667)</u>	<u>(1,738)</u>
Total comprehensive loss	<u>\$ (10,667)</u>	<u>\$ (1,738)</u>
Basic loss per share	<u>\$ (2.13)</u>	<u>\$ (0.35)</u>

Cathay Venture Inc.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31	
	2019	2018
Assets		
Current assets	\$ 1,470,770	\$ 239,721
Financial assets at fair value through profit or loss - non-current	3,824,954	3,229,147
Investments accounted for using the equity method	309,723	279,048
Property and equipment	3,612	3,842
Right-of-use assets	16,231	-
Deferred tax assets	45,778	51,627
Other non-current assets	<u>1,126</u>	<u>1,126</u>
Total	<u>\$ 5,672,194</u>	<u>\$ 3,804,511</u>
Liabilities		
Current liabilities	\$ 42,946	\$ 62,904
Non-current liabilities	<u>17,793</u>	<u>6,076</u>
Total liabilities	<u>60,739</u>	<u>68,980</u>
Equity		
Ordinary shares	4,565,146	3,359,087
Capital surplus	576,667	128,625
Retained earnings	469,567	247,913
Other equity	<u>75</u>	<u>(94)</u>
Total equity	<u>5,611,455</u>	<u>3,735,531</u>
Total	<u>\$ 5,672,194</u>	<u>\$ 3,804,511</u>

Cathay Venture Inc.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	For the Years Ended December 31	
	2019	2018
Operating revenue	\$ 339,664	\$ 230,565
Operating costs	(30,919)	(32,237)
Operating expenses	(16,140)	(14,028)
Non-operating income and expenses	<u>(97)</u>	<u>(10,322)</u>
Profit before income tax	292,508	173,978
Income tax benefit	<u>15,509</u>	<u>13,329</u>
Net income	308,017	187,307
Other comprehensive income	<u>169</u>	<u>214</u>
 Total comprehensive income	 <u>\$ 308,186</u>	 <u>\$ 187,521</u>
 Basic earnings per share	 <u>\$0.77</u>	 <u>\$0.54</u>

Cathay Investment Inc.

Condensed Balance Sheets
(In Thousands of New Taiwan Dollars)

	December 31, 2019
Assets	
Current assets	\$ 34,948
Other non-current assets	<u>1,040</u>
 Total	 <u>\$ 35,988</u>
 Liabilities	
Current liabilities	\$ 349
Non-current liabilities	<u>681</u>
Total liabilities	<u>1,030</u>
 Equity	
Share capital - ordinary shares	35,000
Retained earnings	<u>(42)</u>
Total equity	<u>34,958</u>
 Total	 <u>\$ 35,988</u>

Cathay Investment Inc.

Condensed Statements of Comprehensive Income
(In Thousands of New Taiwan Dollars, Except Loss Per Share)

	From November 5 to December 31, 2019
Operating revenue	\$ -
Operating costs	-
Operating expenses	(54)
Non-operating income and expenses	<u>2</u>
Loss before income tax	(52)
Income tax benefit	<u>10</u>
Net loss	(42)
Other comprehensive income	<u>-</u>
 Total comprehensive loss	 <u>\$ (42)</u>
 Basic loss per share	 <u>\$ (0.01)</u>

Note: Cathay Investment has been included in the consolidated financial statements as a subsidiary since November 5, 2019.

- b. The profitability of the Company, the Group and its insurance subsidiaries, banking subsidiaries and security subsidiaries.

For the year ended December 31, 2019

Unit: %

	Return on Assets		Return on Equity		Net Income
	Before Tax	After Tax	Before Tax	After Tax	Ratio
The Group	0.73	0.66	10.76	9.74	11.49
The Company	8.67	8.68	9.71	9.72	97.97
Cathay Life	0.59	0.57	8.38	8.01	4.17
Cathay Century	6.22	5.25	22.00	18.57	10.29
Cathay United Bank	0.89	0.77	11.79	10.17	36.30
Cathay Securities	3.21	2.79	9.85	8.57	19.94

For the year ended December 31, 2018

Unit: %

	Return on Assets		Return on Equity		Net Income
	Before Tax	After Tax	Before Tax	After Tax	Ratio
The Group	0.61	0.57	9.47	8.83	10.95
The Company	8.29	8.04	9.19	8.91	95.01
Cathay Life	0.44	0.48	6.69	7.32	3.78
Cathay Century	4.93	4.00	18.09	14.69	8.22
Cathay United Bank	0.88	0.77	12.53	10.96	35.94
Cathay Securities	2.20	1.80	7.52	6.16	14.55

Note: Net income ratio = Net income/Net revenue

33. BUSINESS OR TRADING ACTIVITIES WITHIN SUBSIDIARIES

a. Integration of business activities

In order to improve the Group's competitiveness and enhance its operation synergy, the Company integrates various services, such as banking, insurance, and securities, and builds up a full-functioning financial platform; with 631 operating location all over Taiwan and about 30 thousand professional salesperson, the Company provides comprehensive financial planning and one-stop shopping services to its clients.

b. Cross utilization of information

To provide diversified financial commodities and services to clients, the Company has referred to the Financial Holding Company Act, Personal Data Protection Act, Regulations for Co-selling Activities among Subsidiaries of Financial Holding Company, Self-discipline Standards for Financial Holding Company and its Subsidiaries and other related regulations issued by the FSC, to stipulate the Regulations for Co-selling Activities among Subsidiaries of Cathay Financial Holdings, contracts for Co-selling Activities among Subsidiaries of Cathay Financial Holdings, Non-disclosure Agreement of Business Information and Customers' Personal Data among Subsidiary of Cathay Financial Holdings, Joint Statement for Security Measures of Cathay Financial Holdings and its Subsidiaries, Operation Rules of Cathay Financial Holdings Marketing Planning Division for Monitoring Subsidiaries' Selling Activities, and Guidelines of Cathay Financial Holdings' Data Storage Management; by providing customers with exit mechanism, the Company strives to cross-utilize clients' personal data under a legal and safe environment and provide comprehensive and integrated financial commodities and services to clients.

c. Business facilities and locations

In order to achieve the target of providing comprehensive financial services by one-stop shopping, the Group keeps on expanding co-selling activities to the extent allowed by laws and regulations.

- 1) Cathay United Bank is engaged in co-selling activities for securities business through its 165 branches. Cathay United Bank has been engaged in insurance agency business since April 29, 2016 and promoted life insurance products in its 165 branches.
- 2) Cathay Life is engaged in co-selling activities for banking and property and casualty insurance businesses in its service units (75 locations).
- 3) Cathay Securities sets up co-selling offices in Cathay Life's 32 branches (Zhongxiao and others). As permitted by laws, to facilitate account opening services through sharing business facilities and locations.

d. Allocation of revenues, costs, expenses, profits and losses

Revenue, costs, expenses, profits or losses arising from integrated business activities among the Company and its subsidiaries are allocated to each subsidiary based on the related business features or other reasonable allocation methods.

34. SEGMENT INFORMATION

a. General information on operating segments

The Group separated operating segments based on the nature of business and classified them into five reportable segments for management purposes:

- 1) **Banking operating segment:** The banking operating segment is engaged in permitted businesses of commercial banks provided by the Banking Act of the Republic of China, foreign exchange business, guarantee business, advisory service of foreign currency investments, trust business, offshore banking units and other financial business of investments from returning expatriates.
- 2) **Life insurance operating segments:** The life insurance operating segment is engaged in interest-sensitive sales of traditional insurance, investment-linked insurance and annuity insurance and providing financial planning services and policy loan services.
- 3) **Property insurance operating segment:** The property insurance operating segment is engaged in fire insurance, marine insurance, land and air insurance, liability insurance, financial guarantee insurance, reinsurance and other insurance.
- 4) **Securities operating segment:** The securities operating segment is engaged in securities brokerage, discretionary and underwriting and is dedicated to capabilities of research development and design to provide security financial services with a variety of new financial products.
- 5) **Other operating segment:** Such segment includes assets, liabilities, revenue and expenditures which can not be directly attributable to or reasonably allocated to certain operating segments.

To determine allocation of resources and performance measure, the management monitors results of each operating segment. The accounting policies for each operating segment are the same as those stated in Note 4 the summary of significant accounting policies.

b. Information of reporting segment income was as follows:

For the year ended December 31, 2019

Location	Banking Division	Life Insurance Division	Property Insurance Division	Securities Division	Other Division	Total
Net interest income (loss)	\$ 36,635,646	\$ 159,501,497	\$ 533,026	\$ 134,866	\$ (438,530)	\$ 196,366,505
Net income and gains other than interest income	16,892,469	323,102,006	6,204,611	3,161,725	10,159,882	359,520,693
Profit from operations	53,528,115	482,603,503	6,737,637	3,296,591	9,721,352	555,887,198
Provision for bad debt, commitments and guaranteed liability reserve	(2,852,780)	647,389	-	(2)	-	(2,205,393)
Net changes in insurance liability reserve	-	(393,679,154)	(395,043)	-	-	(394,074,197)
Operating expenses	(32,716,674)	(42,175,456)	(3,156,347)	(2,361,238)	(8,640,719)	(89,050,434)
Profit (loss) from continuing operations before taxes	17,958,661	47,396,282	3,186,247	935,351	1,080,633	70,557,174
Income tax (expense) benefit	(3,987,343)	(1,662,000)	(388,792)	(105,117)	(554,618)	(6,697,870)
Net income from continuing operations	13,971,318	45,734,282	2,797,455	830,234	526,015	63,859,304

For the year ended December 31, 2018

Location	Banking Division	Life Insurance Division	Property Insurance Division	Securities Division	Other Division	Total
Net interest income (loss)	\$ 33,538,751	\$ 146,668,694	\$ 544,505	\$ 169,704	\$ (293,435)	\$ 180,628,219
Net income and gains other than interest income	18,220,102	259,033,019	5,341,295	2,743,592	7,345,660	292,683,668
Profit from operations	51,758,853	405,701,713	5,885,800	2,913,296	7,052,225	473,311,887
Provision for bad debt, commitments and guaranteed liability reserve	(5,031,541)	443,350	-	(1,056)	(9,839)	(4,599,086)
Net changes in insurance liability reserve	-	(333,715,568)	(406,370)	-	-	(334,121,938)
Operating expenses	(30,212,098)	(35,753,800)	(2,943,849)	(2,284,372)	(7,797,970)	(78,992,089)
Profit (loss) from continuing operations before taxes	16,515,214	36,675,695	2,535,581	627,868	(755,584)	55,598,774
Income tax (expense) benefit	(3,231,103)	1,986,759	(348,971)	(101,212)	(2,081,991)	(3,776,518)
Net income from continuing operations	13,284,111	38,662,454	2,186,610	526,656	(2,837,575)	51,822,256

Note: All intercompany transactions among the operating segments have been eliminated.

c. Geographical information

	Revenue from External Customers	
	For the Years Ended December 31	
	2019	2018
Taiwan	\$ 43,906,315	\$ 47,681,807
Other countries	<u>152,460,190</u>	<u>132,946,412</u>
	<u>\$ 196,366,505</u>	<u>\$ 180,628,219</u>

Note 1: Revenue is categorized based on the countries where the customers are located.

Note 2: There was no individual external customer whose revenue accounted for 10% or more of the Group's revenue.

35. RISK MANAGEMENT FOR INSURANCE CONTRACTS AND FINANCIAL INSTRUMENTS

a. Cathay Life and its subsidiaries

1) Risk management objectives, policies, procedures and methods:

a) Objectives of risk management

Cathay Life's risk management policy aims to promote operational efficiency, ensure asset safety, increase shareholders' value, and comply with applicable domestic and overseas laws and regulations for the purpose of steady growth and sustainable management.

- b) Framework of risk management, organizational structure and responsibilities
- i. The board of directors
 - i) The board of directors should establish appropriate risk management framework and culture, ratify appropriate risk management policy and review it regularly and allocate resources in the most effective manner.
 - ii) The board of directors and senior management should consistently promote, execute risk management and keep the consistency of the operational objectives of Cathay Life as well as operational strategies and operations management.
 - iii) The board of directors should be aware of the risks arising from operations, ensure the effectiveness of risk management and bear the ultimate responsibility for overall risk management.
 - iv) The board of directors should delegate authority to risk management department to deal with violation to risk limits by other departments.
 - ii. Risk management committee
 - i) The committee should propose the risk management policies, framework and organizational functions and establish quantitative and qualitative risk management standards. The committee is also responsible for reporting the results of implementing risk management to the board of directors regularly and making necessary suggestions for improvement.
 - ii) The committee should execute the risk management policies set by the board of directors and review the development, build-up and performance of overall management mechanisms regularly.
 - iii) The committee should assist and monitor the risk management activities.
 - iv) The committee should arrange the risk category, risk limit allocation and risk taking according to the changes in environment.
 - v) The committee should enhance cross-department interaction and communication.
 - iii. Chief risk officer
 - i) The chief risk officer should maintain independence and should not concurrently play a business or financial role nor hold a position in any profit center of Cathay Life.
 - ii) The chief risk officer should be able to access any business information which may have an impact on risk overview of Cathay Life.
 - iii) The chief risk officer should be in charge of overall risk management of Cathay Life.
 - iv) The chief risk officer should participate in Cathay Life's important decision-making process and, as appropriate, provide opinions from a risk management perspective.
 - iv. Risk management department
 - i) The department is responsible for operational affairs such as monitoring, measuring and evaluating daily risks, which should be performed independently to business units.

ii) The department should perform the following functions with regard to different business activities:

- Propose and execute the risk management policies set by the board of directors.
- Propose the risk limits based on risk appetite.
- Summarize the risk information provided by each department, negotiate and communicate with each department to facilitate the execution of the policies and the risk limits.
- Regularly present risk management reports.
- Regularly review the risk limits of each business unit and deal with the violation of the business units authorized by the board of directors.
- Assist to execute stress testing.
- Execute back testing if necessary.
- Other risk management related issues.

v. Business units

i) Each business unit should assign a risk management coordinator to assist in execution of the risk management of each business unit.

ii) The duties of the risk management include the following:

- Identify and measure risks and report risk exposures and potential impacts on time.
- Regularly review the risks and their limits and, in case of any excess of risk limits, report the excess of risk limits along with the corresponding actions.
- Assist to develop the risk model and ensure that risk measurement, application of the model and the parameter settings are reasonable and consistent.
- Ensure that internal control procedures are executed effectively to comply with applicable rules and the risk management policies.
- Assist to collect data related to operational risk.
- Manager of a business unit is responsible for daily risk management and risk reporting of the unit, if necessary, and takes necessary actions to mitigate such risks.
- Manager of a business unit should supervise the unit to submit risk management information regularly to the risk management department.

vi. Audit department

The department is responsible for the audit of each department's implementation status of risk management pursuant to the applicable laws and regulations and related rules and guidance of Cathay Life.

Each subsidiary's risk management department or related unit should develop risk management policies based on the nature of its business and needs and report to Cathay Life's risk management committee for future reference.

c) Range and nature of risk assessment or risk reporting

Cathay Life's risk management procedures include risk identification, risk measurement, risk control and risk reporting. Cathay life sets its management standards for market risk, credit risk, country risk, liquidity risk, operational risk, insurance risk, asset and liability matching risk, and capital adequacy, as well as for information security and personal data management. Cathay life also develops methods of assessment and evaluation, monitors its risks and regularly provides the risk management reports.

i. Market risk

Market risk is the risk of losses in value of Cathay Life's financial assets arising from the changes in market prices of financial instruments. Cathay life adopts measurement indicators for market risk based on VaR and reviews regularly. In addition, Cathay life performs back testing to ensure the accuracy of the market risk model regularly. Furthermore, Cathay life applies scenario analysis and stress testing to evaluate the possible impacts on asset portfolio due to significant domestic and/or international events regularly. In response to the implementation of foreign exchange valuation reserve, Cathay life determines the ceiling of foreign exchange risk, implements warning system and monitors foreign exchange risk regularly.

ii. Credit risk

Credit risk is the risk of losses on Cathay Life's rights due to the event that the counterparty or debtor does not perform the contractual obligation. Cathay life applies credit rating, credit concentration and VaR of credit as measurement indicators which are reviewed regularly. Furthermore, Cathay life applies scenario analysis and stress testing to evaluate the possible impacts on asset portfolio due to significant domestic and/or international events regularly.

iii. Country risk

Country risk is the risk that Cathay life suffers losses from loans, financial investments and long-term investments in a specific country as a result of market price fluctuation or default of security issuers or debtors stemming from local political and/or economic situations. Cathay life adopts measurement indicators for country risk, which are calculated by total investments in a certain country or specific area divided by total foreign investments or adjusted net assets. The Company reviews and adjusts the indicator on a regular basis.

iv. Liquidity risk

Liquidity risk is comprised of funding liquidity risk and market liquidity risk. Funding liquidity risk is the risk that Cathay Life is not capable of performing their matured commitment because it fails to realize assets or obtain sufficient funds. Cathay Life has established measurement indicators of funding liquidity risk and reviews the indicators regularly. In addition, a funding reporting system has been established under which the risk management department manages funding liquidity based on the information provided by relevant business units. Furthermore, the cash flow analysis model has been applied and monitored regularly, and improvements should be made once unusual events occur. The cash flow analysis model is also applied to set the annual assets allocation plan to maintain appropriate liquidity of assets. Market liquidity risk is the risk of significant changes in fair values when Cathay Life sells or offsets its positions during a market disorder or a lack of

sufficient market depth. Cathay Life has established a liquidity threshold for investment positions. Each investment department evaluates the market trading volumes and adequacy of positions held according to the features and objectives of its investment positions.

v. Operational risk

Operational risk is the risk of losses caused by misconducts or errors of internal process, personnel, and system by external issues. Operational risk includes legal risk but excludes strategic risk and reputation risk. Cathay Life has set the standard operating procedures based on the nature of the business and established reporting system for loss events of operation risk as well as to collect and manage information with respect to losses resulting from operational risk. To maintain Cathay Life's operation and ability to provide customer services while minimizing the losses under a major crisis, Cathay life has established emergency handling mechanism and information system damage responses.

vi. Insurance risk

Cathay Life assumes certain risks which is transferred from policyholders after the collection of premiums from policyholders, and Cathay Life may bear losses due to unexpected changes when paying claims and related expenses. This risk is involved with policy design and pricing risk, underwriting risk, reinsurance risk, catastrophe risk, claim risk and reserve-related risk.

vii. Asset and liability matching risk

This risk resulted from the differences between the changes in values of assets and those of liabilities. Cathay life measures the risk with capital costs, duration, cash flow management and scenario analysis.

viii. Risk-based capital (RBC) ratio

The RBC ratio is the total capital of Cathay life divided by its risk-based capital, as regulated under the Insurance Act and the Regulations Governing Capital Adequacy of Insurance Companies. Cathay life regards such ratio as a management indicator for capital adequacy.

ix. Risk of information security and personal data management

The risk of information security and personal data management refers to the damage resulted from confidentiality, accuracy and availability of information asset, or damage caused by stealing, tampering, damaging, losing or leaking personal data. Cathay Life has a security and personal data management policy to reduce the impact of information security incidents and personal data damages.

d) Process of assuming, measuring, monitoring and controlling risks and the underwriting policies to determine the proper risk classification and premium levels

i. The process of assuming, measuring, monitoring and controlling insurance risks

i) Stipulate Cathay Life's insurance risk management standards including the definitions and range of risks, management structure, risk management indicators and other risk management measures.

ii) Establish methods to evaluate insurance risks.

- iii) Regularly provide the insurance risk management report as a reference for monitoring insurance risk and for developing insurance risk management strategies.
 - iv) Regularly summarize the results of implementing risk management policies and report to the risk management committee. When an exceptional risk event occurs, the related departments should propose corresponding solutions to the risk management committee of Cathay life and that of the Company.
 - ii. The underwriting policies to determine proper risk classification and premium levels
 - i) Underwriters should comply with the rules of financial underwriting. For underwriting a new policy of an existing policyholders, the underwriter should consider previous information as well as the exceptional cases from the insurance notification database and total insured amounts in insurance enterprises, to check if the number of policies, the insured amounts and the premiums are reasonable and affordable according to the policyholder's financial resources and socioeconomic status and to determine if the policyholder is capable of paying renewal premiums.
 - ii) Cathay life has set up an underwriting team to deal with controversial cases with regard to new contracts and to interpret relevant underwriting standards
 - iii) Cathay life has set up a special panel for large policies to enhance risk management over large policies and avoid adverse selection and moral hazard.
- e) The scope of insurance risk assessment and management from a company-wide perspective
 - i. Insurance risk assessment covers the following risks:
 - i) Product design and pricing risk: The risk arises from improper design of products, inconsistent terms and conditions and pricing or unexpected changes.
 - ii) Underwriting risk: Unexpected losses arise from solicitation activities, underwriting and approval activities, other expenditure activities, etc.
 - iii) Reinsurance risk: This risk occurs when a company fails to reinsure the excess risk over the limits or a reinsurer fails to fulfill its obligations such that premiums, claims or expenses cannot be reimbursed.
 - iv) Catastrophe risk: This risk arises from accidents which lead to considerable losses in one or more categories of insurance and the aggregate amount of such losses is huge enough to affect Cathay Life's credit rating or solvency.
 - v) Claim risk: This risk arises from mishandling claims.
 - vi) Reserve-related risk: This risk occurs when Cathay life does not have sufficient reserves to fulfill its obligations owing to underestimation of its liabilities.
 - ii. The scope of management of insurance risk
 - i) Develop a risk control framework of Cathay Life's insurance risk to empower related development to execute risk management.
 - ii) Establish Cathay Life's insurance risk management standards including the definitions and types of risks, management structure, risk management indicators and other risk management measures.

- iii) Develop related response in consideration of Cathay Life's growth strategy and changes in the domestic and global economic and financial environments.
 - iv) Determine methods to measure insurance risks.
 - v) Regularly provide the insurance risk management report as a reference for monitoring insurance risk and a developing insurance risk management strategies.
 - vi) Other insurance risk management issues.
- f) Method to limit or transfer insurance risk exposure and to avoid inappropriate concentration risk

Cathay Life limits or transfers insurance risk exposure and avoids inappropriate concentration risk mainly through the reinsurance management plan which is developed considering Cathay Life's risk taking ability, risk profiling and legal issues factors to determine whether to retain or cede a policy. In order to maintain safety of risk transfer and to control the risk of reinsurance transactions, Cathay life has established reinsurer selection standards.

- g) Asset/liability management
- i. Cathay Life established an asset/liability management committee to improve the asset/liability management structure, ensure the application of the asset/liability management policy and review the performance from strategy and practice aspect on a regular basis to reduce all types of risks Cathay life faces.
 - ii. Authorized departments review the measurement of asset/liability matching risk and report to the asset/liability management committee regularly and results are also reported to the risk management committee of Cathay Life. Furthermore, the annual report is delivered to the risk management committee of the Company.
 - iii. When an exceptional situation occurs, the related departments should propose reactions to the asset/liability management committee, the risk management committee of Cathay life and that of the Company.
- h) The procedures to manage, monitor and control a special event for which the Company is committed to assuming additional liabilities or funding addition capital

Pursuant to the applicable laws and regulations, Cathay Life's RBC ratio should be higher than a certain number. In order to enhance Cathay Life's capital management and to maintain a proper RBC ratio, Cathay life has established a set of capital adequacy management standards as follows:

- i. Capital adequacy management
 - i) Regularly provide capital adequacy management reports and analysis to the finance department of the Company
 - ii) Regularly provide the capital adequacy management analysis report to the risk management committee.
 - iii) Conduct simulation analysis to figure out the use of funding, the changes of the financial environment or the amendments to applicable laws and regulations affecting RBC ratio.
 - iv) Regularly review RBC ratio and related control standards to ensure a solid capital adequacy management.

ii. Exception management process

When RBC ratio exceeds the internal risk control criteria or other exceptions occur, Cathay life is required to notify the risk management department and the finance department and the risk management department of Cathay Financial Holdings together with the capital adequacy analysis report and actions.

i) Policies for hedge or mitigation of risk and monitoring procedures on continuous effectiveness of hedging instruments

i. Cathay life enters into derivative transactions to reduce market risk and credit risk of the asset positions including stock index options, index futures, interest rate futures, IRS, forwards, CCS and credit default swaps for hedging the equity risk, interest rate risk, cash flow risk, foreign exchange risk and credit risk from Cathay Life's investments; however, the derivatives not qualified for hedge accounting are classified as financial assets at FVTPL.

ii. Hedging instruments against risks and implementation are developed preliminarily in consideration of the risk taking abilities. Cathay life executes hedge and exercises authorized financial instruments to adjust the overall risk level to the tolerance levels based on the market dynamics, business strategies, the characteristics of products and risk management policies.

iii. Cathay life assesses and reviews the effectiveness of the hedge instruments and hedged items regularly. The assessment report is issued and forwarded to the management which is delegated by the board of directors; meanwhile, a copy of the assessment report is delivered to the audit department for future reference.

j) The policies and procedures against the concentration of credit and investment risks

Considering the credit risk factors, Cathay life has set up the measurement indicators for credit and investment positions by business groups, industries and countries. When the limits of credit and investments are reached or breached as a result of any increase of the credit line or investment, Cathay life shall not grant loans or make investment in general. However, if Cathay life has to undertake the business under certain circumstances, Cathay life shall follow the internal regulations, including but not limited to "Guidelines for sovereign risk management", "Guidelines for securities investment risk limit" and "Guidelines for credit and investment risk management on conglomerate and other juristic person institute".

2) Information of insurance risk

a) Sensitivity of insurance risk - insurance contracts and financial instruments with discretionary participation features

i. Cathay Life

For the Year Ended December 31, 2019					
	Scenarios	Changes in Income Before Tax		Changes in Equity	
Life table/morbidity	×1.05 (×0.95)	Decrease (increase)	\$ 2,886,583	Decrease (increase)	\$ 2,309,267
Expense	×1.05 (×0.95)	Decrease (increase)	3,493,065	Decrease (increase)	2,794,452
Surrender rate	×1.05 (×0.95)	Increase (decrease)	624,863	Increase (decrease)	499,891
Rate of return	+0.1%	Increase	5,701,927	Increase	4,561,541
Rate of return	-0.1%	Decrease	5,707,518	Decrease	4,566,014

For the Year Ended December 31, 2018					
	Scenarios	Changes in Income Before Tax		Changes in Equity	
Life table/morbidity	×1.05 (×0.95)	Decrease (increase)	\$ 2,706,747	Decrease (increase)	\$ 2,165,397
Expense	×1.05 (×0.95)	Decrease (increase)	2,909,035	Decrease (increase)	2,327,228
Surrender rate	×1.05 (×0.95)	Increase (decrease)	455,191	Increase (decrease)	364,153
Rate of return	+0.1%	Increase	5,289,255	Increase	4,231,404
Rate of return	-0.1%	Decrease	5,294,445	Decrease	4,235,556

ii. Cathay Lujiazui Life

For the Year Ended December 31, 2019					
	Scenarios	Changes in Income Before Tax		Changes in Equity	
Life table/morbidity	×1.10 (×0.90)	Decrease (increase)	\$ 156,997	Decrease (increase)	\$ 117,748
Expense	×1.05 (×0.95)	Decrease (increase)	86,067	Decrease (increase)	64,550
Surrender rate	×1.10 (×0.90)	Increase (decrease)	93,335	Increase (decrease)	70,001
Rate of return	+0.25%	Increase	765,598	Increase	574,199
Rate of return	-0.25%	Decrease	840,422	Decrease	630,317

For the Year Ended December 31, 2018					
	Scenarios	Changes in Income Before Tax		Changes in Equity	
Life table/morbidity	×1.10 (×0.90)	Decrease (increase)	\$ 156,537	Decrease (increase)	\$ 117,402
Expense	×1.05 (×0.95)	Decrease (increase)	81,505	Decrease (increase)	61,128
Surrender rate	×1.10 (×0.90)	Increase (decrease)	103,360	Increase (decrease)	77,520
Rate of return	+0.25%	Increase	569,098	Increase	426,824
Rate of return	-0.25%	Decrease	624,721	Decrease	468,541

iii. Cathay Life (Vietnam)

For the Year Ended December 31, 2019					
	Scenarios	Changes in Income Before Tax		Changes in Equity	
Life table/morbidity	×1.05 (×0.95)	Decrease (increase)	\$ 1,330	Decrease (increase)	\$ 1,064
Expense	×1.05 (×0.95)	Decrease (increase)	47,212	Decrease (increase)	37,770
Surrender rate	×1.10 (×0.95)	Increase (decrease)	8,291	Increase (decrease)	6,633
Rate of return	+0.1%	Increase	13,402	Increase	10,722
Rate of return	-0.1%	Decrease	13,415	Decrease	10,732

For the Year Ended December 31, 2018					
	Scenarios	Changes in Income Before Tax		Changes in Equity	
Life table/morbidity	×1.05 (×0.95)	Decrease (increase)	\$ 742	Decrease (increase)	\$ 594
Expense	×1.05 (×0.95)	Decrease (increase)	33,710	Decrease (increase)	26,968
Surrender rate	×1.10 (×0.95)	Increase (decrease)	7,768	Increase (decrease)	6,214
Rate of return	+0.1%	Increase	9,699	Increase	7,759
Rate of return	-0.1%	Decrease	9,709	Decrease	7,767

i) Changes in income before tax listed above referred to the effects of income before tax for the years ended December 31, 2019 and 2018. The changes in equity of Cathay Life, Cathay Lujiazui Life and Cathay Life (Vietnam) were assumed that the income tax was calculated at rates of 20%, 25% and 20% of pre-tax income, respectively.

ii) As an increase (decrease) of 0.1% in discount rates is applied to the liability adequacy test, the result of the test is still adequate for Cathay life and there is no impact on income before tax and equity. However, if the discount rate keeps declining significantly, income before tax and equity may be affected.

iii) Sensitivity test

- Mortality/morbidity sensitivity test is executed by multiplying the mortality rate, and the morbidity rate of injury insurance by changes in scenarios, resulting in the corresponding changes in income before tax.
- Expense sensitivity test is executed by multiplying all expense items listed in statements of comprehensive income (Note 1) by changes in scenarios, resulting in the corresponding changes in income before tax.

- Surrender rate sensitivity test is executed by multiplying surrender rate by changes in scenarios, resulting in the corresponding changes in income before tax.
- Rate of return sensitivity test is executed by adjusting the rate of return (Note 2) to increase (decrease) by changes in scenarios, resulting in the corresponding changes in income before tax.

Note 1: Expense items includes underwriting expenses, commission expenses, other operating costs as well as general expenses, administration expenses, employee training expenses of operating expenses, and expected credit impairment losses and gains on reversal from non-investments.

Note 2: Rate of return is calculated as follows (to be annualized):

$$2 \times (\text{net investment} - \text{finance costs}) / (\text{the beginning balance of available funds} + \text{the ending balance of available funds, net incomes (losses) on investment} + \text{finance costs})$$

b) Concentration of insurance risks

Cathay Life's insurance business is mainly from the R.O.C., and all the insurance policies have similar risk exposure; for example, the risk exposure to the unexpected changes in trend (mortality, morbidity, and surrender rate) or the risk exposure to multiple insurance contracts caused by a single incident (for example, simultaneous risk exposure to life insurance, health insurance, and casualty insurance caused by an earthquake). Cathay Life reduces risk exposure not only by monitoring risks consistently, but also by arranging reinsurance contracts.

In principle, Cathay Life reviews the overall results of claims and payments and its ability to assume risk periodically, and performs an evaluation of insurance risks according to the retention amounts, which is submitted for approval by authority. Cathay life cedes the excess of insurance risks over the retention amounts to reinsurers. At the same time, Cathay life considers unexpected human and natural disasters to estimate the reasonable maximum of losses according to the retained risks regularly; Cathay Life determines whether it is necessary to adjust the reinsured amount or catastrophe reinsurance according to the range of losses and its ability to assume risks. Hence, the insurance risks to some degree have been diversified to reduce the potential impact on unexpected losses.

Furthermore, according to Regulations Governing the Setting Aside of Various Reserves by Insurance Enterprises, special reserve for catastrophic events should be provided for huge claims and payments due to future catastrophic events, and special reserve for fluctuation of risk should be provided for abnormal changes in loss ratio and claims of each insurance type. The annual increase of special reserve for catastrophic events and fluctuation of risks should be recorded in special reserve of equity, net of tax in accordance with IAS 12.

c) Claim development trend

i. Cathay Life

i) Direct business development trend

Accident Year	Development Year							Unreported Claim	Reserve for Unreported Claim
	1	2	3	4	5	6	7		
2013	14,442,425	17,662,901	17,964,940	18,028,018	18,069,018	18,097,514	18,114,195	-	-
2014	14,671,864	17,805,516	18,119,932	18,201,745	18,198,744	18,219,624	18,236,928	17,304	17,339
2015	15,353,566	18,647,560	18,975,168	19,056,336	19,103,869	19,130,394	19,148,638	44,769	44,858
2016	15,940,308	19,566,897	19,885,388	19,971,081	20,015,621	20,043,491	20,062,635	91,554	91,736
2017	17,297,974	21,370,269	21,769,245	21,857,506	21,905,899	21,936,562	21,957,077	187,832	188,208
2018	19,438,330	23,925,964	24,342,331	24,442,830	24,496,782	24,531,153	24,553,110	627,146	628,401
2019	21,412,454	26,255,736	26,712,604	26,821,429	26,880,489	26,917,744	26,940,927	5,528,473	5,539,530
Expected future payment									\$ 6,510,072
Add: Assumed reserve for incurred but not reported claim									21,847
Reserve for unreported claim									6,531,919
Add: Reported but not paid claim									4,032,692
Claims reserve balance									<u>\$ 10,564,611</u>

ii) Retained business development trend

Accident Year	Development Year							Unreported Claim	Reserve for Unreported Claim
	1	2	3	4	5	6	7		
2013	14,552,889	17,819,664	18,127,219	18,191,122	18,232,660	18,261,664	18,278,424	-	-
2014	14,772,070	17,947,230	18,265,698	18,348,342	18,346,033	18,367,050	18,384,481	17,431	17,466
2015	15,474,235	18,809,508	19,140,593	19,222,947	19,270,603	19,297,466	19,315,887	45,284	45,375
2016	16,051,766	19,702,389	20,024,753	20,110,678	20,155,599	20,183,732	20,202,957	92,279	92,464
2017	17,425,760	21,529,927	21,929,989	22,019,087	22,067,963	22,098,984	22,119,614	189,625	190,004
2018	19,559,154	24,057,586	24,478,074	24,579,614	24,634,269	24,669,349	24,691,638	634,052	635,320
2019	21,440,110	26,292,487	26,750,811	26,860,026	26,919,366	26,956,944	26,980,319	5,540,209	5,551,290
Expected future payment									\$ 6,531,919
Add: Reported filed but not paid claim									4,028,960
Retained claims reserve balance									<u>\$ 10,560,879</u>

Note: Retained business equals direct business plus assumed reinsurance business less ceded reinsurance business.

In accordance with Jin Guan Bao Shou No. 10402133590 issued on December 22, 2015 by the FSC, reserve for claims not yet filed is provided as claims filed and adjusted for related expenses; reserve for claims filed but not yet paid is provided on a case-by-case basis. The loss reserve is the sum of the above reserve, and due to uncertainty, estimation, and judgment, there is a high degree of complexity in the provision of loss reserve. Any changes in the estimation or judgment are treated as changes in accounting estimates and the impacts of the changes are recognized as profit or loss as incurred. Notification to Cathay life may be delayed in certain cases, and estimates of the payments for cases not yet filed are involved with a large volume of past experiences and subjective judgement; therefore, it is unable to confirm that the loss reserve on the balance sheet date will be equal to the final settlements of claims and payments. The loss reserve is estimated based upon the currently available information; however, the final results may deviate from the original estimates because of the subsequent conditions of the cases.

The above table shows the development trend of claim payments. The accident year is the year when the insurance events occurred; the x-axis is the year of the development for the cases; the amounts above the diagonal line represent the cases in at specific accident year the corresponding accumulated claims and payments and claims filed but not yet paid at the end of the year for the cases in at specific accident year; the amounts below the diagonal line represent the estimates of corresponding accumulated developments for the cases in at specific accident year. The circumstances and trends affecting the provision of loss reserve in the current year may differ in the future; therefore, the expected future payments cannot be determined by this table.

ii. Cathay Lujiazui Life

i) Direct business development trend

Accident Year	Development Year							Expected Future Payment
	1	2	3	4	5	6	7	
2013	238,178	465,151	502,722	506,547	506,547	506,547	506,547	-
2014	352,155	566,112	601,603	610,880	610,880	610,880	610,880	-
2015	206,682	386,830	413,988	434,558	434,558	434,558	434,558	-
2016	245,254	420,859	473,061	525,515	525,515	525,515	525,515	-
2017	252,319	478,466	533,828	556,916	556,916	556,916	556,916	23,088
2018	311,729	365,833	398,634	415,875	415,875	415,875	415,875	50,042
2019	419,936	701,477	764,372	797,431	797,431	797,431	797,431	377,495
Expected future payment								\$ 450,625
Less: Expected reported but not paid claim								(798)
Reserve for unreported claim								449,827
Add: Reported but not paid claim								16,184
Claims reserve balance								<u>\$ 466,011</u>

ii) Retained business development trend

Accident Year	Development Year							Expected Future Payment
	1	2	3	4	5	6	7	
2013	232,822	458,617	496,167	499,972	499,972	499,972	499,972	-
2014	351,330	557,871	593,323	602,597	602,597	602,597	602,597	-
2015	185,223	364,969	392,106	395,171	395,171	395,171	395,171	-
2016	242,780	418,023	470,224	512,545	512,545	512,545	512,545	-
2017	240,710	466,857	521,048	536,655	536,655	536,655	536,655	15,607
2018	303,385	355,141	387,505	399,113	399,113	399,113	399,113	43,972
2019	416,414	701,443	765,366	788,291	788,291	788,291	788,291	371,877
Expected future payment								\$ 431,456
Less: Expected reported but not paid claim								(798)
Add: Reported but not paid claim								15,072
Retained claim reserve balance								<u>\$ 445,730</u>

Note: Retained business equals direct business plus assumed reinsurance less ceded reinsurance business.

Cathay Lujiazui Life provides loss reserve for claims filed but not paid and claims not yet filed. Due to uncertainty, estimation, and judgment, there is a high degree of complexity in provision of loss reserve. Any changes in the estimation or judgment are treated as changes in accounting estimates and the impacts of the changes are recognized as profit or loss as incurred. Notification to Cathay Lujiazui Life may be delayed in certain cases, and estimates of the payments for cases not yet filed involved a large volume of past experiences and subjective judgement; therefore, it is unable to confirm that the loss reserve on the balance sheet date will be equal to the final settlements of claims and payments. The loss reserve is estimated based upon the currently available information; however, the final results may deviate from the original estimates because of the subsequent conditions of the cases.

The above table shows the development trend of claim payments. The accident year is the year when the insurance events occurred; the x-axis is the year of the development for the cases; the amounts above the diagonal line represent the cases in at specific accident year the corresponding accumulated claims and payments and claims filed but not yet paid at the end of the year for the cases in at specific accident year; the amounts below the diagonal line represent the estimates of corresponding accumulated developments for the cases in at specific accident year. The circumstances and trends affecting the provision of loss reserve in current year may differ in the future; therefore, the expected future payments cannot be determined by this table.

iii. Cathay Life (Vietnam)

i) Direct business development trend

Accident Year	Development Year				
	1	2	3	4	5
2015	1,143	1,254	1,254	1,257	1,257
2016	1,213	2,259	2,259	2,259	2,259
2017	8,555	11,618	11,618	11,623	11,623
2018	41,882	48,183	48,183	48,202	48,202
2019	119,665	143,218	143,218	143,276	143,276

ii) Retained business development trend

Accident Year	Development Year				
	1	2	3	4	5
2015	1,348	1,576	1,576	1,576	1,576
2016	2,088	2,509	2,509	2,509	2,509
2017	14,625	17,767	17,767	17,774	17,774
2018	84,781	97,366	97,366	97,401	97,401
2019	96,290	111,843	111,843	111,884	111,884

The above table shows the development trend of claim payments. The accident year is the year when the insurance events occurred; the x-axis is the year of the development for the cases; the amounts above the diagonal line represent the cases in specific accident year the corresponding accumulated claims and payments and claims filed but not yet paid at the end of the year for the cases in a specific accident year; the amounts below the diagonal line represent the estimates of corresponding accumulated developments for the cases in at specific accident year.

Cathay Life (Vietnam) provides loss reserve for claims filed but not paid and claims not yet filed. Reserve for claims not yet filed is estimated by multiplying the loss ratio of earned premiums based upon the past loss experiences instead of loss triangle method, which was approved by local authorities in Vietnam; therefore, provision for loss reserve is not determined by the aboved table. Estimates of the payments for cases not yet filed involved a large volume of past experiences and subjective judgement; therefore, it is unable to confirm that the loss reserve on the balance sheet date will be equal to the final settlements of claims and payments.

3) Credit risk, liquidity risk, and market risk for insurance contracts

a) Credit risk

The credit risk of the insurance contracts occurs as the reinsurers fail to perform the obligations of reinsurance contracts, which may result in impairment losses on reinsurance assets.

Due to the nature of reinsurance market and the regulations on qualified reinsurers, the insurers in Taiwan sustain certain degree of credit risk concentration of reinsurers. To reduce this risk, Cathay Life chooses the reinsurance counterparty, reviews its credit rating periodically, monitors and controls the risk of reinsurance transactions properly in accordance with Cathay Life's Reinsurance Risk Management Plan and Evaluation Standards for Reinsurers.

The credit ratings of Cathay Life's reinsurers are above a certain level, complying with Cathay Life's internal rules and relevant legal requirements in Taiwan. Furthermore, reinsurance assets are relatively immaterial to Cathay Life's total assets; therefore, no significant credit risk exists.

b) Liquidity risk

The table below is the analysis of the net (undiscounted) cash flow of insurance contracts and of financial instruments with discretionary participation features. The figures shown in this table are the estimated amount of the total insurance payments and expenses of valid insurance contracts in the future deduct total premium on the balance sheet date. The actual future payment amounts may differ due to the difference between the actual and expected experiences.

Unit: In Billions of NTD

	Insurance Contracts and Financial Instruments with Discretionary Participation Features		
	Within 1 Year	1 to 5 Years	Over 5 Years
December 31, 2019	\$ (1,665)	\$ 3,012	\$ 179,320
December 31, 2018	(1,095)	1,993	175,216

Note: Separate account products are not included.

c) Market risk

Cathay Life measures insurance liabilities by the discounted rates required by the authorities. The authorities regularly review the assumption of the discount rate for policy reserves; however, the change of the assumption may not be at the same time, in the same direction of change with the market price and interest rate, and only applied to new contracts. Therefore, the impacts of those possible changes in market risk on the provision of policy reserve for Cathay Life's valid insurance contracts are considered minor to profit or loss of equity. When the authorities change the discount rate assumption in a reasonably possible manner with remote possibility as current assessment, it will have an impact in a range on profit or loss or equity depending upon the level of the change and the overall product portfolio of Cathay Life. Furthermore, the reasonably possible change in the market risk may have impact on the future cash flows of insurance contracts and financial instruments with discretionary participation features, which are estimated based on available information at the balance sheet date and are used for assessing the adequacy of recognized insurance liabilities. Based on the reasonably possible changes in current market risk, it has little impact on the adequacy of recognized insurance liabilities.

b. Cathay Century and its subsidiaries

1) Risk management objectives, policies, procedures and methods:

a) Framework of risk management, organizational structure and responsibilities

i. Board of directors

- i) Board of directors should be aware of the risks arising from operations, ensure the effectiveness of risk management and bear the ultimate responsibility for overall risk management.
- ii) Board of directors should establish an appropriate risk management framework and culture, ratify the appropriate risk management policy and allocate resources in the most effective manner.

iii) Board of directors should consider the effect of the aggregated risks of business's overall perspective; should also follow the legal capital requirement and the relevant financial or business operating regulations that affect capital allocation.

ii. Risk management department

i) Risk management committee

- The committee should propose the risk management policies, framework, and organization functions and establish quantitative and qualitative management standards. The committee is also responsible for reporting the results of implementing risk management to the board of directors regularly, and making necessary suggestions for improvement.
- The committee should execute the risk management policies set by the board of directors and review development, build-up and performance of overall management mechanisms regularly.
- The committee should assist and monitor the risk management activities performed by each department.
- The committee should arrange the risk category, risk limit allocation and risk taking according to the changes in environment.
- The committee should enhance cross-department interaction and communication.

ii) Chief risk officer

The appointment of chief risk officers of Cathay Century and its subsidiaries should be approved by the board of directors, who should maintain independence and should not concurrently play a business or financial role nor has the right to access any information which may affect Cathay Century and its subsidiaries' risk overview.

- The chief risk officer should be in charge of the overall risk management.
- The chief risk officer should participate in the important decision making process and provide appropriate suggestions from a risk management perspective.
- The chief risk officers should be a member of risk management committee.

iii) Risk management department

Cathay Century and its subsidiaries established a risk management department, which is responsible for monitoring, measuring and evaluating major risks, performed independently to business units.

Duties of risk management department are as follows:

- Propose and execute the risk management policies set by the board of directors.
- Propose the risk limits based on risk appetite.
- Summarize the risk information provided by each department, negotiate and communicate with each department to facilitate the execution of the policies and the risk limits.

- Regularly present risk management reports.
- Regularly review the risk limits and its use of each business unit.
- Assist to execute stress testing and back testing if necessary.
- Other risk management related issues.

iii. Business unit

i) The risk management duties of the manager of a business unit are as follows:

- Manage and report daily risk of the business unit and take necessary responsive actions.
- Supervise the unit to submit risk management information regularly to the risk management department.

ii) The risk management duties of a business unit are as follows:

- Identify and measure risks and report risk exposures.
- Evaluate the impacts (quantitative or qualitative) when risks occur and deliver the risk information in a timely and accurate manner.
- Regularly review the risks and their limits to ensure the effective execution of risk limits within business unit.
- Monitor risk exposures and, in case of any excess of risk limits, report the excess of risk limits along with the corresponding actions.
- Assist to develop the risk model and ensure that the risk measurement, application of model, and the parameter settings are reasonable and consistent.
- Ensure that internal control procedures are executed effectively to comply with applicable rules and the risk management policies.
- Assist to collect data related to operational risk.

iv. Audit department

The department is responsible for the audit of each department's performance of risk management pursuant to the applicable laws and regulations and related rules and guidance of Cathay Century.

b) Risk reporting and the scope and nature of risk assessment for property insurance business

i. Risk reporting

- i) Each business unit should regularly deliver risk information to risk management department are required, and report the excess of risk limits and responding measures when risk exposure exceeds the limit.

ii) The risk management department summarizes the risk information provided by each department, tracks the uses of major risk limit, submits a monthly risk management report to the general manager, and makes quarterly report to the risk management committee and board of directors.

ii. Risk reporting range and nature of risk assessment for property insurance business

The risk management department of Cathay Century and its subsidiaries and the Company collaborated in building the market risk management system. The system structure was developed in consideration of the system functionality, data source, completeness of data upload, and the safety of the environment of the system. The front-end of investment department has acquired the information system related to the investment market. The risk management system focuses on risk quantification, which is needed by middle-end, and would be only authorized to risk management personnel.

c) Processes to undertake, evaluate, supervise and control insurance risk of property insurance business and underwriting policies to ensure proper risk classification and premium level.

In Cathay Century and its subsidiaries, risk management department is responsible for monitoring and integrating insurance risks as a whole, and setting up risk indicators, risk limit, and managing mechanism. Each related department is the execution unit of insurance risk control and regularly reports execution to risk management department in accordance with laws and regulations, internal rules, and professional knowledge and experience related to its duties. The risk management department proposes the insurance risk management report to the risk management committee and the board of directors each quarter.

d) The scope of insurance risk assessment and management from a company-wide perspective

Insurance risk management of Cathay Century and its subsidiaries covers product design and pricing, underwriting, reinsurance, catastrophe, claim, and reserve. Proper management mechanisms are set up and executed thoroughly.

e) Methods to limit insurance risk exposure and avoid inappropriate concentration risk

When Cathay Century and its subsidiaries implement business, the underwriter evaluates the quality of the business based on the underwriting criteria of each insurance to decide whether to undertake the business to properly hedge and control the risk and reduce the exposure.

In addition, for reinsurance business, risk management mechanism is set up in accordance with the Regulations Governing Insurance Enterprises Engaging in Operating Reinsurance and Other Risk Spreading Mechanisms. The capabilities of undertaking risk is considered to develop reinsurance risk management plan and maximum of accumulated retained risks of each risk unit for execution.

Accumulated risk with the portfolio of direct written premiums and other inward-insurance business is conducted before an individual case of outward/inward reinsurance is executed. When the cumulative insurance amount exceeds contract limit or self-retain limit, risk is diversified through facultative reinsurance.

Based on Cathay Century and its subsidiaries' reinsurance risk management plan, the risk management and insurance departments jointly review and discuss the accumulated retained risk limits of each risk unit in each insurance type every fiscal year as the basis for determining the maximum accumulated risk limit for each risk unit, which is then submitted to the general manager for approval before implementation. The following table summarizes the maximum accumulated retained risk limit of each risk unit by type of insurance:

Insurance by Type	For the Years Ended December 31	
	2019	2018
Fire insurance	\$ 1,182,000	\$ 1,233,000
Marine insurance	1,182,000	1,233,000
Engineering insurance	1,182,000	1,233,000
Miscellaneous insurance/Liability insurance	1,182,000	1,233,000
Healthy and Accident insurance	1,182,000	1,233,000
Automobile insurance	50,000	1,233,000
Liability insurance	250,000	1,233,000

f) Asset-liability management

i. Asset liability management with risk identification and measurement

Financial accounting and actuarial department should identify the possible market risk, liquidity risk and insurance risk that may occur during operation. The cash inflows from assets are measured to evaluate whether it's sufficient to cover the cash outflow in liabilities by cash flow test method (but not limited to); that is, whether the asset allocation has reasonable liquidity to pay expenditures from liabilities in future years.

ii. Asset-liability coordinate with risk response

When market risk, liquidity risk and insurance risk events occur, financial, accounting and actuarial service department should take appropriate reactions to asset liability risk, and report to the risk management department and propose to the risk management department and risk management committee for examination.

g) Procedures to manage, monitor and control a special event for which property insurance business is committed to assuming additional liabilities or funding additional capital

Cathay Century and its subsidiaries have established a set of capital adequacy management standards, including RBC management indicators for regular review, under which RBC is calculated each quarter and RBC management report is prepared every half year as implementation of RBC management.

If the RBC ratio exceeds the control criteria (risk limit) or other exceptions occur, the related departments should propose reactions to the risk management committee and inform the Company to review the impact on the Group's CAR.

2) Receivables and payables of insurance contracts

a) Receivables

Insurance by Type	Premiums Receivable	
	December 31	
	2019	2018
Fire insurance	\$ 832,679	\$ 683,291
Marine insurance	280,050	280,529
Land and air insurance	165,238	161,746
Liability insurance	252,358	209,834
Financial guarantee insurance	24,869	30,796
Other property insurance	466,437	253,298
Accident insurance	130,202	113,629
Health insurance	9,748	7,979
Compulsory auto liability insurance	<u>20,950</u>	<u>19,090</u>
	2,182,531	1,760,192
Less: Loss allowance	<u>(33,108)</u>	<u>(74,252)</u>
Net amount	<u>\$ 2,149,423</u>	<u>\$ 1,685,940</u>

Aging analysis of premiums receivable:

	December 31	
	2019	2018
Up to 90 days	\$ 1,460,661	\$ 1,533,285
Over 90 days	<u>721,870</u>	<u>226,907</u>
	<u>\$ 2,182,531</u>	<u>\$ 1,760,192</u>

The overdue amounts as of December 31, 2019 and 2018 in the above premiums receivable were \$721,870 thousand and \$\$226,131 thousand, respectively, and loss allowance of \$19,019 thousand and \$58,942 thousand were provided, respectively.

b) Liability on policyholders' claims filed and losses not yet filed

Claims and payments recoverable for policyholders' claims filed and paid

Insurance by Type	Claims Filed and Paid	
	December 31	
	2019	2018
Fire insurance	\$ 11,803	\$ 44,225
Marine insurance	14,046	12,631
Land and air insurance	41,335	46,598
Liability insurance	48,045	53,431
Financial guarantee insurance	3,952	188
Other property insurance	21,993	19,525
Accident insurance	18,354	18,497
Health insurance	-	-
Compulsory auto liability insurance	<u>178,606</u>	<u>154,031</u>
	338,134	349,126
Less: Loss allowance	<u>(16,907)</u>	<u>(3,491)</u>
Net amount	<u>\$ 321,227</u>	<u>\$ 345,635</u>

c) Payables

December 31, 2019			
Insurance by Type	Commission Payable	Others	Total
Fire insurance	\$ 28,685	\$ 13,250	\$ 41,935
Marine insurance	8,300	15,052	23,352
Land and air insurance	73,939	99,854	173,793
Liability insurance	21,674	24,333	46,007
Financial guarantee insurance	2,601	451	3,052
Other property insurance	5,452	13,266	18,718
Accident insurance	10,629	33,141	43,770
Health insurance	2,576	3,471	6,047
Compulsory automobile liability insurance	<u>27,240</u>	<u>-</u>	<u>27,240</u>
	<u>\$ 181,096</u>	<u>\$ 202,818</u>	<u>\$ 383,914</u>

December 31, 2018			
Insurance by Type	Commission Payable	Others	Total
Fire insurance	\$ 24,649	\$ 12,551	\$ 37,200
Marine insurance	7,297	16,492	23,789
Land and air insurance	26,313	91,261	117,574
Liability insurance	12,332	23,479	35,811
Financial guarantee insurance	3,787	491	4,278
Other property insurance	4,734	12,983	17,717
Accident insurance	8,661	28,501	37,162
Health insurance	2,590	2,564	5,154
Compulsory automobile liability insurance	<u>24,817</u>	<u>-</u>	<u>24,817</u>
	<u>\$ 115,180</u>	<u>\$ 188,322</u>	<u>\$ 303,502</u>

d) Due from (to) reinsurers and ceding companies - reinsurance

December 31, 2019		
Items	Due from Reinsurers and Ceding Companies	Due to Reinsurers and Ceding Companies
Non-Life Insurance Association of the R.O.C	\$ 329,413	\$ 314,263
AON	72,042	415,823
Willis	49,804	4,216
Central Re	16,758	105,805
Others (individually below 5%)	<u>320,592</u>	<u>932,784</u>
	788,609	1,772,891
Less: Loss allowance	<u>(44,386)</u>	<u>-</u>
Net amount	<u>\$ 744,223</u>	<u>\$ 1,772,891</u>

	December 31, 2018	
	Due from Reinsurers and Ceding Companies	Due to Reinsurers and Ceding Companies
Non-Life Insurance Association of the R.O.C.	\$ 135,160	\$ 351,019
AON	29,292	65,670
Cathay (China)	36,346	796
Central Re	6,555	78,273
EverApex	859	78,547
FP Marine Risks	33,838	8,187
Guy Carpenter	33,344	18,508
Marsh	12,879	225,517
Willis	32,241	45,542
Others (individually below 5%)	<u>145,710</u>	<u>627,165</u>
	466,224	1,499,224
Less: Loss allowance	<u>(17,818)</u>	<u>-</u>
Net amount	<u>\$ 448,406</u>	<u>\$ 1,499,224</u>

The overdue amounts as of December 31, 2019 and 2018 in the above due from (to) reinsurers and ceding companies were \$10,483 thousand and \$13,169 thousand, respectively, and loss allowances of \$10,483 thousand and \$13,169 thousand were provided, respectively.

Due from and due to the reinsurers and ceding companies cannot be offset, except for those meeting requirements in Article 42 of IAS 32.

3) Acquisition cost of insurance contracts

Insurance by Type	For the Year Ended December 31, 2019				
	Commission Expenses	Service fee Charge	Reinsurance Commission Expenses	Others	Total
Fire insurance	\$ 185,873	\$ 14,335	\$ 131,307	\$ 16,370	\$ 347,885
Marine insurance	66,115	1,616	16,274	1,311	85,316
Land and air insurance	1,066,167	381	16,415	412,459	1,495,422
Liability insurance	180,707	90	294	21,023	202,114
Financial guarantee insurance	11,213	95	4,683	110	16,101
Other property insurance	75,193	6,053	57,594	3,570	142,410
Accident insurance	437,657	598	4,367	118,079	560,701
Health insurance	74,570	401	1,222	16,821	93,014
Compulsory auto liability insurance	<u>-</u>	<u>396,554</u>	<u>-</u>	<u>-</u>	<u>396,554</u>
	<u>\$ 2,097,495</u>	<u>\$ 420,123</u>	<u>\$ 232,156</u>	<u>\$ 589,743</u>	<u>\$ 3,339,517</u>

For the Year Ended December 31, 2018					
Insurance by Type	Commission Expenses	Service fee Charge	Reinsurance Commission Expenses	Others	Total
Fire insurance	\$ 177,507	\$ 9,230	\$ 72,638	\$ 13,253	\$ 272,628
Marine insurance	65,878	1,116	9,376	1,345	77,715
Land and air insurance	1,006,097	1	662	382,851	1,389,611
Liability insurance	162,331	102	335	13,236	176,004
Financial guarantee insurance	13,341	6	83	96	13,526
Other property insurance	71,896	3,597	33,600	2,622	111,715
Accident insurance	388,149	210	582	103,373	492,314
Health insurance	61,385	437	2,226	13,065	77,113
Compulsory auto liability insurance	-	387,993	-	-	387,993
	<u>\$ 1,946,584</u>	<u>\$ 402,692</u>	<u>\$ 119,502</u>	<u>\$ 529,841</u>	<u>\$ 2,998,619</u>

Acquisition costs of the insurance contracts were not deferred.

4) Profit and loss analysis of the insurance business

Direct underwriting business

For the Year Ended December 31, 2019						
Insurance by Type	Written Premium (Net of Premium Allowance)	Net Changes in Unearned Premium Reserve	Acquisition Cost of Insurance Contracts	Claims and Payments (Including Claim Expense)	Net Changes in Loss Reserve	Profit (Loss)
Fire insurance	\$ 3,372,742	\$ (68,947)	\$ 216,578	\$ 628,539	\$ 68,455	\$ 2,528,117
Marine insurance	681,264	(2,677)	69,043	269,821	(2,424)	347,501
Land and air insurance	9,672,387	355,372	1,479,007	5,529,317	299,606	2,009,085
Liability insurance	1,548,215	57,891	201,821	636,573	68,539	583,391
Financial guarantee insurance	107,747	(9,126)	11,418	63,400	(26,938)	68,993
Other property insurance	1,202,681	398,135	84,816	295,879	54,659	369,192
Accident insurance	3,533,611	56,501	556,333	1,569,170	(44,591)	1,396,198
Health insurance	440,698	10,047	91,791	107,962	11,956	218,942
Compulsory auto liability insurance	2,896,160	(8,038)	396,554	2,308,745	92,545	106,354
	<u>\$ 23,455,505</u>	<u>\$ 789,158</u>	<u>\$ 3,107,361</u>	<u>\$ 11,409,406</u>	<u>\$ 521,807</u>	<u>\$ 7,627,773</u>

For the Year Ended December 31, 2018

Insurance by Type	Written Premium (Net of Premium Allowance)	Net Changes in Unearned Premium Reserve	Acquisition Cost of Insurance Contracts	Claims and Payments (Including Claim Expense)	Net Changes in Loss Reserve	Profit (Loss)
Fire insurance	\$ 3,263,438	\$ (23,599)	\$ 199,990	\$ 718,581	\$ (407,044)	\$ 2,775,510
Marine insurance	685,174	21,178	68,339	293,862	(63,969)	365,764
Land and air insurance	9,087,689	309,591	1,388,949	5,264,574	465,243	1,659,332
Liability insurance	1,422,172	92,340	175,669	563,950	143,579	446,634
Financial guarantee insurance	125,947	5,742	13,443	15,273	(7,308)	98,797
Other property insurance	775,603	52,437	78,115	394,911	24,111	226,029
Accident insurance	3,174,156	13,407	491,732	1,235,385	95,192	1,338,440
Health insurance	349,362	10,135	74,887	101,948	137	162,255
Compulsory auto liability insurance	<u>2,924,496</u>	<u>(8,860)</u>	<u>387,993</u>	<u>1,697,508</u>	<u>92,119</u>	<u>755,736</u>
	<u>\$ 21,808,037</u>	<u>\$ 472,371</u>	<u>\$ 2,879,117</u>	<u>\$ 10,285,992</u>	<u>\$ 342,060</u>	<u>\$ 7,828,497</u>

Reinsurance inward business

For the Year Ended December 31, 2019

Insurance by Type	Reinsurance Premium	Net Changes in Unearned Premium Reserve	Reinsurance Commission Expense	Reinsurance Claim	Net Changes in Loss Reserve	Profit (Loss)
Fire insurance	\$ 677,858	\$ (61,947)	\$ 131,307	\$ 301,179	\$ 291,187	\$ 16,132
Marine insurance	73,700	4,895	16,274	31,742	18,274	2,515
Land and air insurance	44,626	6,653	16,415	4,514	5,294	11,750
Liability insurance	2,912	(314)	295	178	423	2,330
Financial guarantee insurance	17,572	1,899	4,683	730	12,120	(1,860)
Other property insurance	275,279	(29,089)	57,593	142,041	9,914	94,820
Accident insurance	26,691	2,511	4,367	4,459	4,682	10,672
Health insurance	16,027	(8,218)	1,222	9,852	898	12,273
Compulsory auto liability insurance	<u>753,281</u>	<u>(1,569)</u>	<u>-</u>	<u>905,668</u>	<u>18,606</u>	<u>(169,424)</u>
	<u>\$ 1,887,946</u>	<u>\$ (85,179)</u>	<u>\$ 232,156</u>	<u>\$ 1,400,363</u>	<u>\$ 361,398</u>	<u>\$ (20,792)</u>

For the Year Ended December 31, 2018

Insurance by Type	Reinsurance Premium	Net Changes in Unearned Premium Reserve	Reinsurance Commission Expense	Reinsurance Claim	Net Changes in Loss Reserve	Profit (Loss)
Fire insurance	\$ 406,033	\$ 46,475	\$ 72,638	\$ 155,461	\$ (2,811)	\$ 134,270
Marine insurance	41,780	736	9,376	21,785	19,882	(9,999)
Land and air insurance	2,460	(1,545)	662	659	(683)	3,367
Liability insurance	2,230	(192)	335	344	(1,150)	2,893
Financial guarantee insurance	1,457	(201)	83	1,746	1,299	(1,470)
Other property insurance	142,632	13,559	33,600	57,751	42,702	(4,980)
Accident insurance	10,880	1,859	582	1,591	347	6,501
Health insurance	17,485	4,219	2,226	16,045	733	(5,738)
Compulsory auto liability insurance	<u>753,227</u>	<u>(13,848)</u>	<u>-</u>	<u>969,958</u>	<u>(12,408)</u>	<u>(190,475)</u>
	<u>\$ 1,378,184</u>	<u>\$ 51,062</u>	<u>\$ 119,502</u>	<u>\$ 1,225,340</u>	<u>\$ 47,911</u>	<u>\$ (65,631)</u>

Ceded reinsurance business

For the Year Ended December 31, 2019						
Insurance by Type	Reinsurance Expenses	Net Changes in Ceded Unearned Premium Reserve	Reinsurance Commission Income	Claims and Payments (Recovered from Reinsurers)	Net Changes in Ceded Loss Reserve	Profit (Loss)
Fire insurance	\$ 2,097,213	\$ (137,244)	\$ 144,728	\$ 317,175	\$ (85,176)	\$ 1,857,730
Marine insurance	457,469	2,614	57,272	199,685	(15,724)	213,622
Land and air insurance	341,018	(22,046)	89,912	178,666	(23,197)	117,683
Liability insurance	510,465	(9,206)	108,044	196,642	99,094	115,891
Financial guarantee insurance	68,484	(11,139)	14,082	52,142	(16,933)	30,332
Other property insurance	883,152	407,215	97,602	134,021	85,546	158,768
Accident insurance	228,056	5,471	60,598	75,503	4,056	82,428
Health insurance	-	-	-	-	-	-
Compulsory auto liability insurance	<u>1,207,714</u>	<u>(4,822)</u>	<u>-</u>	<u>1,334,581</u>	<u>56,783</u>	<u>(178,828)</u>
	<u>\$ 5,793,571</u>	<u>\$ 230,843</u>	<u>\$ 572,238</u>	<u>\$ 2,488,415</u>	<u>\$ 104,449</u>	<u>\$ 2,397,626</u>

For the Year Ended December 31, 2018						
Insurance by Type	Reinsurance Expenses	Net Changes in Ceded Unearned Premium Reserve	Reinsurance Commission Income	Claims and Payments (Recovered from Reinsurers)	Net Changes in Ceded Loss Reserve	Profit (Loss)
Fire insurance	\$ 2,096,301	\$ 1,407	\$ 125,934	\$ 290,325	\$ (194,633)	\$ 1,873,268
Marine insurance	462,526	15,731	59,700	203,307	(44,587)	228,375
Land and air insurance	371,859	(19,508)	110,911	197,008	(23,955)	107,403
Liability insurance	482,676	49,469	104,025	162,174	68,977	98,031
Financial guarantee insurance	92,472	5,509	16,390	8,162	(34,295)	96,706
Other property insurance	443,898	9,218	83,189	165,344	41,720	144,427
Accident insurance	223,010	19,214	55,775	81,671	(970)	67,320
Health insurance	-	-	-	-	(324)	324
Compulsory auto liability insurance	<u>1,216,270</u>	<u>(5,329)</u>	<u>-</u>	<u>995,187</u>	<u>57,123</u>	<u>169,289</u>
	<u>\$ 5,389,012</u>	<u>\$ 75,711</u>	<u>\$ 555,924</u>	<u>\$ 2,103,178</u>	<u>\$ (130,944)</u>	<u>\$ 2,785,143</u>

5) Sensitivity to insurance risk

a) Cathay Century

Insurance by Type	Premium Income	Expected Loss Rate	Impact on Profit or Loss of 5% Change in Expected Loss Rate	
			Before Reinsurance	After Reinsurance
Fire insurance	\$ 3,117,779	41.63%	\$ (155,889)	\$ (131,018)
Marine insurance	671,406	40.93%	(33,570)	(14,375)
Land and air insurance	9,534,101	63.92%	(476,705)	(459,593)
Liability insurance	1,547,265	53.71%	(77,363)	(53,010)
Financial guarantee insurance	107,747	176.74%	(5,387)	(3,535)
Other property insurance	1,199,342	65.38%	(59,967)	(45,177)
Accident insurance	3,508,288	43.06%	(175,414)	(164,743)
Health insurance	440,698	41.38%	(22,035)	(22,004)
Compulsory automobile liability insurance	<u>2,896,160</u>	Not applicable	Not applicable	Not applicable
	<u>\$ 23,022,786</u>		<u>\$ (1,006,330)</u>	<u>\$ (893,455)</u>

The above table shows that with 5% increase in the expected loss rate of every insurance contract of Cathay Century, profit or loss may be impacted to an extent; however, the impact has been mitigated through the arrangement of reinsurance to achieve the effect of risk diversification.

b) Cathay Insurance (Vietnam)

Insurance by Type	Premium Income	Expected Loss Rate	Impact on Profit or Loss of 5% Change in Expected Loss Rate	
			Before Reinsurance	After Reinsurance
Automobile insurance	\$ 138,286	30.61%	\$ (6,914)	\$ (6,885)
Marine insurance	9,858	15.16%	(493)	(113)
Fire insurance	254,963	53.38%	(12,748)	(2,962)
Engineering insurance	3,339	28.25%	(167)	(51)
Accident insurance	25,323	36.75%	(1,266)	(1,266)
Liability insurance	<u>950</u>	14.24%	<u>(48)</u>	<u>(15)</u>
	<u>\$ 432,719</u>		<u>\$ (21,636)</u>	<u>\$ (11,292)</u>

The above table shows that with 5% increase in the expected loss rate of every insurance contract of Cathay Insurance (Vietnam), profit or loss may be impacted to an extent; however, the impact has been mitigated through the arrangement of reinsurance to achieve the effect of risk diversification.

6) Risk concentration

a) Cathay Century

i. Situations that may cause concentration of insurance risk:

i) Single insurance contract or several related contracts

As of December 31, 2019, according to related underwriting guidelines for the commercial insurance with low frequency of occurrence and enormous possible losses, the underwriting department, reinsurance department and risk management department have reviewed or discussed in project meeting.

ii) Exposure to unanticipated changes in trend

As of December 31, 2019, there is no exposure to unanticipated change in trend.

iii) Material litigation or legal risks that may lead to huge losses incurred by a single contract or have an extensive effect on several contracts

“The Regulations for Assisting in Filing Lawsuit Cases of Cathay Century Insurance” is set up to safeguard the rights of Cathay Century and the insured and to implement process control of lawsuit cases of insurance claim. In addition, each unit has appointed a staff for compliance matters to minimize possible legal risk. As of December 31, 2019, there are no material litigation or legal risks that may lead to substantial losses incurred by a single contract or have an extensive effect on several contracts.

iv) Correlation and interaction among different risks

When a catastrophe occurs, the underwritten cases will incur huge claims, and other risks such as market risk, credit risk, liquidity risk, may arise accordingly. To avoid the operations being severely endangered by these derived risks from a catastrophe, Cathay Century established “Operation Standards under Crisis”, under which crisis handling team is set up in reaction to the event and execute emergent tasks such as resource coordination and fund procurement to protect the rights of the insured and Cathay Century and to maintain financial stability. As of December 31, 2019, there is no interaction among risks resulting from a catastrophe.

v) When a non-linear relationship as a certain key variable has approached to the extent that future cash flows may be materially influenced

Since the 3rd stage of liberalization of property insurance premium rate took effect, Cathay Century has conducted regular reviews on voluntary automobile insurance, commercial fire insurance, and residential fire insurance in accordance with regulations. When the actual loss rate exceeds the expected loss rate to a certain percentage, premium rates will be properly adjusted to avoid persistent enlargement of losses. In addition, the actuarial department observes the changes in trend of loss rates of each product on irregular basis and adjusts pricing and coverage in a timely manner to effectively lower insurance risks.

For investment instruments, changes in risk indicators are monitored on a regular basis with cash flow analysis as well as stress testing, to control and manage the impact of fluctuations in major risk factors.

In addition, stress testing is performed for the overall business every year to assess the impacts on financial positions due to extreme scenarios of the assets and insurance risk and understand the major risk factors to response in advance.

vi) Concentration of geographic regions and operating segments

Cathay Century's catastrophe insurance for earthquakes and floods are mainly in Taipei, Taoyuan, Hsinchu, Chiayi, Tainan, Kaohsiung and Pingtung.

ii. Disclosure of concentration of insurance risk, including explanation of indicators used to identify the common features of insurance risk concentration and exposure to related insurance liabilities related to such feature

The following table summarizes Cathay Century's concentration of risk before and after reinsurance by insurance type:

Insurance Type	For the Year Ended December 31, 2019				
	Premium Income	Reinsurance Premium Inward	Reinsurance Expenses	Net Premium Income	%
Fire insurance	\$ 3,117,779	\$ 678,468	\$ 1,861,823	\$ 1,934,424	9.99
Marine insurance	671,406	73,700	450,507	294,599	1.52
Land and air insurance	9,534,101	44,609	340,897	9,237,813	47.71
Liability insurance	1,547,265	2,845	509,829	1,040,281	5.37
Financial guarantee insurance	107,747	17,572	68,484	56,835	0.29
Other property insurance	1,199,342	275,279	881,111	593,510	3.07
Accident insurance	3,508,288	26,691	228,056	3,306,923	17.08
Health insurance	440,698	16,027	-	456,725	2.36
Compulsory automobile liability insurance	2,896,160	753,281	1,207,714	2,441,727	12.61
Total	\$ 23,022,786	\$ 1,888,472	\$ 5,548,421	\$ 19,362,837	100.00

iii. Disclosure of the past performance of property insurance business regarding the management risks with low frequency of occurrence but enormous impact, to the user of financial statement assess the uncertainty of cash flows related to such risks

Catastrophes such as earthquake, typhoon, and flood along with related hung claims, result in tremendous impact to the property insurance business.

To control and manage risk with low frequency of occurrence but enormous impact, Cathay Century assesses the risk of natural disasters and special insured items (for example, high-tech factory, power plant and traffic engineering) holds loss prevention seminars regularly to help clients lower the incidence rate of disasters.

b) Cathay Insurance (Vietnam)

i. Situations that may cause concentration of insurance risk:

i) Single insurance contract or several related contracts

As of December 31, 2019, according to related underwriting guidelines for the commercial insurance with low frequency of occurrence and enormous possible losses, the underwriting department and reinsurance department have reviewed or discussed in project meeting.

ii) Exposure to unanticipated changes in trend

As of December 31, 2019, there is no exposure to unanticipated change in trend.

iii) Material litigation or legal risks that may lead to huge losses incurred by a single contract or have an extensive effect on several contracts

“The Procedure for Subrogation” and “The Proceedings of the Court” are set up to safeguard the rights of Cathay Insurance (Vietnam) and the insured and to implement process control of lawsuit cases of insurance claim. In addition, each unit has appointed a staff for compliance matters to minimize possible legal risk. As of December 31, 2019, there are no material litigation or legal risks that may lead to huge losses incurred by a single contract or have an extensive effect on several contracts.

iv) Correlation and interaction among different risks

When a catastrophe occurs, the underwritten cases will incur huge claims, and other risks such as market risk, credit risk, liquidity risk, may be derived accordingly. To avoid the operations being severely endangered by these derived risks from a catastrophe, Cathay Insurance (Vietnam) established the Points for Handling Major Events of Cathay Insurance (Vietnam) under which crisis handling team is set up in reaction to the event and execute emergent tasks such as resource coordination and fund procurement to protect the rights of the insured and Cathay Century and to keep financial stability. As of December 31, 2019, there is no interaction among risks resulting from a catastrophe.

v) Concentration of geographical regions and operating segments

Cathay Insurance (Vietnam)’s catastrophe insurance for earthquakes and floods are mainly in the areas of Ho Chi Minh City, Tinh Dong Nai and Tinh Ha Tinh.

- ii. Disclosure of concentration of insurance risk, including explanation of indicators used to identify the common features of insurance risk concentration and exposure to related insurance liabilities related to such feature.

The following table summarizes the Cathay Insurance (Vietnam)'s concentration of risk before and after reinsurance by insurance type:

Insurance Type	For the Year Ended December 31, 2019				
	Premium Income	Reinsurance Premium Inward	Reinsurance Expenses	Net Premium Income	%
Automobile insurance	\$ 138,286	\$ 17	\$ 121	\$ 138,182	73.88
Flood insurance	9,858	-	6,962	2,896	1.55
Fire insurance	254,963	1,328	237,327	18,964	10.14
Engineering insurance	3,339	-	2,041	1,298	0.69
Accident insurance	25,323	-	-	25,323	13.54
Liability insurance	950	67	636	381	0.20
Total	\$ 432,719	\$ 1,412	\$ 247,087	\$ 187,044	100.00

- c) Disclosure of the past performance of property insurance business regarding the management risks with low frequency of occurrence but enormous impact, to the user of financial statement assess the uncertainty of cash flows related to such risks

Catastrophes such as typhoon and flood, will bring tremendous insurance risk to property insurance business. To control and manage risk with low frequency occurrence but enormous impact, Cathay Insurance (Vietnam) assesses the risk of natural disasters and special insured items holds loss prevention seminars regularly to help clients lower the incidence rate of disasters.

7) Development trends of claims

a) Cathay Century

Accident Year	≤ 2012	2013	2014	2015	2016	2017	2018	2019	Total
Accumulated estimated claim payments									
End of the underwriting year	\$ -	\$ 5,773,901	\$ 7,066,945	\$ 7,559,012	\$ 12,235,424	\$ 8,134,147	\$ 9,090,990	\$ 10,190,448	
After the first year	-	6,109,827	7,217,836	7,418,703	11,455,620	8,025,062	8,574,948	-	
After the second year	-	6,169,858	7,156,309	7,548,387	10,970,548	7,965,701	-	-	
After the third year	-	6,103,460	7,135,341	7,495,744	11,133,431	-	-	-	
After the fourth year	-	6,135,016	7,133,873	7,449,663	-	-	-	-	
After the fifth year	-	6,114,404	7,145,756	-	-	-	-	-	
After the sixth year	-	6,042,254	-	-	-	-	-	-	
Final estimated claim payments	-	6,042,254	7,145,756	7,449,663	11,133,431	7,965,701	8,574,948	10,190,448	
Accumulated claims disbursed	-	5,998,507	6,931,391	7,397,712	10,898,450	7,725,188	7,787,018	5,394,920	
Adjustment	56,981	43,747	214,365	51,951	234,981	240,513	787,930	4,795,528	\$ 6,425,996
Amount recognized in balance sheet	\$ 56,981	\$ 43,747	\$ 214,365	\$ 51,951	\$ 234,981	\$ 240,513	\$ 787,930	\$ 4,940,448	\$ 6,570,916

Note: The upper part of table illustrates claim payments estimated in underwriting years by property insurance business. The lower part of the table illustrates the reconciliation of the accumulated claims disbursed to the balance sheet.

The above table excludes direct loss reserve of compulsory insurance of \$1,575,588 thousand and assumed loss reserve of \$1,138,597 thousand.

b) Cathay Insurance (Vietnam)

Since the claim data of Cathay Insurance (Vietnam) is still immature, the historical experience for development trend of claim are not available. Cathay Insurance (Vietnam) provided loss reserve for claims incurred but not yet filed at 5% of retained premiums following the suggestion by Vietnamese Ministry of Finance 2842/BTC/QLBH.

36. FINANCIAL INSTRUMENTS

a. Categories of financial instruments

	December 31	
	2019	2018
<u>Financial assets</u>		
Financial assets at FVTPL	\$ 1,653,983,453	\$ 1,428,824,049
Financial assets at FVTOCI	1,182,534,102	1,127,810,270
Financial assets for hedging	548,075	216,611
Measured at amortized cost		
Cash and cash equivalents	413,405,471	206,576,054
Due from the Central Bank and other banks	110,945,093	104,223,315
Financial assets measured at amortized cost	3,068,838,014	2,688,221,788
Notes and bonds purchased under resale agreements	43,586,931	59,212,899
Discounts and loans, net	2,066,761,296	2,176,775,907
Receivables, net	185,049,532	161,216,190
Other financial assets	615,117,482	555,740,531
Guarantee deposits paid	38,396,708	57,523,991
<u>Financial liabilities</u>		
Financial liabilities at FVTPL	111,526,387	129,698,896
Financial liabilities for hedging	30,894	-
Financial liabilities at amortized cost		
Due to the Central Bank and other banks	84,108,128	81,432,233
Notes and bonds sold under repurchase agreements	50,278,533	59,307,037
Commercial paper payable, net	54,018,845	62,989,367
Payables	66,934,725	66,727,399
Deposits and remittances	2,303,443,816	2,187,203,086
Bonds payable	118,900,000	90,600,000
Other borrowings	2,201,364	336,381
Other financial liabilities	676,972,179	627,815,178
Lease liabilities	12,720,337	-
Guarantee deposits received	18,257,447	6,059,194

b. The methods and assumptions applied in determining the fair value of financial instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used by the Group to measure or disclose the fair values of financial assets and financial liabilities:

- 1) The carrying amount of cash and cash equivalents, accounts receivable, short-term debts and accounts payable approximates their fair value due to their short maturities.

- 2) For financial assets and liabilities traded in an active market with standard terms and conditions, their fair value is determined based on market quotation price (including listed equity securities, beneficiary certificates, bonds and futures etc.) at the reporting date.
- 3) Fair values of equity instruments without market quotations (including private placement of listed equity securities, unquoted public company and private company equity securities) are estimated using the market method valuation techniques based on parameters such as prices based on market transactions of equity instruments of identical or comparable entities and other relevant information (for example, inputs such as discount for lack of marketability, P/E ratio of similar entities and Price-Book ratio of similar entities).
- 4) Fair value of debt instruments without market quotations is determined based on the counterparty prices or valuation method. The valuation method uses DCF method as a basis, and the assumptions such as the interest rate and discount rate are primarily based on relevant information of similar instruments (such as yield curves published by the Taipei Exchange, average prices for Fixed Rate Commercial Paper published by Reuters and credit risk information).
- 5) The fair value of derivatives which are not options and without market quotations, is determined based on the counterparty prices or discounted cash flow analysis using the interest rate yield curve for the contract period. Fair value of option-based derivative financial instruments is obtained using the counterparty prices or appropriate option pricing model (for example, Black-Scholes model) or other valuation method (for example, Monte Carlo Simulation).
- 6) The Group evaluates the credit risk of the derivative contract traded over-the-counter through the following calculation. Under the assumption that the Group will not default, the Group determines its credit value adjustment by multiplying three factors, probability of default, loss given default, and exposure at default, of the counterparty. On the other hand, under the assumption that the counterparty will not default, the Group calculates its debit value adjustment by multiplying three factors, probability of default, loss given default, and exposure at default, of the Group. The Group decides the estimated probability of default by referring to the probability of default announced by external credit rating agencies. The Group sets estimated loss given default at 60% by considering the experiences of Jon Gregory, a scholar, and foreign financial institutions. The estimated exposure at default for current period is evaluated by considering the fair value of the derivative instruments traded on the Taipei Exchange.

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

1) Fair value hierarchy

Items	December 31, 2019				December 31, 2018			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Assets								
Financial assets at FVTPL								
Stocks	\$ 495,159,801	\$ 445,750,414	\$ 42,710,567	\$ 6,698,820	\$ 673,969,471	\$ 595,193,754	\$ 72,200,110	\$ 6,575,607
Bonds	305,294,693	8,748,708	294,583,505	1,962,480	247,536,253	14,790,150	231,090,829	1,655,274
Other	773,731,408	474,400,100	205,203,877	94,127,431	455,969,651	196,842,000	182,125,718	77,001,933
Financial assets at FVTOCI								
Stocks	62,877,916	52,330,749	-	10,547,167	43,192,054	34,662,164	154,309	8,375,581
Bonds (Note)	1,050,516,360	107,544,852	942,517,660	453,848	1,086,899,086	114,029,003	972,870,083	-
Other	70,253,313	-	70,253,313	-	-	-	-	-
Liabilities								
Financial liabilities at FVTPL								
Financial liabilities designated as at FVTPL	57,604,294	-	57,604,294	-	51,441,482	-	51,441,482	-
Held for trading	2,510,119	2,510,119	-	-	2,521,778	2,521,778	-	-
Derivative instruments								
Assets								
Financial assets at FVTPL	79,797,551	1,330,214	67,786,158	10,681,179	51,348,674	512,893	38,751,564	12,084,217
Financial assets for hedging	548,075	-	548,075	-	216,611	-	216,611	-
Liabilities								
Financial liabilities at FVTPL	51,411,974	492,986	40,237,809	10,681,179	75,735,636	271,010	63,380,409	12,084,217
Derivative financial liabilities for hedging	30,894	-	30,894	-	-	-	-	-

Note: Guarantee deposits paid in bonds are included.

Transfers between Level 1 and Level 2:

- For the year ended December 31, 2018, Cathay Life and its subsidiaries transferred shares mandatorily classified as FVTPL of \$2,450,314 thousand from Level 2 to Level 1 due to the availability of market prices.
- For the year ended December 31, 2018, Cathay Century and its subsidiaries transferred shares mandatorily classified as FVTPL of \$105,291 thousand from Level 2 to Level 1 due to the availability of market prices.
- For the year ended December 31, 2019, there were no transfers between Level 1 and Level 2 for assets or liabilities measured at fair value.

2) Reconciliation for movements in Level 3 fair value measurements

	For the Year Ended December 31, 2019		
	Financial Assets		Financial Liabilities
	At FVTPL	At FVTOCI	At FVTPL
Beginning balance	\$ 97,317,031	\$ 8,375,581	\$ 12,084,217
Recognized in profit or loss			
Gain (loss) on financial assets and liabilities at FVTPL	3,564,416	-	(611,416)
Gain on reclassification using the overlay approach	23,170	-	-
Recognized in other comprehensive income			
Exchange differences on translating the financial statements of foreign operations	(37,159)	(112)	-
Other comprehensive loss reclassified using the overlay approach	(23,170)	-	-
Gain on equity instruments at FVTOCI	-	1,936,703	-
Acquisitions or issuances	28,668,827	744,333	23,000
Disposals or settlements	(16,013,223)	(55,490)	(814,622)
Transfers out of Level 3	(29,982)	-	-
Ending balance	<u>\$ 113,469,910</u>	<u>\$ 11,001,015</u>	<u>\$ 10,681,179</u>
	For the Year Ended December 31, 2018		
	Financial Assets		Financial Liabilities
	At FVTPL	At FVTOCI	At FVTPL
Beginning balance	\$ 70,194,011	\$ 8,805,837	\$ 8,720,347
Recognized in profit or loss			
Gain on financial assets and liabilities at FVTPL	17,197,053	-	5,245,100
Loss on reclassification using the overlay approach	(7,748,963)	-	-
Amount recognized in other comprehensive income			
Exchange differences on translating the financial statements of foreign operations	20,806	129	-
Other comprehensive gain reclassified using the overlay approach	7,748,963	-	-
Gain on equity instruments at FVTOCI	-	1,281,806	-
Acquisitions or issuances	26,267,995	331,449	53,492
Disposals or settlements	(14,150,703)	(395,326)	(1,934,722)
Transfers to Level 3	941,655	-	-
Transfers out of Level 3	(3,153,786)	(1,648,314)	-
Ending balance	<u>\$ 97,317,031</u>	<u>\$ 8,375,581</u>	<u>\$ 12,084,217</u>

Regarding the above amounts recognized in profit or loss for the years ended December 31, 2019 and 2018, unrealized losses of \$1,732,681 thousand and unrealized gains of \$6,114,069 thousand were related to financial assets held at the end of the year, respectively.

Regarding the above amounts recognized in profit or loss for the years ended December 31, 2019 and 2018, unrealized gains of \$611,416 thousand and unrealized losses of \$5,245,100 thousand were related to financial liabilities held at the end of the year, respectively.

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

The significant unobservable inputs applied for recurring Level 3 fair value measurement were as follows:

Cathay Life and its subsidiaries

December 31, 2019				
Items	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted-average)	Relationship Between Inputs and Fair Value
Financial assets at FVTPL and financial assets at FVTOCI	Equity approach	Discount for lack of liquidity	0%-3%	The higher the discount for lack of marketability, the lower the fair value estimates
	Market approach	Discount for lack of marketability	11%-30%	The higher the discount for lack of marketability, the lower the fair value estimates
	Income approach	Discount for lack of marketability, discount for minority interest, etc.	23%-39%	The higher the discount for lack of marketability and control, the lower the fair value estimates
		Growth rate of net profit after tax	(48)%-265%	The higher the growth rate of adjusted net profit after tax, the higher the fair value estimates
		Dividend payout ratio	0%-140%	The higher the dividend payout ratio, the higher the fair value estimates
December 31, 2018				
Items	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted-average)	Relationship Between Inputs and Fair Value
Financial assets at FVTPL and financial assets at FVTOCI	Equity approach	Discount for lack of liquidity	0%-3%	The higher the discount for lack of marketability, the lower the fair value estimates
	Market approach	Discount for lack of marketability	11%-30%	The higher the discount for lack of marketability, the lower the fair value estimates
	Income approach	Discount for lack of marketability, discount for minority interest, etc.	22%-37%	The higher the discount for lack of marketability and control, the lower the fair value estimates
		Growth rate of net profit after tax	(48)%-36%	The higher the growth rate of adjusted net profit after tax, the higher the fair value estimates
		Dividend payout ratio	70%-140%	The higher the dividend payout ratio, the higher the fair value estimates

Cathay United Bank and its subsidiaries

December 31, 2019				
Items	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted-average)	Relationship Between Inputs and Fair Value
Financial assets at FVTPL	Market approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value of shares
Financial assets at FVTOCI	Market approach	Discount for lack of marketability	15%-30%	The higher the discount for lack of marketability, the lower the fair value of shares
	Income approach	Cost of equity rate	6%-7%	The higher the cost of equity rate, the lower the fair value of the shares
	Value of net assets approach	Value of net assets	N/A	The higher the value of net assets, the higher the fair value of the shares.

December 31, 2018				
Items	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted-average)	Relationship Between Inputs and Fair Value
Financial assets at FVTPL	Market approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value of shares
Financial assets at FVTOCI	Market approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value of shares
	Income approach	Cost of equity rate	6%-7%	The higher the cost of equity rate, the lower the fair value of the shares
	Value of net assets approach	Value of net assets	N/A	The higher the value of net assets, the higher the fair value of the shares

Cathay Century and its subsidiaries

December 31, 2019				
Financial Assets	Valuation Techniques	Significant Unobservable Inputs	Weighted Average Number	Relationship Between Inputs and Fair Value
Financial assets at FVTOCI	Market approach	Discount for lack of marketability	29%	The higher the discount for lack of marketability, the lower the fair value of the shares

December 31, 2018				
Financial Assets	Valuation Techniques	Significant Unobservable Inputs	Weighted Average Number	Relationship Between Inputs and Fair Value
Financial assets at FVTOCI	Market approach	Discount for lack of marketability	29%	The higher the discount for lack of marketability, the lower the fair value of the shares

Cathay Securities and its subsidiaries

December 31, 2019					
Items	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted-average)	Relationship Between Inputs and Fair Value	Sensitivity of the Input to Fair Value
Investments in equity instruments at FVTOCI	Market comparison approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value	Rate of discount for lack of marketability (3%)-3%, floating rate of fair value 3.67%-(3.67%)

December 31, 2018					
Items	Valuation Techniques	Significant Unobservable Inputs	Interval (Weighted-average)	Relationship Between Inputs and Fair Value	Sensitivity of the Input to Fair Value
Investments in equity instruments at FVTOCI	Market comparison approach	Discount for lack of marketability	15%-20%	The higher the discount for lack of marketability, the lower the fair value	Rate of discount for lack of marketability (3%)-3%, floating rate of fair value 3.67%-(3.67%)

4) Valuation process for Level 3 fair value measurements.

The Group'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. 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 Group's accounting policies at each reporting date.

d. Fair values of financial instruments not measured at fair value

Other than cash and cash equivalents, due from the Central Bank and call loans to other banks, securities purchased under resale agreements, receivables, loans, guarantee deposits paid, due to the Central Bank and other banks, securities sold under repurchase agreements, commercial paper payable, bonds payable, other borrowings, payables, deposits and guarantee deposits received, the items whose carrying amount approximate their fair value, the fair values of the Group's financial instruments which are not measured at fair value are listed in the table below:

December 31, 2019

Carrying Amount	Fair Value				Total
	Level 1	Level 2	Level 3		
<u>Financial assets</u>					
Financial assets measured at amortized cost (Note)	\$ 3,078,552,855	\$ 95,315,301	\$ 3,172,189,998	\$ 4,339,864	\$ 3,271,845,163

December 31, 2018

Carrying Amount	Fair Value				Total
	Level 1	Level 2	Level 3		
<u>Financial assets</u>					
Financial assets measured at amortized cost (Note)	\$ 2,704,025,477	\$ 121,132,583	\$ 2,480,186,972	\$ 6,061,288	\$ 2,607,380,843
Other financial assets	1,999,406	-	2,009,973	-	2,009,973

Note: Guarantee deposits paid in bonds are included.

The fair values of the financial assets and financial liabilities included in the Level 2 and Level 3 categories above have been determined in accordance with income approaches based on a discounted cash flow analysis. Significant unobservable inputs used in Level 3 fair value measurement were the discount rates that reflect the credit risk of counterparties and the cash flows that reflect the feature of early reimbursement.

e. Hedge accounting disclosures

Cathay Life and its subsidiaries

1) Cash flow hedges

The future cash flows of the floating-rate assets held by Cathay life and its subsidiaries may fluctuate due to the changes in market interest rates and thus lead to risks. Accordingly, Cathay life and its subsidiaries held IRS to hedge risks arising from the changes in interest rates. Information of hedge accounting is as follows:

a) Hedging instruments

<u>December 31, 2019</u>					
Hedging Instrument	Nominal Amount of the Hedging Instrument	Carrying Amount of the Hedging Instrument		Line Item in the Balance Sheet Where the Hedging Instrument Is Included	Changes in Fair Value Used for Calculating Hedge Ineffectiveness for the Current Period
		Assets	Liabilities		
Interest rate swaps	\$ 6,800,000	\$ 185,206	\$ -	Financial assets for hedging	\$ 34,498
Interest rate swaps	1,317,138	-	30,894	Financial liabilities for hedging	(31,677)

<u>December 31, 2018</u>					
Hedging Instrument	Nominal Amount of the Hedging Instrument	Carrying Amount of the Hedging Instrument		Line Item in the Balance Sheet Where the Hedging Instrument Is Included	Changes in Fair Value Used for Calculating Hedge Ineffectiveness for the Current Period
		Assets	Liabilities		
Interest rate swaps	\$ 6,800,000	\$ 216,611	\$ -	Financial assets for hedging	\$ 54,891

b) Maturities of the nominal amount of hedging instruments and average price or rate

<u>Maturity</u>						
	1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	Over 5 Years	
<u>December 31, 2019</u>						
Interest rate swaps						
Nominal principal	\$ -	\$ -	\$ 2,922,306	\$ 5,194,832	\$ -	
Average fixed rate	-	-	1.6%-2.5%	1.7%-2.5%	-	

<u>Maturity</u>						
	1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	Over 5 Years	
<u>December 31, 2018</u>						
Interest rate swaps						
Nominal principal	\$ -	\$ -	\$ -	\$ 3,800,000	\$ 3,000,000	
Average fixed rate	-	-	-	1.6%	1.7%	

c) Hedged items

For the Year Ended December 31, 2019								
	Changes in Fair Value Used for Calculating Hedge Ineffectiveness for the Current Period	Cash Flow Hedge Reserve	Balance of Cash Flow Hedge Reserve Generated from the Hedging Relationships Where Hedge Accounting Is No Longer Applicable	Change in the Value of the Hedging Instrument Recognized in Other Comprehensive Income	Hedge Ineffectiveness Recognized in Profit or loss	Line Item in Profit or Loss that Includes Hedge Ineffectiveness	Amount Reclassified from the Cash Flow Hedge Reserve to Profit or Loss	Line Item Affected in Profit or Loss Because of the Reclassification
Floating-rate bonds	\$ (34,498)	\$ 185,206	N/A	\$ 34,498	\$ -	\$ -	\$ (65,902)	Net other non-interest gain
Payables	31,677	(30,894)	N/A	(31,677)	-	-	-	Net other non-interest gain
Discontinued hedge - floating-rate bonds	N/A	N/A	(275)	N/A	N/A	N/A	1	Net other non-interest gain

For the Year Ended December 31, 2018								
	Changes in Fair Value Used for Calculating Hedge Ineffectiveness for the Current Period	Cash Flow Hedge Reserve	Balance of Cash Flow Hedge Reserve Generated from the Hedging Relationships Where Hedge Accounting Is No Longer Applicable	Change in the Value of the Hedging Instrument Recognized in Other Comprehensive Income	Hedge Ineffectiveness Recognized in Profit or loss	Line Item in Profit or Loss that Includes Hedge Ineffectiveness	Amount Reclassified from the Cash Flow Hedge Reserve to Profit or Loss	Line Item Affected in Profit or Loss Because of the Reclassification
Floating-rate bonds	\$ (54,891)	\$ 216,611	N/A	\$ 54,891	\$ -	\$ -	\$ (84,725)	Net other non-interest gain
Discontinued hedge - floating-rate bonds	N/A	N/A	\$ -	N/A	N/A	N/A	1,087	Net other non-interest gain

d) Reconciliation for equity component applying hedge accounting and related other comprehensive income were summarized below:

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 173,289	\$ 203,647
Gross amount recognized in other comprehensive income		
Change in the value of the hedging instrument recognized in other comprehensive income	2,545	54,891
Amount reclassified from the cash flow hedge reserve to profit or loss	(65,901)	(83,638)
Income tax	<u>6,336</u>	<u>(1,611)</u>
Ending balance	<u>\$ 116,269</u>	<u>\$ 173,289</u>

2) Fair value hedges

The book value of the foreign currency denominated assets held by Cathay life may fluctuate due to the changes in market exchange rates and thus lead to risk. Accordingly, Cathay life held derivative instruments related to exchange rates to hedge risks arising from changes in exchange rates. Information of hedge accounting is as follows:

a) Hedging instruments

Hedging Instrument	Nominal Amount of the Hedging Instrument	December 31, 2019		Line Item in the Balance Sheet Where the Hedging Instrument Is Included	Changes in Fair Value Used for Calculating Hedge Ineffectiveness for the Current Period
		Carrying Amount of the Hedging Instrument			
		Assets	Liabilities		
Cross currency swaps	\$ 9,742,013	\$ 362,869	\$ -	Financial assets for hedging	\$ 93,293

b) Maturities of the nominal amount of hedging instruments and average price or rate

	Maturity				
	1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	Over 5 Years
<u>December 31, 2019</u>					
Cross currency swaps					
Nominal principal	\$ -	\$ -	\$ -	\$ -	\$ 9,742,013
Interest rate	-	-	-	-	2.20%-2.39%
Exchange rate (EUR/USD)	-	-	-	-	1.1285-1.1353

c) Hedged items

	For the Year Ended December 31, 2019							
	Book Value of Hedged Item		Cumulative Adjustment for Change in Fair Value of Hedged Item Included in the Book Value of the Hedged Item		Line item in the Statement of Financial Position That Includes the Hedged items	Charges in Fair Value Used for Calculating Hedge Ineffectiveness for Current Period	Ineffectiveness Recognized in Profit or loss	Line item in Profit or Loss That Includes the Hedge Ineffectiveness
	Assets	Liabilities	Assets	Liabilities				
Overseas bonds	\$ 9,742,013	\$ -	\$ (93,293)	\$ -	Financial assets at amortized cost	\$ (93,293)	\$ -	\$ -

d) Reconciliation for equity component applying hedge accounting and related other comprehensive income were summarized below:

	For the Year Ended December 31, 2019
<u>Foreign currency basis-related period</u>	
Beginning balance	\$ -
Gross amount recognized in other comprehensive income	
Change in the value of the hedging instrument recognized in other comprehensive income	269,576
Income tax	<u>(53,915)</u>
Ending balance	<u>\$ 215,661</u>

f. Offsetting of financial assets and financial liabilities

Cathay Life and its subsidiaries

Cathay Life and its subsidiaries engage in derivative financial instruments that do not meet the offsetting criteria of standards, but enters into master netting arrangements or other similar agreements with counterparties. Financial instruments subject to master netting arrangements or other similar agreements could be settled at net amount as agreed by both parties of the transaction, or the financial instrument should be settled at gross amount otherwise. However, if one of both parties of the transaction defaults, the other party could choose to settle the transaction at net amount.

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

December 31, 2019

Financial Assets Bound by Offsetting or Enforceable Master Netting Arrangements or Similar Agreement						
Item	Gross Amount of Recognized Financial Assets (a)	Gross Amount of Offset Financial Liabilities Recognized on the Balance Sheet (b)	Net Financial Assets Recognized on the Balance Sheet (c)=(a)-(b)	Relevant Amount That Has Not Been Offset on the Balance Sheet (d)		Net Amount (e)=(c)-(d)
				Financial Instruments	Cash Collateral Received	
				Derivative financial instruments	\$ 28,758,412	

Financial Liabilities Bound by Offsetting or Enforceable Master Netting Arrangements or Similar Agreement						
Item	Gross Amount of Recognized Financial Liabilities (a)	Gross Amount of Offset Financial Liabilities Recognized on the Balance Sheet (b)	Net Financial Liabilities Recognized on the Balance Sheet (c)=(a)-(b)	Relevant Amount That Has Not Been Offset on the Balance Sheet (d)		Net Amount (e)=(c)-(d)
				Financial Instruments	Cash Collateral Received	
				Derivative financial instruments	\$ 2,956,318	

December 31, 2018

Financial Assets Bound by Offsetting or Enforceable Master Netting Arrangements or Similar Agreement						
Item	Gross Amount of Recognized Financial Assets (a)	Gross Amount of Offset Financial Liabilities Recognized on the Balance Sheet (b)	Net Financial Assets Recognized on the Balance Sheet (c)=(a)-(b)	Relevant Amount That Has Not Been Offset on the Balance Sheet (d)		Net Amount (e)=(c)-(d)
				Financial Instruments	Cash Collateral Received	
				Derivative financial instruments	\$ 5,584,159	

Financial Liabilities Bound by Offsetting or Enforceable Master Netting Arrangements or Similar Agreement						
Item	Gross Amount of Recognized Financial Liabilities (a)	Gross Amount of Offset Financial Liabilities Recognized on the Balance Sheet (b)	Net Financial Liabilities Recognized on the Balance Sheet (c)=(a)-(b)	Relevant Amount That Has Not Been Offset on the Balance Sheet (d)		Net Amount (e)=(c)-(d)
				Financial Instruments	Cash Collateral Received	
				Derivative financial instruments	\$ 27,499,106	

Cathay United Bank and its subsidiaries

Cathay United Bank and its subsidiaries engages in financial instrument transactions that are offset in accordance with IAS 32, section 42, and the financial assets and financial liabilities that are relevant to such transactions are presented in the balance sheets at net amounts.

Cathay United Bank and its subsidiaries is also engaged in financial instrument transactions that are not offset in accordance with the regulations, but entered into enforceable master netting arrangements or other similar agreements with counterparties, for example: Global master repurchase agreements, global securities lending agreements, or other similar agreements. 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

Item	Financial Assets Subject to Offsetting, Master Netting Arrangement or Similar Agreements					
	Gross Amount of Recognized Financial Assets (a)	Gross Amount Offset in the Balance Sheet (b)	Amount Presented in the Balance Sheet (c)=(a)-(b)	Amount Not Offset in the Balance Sheet (d)		Net Amount (e)=(c)-(d)
				Financial Instruments (Note)	Cash Collateral Received/ Pledged	
Derivative financial instruments	\$ 51,387,906	\$ -	\$ 51,387,906	\$ 49,166,645	\$ 2,221,261	\$ -

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

December 31, 2019

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

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

December 31, 2018

Item	Financial Assets Subject to Offsetting, Master Netting Arrangement or Similar Agreements					
	Gross Amount of Recognized Financial Assets (a)	Gross Amount Offset in the Balance Sheet (b)	Amount Presented in the Balance Sheet (c)=(a)-(b)	Amount Not Offset in the Balance Sheet (d)		Net Amount (e)=(c)-(d)
				Financial Instruments (Note)	Cash Collateral Received/ Pledged	
Derivative financial instruments	\$ 49,475,706	\$ -	\$ 49,475,706	\$ 49,475,706	\$ -	\$ -

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

December 31, 2018

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

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

Cathay Securities and its subsidiaries

Cathay Securities enters into secured repurchase agreements with counterparties, for which Cathay Securities provides securities as collateral. Only in the event of default, insolvency or bankruptcy, these transactions are allowed to be offset, which does not meet the offsetting criteria of financial instrument transactions, Article 42 of IAS 32, and they are not subject to enforceable master netting arrangements or other similar agreements and should be settled at gross amounts. 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 of Cathay Securities and its subsidiaries is disclosed as follows:

December 31, 2019

Financial Liabilities	Gross Amount of Recognized Financial Liabilities	Gross Amount of Offset Financial Assets Recognized on the Balance Sheet	Net Financial Liabilities Recognized on the Balance Sheet	Relevant Amount That Has Not Been Offset on the Balance Sheet		Net Amount
				Financial Instruments (Note)	Cash Collateral Received	
Repurchase bonds	\$ 2,098,081	\$ -	\$ 2,098,081	\$ 2,065,100	\$ -	\$ 32,981

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

December 31, 2018

Financial Liabilities	Gross Amount of Recognized Financial Liabilities	Gross Amount of Offset Financial Assets Recognized on the Balance Sheet	Net Financial Liabilities Recognized on the Balance Sheet	Relevant Amount That Has Not Been Offset on the Balance Sheet		Net Amount
				Financial Instruments (Note)	Cash Collateral Received	
Repurchase bonds	\$ 3,332,528	\$ -	\$ 3,332,528	\$ 3,379,521	\$ -	\$ (46,993)

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

g. Transfers of financial assets

Financial assets transferred that have not been fully removed

Cathay United Bank and its subsidiaries

Transferred financial assets that are part of Cathay United Bank and its subsidiaries' 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 Cathay United Bank is obligated to repurchase the transferred financial assets according to a fixed price in future periods. With respect to such transactions, Cathay United Bank will not be able to use, sell or pledge such transferred financial assets during the effective period. However Cathay United 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	Carrying Value of Transferred Financial Assets	Carrying Value of Related Financial Liabilities	Fair Value of Transferred Financial Assets	Fair Value of Related Financial Liabilities	Net Fair Value
Financial assets at FVTOCI					
Repurchase agreements	\$ 37,202,442	\$ 35,456,986	\$ 37,202,442	\$ 35,456,986	\$ 1,745,456
Financial assets at amortized cost					
Repurchase agreements	15,538,318	12,723,466	15,346,975	12,723,466	2,623,509

December 31, 2018					
Category of Financial Assets	Carrying Value of Transferred Financial Assets	Carrying Value of Related Financial Liabilities	Fair Value of Transferred Financial Assets	Fair Value of Related Financial Liabilities	Net Fair Value
Financial assets at FVTPL					
Repurchase agreements	\$ 581,159	\$ 523,342	\$ 581,159	\$ 523,342	\$ 57,817
Financial assets at FVTOCI					
Repurchase agreements	44,424,315	42,613,744	44,424,315	42,613,744	1,810,571
Financial assets at amortized cost					
Repurchase agreements	14,649,885	11,447,258	13,056,317	11,447,258	1,609,059
Securities sold under agreements					
Repurchase agreements	1,493,132	1,390,165	1,493,132	1,390,165	102,967

Cathay Securities and its subsidiaries

Transferred financial assets that are part of Cathay Securities and its subsidiaries' daily operations that do not meet the criteria for full derecognition are mostly made up of notes and bonds issued under repurchase agreements. The cash flows of these transactions have been transferred, and reflects the liability where Cathay Securities and its subsidiaries are obligated to buy back the transferred financial assets according to fixed prices in future periods. With respect to such transactions, Cathay Securities and its subsidiaries will not be able to use, sell or pledge the said transferred financial assets during the effective period. However, Cathay Securities and its subsidiaries are still exposed to interest rate risk and credit risk, hence the assets are not fully derecognized.

The following table analyses Cathay Securities and its subsidiaries' financial assets and financial liabilities that have not been fully derecognized:

December 31, 2019

Categories of Financial Assets	Carrying Value of Transferred Financial Assets	Carrying Value of Related Financial Liabilities	Carrying Value of Related Financial Liabilities	Fair Value of Related Financial Liabilities	Net Fair Value
<u>Financial assets at FVTOCI</u>					
Repurchase bonds	\$ 2,065,100	\$ 2,098,081	\$ 2,065,100	\$ 2,098,081	\$ (32,981)

December 31, 2018

Categories of Financial Assets	Carrying Value of Transferred Financial Assets	Carrying Value of Related Financial Liabilities	Carrying Value of Related Financial Liabilities	Fair Value of Related Financial Liabilities	Net Fair Value
<u>Financial assets at FVTOCI</u>					
Repurchase bonds	\$ 3,379,521	\$ 3,332,528	\$ 3,379,521	\$ 3,332,528	\$ 46,993

h. Financial risk management objectives and policies

Cathay Life and its subsidiaries

Cathay Life's major financial instruments include equity and debt investments, derivative instruments, receivables, payables and bonds payable. The main financial risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

1) Market risk analysis

a) Sources of market risk

Market risk is the risk that changes in market risk factors, such as the exchange rate, product price, interest rate, credit spread and stock price, may decrease Cathay Life and its subsidiaries' income or value of investment portfolio.

Cathay Life and its subsidiaries continuously utilize market risk management instruments such as Value at Risk ("VaR") and stress testing to completely and effectively measure, monitor and manage market risk.

i. Value at Risk

VaR is the maximum loss on the investment portfolio due to changes in market risk factors over a given period and at a specified confidence level. Currently, Cathay Life and its subsidiaries respectively adopt the one-week VaR at 95% and 99% confidence levels to measure market risk.

ii. Stress testing

In addition to the VaR model, Cathay Life and its subsidiaries carry out regular stress testing to measure the potential risk in the case of extreme and abnormal events.

Cathay Life and its subsidiaries perform stress testing on positions regularly by applying the simple sensitivity test and scenario analysis. Such tests cover the losses on positions which resulted from changes in specific risk factors in various kinds of historical scenarios.

i) Simple sensitivity test

The simple sensitivity test is to measure the changes in the value of the investment portfolio caused by changes in specific risk factors.

ii) Scenario analysis

The scenario analysis is to measure the changes in the total value of the investment positions caused by hypothetical stress events, including the following scenarios:

- Historical scenario

By considering the fluctuations in risk factors during a specific historical event, Cathay Life and its subsidiaries evaluate the losses that would be incurred for the current investment portfolio at the time of the event.

- Hypothetical scenario

Cathay Life and its subsidiaries simulate rational expectations for possible extreme market changes to evaluate the losses incurred on the investment positions by considering the fluctuations in related risk factors and the relevance between the investment targets and the risk factors.

The risk management department regularly performs stress testing with historical and hypothetical scenarios to serve as a basis for risk analysis, early warning for risk and business management.

Table of Stress Testing

Risk Factor	Variable (+/-)	For the Years Ended December 31	
		2019	2018
Equity risk (stock price index)	-10%	\$ (48,324,062)	\$ (71,190,476)
Interest rate risk (yield curve)	+100bps	(107,250,216)	(111,404,367)
Foreign currency risk (foreign exchange rate)	Appreciation of NTD to all foreign currencies by 1%	(11,428,906)	(10,932,445)

Note 1: Impact of credit spread changes was not considered.

Note 2: Effects of hedging were considered.

Note 3: Data of subsidiaries was not disclosed as Cathay Life assessed that there would be no material impact should the disclosures for the subsidiaries be included.

iii. Sensitivity analysis

Summary of Sensitivity Analysis

For the Year Ended December 31, 2019

Risk Factor	Variable (+/-)	Change in Profit or Loss	Change in Equity
Foreign currency risk	Appreciation of USD/NTD by 1%	\$ 6,971,123	\$ 4,572,072
	Appreciation of CNY/USD by 1%	1,273,520	377,983
	Appreciation of HKD/USD by 1%	(1,447)	350,916
	Appreciation of EUR/USD by 1%	410,075	163,587
	Appreciation of GBP/USD by 1%	78,732	296,052
Interest rate risk	Upward parallel shift of the yield curve (USD) by 1bp	(111)	(846,435)
	Upward parallel shift of the yield curve (CNY) by 1bp	-	(14,547)
	Upward parallel shift of the yield curve (EUR) by 1bp	-	(14,281)
	Upward parallel shift of the yield curve (GBP) by 1bp	-	(9,463)
	Upward parallel shift of the yield curve (NTD) by 1bp	147	(74,278)
	Equity price risk	Increase in equity price by 1%	(70,248)

For the Year Ended December 31, 2018

Risk Factor	Variable (+/-)	Change in Profit or Loss	Change in Equity
Foreign currency risk	Appreciation of USD/NTD by 1%	\$ 5,703,586	\$ 5,189,911
	Appreciation of CNY/USD by 1%	834,767	536,707
	Appreciation of HKD/USD by 1%	1,978	614,256
	Appreciation of EUR/USD by 1%	93,336	197,382
	Appreciation of GBP/USD by 1%	30,281	245,729
Interest rate risk	Upward parallel shift of the yield curve (USD) by 1bp	2,040	(912,051)
	Upward parallel shift of the yield curve (AUD) by 1bp	1,501	-
	Upward parallel shift of the yield curve (EUR) by 1bp	3,709	(8,246)
	Upward parallel shift of the yield curve (NTD) by 1bp	491	(161,089)
Equity price risk	Increase in equity price by 1%	135,986	7,006,951

Note 1: Impact of credit spread changes was not considered.

Note 2: Effects of hedging were considered.

Note 3: Change in equity was not included in the impact on the change in profit or loss.

Note 4: Provision or reversal of reserve for foreign exchange fluctuations was not considered in the change in profit or loss due to foreign currency risk.

Note 5: Data of subsidiaries was not disclosed as Cathay Life assessed that there would be no material impact should the disclosures for the subsidiaries be included.

2) Credit risk analysis

a) Sources of credit risk

When engaged in financial transactions, Cathay life is exposed to credit risks, including issuer credit risk, counterparty credit risk and credit risk of underlying assets:

- i. Issuer credit risk is the risk that Cathay life may suffer financial losses on debt instruments or bank savings because the issuers (guarantors), borrowers or banks are not able to perform repayment obligations on agreed conditions due to default, bankruptcy or liquidation.
- ii. Counterparty credit risk is the risk that Cathay life may suffer financial losses because the counterparty does not perform its obligation to settle or pay at the appointed date.
- iii. Credit risk of underlying assets is the risk that Cathay life may suffer losses due to deterioration of the credit quality, increase of credit spread, downgrade or breach of any contract terms of underlying assets linked to financial instruments.

b) Concentration risk

i. Regional distribution of maximum risk exposure for Cathay Life's financial assets:

December 31, 2019

Financial Assets	Taiwan	Asia	Europe	North America	Emerging Markets and Others	Total
Cash and cash equivalents	\$ 261,553,382	\$ 27,832,083	\$ 185,653	\$ 86,397,047	\$ 16,115,903	\$ 392,084,068
Financial assets at FVTPL	43,409,974	31,448,394	113,252,004	46,690,879	56,395,527	291,196,778
Financial assets at FVTOCI	39,964,295	37,498,812	166,000,546	353,996,509	221,251,605	818,711,767
Financial assets for hedging	87,793	-	362,869	97,413	-	548,075
Financial assets measured at amortized cost	175,262,332	173,472,898	434,046,724	1,167,292,440	663,869,507	2,613,943,901
	<u>\$ 520,277,776</u>	<u>\$ 270,252,187</u>	<u>\$ 713,847,796</u>	<u>\$ 1,654,474,288</u>	<u>\$ 957,632,542</u>	<u>\$ 4,116,484,589</u>
Proportion	12.6%	6.6%	17.3%	40.2%	23.3%	100%

December 31, 2018

Financial Assets	Taiwan	Asia	Europe	North America	Emerging Markets and Others	Total
Cash and cash equivalents	\$ 108,663,821	\$ 598,577	\$ 136,389	\$ 54,671,101	\$ 201,744	\$ 164,271,632
Financial assets at FVTPL	36,221,083	26,691,362	86,749,425	34,116,884	82,160,244	265,938,998
Financial assets at FVTOCI	90,868,582	31,038,900	168,157,801	359,145,961	242,495,856	891,707,100
Financial assets for hedging	96,344	-	-	120,267	-	216,611
Financial assets measured at amortized cost	183,624,214	140,559,799	382,921,822	1,001,042,809	549,913,112	2,258,061,756
Other financial assets	-	-	1,999,406	-	-	1,999,406
	<u>\$ 419,474,044</u>	<u>\$ 198,888,638</u>	<u>\$ 639,964,843</u>	<u>\$ 1,449,097,022</u>	<u>\$ 874,770,956</u>	<u>\$ 3,582,195,503</u>
Proportion	11.7%	5.5%	17.9%	40.5%	24.4%	100%

ii. Regional distribution of maximum risk exposure for Cathay Life's secured loans:

December 31, 2019

Location of Collaterals	Northern and Eastern Areas	Central Area	Southern Area	Overseas	Total
Secured loans	\$ 234,560,225	\$ 40,573,607	\$ 63,399,966	\$ 6,598,385	\$ 345,132,183
Non-accrual receivables	453,880	78,936	124,981	-	657,797
	<u>\$ 235,014,105</u>	<u>\$ 40,652,543</u>	<u>\$ 63,524,947</u>	<u>\$ 6,598,385</u>	<u>\$ 345,789,980</u>
Proportion	68%	11.8%	18.4%	1.8%	100%

December 31, 2018

Location of Collaterals	Northern and Eastern Areas	Central Area	Southern Area	Overseas	Total
Secured loans	\$ 287,440,820	\$ 48,492,142	\$ 71,391,306	\$ 8,193,993	\$ 415,518,261
Non-accrual receivables	<u>878,642</u>	<u>36,044</u>	<u>54,067</u>	<u>-</u>	<u>968,753</u>
	<u>\$ 288,319,462</u>	<u>\$ 48,528,186</u>	<u>\$ 71,445,373</u>	<u>\$ 8,193,993</u>	<u>\$ 416,487,014</u>
Proportion	69.2%	11.6%	17.2%	2.0%	100%

c) Categories for credit risk quality

Cathay Life classified credit risk into low credit risk, medium credit risk, high credit risk and credit impaired. The definitions of each category are as follows:

- i. Low credit risk indicates that an entity or a subject has a robust ability to perform financial commitment. Even though it encounters material uncertainty or exposes to unfavorable conditions, its ability to perform financial commitment obligations will be kept and maintained.
- ii. Medium credit risk indicates that an entity or a subject has a weak ability to perform financial commitment. Unfavorable operational, financial or economic conditions will diminish its ability to perform financial commitment.
- iii. High credit risk indicates that an entity or a subject has a fragile ability to perform financial commitment. The capability to perform financial commitment depends on the favorability of its business environment and financial conditions.
- iv. Credit impaired indicates that an entity or a subject fails to fulfill its obligations, and Cathay Life evaluates the potential losses and determines it as impaired.

d) Determination on the credit risk that has increased significantly since initial recognition

- i. Cathay life assesses whether there is a significant increase in credit risk of a financial instrument applicable for impairment requirements under IFRS 9 since initial recognition at each reporting date. To make this assessment, Cathay life considers reasonable and supportable information (including forward-looking information) which indicates that credit risk has increased significantly since initial recognition. Main indicators include external credit rating, past due information, credit spread and other market information which shows that the credit risk related to borrowers and issuers has increased significantly.
- ii. If the credit risk of a financial instrument is determined to be low at the reporting date, it indicates that the credit risk of the financial instrument has not increased significantly since initial recognition.

e) The definition of default and credit-impaired financial assets

Cathay Life's definition of default on financial assets is the same as that of a credit-impaired financial asset. If one or more of the following criteria are met, a financial asset is considered defaulted and credit-impaired:

- i. Quantitative factor: When the contractual payments are overdue for more than 90 days, the financial asset is considered defaulted and credit-impaired.

- ii. Qualitative factor: An evidence indicates that the issuers or borrowers cannot pay the contractual payments, or that they have significant financial difficulties, for example:
 - i) The issuers or borrowers have entered into bankruptcy or are probable to enter into bankruptcy or financial reorganization.
 - ii) The issuers or borrowers fail to pay interest or principal according to the issue terms and conditions.
 - iii) The collaterals of the borrowers are provisionally seized or enforced.
 - iv) The borrowers claim for a change of credit conditions due to financial difficulties.
 - iii. The abovementioned definitions of default on a financial asset and a credit-impaired financial asset are applicable to all financial assets held by Cathay Life, and are aligned with those of relevant financial assets for internal credit risk management. The definitions are also applicable to related impairment assessment model.
- f) Measurement of expected credit loss

- i. The methodology and assumptions applied

For financial instruments on which the credit risk has not increased significantly since initial recognition, Cathay life measures loss allowance for financial instruments at an amount equal to 12-month expected credit losses; for financial instruments whose credit risk has increased significantly since initial recognition or those which have been credit-impaired, Cathay life measures loss allowance for financial instruments at an amount equal to the lifetime expected credit losses.

In the measurement of expected credit losses, 12-month and lifetime expected credit losses are the multiply of exposure at default (“EAD”), loss given default (“LGD”) and probability of default (“PD”) of issuers, guarantee agencies or borrowers for 12 months and the lifetime, respectively, in consideration of time value of money.

PD is the rate that a default occurs on issuers, guarantee agencies or borrowers. LGD is the loss rate that resulted from a default of issuers, guarantee agencies or borrowers. Loss given default used by Cathay life in impairment assessment is based on information regularly issued by Moody’s. Probability of default is based on information regularly issued by Taiwan Ratings Crop. and Moody’s and is determined based upon current observable information and macroeconomic information (for example, gross domestic product and economic growth rate) with adjustments of historical data. Exposure at default is measured at the amortized cost and interest receivables of financial assets.

- ii. Forward-looking information considerations

Cathay life takes forward-looking information into consideration while measuring expected credit losses of financial assets.

g) Gross carrying amounts of maximum credit risk exposure and categories for credit quality

i. Financial assets of Cathay Life

	December 31, 2019					
	Stage 1	Stage 2	Stage 3		Loss Allowance	Gross Carrying Amount
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets		
Investment grade						
Debt instruments at FVTOCI	\$ 806,786,368	\$ -	\$ -	\$ -	\$ -	\$ 806,786,368
Financial assets measured at amortized cost	2,586,272,855	-	-	-	(988,749)	2,585,284,106
Other financial assets	-	-	-	-	-	-
Non-investment grade						
Debt instruments at FVTOCI	11,734,687	190,712	-	-	-	11,925,399
Financial assets measured at amortized cost	25,743,796	3,124,271	-	-	(208,272)	28,659,795

	December 31, 2018					
	Stage 1	Stage 2	Stage 3		Loss Allowance	Gross Carrying Amount
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets		
Investment grade						
Debt instruments at FVTOCI	\$ 868,624,804	\$ -	\$ -	\$ -	\$ -	\$ 868,624,804
Financial assets measured at amortized cost	2,221,201,714	-	-	-	(853,594)	2,220,348,120
Other financial assets	2,000,000	-	-	-	(594)	1,999,406
Non-investment grade						
Debt instruments at FVTOCI	22,790,603	215,072	76,621	-	-	23,082,296
Financial assets measured at amortized cost	26,117,815	7,906,750	5,155,973	-	(1,466,902)	37,713,636

Note: Investment grade assets refer to those with credit ratings of at least BBB-; non-investment grade assets are those with credit ratings lower than BBB-.

ii. Secured loans and non-accrual loans of Cathay Life

	December 31, 2019						
	Stage 1	Stage 2	Stage 3		Loss Allowance	Difference from Impairment Charged in Accordance with Guidelines for Handling Assessment of Assets	Gross Carrying Amount
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets			
Secured loans and non-accrual loans	\$ 337,652,839	\$ 141,286	\$ 7,995,855	\$ -	\$ (1,232,047)	\$ (3,593,929)	\$ 340,964,004

	December 31, 2018						
	Stage 1	Stage 2	Stage 3		Loss Allowance	Difference from Impairment Charged in Accordance with Guidelines for Handling Assessment of Assets	Gross Carrying Amount
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets			
Secured loans and non-accrual loans	\$ 411,821,024	\$ 111,237	\$ 4,554,753	\$ -	\$ (682,254)	\$ (5,126,352)	\$ 410,678,408

h) Reconciliation for loss allowance is summarized below:

i. Debt instrument investments at FVTOCI

	12-month Expected Credit Losses	Lifetime Expected Credit Losses			Total of Impairment Charged in Accordance with IFRS 9
		Collectively Assessed	Not Purchased or Originated Credit- impaired Financial Assets	Purchased or Originated Credit- impaired Financial Assets	
January 1, 2019	\$ 468,280	\$ 17,049	\$ 12,339	\$ -	\$ 497,668
Changes due to financial instruments recognized as at January 1					
Transferred to lifetime expected credit losses	(3,441)	3,441	-	-	-
New financial assets originated or purchased	148,212	-	7	-	148,219
Financial assets that have been derecognized during the period	(271,945)	(86,404)	(12,462)	-	(370,811)
Changes in models/risk parameters	2,062	75,028	-	-	77,090
Foreign exchange and other movements	(6,090)	552	116	-	(5,422)
December 31, 2019	<u>\$ 337,078</u>	<u>\$ 9,666</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 346,744</u>
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit- impaired Financial Assets	Purchased or Originated Credit- impaired Financial Assets	Total of Impairment Charged in Accordance with IFRS 9
January 1, 2018	\$ 455,064	\$ 96,965	\$ -	\$ -	\$ 552,029
Changes due to financial instruments recognized as at January 1					
Transferred to lifetime expected credit losses	(1,372)	1,372	-	-	-
Transferred to credit-impaired financial assets	(19)	-	19	-	-
Transferred to 12-month expected credit losses	127	(127)	-	-	-
New financial assets originated or purchased	197,122	-	4,313	-	201,435
Financial assets that have been derecognized during the period	(218,560)	(139,162)	-	-	(357,722)
Changes in models/risk parameters	21,707	57,581	8,007	-	87,295
Foreign exchange and other movements	14,211	420	-	-	14,631
December 31, 2018	<u>\$ 468,280</u>	<u>\$ 17,049</u>	<u>\$ 12,339</u>	<u>\$ -</u>	<u>\$ 497,668</u>

ii. Financial assets measured at amortized cost

	Lifetime Expected Credit Losses				Total of Impairment Charged in Accordance with IFRS 9
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit-impaired Financial Assets	Purchased or Originated Credit-impaired Financial Assets	
January 1, 2019	\$ 904,430	\$ 705,622	\$ 710,444	\$ -	\$ 2,320,496
Changes due to financial instruments recognized as at January 1					
Transferred to lifetime expected credit losses	(2,069)	2,069	-	-	-
New financial assets originated or purchased	471,829	-	-	-	471,829
Financial assets that have been derecognized during the period	(363,639)	(533,832)	(658,551)	-	(1,556,022)
Changes in models/risk parameters	55,156	(18,543)	-	-	36,613
Foreign exchange and other movements	<u>(22,670)</u>	<u>(1,332)</u>	<u>(51,893)</u>	<u>-</u>	<u>(75,895)</u>
December 31, 2019	<u>\$ 1,043,037</u>	<u>\$ 153,984</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,197,021</u>

	Lifetime Expected Credit Losses				Total of Impairment Charged in Accordance with IFRS 9
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit-impaired Financial Assets	Purchased or Originated Credit-impaired Financial Assets	
January 1, 2018	\$ 754,100	\$ 705,758	\$ -	\$ -	\$ 1,459,858
Changes due to financial instruments recognized as at January 1					
Transferred to lifetime expected credit losses	(4,597)	4,597	-	-	-
Transferred to credit-impaired financial assets	(696)	-	696	-	-
Transferred to 12-month expected credit losses	29,348	(29,348)	-	-	-
New financial assets originated or purchased	236,156	-	294,207	-	530,363
Financial assets that have been derecognized during the period	(110,906)	(366,214)	-	-	(477,120)
Changes in models/risk parameters	(24,051)	371,227	415,541	-	762,717
Foreign exchange and other movements	<u>25,076</u>	<u>19,602</u>	<u>-</u>	<u>-</u>	<u>44,678</u>
December 31, 2018	<u>\$ 904,430</u>	<u>\$ 705,622</u>	<u>\$ 710,444</u>	<u>\$ -</u>	<u>\$ 2,320,496</u>

iii. Other financial assets

	Lifetime Expected Credit Losses				Total of Impairment Charged in Accordance with IFRS 9
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit-impaired Financial Assets	Purchased or Originated Credit-impaired Financial Assets	
January 1, 2019	\$ 594	\$ -	\$ -	\$ -	\$ 594
Financial assets that have been derecognized during the year	(667)	-	-	-	(667)
Foreign exchange and other movements	73				73
December 31, 2019	\$ -	\$ -	\$ -	\$ -	\$ -

	Lifetime Expected Credit Losses				Total of Impairment Charged in Accordance with IFRS 9
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit-impaired Financial Assets	Purchased or Originated Credit-impaired Financial Assets	
January 1, 2018	\$ 901	\$ -	\$ -	\$ -	\$ 901
Foreign exchange and other movements	(307)	-	-	-	(307)
December 31, 2018	\$ 594	\$ -	\$ -	\$ -	\$ 594

iv. Secured loans and non-accrual receivable

	Lifetime Expected Credit Losses				Total of Impairment Charged in Accordance with IFRS 9	Difference from Impairment Charged in Accordance with Guidelines for Handling Assessment of Assets	Total
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit-impaired Financial Assets	Purchased or Originated Credit-impaired Financial Assets			
January 1, 2019	\$ 90,567	\$ 201	\$ 591,486	\$ -	\$ 682,254	\$ 5,126,352	\$ 5,808,606
Changes due to financial instruments recognized as at January 1							
Transferred to lifetime expected credit losses	(18)	894	(876)	-	-	-	-
Transferred to credit-impaired financial assets	(4,613)	(76)	4,689	-	-	-	-
Transferred to 12-month expected credit losses	1,397	(74)	(1,323)	-	-	-	-
New financial assets originated or purchased	3,918	-	11,254	-	15,172	-	15,172
Financial assets that have been derecognized during the period	(13,573)	(33)	(229,458)	-	(243,064)	-	(243,064)
Difference from impairment charged in accordance with Guidelines for Handling Assessment of Assets	-	-	-	-	-	(1,532,423)	(1,532,423)
Changes in models/risk parameters	7,131	(613)	771,167	-	777,685	-	777,685
December 31, 2019	\$ 84,809	\$ 299	\$ 1,146,939	\$ -	\$ 1,232,047	\$ 3,593,929	\$ 4,825,976

	Lifetime Expected Credit Losses				Total of Impairment Charged in Accordance with IFRS 9	Difference from Impairment Charged in Accordance with Guidelines for Handling Assessment of Assets	Total
	12-month Expected Credit Losses	Collectively Assessed	Not Purchased or Originated Credit-impaired Financial Assets	Purchased or Originated Credit-impaired Financial Assets			
January 1, 2018	\$ 108,879	\$ 1,211	\$ 601,271	\$ -	\$ 711,361	\$ 5,438,078	\$ 6,149,439
Changes due to financial instruments recognized as at January 1							
Transferred to lifetime expected credit losses	(15)	15	-	-	-	-	-
Transferred to credit-impaired financial assets	(338)	(44)	382	-	-	-	-
Transferred to 12-month expected credit losses	2,763	(1,036)	(1,727)	-	-	-	-
New financial assets originated or purchased	23,349	-	8,284	-	31,633	-	31,633
Financial assets that have been derecognized during the period	(12,626)	(124)	(69,442)	-	(82,192)	-	(82,192)
Difference from impairment charged in accordance with Guidelines for Handling Assessment of Assets	-	-	-	-	-	(311,726)	(311,726)
Changes in models/risk parameters	(31,445)	179	52,718	-	21,452	-	21,452
December 31, 2018	\$ 90,567	\$ 201	\$ 591,486	\$ -	\$ 682,254	\$ 5,126,352	\$ 5,808,606

There were no significant changes in loss allowance due to significant changes in the gross carrying amounts of the financial instruments.

i) Exposure to credit risk and loss allowance of receivables

Measurement of loss allowance of Cathay Life's receivables which are in the scope of the impairment requirements under IFRS 9 are based upon the lifetime expected credit losses under the simplified approach. Loss allowance measured by a provision matrix under simplified approach is as follows:

	Recognition				Total
	Not Yet Due/within 1 Month	1-3 Months	3-6 Months	Over 6 Months	
<u>December 31, 2019</u>					
Gross carrying amount (Note)	\$ 14,553,629	\$ 74,573	\$ 495	\$ -	\$ 14,628,697
Loss rate	0%	2%	10%	50%	
Lifetime expected credit losses	-	1,491	50	-	1,541

Note: Cathay Life's receivables included notes receivable in the amount of \$80,968 thousand and other receivables in the amount of \$14,547,729 thousand.

	Recognition				Total
	Not Yet Due/within 1 Month	1-3 Months	3-6 Months	Over 6 Months	
<u>December 31, 2018</u>					
Gross carrying amount (Note)	\$ 11,311,658	\$ 111,076	\$ 1,219	\$ 3	\$ 11,423,956
Loss rate	0%	2%	10%	50%	
Lifetime expected credit losses	-	2,222	123	1	2,346

Note: Cathay Life's receivables included notes receivable in the amount of \$72,825 thousand and other receivables in the amount of \$11,351,131 thousand.

The movements of loss allowance were as follows:

	For the Years Ended December 31	
	2019	2018
Beginning balance	\$ 2,346	\$ 2,175
Provision (reversal) for the current period	<u>(805)</u>	<u>171</u>
Ending balance	<u>\$ 1,541</u>	<u>\$ 2,346</u>

2) Liquidity risk analysis

a) Sources of liquidity risk

Liquidity risks of financial instruments are comprised of funding liquidity risk and market liquidity risk. Funding liquidity risk is the risk that Cathay Life is not capable of performing matured commitment because its fails to realize assets or obtain sufficient funds. Market liquidity risk is the risk of significant changes in fair values when Cathay Life sells or offsets its positions during a market disorder or a lack of sufficient market depth.

b) Liquidity risk management

Cathay Life assesses the characteristics of business, monitors short-term cash flows, and constructs the completed mechanism of liquidity risk management. Furthermore, Cathay life manages market liquidity risk cautiously by considering market trading volumes and adequacy of holding positions symmetrically.

Cathay Life uses cash flow model and stress testing to assess cash flow risk based on actual management needs or special situations. Also, for abnormal and urgent financing needs, management of Cathay life makes an emergency operating procedure to deal with significant liquidity risks.

The analysis of cash outflows to Cathay Life and its subsidiaries is listed below and based on the residual terms to maturity on the balance sheet date. The disclosed amounts are prepared in accordance with contract cash flows and, accordingly for certain line items, the disclosed amounts are different to the amounts on consolidated balance sheets.

The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

	December 31, 2019				
	Less than 6 Months	Due in 6-12 Months	Due in 1-2 Years	Due in 2-5 Years	Over 5 Years
<u>Non-derivative financial liabilities</u>					
Payables	\$ 29,055,173	\$ 281,015	\$ 385,835	\$ 1,195,135	\$ 47,444
Bonds payable (Note 1)	561,650	1,194,411	3,169,920	8,145,000	87,030,080
Lease liabilities (Note 2)	297,218	358,116	568,511	1,375,285	18,287,241
<u>Derivative financial liabilities</u>					
Foreign exchange forward contracts	1,834,039	298,058	-	-	-
Foreign currency swaps	1,231,198	-	-	-	-
Interest rate swaps	1,481	1,517	3,410	1,259	-
Options	18,016	-	-	-	-
	December 31, 2018				
	Less than 6 Months	Due in 6-12 Months	Due in 1-2 Years	Due in 2-5 Years	Over 5 Years
<u>Non-derivative financial liabilities</u>					
Payables	\$ 31,044,618	\$ 239,517	\$ 285,769	\$ 1,242,728	\$ 9,636
Bonds payable (Note 1)	414,540	1,194,411	2,415,000	7,245,000	78,400,000
<u>Derivative financial liabilities</u>					
Foreign currency swaps	23,555,917	10,107,225	-	-	-
Foreign exchange forward contracts	5,538,893	53,900	-	-	-
Interest rate swaps	14,230	3,686	3,978	2,587	-

Note 1: For the bonds payable without maturity dates, the contract cash flows were determined for 10 years as remaining periods.

Note 2: For the lease liabilities, the contract cash flows were determined for 1 to 43 years as remaining periods.

Cathay United Bank and its subsidiaries

Cathay United Bank's risk control and hedging strategy follows the requirements of the customer service-oriented banking industry and regulatory environment. In order to comply with the above requirements, Cathay United Bank adopted different risk management methods to identify its risks and Cathay United 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.

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

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

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

1) Credit risk

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

a) Credit risk policy and implementation

i. Cathay United Bank, Indovina Bank and CUBCN Bank

To centralize risk management functions currently handled by different departments, Cathay United 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 credit risk management are to improve asset quality and to generate stable profits while reducing risk through a diversified and balanced loan portfolio. Cathay United 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. Cathay United 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.

Cathay United 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 Cathay United 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.

ii. CUBC Bank

CUBC Bank's board of directors resolved that a risk management department would be established to manage the credit risk. CUBC Bank's 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 charge with approval of all credit in excess of CUBC Bank's 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.

b) Judgment that credit risk has increased significantly since initial recognition

i. Cathay United Bank and CUBCN Bank

Cathay United 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, Cathay United 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:

i) Quantitative indicators

- 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.

- 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.

ii) 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.

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

ii. 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:

i) 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.

ii) 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.

iii) Past due information

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

iv) 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.

iii. CUBC Bank

CUBC Bank observes the following indicators at each reporting date in order to determine if the financial asset is credit impaired:

i) 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.

ii) Loan classification from NBC

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

iii) 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.

c) Default and credit impairment of financial asset

i. Cathay United Bank and CUBCN Bank

Cathay United Bank and CUBCN Bank's 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, Cathay United Bank determines the financial assets to be subject to default and credit impairment.

i) Quantitative indicators

- Changes on credit rating

When the credit rating of the financial asset at the reporting date falls into the default level, it is determined to be credit impaired.

- 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.

ii) Qualitative indicator

When the information observed at the reporting date meets the following conditions, the financial asset is determined to be credit impaired.

- Bailout, reorganization, individual agreement due to debtor's financial difficulties.
- Lawsuit action has been taken
- Debt settlement, debt negotiation.
- 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 Cathay United 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.

ii. 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:

i) 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.

ii) Past due information

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

iii) 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.

iii. CUBC Bank

CUBC 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:

i) Past due information

The contract payment is 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.

ii) 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 a significant increase in credit risk since initial recognition.

iii) 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.

d) The measurement of expected credit loss

i. Cathay United Bank and CUBCN Bank

For the purpose of assessing the expected credit losses, Cathay United 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 initial recognition (Stage 1), Cathay United Bank and CUBCN Bank should measure the allowance for losses using 12-month expected credit losses. When the credit risk of the financial instrument has increased significantly (Stage 2) or the financial instrument is credit impaired (Stage 3) after initial recognition, Cathay United Bank and CUBCN Bank should measure the allowance for losses based on lifetime expected credit losses.

For the measurement of the expected credit loss, Cathay United 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 Cathay United 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.).

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

Cathay United 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.

ii. 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
Bond portfolio	Grouped by product category, external credit rating and payment ranks

i) 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.

ii) 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.

iii. Cathay United Bank Cambodia (CUBC Bank)

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

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

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.

e) Write-off policy

Cathay United Bank and its subsidiaries write off all or part of their financial assets when all or part of their financial assets cannot reasonably be expected to be recovered.

Indicators that show that the financial assets cannot be reasonably collected are as follows:

- i. The recovery activity has stopped.
- ii. Assessed the borrower doesn't have sufficient assets or sources of income to pay the overdraft.

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

f) Consideration of forward-looking information

Cathay United Bank and CUBCN Bank

Cathay United 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 Cathay United Bank and CUBCN Bank in 2019 are as follows:

Credit Category	Probability of Default (PD)	Loss Given Default (LGD)
Enterprise loan	Consumer Price Index Government Expenditures GDP % Proportion of investment in GDP (%)	GDP %
	Consumer loan	
Credit card	Price Index Proportion of government revenue in GDP (%)	

Indovina Bank

Indovina Bank carries out quantitative and qualitative analyses based on historical data in identifying the local and global economic factors impacting the credit risk and expected credit losses of different portfolios, and uses the regression model, interpolation adjustments and historical situation in analyzing and estimating the impairment parameters after forward-looking adjustments. The selected economic factors and their effects on PDs varied from different types of portfolios.

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

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

Cathay United Bank Cambodia (CUBC Bank)

CUBC Bank builds the expected credit loss parameter model based on the historical default and loss data, taking into consideration the local risk distribution and borrower characteristics when using the local overall economic data in carrying out the forward looking adjustments of estimation parameters using the interpolation method.

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

Segment	Selected Factors
Loans	Change in inflation (%) Change in volume of imports (%) Proportion of investments in GDP (%)
Credit card	Change in volume of exports (%) Proportion of savings in GDP (%) Proportion of current account balance in in GDP (%)

g) Credit risk management policy

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

i. Categories of credit risk

The credit risk of Cathay United 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, Cathay United Bank established the regulations governing the procedure to deal with non-performing loans, non-accrual loans and bad debts.

ii. Grades of credit quality

Cathay United 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, Cathay United Bank employs statistical methods and the professional judgment from the experts. Cathay United 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 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, Cathay United Bank also evaluates default risk of clients by using the credit rating scores developed by Cathay United Bank and the external due diligence services.

The credit quality of Cathay United 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, Cathay United 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.

Cathay United 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.

iii. Hedge of credit risk and easing policy

i) Collateral

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

Other non-credit business collateral 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.

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

To avoid the excessive risk concentration, Cathay United Bank limits the credit amounts of single counterparties and groups; Cathay United 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, Cathay United 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.

iii) Net settlement agreement

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

iv. Cathay United Bank's maximum exposure 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:

i) Cathay United Bank

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

ii) Indovina Bank

Off Balance Sheet Items	Maximum Exposure to Credit Risk	
	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

iii) CUBC Bank

Off Balance Sheet Items	Maximum Exposure to Credit Risk	
	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	-

iv) CUBCN Bank

Off Balance Sheet Items	Maximum Exposure to Credit Risk	
	December 31, 2019	December 31, 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, Cathay United Bank conducts an overall assessment and takes appropriate risk reduction measures, such as obtaining collateral and guarantors. For obtaining of collateral, Cathay United Bank has collateral management guidelines, to ensure that collateral meet the specific criteria and has the effect of reducing the business risk.

The management deems Cathay United Bank and its subsidiaries are able to control and minimize the credit risk exposures in off-balance-sheet items as Cathay United Bank and its subsidiaries use more strict rating procedures when extending credits and conduct reviews regularly.

The carrying amount of the maximum credit risk exposure of on-balance-sheet financial assets are as follows:

Cathay United Bank and its subsidiaries' discounts and loans:

	December 31, 2019			Difference from Impairment Charged in Accordance with Applicable Laws and Regulations	Total
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3 Lifetime Expected Credit Losses		
Total carrying amount	\$ 1,500,192,488	\$ 68,503,519	\$ 11,866,187	\$ -	\$ 1,580,562,194
Less: Allowance impairment	(2,753,556)	(1,746,741)	(5,386,493)	-	(9,886,790)
Difference from impairment charged in accordance with regulations	-	-	-	(17,524,498)	(17,524,498)
	\$ 1,497,438,932	\$ 66,756,778	\$ 6,479,694	\$ (17,524,498)	\$ 1,553,150,906

Cathay United Bank and its subsidiaries' receivables:

	December 31, 2019			Difference from Impairment Charged in Accordance with Applicable Laws and Regulations	Total
	Stage 1	Stage 2	Stage 3		
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses		
Total carrying amount	\$ 99,439,051	\$ 1,560,450	\$ 2,265,790	\$ -	\$ 103,265,291
Less: Allowance impairment	(509,882)	(154,306)	(1,660,104)	-	(2,324,292)
Difference from impairment charged in accordance with regulations	-	-	-	(52,976)	(52,976)
	<u>\$ 98,929,169</u>	<u>\$ 1,406,144</u>	<u>\$ 605,686</u>	<u>\$ (52,976)</u>	<u>\$ 100,888,023</u>

Cathay United Bank and its subsidiaries' discounts and loans:

	December 31, 2018			Difference from Impairment Charged in Accordance with "Guidelines for Handling Assessment of Assets"	Total
	Stage 1	Stage 2	Stage 3		
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses		
Total carrying amount	\$ 1,549,705,049	\$ 59,275,734	\$ 11,769,709	\$ -	\$ 1,620,750,492
Less: Allowance impairment	(3,914,449)	(1,667,321)	(4,912,617)	-	(10,494,387)
Difference from impairment charged in accordance with regulations	-	-	-	(14,932,854)	(14,932,854)
	<u>\$ 1,545,790,600</u>	<u>\$ 57,608,413</u>	<u>\$ 6,857,092</u>	<u>\$ (14,932,854)</u>	<u>\$ 1,595,323,251</u>

Cathay United Bank and its subsidiaries' receivables:

	December 31, 2018			Difference from Impairment Charged in Accordance with Applicable Laws and Regulations	Total
	Stage 1	Stage 2	Stage 3		
	12-month Expected Credit Losses	Lifetime Expected Credit Losses	Lifetime Expected Credit Losses		
Total carrying amount	\$ 83,956,813	\$ 1,660,989	\$ 2,422,873	\$ -	\$ 88,040,675
Less: Allowance impairment	(126,022)	(116,965)	(1,768,492)	-	(2,011,479)
Difference from impairment charged in accordance with regulations	-	-	-	(50,470)	(50,470)
	<u>\$ 83,830,791</u>	<u>\$ 1,544,024</u>	<u>\$ 654,381</u>	<u>\$ (50,470)</u>	<u>\$ 85,978,726</u>

v. Credit risk concentration of Cathay United Bank and its subsidiaries

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 Cathay United Bank is derived 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. Cathay United Bank does not significantly concentrate on a single client or counterparty, and the transaction amount with a single client or counterparty relative to the Cathay United Bank's total bills discounts and loans and overdue receivables is not significant. Discounts and loans, guarantees, bills purchased, and acceptances receivable of Cathay United Bank according to industry and country were listed below:

Industry Type Items	December 31			
	2019		2018	
	Amount	%	Amount	%
Manufacturing	\$ 116,211,750	7.28	\$ 117,141,000	7.16
Financial institutions and 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	<u>352,249,142</u>	<u>22.07</u>	<u>403,005,618</u>	<u>24.63</u>
	<u>\$ 1,596,320,169</u>	<u>100.00</u>	<u>\$ 1,636,523,887</u>	<u>100.00</u>

Geographic Region Items	December 31			
	2019		2018	
	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	<u>22,877,127</u>	<u>1.43</u>	<u>84,693,013</u>	<u>5.18</u>
	<u>\$ 1,596,320,169</u>	<u>100.00</u>	<u>\$ 1,636,523,887</u>	<u>100.00</u>

2) Liquidity risk

a) 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.

b) 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. Cathay United 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 Cathay United Bank immediately reports to the board of directors.

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

i. Financial assets held to manage liquidity risk

Cathay United 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, discounts and loans, and securities purchased under resell agreements.

ii. Maturity analysis of non-derivative financial liabilities of Cathay United 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	\$ 22,576,316	\$ 25,750,616	\$ 22,544,961	\$ 25,038	\$ 70,896,931
Non-derivative financial liabilities at FVTPL	-	506,683	91,623	51,704,655	52,302,961
Securities sold under repurchase agreements	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	54,452,263
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:

	December 31, 2019				
	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	Total
Lease liabilities	\$ 1,116,536	\$ 2,470,871	\$ 204,253	\$ 634	\$ 3,792,294

	December 31, 2018				
	0-30 Days	31-180 Days	181 Days-1 Year	Over 1 Year	Total
Due to the Central Bank and call loans from banks	\$ 33,388,821	\$ 17,227,043	\$ 17,187,533	\$ 147,450	\$ 67,950,847
Non-derivative financial liabilities at FVTPL	-	-	610,767	51,992,332	52,603,099
Securities sold under repurchase agreements	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	116,509,145	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

iii. Maturity analysis of derivative financial liabilities

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

Gross settled derivative financial instruments engaged by Cathay United Bank include:

- i) Foreign exchange derivative instruments: Currency futures and 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 Cathay United 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 FVTPL					
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	<u>(3,055,553)</u>	<u>(7,301,136)</u>	<u>(1,048,386)</u>	<u>(448,474)</u>	<u>(11,853,549)</u>
Cash inflow subtotal	<u>15,580</u>	<u>6,979</u>	<u>638</u>	<u>-</u>	<u>23,197</u>
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 FVTPL					
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	<u>(3,885,466)</u>	<u>(4,775,314)</u>	<u>(665,736)</u>	<u>(720,715)</u>	<u>(10,047,231)</u>
Cash inflow subtotal	<u>24,170</u>	<u>17,928</u>	<u>717</u>	<u>-</u>	<u>42,815</u>
Net cash flow	<u>\$ (3,861,296)</u>	<u>\$ (4,757,386)</u>	<u>\$ (665,019)</u>	<u>\$ (720,715)</u>	<u>\$ (10,004,416)</u>

iv. Maturity analysis of off-balance sheet items

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

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

December 31, 2019

	Not Later Than 1 Year	1-5 Years	Later Than 5 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 1 Year	1-5 Years	Later Than 5 Years	Total
Irrevocable loan commitments	\$ 109,990,204	\$ 35,237,143	\$ 9,378,042	\$ 154,605,389
Credit card commitments	55,543,412	237,450,848	376,237,944	669,232,204
Financial guarantee contracts	12,492,672	4,793,131	466,835	17,752,638

3) Market risk

a) 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.

Cathay United Bank organized a 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 Cathay United 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 Cathay United 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.

b) Market risk management strategy and process

Market risk management process

i. Identification and measurement

The operations department and risk management department of Cathay United 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.

ii. 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. Cathay United 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.

c) 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.

i. Strategy

In order to control market risk effectively and ensure flexibility in operating the transaction strategy, Cathay United 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.

ii. Policy and procedure

Cathay United Bank sets the “Regulation Governing of Market Risk Management” as the important regulation that should be complied with when holding the trading portfolio.

iii. 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 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.

iv. Method of measurement

i) The assumption and calculation of VaR: See the VaR section.

ii) Cathay United 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.

d) Interest risk management of trading book

i. 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 fluctuations in interest rate. The main instruments include the securities and derivatives that relate to interest rates.

ii. Interest risk management procedure of the trading book

Cathay United Bank prudently chooses 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, Cathay United 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.

iii. Method of measurement

i) The assumptions and calculation of the VaR: See VaR section.

ii) Cathay United Bank measures the investment portfolio's interest risk exposure monthly.

e) Interest risk management of the 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.

i. Strategy

Interest risk management enhances Cathay United 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.

ii. Management procedure

When undertaking the operations relating to interest rate instruments, Cathay United Bank identifies the repricing risk of interest rate, yield curve risk, basis risk and options risk characteristics. In addition, Cathay United Bank also measures the potential impact of interest rate changes on the profit and economic value of the Bank. Cathay United 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.

iii. Method of measurement

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

f) Foreign exchange risk management

i. Definition of foreign exchange risk

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

ii. Policy, procedure and measurement methodology of foreign exchange risk management

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

For foreign exchange risk, Cathay United 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.

g) Risk management of equity securities price

i. Definition of risk of equity securities price

The market risk of equity securities held by Cathay United 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.

ii. Purpose of risk management in equity securities prices

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

iii. Procedure of risk management of equity securities prices

Cathay United Bank sets an 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.

iv. Measurement methodology

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

Cathay United 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.

Cathay United 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. Cathay United Bank applies historical simulation with a statistical confidence of 99% to extrapolate the VaR of one-year fluctuations. The following form indicates the VaR which is the estimation of the potential amount of loss within one day, while the statistical confidence of 99% represents the possible fluctuations that would be included in assumed adverse market changes. Based 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	Average Balance	Maximum Balance	Minimum Balance	Ending Balance
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 Balance	Maximum Balance	Minimum Balance	Ending Balance
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.

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

h) Stress testing

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

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

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

i) Sensitivity analysis

i. 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. Cathay United Bank’s interest rate-sensitive portfolios include bonds, interest rate swaps and structured products composed of such products.

ii. 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 fluctuations.

iii. Equity securities price risk

Equity securities price factor sensitivities (“Equity delta”) represent the change in the equity of the securities price portfolio caused by a parallel unit shift of 1% (100 basis points) in the underlying share price fluctuation. Cathay United Bank’s equity portfolios include shares and equity index options.

Risk Factors	Changes (+/-)	December 31, 2019	
		Sensitivity of Profit or Loss	Sensitivity of Equity
Foreign exchange rate factor sensitivity (FX Delta)	USD+1%	\$ 78,082	\$ -
	HKD+1%	(26,787)	-
	JPY+1%	(1,077)	-
	AUD+1%	(926)	-
	CNY+1%	4,109	-
Interest rate factor sensitivity (PVBP)	Yield curves (USD) parallel shift+1bp	(8,600)	-
	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

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

Cathay Century and its subsidiaries

Cathay Century and its subsidiaries' major financial instruments include equity and debt investments, derivatives, receivables, payables and bonds payable. The major risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

1) Market risk analysis

Market risk is the risk resulting from changes in market risk factors, such as exchange rate, product price, interest rate, credit spread, and stock price, may decrease Cathay Century and its subsidiaries' income or value of investment portfolio.

Cathay Century and its subsidiaries continues to use market risk management tools such as value at risk ("VaR") and stress testing to completely and effectively measure, monitor and manage market risk.

a) Value at Risk

VaR is used to measure the maximum potential loss of a portfolio in a given period and confidence level when the market risk factors changes. Cathay Century and its subsidiaries calculate VaR on the next day (week or two weeks) at 99% confidence level.

b) Stress testing

In addition to the VaR model, Cathay Century and its subsidiaries periodically use stress testing to assess the potential risk of extreme and abnormal events.

Stress testing is used to evaluate the potential impact on portfolio values when a series of financial variables undergo extreme changes.

Cathay Century and its subsidiaries conduct stress testing regularly on positions by simple sensitivity analysis test and scenario analysis. Such tests cover the losses on positions resulting from changes of various risk factors in various historical scenarios.

i. Simple sensitivity test

Simple sensitivity test measures the changes in the value of the investment portfolio caused by specific risk factors.

ii. Scenario analysis

Scenario analysis measures the changes in the total value of the investment portfolio under a stress event, including the follows scenarios:

i) Historical scenario

By considering the fluctuations in risk factors during a specific historical event, Cathay Century and its subsidiaries evaluate that losses would be incurred for the current investment portfolio in the event.

ii) Hypothetical scenario

Cathay Century and its subsidiaries make reasonable assumptions for extreme market changes that may occur in the future, puts related changes in related risk factors to the current investment portfolio and considers the correlation between the investment targets and risk factors to estimate the possible loss of investments.

The risk management department performs stress testing with historical and hypothetical scenarios regularly. Cathay Century and its subsidiaries' risk analysis, early warning, and business management are in accordance with the stress testing report.

Table of Stress Testing

Risk Factors	Changes (+/-)	December 31, 2019	December 31, 2018
Equity risk (stock index)	-10%	\$ (504,117)	\$ (339,393)
Interest rate risk (yield curve)	+20bps	(150,339)	(145,145)
Exchange risk (exchange rate)	USD depreciate against the NTD by 1 dollar	(115,390)	(109,381)

Note 1: Change in credit spread is not considered.

Note 2: The effect of hedging is considered.

Note 3: Information of subsidiaries is not disclosed due to immaterial effects to the consolidated financial statements.

- Foreign currency risk

Cathay Century and its subsidiaries has foreign currency-denominated assets and liabilities, which expose the Cathay Century and its subsidiaries to foreign currency risk.

The carrying amounts of Cathay Century and its subsidiaries' foreign currency-denominated monetary assets and monetary liabilities and of the derivatives exposed to foreign currency risk at the end of the reporting period are set out in Note 38.

- Interest rate risk

Cathay Century and its subsidiaries is exposed to interest rate risk because entities in the Cathay Century and its subsidiaries hold debt instrument at both fixed and floating interest rates. The risk is managed by the Cathay Century and its subsidiaries by maintaining an appropriate mix of fixed and floating rate debt instrument.

- Price risk

Cathay Century and its subsidiaries was exposed to equity price risk through its investments in listed shares and mutual funds. Equity price exposures were managed by utilizing futures. That positions of futures do not exceed the hedged positions.

c) Sensitivity analysis

December 31, 2019			
Risk Factors	Variation (+/-)	Effect on Profit and Loss	Effect on Equity
Foreign currency risk sensitivity	USD appreciates 1%	\$ 24,084	\$ 2,756
	CNY appreciates 1%	2,506	-
	HKD appreciates 1%	587	4,146
	EUR appreciates 1%	114	318
	VND appreciates 1%	6,154	-
Interest rate risk sensitivity	Yield curve (USD): Upward parallel shift by 1bp	(5,513)	-
	Yield curve (CNY): Upward parallel shift by 1bp	(81)	-
	Yield curve (NTD): Upward parallel shift by 1bp	(1,189)	(811)
Equity securities price sensitivity	Increases 1% in equity price	-	50,412

December 31, 2018

Risk Factors	Variation (+/-)	Effect on Profit and Loss	Effect on Equity
Foreign currency risk sensitivity	USD appreciates 1% against the NTD	\$ 34,043	\$ 5,143
	CNY appreciates 1% against the NTD	8,888	-
	HKD appreciates 1% against the NTD	901	3,538
	EUR appreciates 1% against the NTD	318	295
	VND appreciates 1% against the NTD	6,138	-
Interest rate risk sensitivity	Yield curve (USD): Upward parallel shift by 1bp	(4,935)	-
	Yield curve (CNY): Upward parallel shift by 1bp	(92)	-
	Yield curve (NTD): Upward parallel shift by 1bp	(1,354)	(946)
Equity securities price sensitivity	1% increase in equity security price	-	33,939

Note 1: Change in credit spread is not considered.

Note 2: The effect of hedging is considered.

Note 3: Impacts of changes in profit or loss are not included in those of changes in equity.

Note 4: Provision or reversal of reserve for foreign exchange valuation changes is not considered in profit or loss due to foreign currency risk.

Note 5: Information of subsidiaries is not disclosed due to immaterial effects to the consolidated financial statements.

2) Credit risk

- a) Cathay Century and its subsidiaries' credit risk exposure of financial transactions include issuer credit risk, counterparty credit risk and credit risk of underlying assets.
 - i. Issuer credit risk is the risk that Cathay Century and its subsidiaries or banks may suffer financial losses on debt instruments or bank savings because the issuers (guarantors), borrowers or banks are not able to perform repayment obligations due to default, bankruptcy or liquidation.
 - ii. Counterparty credit risk is the risk that Cathay Century and its subsidiaries may suffer financial losses because the counterparty does not perform its obligation to settle or pay at the appointed date.
 - iii. Credit risk of the underlying assets is the risk that Cathay Century may suffer losses due to deterioration of the credit quality, increase in credit spread, downgrade or breach of any contract terms of underlying assets linked to financial instruments.

b) Credit risk concentration analysis

i. Regional distribution of maximum risk exposure for Cathay Century's financial assets:

December 31, 2019

Financial Assets	Taiwan	Asia	Europe	North Americas	Emerging Market and Others	Total
Cash and cash equivalents	\$ 10,482,899	\$	\$	\$	\$ 184,376	\$ 10,667,275
Financial assets at FVTPL	873,756				-	873,756
Financial assets at FVTOCI	754,014				-	754,014
Financial assets at amortized cost	1,911,928	347,998	1,461,335	3,171,747	1,802,081	8,695,089
Total	\$ 14,022,597	\$ 347,998	\$ 1,461,335	\$ 3,171,747	\$ 1,986,457	\$ 20,990,134
Proportion	66.81%	1.66%	6.96%	15.11%	9.46%	100.00%

December 31, 2018

Financial Assets	Taiwan	Asia	Europe	North Americas	Emerging Market and Others	Total
Cash and cash equivalents	\$ 10,026,154	\$ -	\$ -	\$ -	\$ 140,839	\$ 10,166,993
Financial assets at FVTPL	785,960	-	-	-	-	785,960
Financial assets at FVTOCI	1,045,844	-	-	-	-	1,045,844
Financial assets at amortized cost	2,118,265	356,861	1,493,025	3,275,261	1,802,130	9,045,542
Total	\$ 13,976,223	\$ 356,861	\$ 1,493,025	\$ 3,275,261	\$ 1,942,969	\$ 21,044,339
Proportion of each region to total	66.41%	1.70%	7.10%	15.56%	9.23%	100.00%

c) Determinants for whether the credit risk has increased significantly since initial recognition

- i. Cathay Century and its subsidiaries assess, at each reporting date, whether the credit risk of a financial instrument in the scope of impairment requirements under IFRS 9 has increased significantly since initial recognition. To make this assessment, Cathay Century and its subsidiaries consider reasonable and supportable information (including forward-looking information) which indicates that credit risk has increased significantly since initial recognition. Main indicators include external credit ratings, past due information, credit spread and other market information which shows that the credit risk related to borrowers and issuers has increased significantly.
- ii. If the credit risk at the reporting date is determined to be low, an entity can assume that the credit risk of the financial instrument has not increased significantly since initial recognition.

d) Definitions of a default occurring on a financial asset and a credit-impaired financial asset

The definition of a default occurring on financial assets of Cathay Century and its subsidiaries is the same as a credit-impaired financial asset. If one or more of the criteria below are met, a default occurs and a financial asset is credit-impaired:

- i. Quantitative factors: When contractual payments are more than 90 days past due, a default occurs and a financial asset is credit-impaired.
- ii. Qualitative factors: An evidence indicates that the issuers or borrowers cannot pay the contractual payments or that they have significant financial difficulties, for example:
 - i) The issuers and borrowers have entered bankruptcy or are probable to enter bankruptcy or financial reorganization.
 - ii) The borrowers fail to make interest or principal payments based on original terms and conditions.
 - iii) The collaterals of the borrowers are seized provisionally or enforced.

- iv) The borrowers apply for a change of credit conditions due to financial difficulties.
- iii. The above-mentioned definitions of a default occurring on a financial asset and a credit impairment are applicable to all financial assets held by Cathay Century and its subsidiaries, and are aligned with those of relevant financial assets for internal credit risk management. The definitions are also applicable to the related impairment assessment model.
- e) Measurement of expected credit losses

i. Methods and assumptions adopted

For financial instruments on which the credit risk has not increased significantly since initial recognition, Cathay Century measures the loss allowance for financial instruments at an amount equal to 12-month expected credit losses; for financial instruments on which the credit risk has increased significantly since initial recognition or are credit-impaired, Cathay Century measures the loss allowance for financial instruments at an amount equal to the lifetime expected credit losses.

In the measurement of expected credit losses, Cathay Century took into consideration the 12-month and lifetime probability of default (“PD”) of issuers, guarantee agencies or borrowers, which is included in loss given default (“LGD”) and multiplied by the exposure at default (“EAD”), at the same time taking into consideration the time value of money, when calculating the 12-month and lifetime expected credit losses.

Default rate is the rate that a default occurs on issuers, guarantee agencies and borrowers. Loss given default is the loss rate resulted from the default of issuers, guarantee agencies and borrowers. Loss given default used by Cathay Century in impairment assessment is based on information regularly issued by Moody’s. Probability of default is based on information regularly issued by Taiwan Ratings and Moody’s and is determined based upon current observable information and macroeconomic information (gross domestic product and economic growth rate, for example) with adjustments of historic data. Exposure at default is measured at the amortized cost and interest receivables of the financial assets.

ii. Consideration of forward-looking information

Cathay Century and its subsidiaries take forward-looking information into consideration while measuring expected credit losses of the financial assets.

f) Gross carrying amount of maximum credit risk exposure and category of credit quality

i. Financial assets of Cathay Century and its subsidiaries

	December 31, 2019					Gross Carrying Amount
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3 Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets	Loss Allowance	
<u>Investment grade</u>						
Debt instruments at FVTOCI	\$ 754,014	\$ -	\$ -	\$ -	\$ -	\$ 754,014
Financial assets measured at amortized cost	8,698,998	-	-	-	(3,909)	8,695,089

	December 31, 2018					Gross Carrying Amount
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3		Loss Allowance	
			Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets		
<u>Investment grade</u>						
Debt instruments at FVTOCI	\$ 1,045,844	\$ -	\$ -	\$ -	\$ -	\$ 1,045,844
Financial assets measured at amortized cost	9,049,129	-	-	-	(3,587)	9,045,542

Note: Investment grade assets refer to those with credit ratings of at least BBB-; non-investment grade assets are those with credit rating lower than BBB-.

ii. Secured loans

	December 31, 2019					Gross Carrying Amount
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3		Loss Allowance	
			Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets		
Secured loans	\$ 232,652	\$ -	\$ -	\$ -	\$ (2,803)	\$ 229,849

	December 31, 2018					Gross Carrying Amount
	Stage 1 12-month Expected Credit Losses	Stage 2 Lifetime Expected Credit Losses	Stage 3		Loss Allowance	
			Lifetime Expected Credit Losses	Purchased or Originated Credit-impaired Financial Assets		
Secured loans	\$ 239,701	\$ -	\$ -	\$ -	\$ (2,885)	\$ 236,816

g) Reconciliation for loss allowance is summarized below:

i. Debt instrument investments at FVTOCI

	12-month Expected Credit Losses	Lifetime Expected Credit Losses			Total of Impairment Charged in Accordance with IFRS 9
		Collectively Assessed	Not Purchased or Originated Credit- impaired Financial Assets	Purchased or Originated Credit- impaired Financial Assets	
January 1, 2019	\$ 148	\$ -	\$ -	\$ -	\$ 148
Changes in models/risk parameters	(82)	-	-	-	(82)
December 31, 2019	<u>\$ 66</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 66</u>
January 1, 2018	\$ 150	\$ -	\$ -	\$ -	\$ 150
Changes in models/risk parameters	(2)	-	-	-	(2)
December 31, 2018	<u>\$ 148</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 148</u>

ii. Financial assets measured at amortized cost

	12-month Expected Credit Losses	Lifetime Expected Credit Losses			Total of Impairment Charged in Accordance with IFRS 9
		Collectively Assessed	Not Purchased or Originated Credit- impaired Financial Assets	Purchased or Originated Credit- impaired Financial Assets	
January 1, 2019	\$ 3,542	\$ -	\$ -	\$ -	\$ 3,542
Changes in models/risk parameters	<u>317</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>317</u>
December 31, 2019	<u>\$ 3,859</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,859</u>
January 1, 2018	\$ 3,571	\$ -	\$ -	\$ -	\$ 3,571
Changes in models/risk parameters	<u>(29)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(29)</u>
December 31, 2018	<u>\$ 3,542</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,542</u>

iii. Other assets

	12-month Expected Credit Losses	Lifetime Expected Credit Losses			Total of Impairment Charged in Accordance with IFRS 9
		Collectively Assessed	Not Purchased or Originated Credit- impaired Financial Assets	Purchased or Originated Credit- impaired Financial Assets	
January 1, 2019	\$ 45	\$ -	\$ -	\$ -	\$ 45
Changes in models/risk parameters	<u>5</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5</u>
December 31, 2019	<u>\$ 50</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 50</u>
January 1, 2018	\$ 68	\$ -	\$ -	\$ -	\$ 68
Changes in models/risk parameters	<u>(23)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(23)</u>
December 31, 2018	<u>\$ 45</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 45</u>

iv. Secured loans

	12-month Expected Credit Losses	Lifetime Expected Credit Losses				Difference from Impairment Charged in Accordance with Regulations Governing the Procedures to Evaluate Assets	Total
		Collectively Assessed	Not Purchased or Originated Credit- impaired Financial Assets	Purchased or Originated Credit- impaired Financial Assets	Total of Impairment Charged in Accordance with IFRS 9		
January 1, 2019	\$ 53	\$ -	\$ -	\$ -	\$ 53	\$ 2,832	\$ 2,885
Difference from impairment charged in Regulations Governing the Procedures to Evaluate Assets	<u>13</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>13</u>	<u>(95)</u>	<u>(82)</u>
December 31, 2019	<u>\$ 66</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 66</u>	<u>\$ 2,737</u>	<u>\$ 2,803</u>
January 1, 2018	\$ 45	\$ -	\$ -	\$ -	\$ 45	\$ 3,079	\$ 3,124
Financial assets that have been derecognized during the period	8	-	-	-	8	-	8
Difference from impairment charged in accordance with Regulations Governing the Procedures to Evaluate Assets	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(247)</u>	<u>(247)</u>
December 31, 2018	<u>\$ 53</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 53</u>	<u>\$ 2,832</u>	<u>\$ 2,885</u>

There were no significant changes in loss allowance due to significant changes in the gross carrying amounts of the financial instruments.

h) Exposure to credit risk and loss allowance of receivables

The Company applies the simplified approach to providing for expected credit loss prescribed by IFRS 9, and the estimation of lifetime credit loss was as follows:

December 31, 2019

December 31, 2019	Not Overdue	Overdue	Total
Carrying amount	\$ 1,654,354	\$ 724,959	\$ 2,379,313
Expected credit loss rate	0.97%	3.05%	
Lifetime expected credit losses	\$ 16,026	\$ 22,108	\$ 38,134

December 31, 2018

December 31, 2018	Not Overdue	Overdue	Total
Carrying amount	\$ 1,766,984	\$ 228,874	\$ 1,995,858
Expected credit loss rate	1.00%	26.95%	
Lifetime expected credit losses	\$ 17,640	\$ 61,684	79,324

3) Liquidity risk

a) Sources of liquidity risk

Liquidity risks of the financial instruments are classified as funding liquidity risk and market liquidity risk. Funding liquidity risk represents the default risk that Cathay Century is unable to turn assets into cash or obtain sufficient funds. Market liquidity risk represents the risk of significant changes in fair value that Cathay Century faces when it sells or offsets its assets during market disorder.

b) Liquidity risk management

Cathay Century established a completed capital liquidity management by assessing the business features and short-term cash flow. Considering the trading volume and holding position, Cathay Century carefully manages the market liquidity risk.

According to the actual management need or special situations, Cathay Century uses cash flow model and stress testing to assess cash flow risk. Moreover, Cathay Century has drawn up a plan for capital requirements with respect to abnormal and emergency conditions to deal with significant liquidity risk.

The analysis of cash outflows to Cathay Century and its subsidiaries are listed below and based on the residual terms to maturity on the balance sheet date. The disclosed amounts are prepared in accordance with contract cash flows and, accordingly for certain line items, the disclosed amounts are different to the amounts on consolidated balance sheets.

The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

December 31, 2019

	Less than 6 Months	6-12 Months	1-2 Years	2-5 Years	5+ Years
<u>Non-derivative financial liabilities</u>					
Payables	\$ 3,377,416	\$ 12,401	\$ 6,359	\$ 7,635	\$ -
Lease liabilities	66,810	63,716	81,377	538	-
<u>Derivative financial liabilities</u>					
Swap	367	-	-	-	-

December 31, 2018

	Less than 6 Months	6-12 Months	1-2 Years	2-5 Years	5+ Years
<u>Non-derivative financial liabilities</u>					
Payables	\$ 2,607,649	\$ 5,053	\$ 4,379	\$ 5,696	\$ -
<u>Derivative financial liabilities</u>					
Swap	50,041	-	-	-	-

Cathay Securities and its subsidiaries

1) Risk management system

a) Risk management objectives

Adhering to the risk management policies of the Company, Cathay Securities and its subsidiaries manage the risks during its operating activities in compliance with domestic and foreign regulations as well as in an efficient and flexible manner to maximize the profit.

b) Risk management policies

Cathay Securities complies with the risk management policies as a guiding principle to establish significant risk management matters such as objectives, coverage, organization duties and operating, management principles and reports.

The management policies of Cathay Securities and its subsidiaries cover different types of risk including market risk, credit risk, operating risk, liquidity risk, capital adequacy management, regulation risk and other risks related to operating activities. Before initiating a business, Cathay Securities and its subsidiaries identify relevant risks and have integrated planning of risk management mechanism and methods to ensure that such business is compliant with the management policies.

c) Risk management organization

i. Board of directors

The board of directors takes the ultimate responsibilities for risk management. The board of directors approves the risk management policy, ensures that approved risk management policies are in accordance with the nature of operating activities and types of business and cover different types of risk and monitors the effective implementation of risk management policies.

ii. Risk management committee

The risk management committee is responsible for reviewing risk management policies, principles, and rules of trading transactions, and for determining the appropriate degree of risk exposure and monitoring the implementation of the risk management policies. The risk management committee is under the board of directors and the chairman of board of directors takes chair of the committee, and the members include the general manager, finance supervisor, accounting manager, risk management supervisor, and the relevant trading department supervisor. The committee meetings are typically held quarterly and provisional meetings are called by the chairman of the board.

iii. Risk management department

The risk management department is under the board of directors. The supervisor and staff of the department are prohibited from holding positions at the trading or settlement department. Their responsibilities are to plan and implement risk management policies, principles and directions, review policies regularly to ensure that those policies are suitable for business development. The risk management department also establishes online monitoring and prevention systems and reaction mechanisms, according to the development of Cathay Securities and its subsidiaries.

iv. Business unit

Each business unit participates in the setting of the risk management mechanism and executes daily risk management and reporting to ensure that the risk model used by the business unit is implemented with the consistent credibility and is in accordance with the internal control procedures to comply with the regulations and risk management policies.

v. Auditing office

The auditing office executes risk management and internal control procedures regularly, and traces and documents findings and deviations of internal control procedures periodically to ensure that the appropriate actions of improvement have been taken in time.

vi. Finance department

The finance department participates in the setting of the risk management mechanism. The department is responsible for executing liquidity risk management and providing the liquidity risk report to the risk management department regularly.

vii. Accounting department

The accounting department participates in the setting of the risk management mechanism and provides the form of capital adequacy to the risk management department monthly.

viii. Legal affairs office

The legal affairs office executes legal risk management to ensure that business operations and risk management procedures are all in compliance with the regulations.

d) Risk management workflows

Risk management workflows for Cathay Securities includes risk identification, risk measurement, risk management mechanism, and risk reporting. Risk assessment and response strategies to each risk are addressed as follows:

i. Market risk

i) Definition

Market risk is the risk of losses in Cathay Securities and its subsidiaries' investment positions, including shares, bonds, and derivatives etc. arising from changes in the market prices of financial instruments.

ii) Controls:

Cathay Securities and its subsidiaries set up rules of trading transactions including the limits of authorization, risk limitation, stop-loss rules, and responses to the exceeded limits by each product or service line and implement those control procedures efficiently through the front desk risk control staff and on-line monitoring system. Furthermore, Cathay Securities and its subsidiaries provide the market risk management report regularly that includes market price assessments, the dollar amounts of surplus/shortfall and arbitrage, Value at Risk, and back-testing model and perform stress testing by each extreme scenario to control the risks that Cathay Securities and its subsidiaries face and manage all risks as a whole efficiently.

ii. Credit risk

i) Definition

Credit risk is the risk of loss incurred by Cathay Securities and its subsidiaries as a result of a counterparty or debtor not being able to perform its contract obligations due to deterioration of financial conditions or other factors.

ii) Controls

Cathay Securities and its subsidiaries check and review the credit position of each counterparty before trading and manage risk exposure after trading. Risks arising from securities trading are monitored and controlled based on the credit rating model. Investment concentration and risks are analyzed and documented regularly. Investment limit to each counterparty is established by its credit rating (TCRI, Taiwan Ratings, S&P, Moody's, and Fitch). In addition, the customers covered by the high-risk range of self-managed credit integrity and the credit balance of the underlying account for a certain percentage of the market credit balance are regularly reviewed and the credit risk emergency notification mechanism for the Company is established.

iii. Operational risk

i) Definition

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. This definition includes legal risk, but excludes strategy risk and credit risk.

ii) Controls

Cathay Securities and its subsidiaries establish authority levels and the segregation of duties for the processes of front, middle and back offices. Trading, confirmation, settlement, financial accounting, and trading documents are archived for future reference. The strict processes are also established to prevent fraud and negligence. Cathay Securities and its subsidiaries request each department to establish and implement internal audit and control policies authentically. The reporting mechanism for loss events from operational risk and database are established to understand the causes of the loss.

In addition, the auditing office is established under the board of directors. The functions of the office are to implement daily process checks to establish completed internal audit control and provide internal review reports periodically to lower the loss arising from the operational failures.

iv. Liquidity risk

i) Definition

Fund liquidity refers to Cathay Securities and its subsidiaries' acquisition of funds to maintain its needed flexibility to support asset growth or to repay liabilities; market liquidity refers to the managing and avoidance of risk of loss resulting from significant changes in the market price of held positions due to the lack of market depth or market disruption.

ii) Controls

The measurement index for liquidity risk is established and Cathay Securities compiles the liquidity risk management report regularly to review the capital conditions and cash flow gap as of the balance sheet dates and liquidity of overall foreign currency. Capital allocation planning is based on the compiled structure analysis as of the balance sheet dates. In addition, conducting capital liquidity simulation operations regularly ensures that there are corresponding contingency measures in the extreme situations which can cover the funding gap. Meanwhile, credit lines of short-term financing are acquired from other financial institutions and receipts and payments are managed properly to sustain appropriate liquidity and ensure payment ability.

v. Legal risk

i) Definition

Legal risk is the risk of loss that results from a counterparty being unable to legally enter into a contract due to the contract being defective or eligibility of the counterparty.

ii) Controls

The procedures of making and reviewing legal documentation are established. All the documents related to the contracts are required to be reviewed and approved by the legal office and may be reviewed with reference to external lawyers' opinions if needed.

vi. Capital adequacy management

i) Definition

Cathay Securities and its subsidiaries implement capital management to maintain an appropriate capital adequacy ratio, promote business growth and ensure a robust capital structure.

ii) Controls

Cathay Securities established the capital adequacy index and compiles the capital adequacy management report regularly to evaluate the appropriateness of the capital adequacy ratio and the robustness of the capital structure.

vii. Reputation risk and strategy risk

i) Definition

Reputation risk is the risk of loss resulting from negative aspects of Cathay Securities and its subsidiaries' operations, leading to the loss of customers or revenue, and the need for Cathay Securities and its subsidiaries to bear large amounts of legal fees or other losses from damages. Strategy risk is another risk of current or potential loss to revenue or capital resulting from a strategy that turns out to be defective or inappropriate, or lack of proper responses to the competitors.

ii) Controls

In response to significant events related to reputation and strategy risk, Cathay Securities and its subsidiaries establish internal regulations to mitigate the risk of losses when significant events occur.

Risk management policies and principles are established based on the above-mentioned risks and management mechanisms from each risk source are set out specifically. Cathay Securities and its subsidiaries also establish the constraints for each risk and review the appropriateness of each constraint regularly. Moreover, the risk management implementation reports are reported to the risk management committee, board of directors, and risk management office of Cathay Financial Holdings to elaborate on Cathay Securities and its subsidiaries' risk tolerance and the appropriateness of the current risk management scheme.

e) Hedging and mitigation of risk strategies

The hedging and mitigation risk strategies for Cathay Securities refer to the implementation of dynamic hedging through the purchase and sale of target investment products to duplicate the same cash flows when derivatives mature. The hedging for outstanding stock warrants and structured products is based on the principle of Delta Neutral. If the prices of those investment positions fluctuate significantly in the financial markets, when the regulations for hedging operations are breached due to the impact from significant events, or when the risk personnel's implementation of hedging strategies are in violation of the regulations of hedging operations, the business department is required to explain in writing and report to the risk management department.

Cathay Securities establishes the approval limit and stop-loss mechanism based on the attributes of each product. When the position meets the stop-loss point, the risk management department will inform the supervisor or position administrator in time and monitor the change in the position. In addition, the business department should operate in accordance with the approval limits. If the stop-loss point is met, the investment should be sold or the business department is required to provide an exception report detailing the reason and specific response measures.

2) Market risk analysis

Cathay Securities and its subsidiaries assess, monitor, and manage market risks completely and effectively by applying market risk management tools such as sensitivity analysis, Value at Risk (“VaR”) and stress testing continuously.

a) Sensitivity analysis

Sensitivity analysis is used to measure the degree of impact on each product and investment portfolio due to fluctuations in specific market factors. The relevant monitoring and control regulations are set based on the differences in the types of risk and business attributes of Cathay Securities and its subsidiaries. The degree of risk exposure is monitored and measured by the following sensitivities:

i. Measurement based on interest factors

Price value of basis point (PVBP): Denoting the change in the value of a position given a 1 basis point change in the yield curve.

ii. Measurement based on commodity factors

i) Delta: Measuring the change in the value of a position given a 1% price change of a certain underlying asset.

ii) Gamma: Measuring the dollar amount of change in Delta of a position given a 1% price change of a certain underlying asset.

iii) Vega: Denoting the change in the value of a position given a 1% price volatility change of a certain underlying asset.

b) VaR

VaR is used to measure the risk of the largest potential loss of the investment portfolio arising from movements in market risk factors over a specific time frame and at a certain confidence level. Cathay Securities and its subsidiaries currently measure the VaR of an investment portfolio for the next day at a 99% confidence level. Also, back testing of the VaR model is performed each year to ensure the accuracy of this model.

VaR on one single trading day within the 99% confidence level

	For the Year Ended December 31, 2019			
	Average	Highest	Lowest	End of Period
VaR	\$ 16,043	\$ 21,983	\$ 9,609	\$ 13,303
	For the Year Ended December 31, 2018			
	Average	Highest	Lowest	End of Period
VaR	\$ 32,631	\$ 154,268	\$ 6,389	\$ 11,948

c) Stress testing

Cathay Securities and its subsidiaries perform stress testing on a monthly basis to assess the degree of impact on the asset portfolio arising from foreign and domestic significant events and find the risk factors which exert greater significant influence on the asset portfolio, follow up review and report such factors according to the market conditions and customized or extreme scenarios which take rapid changes in foreign and domestic financial environments into consideration are also performed periodically and the maximum losses arising from these scenarios are measured to ensure that Cathay Securities and its subsidiaries manage the risk from each potential scenario effectively.

Stress testing scenarios, which include the historical scenario and hypothesis scenario, are described as follows:

i. Historical Scenario

Cathay Securities and its subsidiaries assess the dollar amount of losses for the investment portfolio by choosing a specific time frame of historical events and taking the fluctuations of risk factors into the consideration such as the immediate, significant, and comprehensive impact on financial markets from the bankruptcy of Lehman Brothers in 2008 and the Great East Japan earthquake in 2011.

ii. Hypothesis Scenario

Cathay Securities and its subsidiaries make reasonable expected hypotheses on possible future extreme market fluctuations, include movements of the related risk factors in the current investment portfolio, and measure the loss amount generated from such events on the investment position, including the 10% drop in the total stock market value arising from the breakdown of the global system.

**For the Year Ended December 31, 2019
Stress Test Table**

Risk Factor	Changes (+/-)	Changes in Profit and Loss
Equity risk (stock index)	-10%	\$ (77,692)
Interest rate risk (yield curve)	+100bps	(82,351)
Exchange rate risk (exchange rate)	3%	4,473
Product risk (price)	-10%	(369)

**For the Year Ended December 31, 2018
Stress Test Table**

Risk Factor	Changes (+/-)	Changes in Profit and Loss
Equity risk (stock index)	-10%	\$ 69,450
Interest rate risk (yield curve)	+100bps	(149,493)
Exchange rate risk (exchange rate)	3%	(1,527)
Product risk (price)	-10%	-

3) Credit risk analysis

a) Source of credit risk

Credit risk refers to the credit risk that Cathay Securities and its subsidiaries may encounter due to engagement in financial transactions which include the credit risks from issuers, counterparties, and underlying assets:

- i. Issuer credit risk refers to the risk of financial loss that Cathay Securities and its subsidiaries may incur as a result of issuers, guarantors or banks not fulfilling their payment obligations due to default, bankruptcy or liquidation.
- ii. Counterparty credit risk is the risk of financial loss that Cathay Securities and its subsidiaries may incur when a counterparty does not fulfill its settlement or payment obligations on the designated date.
- iii. Underlying asset credit risk refers to the risk of loss that Cathay Securities and its subsidiaries may encounter when the credit quality of the target financial instrument turns weak, credit charges increase, credit rating reduces or when the terms of the contracts are violated.

Financial assets that expose Cathay Securities and its subsidiaries to credit risk include bank accounts, debt securities, trading of over-the-counter derivatives, repurchase and resale of debts, trading from the securities lending, refundable deposits, futures deposits in banks, other refundable deposits and accounts receivable etc.

b) Determinants for whether the credit risk has increased significantly since initial recognition

- i. Cathay Securities and its subsidiaries assess, at each reporting date, whether the credit risk of a financial instrument in the scope of impairment requirements under IFRS 9 has increased significantly since initial recognition. To make this assessment, Cathay Securities and its subsidiaries consider reasonable and supportable information (including forward-looking information) which indicates that credit risk has increased significantly since initial recognition. Main indicators include external credit rating, past due information, credit spread and other market information which shows that the credit risk related to borrowers and issuers has increased significantly.
- ii. Low credit risk: If the credit risk at the reporting date is determined to be low, an entity can assume that the credit risk of the financial instrument has not increased significantly since initial recognition.

c) Definitions of a default occurring on a financial asset and a credit-impaired financial asset

The definition of a default occurring on financial assets of Cathay Securities and its subsidiaries is the same as that of a credit-impaired financial asset. If one or more of the criteria below are met, a default occurs and a financial asset is credit-impaired:

- i. Qualitative factor: An evidence indicates that the issuers or borrowers cannot pay the contractual payments or that they have significant financial difficulties, for example:
 - i) The issuers and borrowers have entered bankruptcy or are probable to file bankruptcy or undergo financial reorganization.
 - ii) The borrowers fail to make interest or principal payments based on original terms and conditions.

ii. The abovementioned definitions of a default occurring on a financial asset and a credit impairment are applicable to all financial assets held by Cathay Securities and its subsidiaries, and are aligned with those of relevant financial assets for internal credit risk management. The definitions are also applicable to the related impairment assessment model.

d) Measurement of expected credit losses

i. Methods and assumptions adopted

For financial instruments on which the credit risk has not increased significantly since initial recognition, Cathay Securities and its subsidiaries measure loss allowance for financial instruments at an amount equal to 12-month expected credit losses; for financial instruments on which the credit risk has increased significantly since initial recognition or are credit-impaired, Cathay Securities and its subsidiaries measure the loss allowance for financial instruments at an amount equal to the lifetime expected credit losses.

To measure expected credit losses, Cathay Securities and its subsidiaries multiply exposure at default by the 12-month and the lifetime probability of default of the issuers, guarantee agencies and borrowers and loss given default. Cathay Securities and its subsidiaries also consider the effect of the time value of money when calculating the 12-month expected credit losses and the lifetime expected credit losses.

Probability of default is the rate that an issuer, guarantee agency and a borrower defaults. Loss given default is the loss rate that results from the default of issuers, guarantee agencies and borrowers. Loss given default used by Cathay Securities and its subsidiaries in impairment assessment is based on information regularly issued by Moody's. Probability of default is based on information regularly issued by Taiwan Ratings and Moody's and is determined based upon current observable information and macroeconomic information (gross domestic product and economic growth rate, for example) after adjustments of historical data. Exposure at default is measured at the amortized cost and interest receivables of the financial assets.

ii. Consideration of forward-looking information

Cathay Securities and its subsidiaries take forward-looking information into consideration while measuring expected credit losses of the financial assets.

e) Loss allowance of accounts receivables

The movements of the loss allowance of accounts receivables were as follows:

	Debt Instrument Investments	Receivables	Other Receivables	Overdue Receivables	Securities Financing Receivables	Security Lending Receivables	Total
Balance at January 1, 2019	\$ 1,020	\$ 88	\$ 12	\$ 95,047	\$ 132	\$ 7	\$ 96,306
Increase (decrease)	<u>(168)</u>	<u>8</u>	<u>5</u>	<u>(54)</u>	<u>34</u>	<u>9</u>	<u>(166)</u>
Balance at December 31, 2019	<u>\$ 852</u>	<u>\$ 96</u>	<u>\$ 17</u>	<u>\$ 94,993</u>	<u>\$ 166</u>	<u>\$ 16</u>	<u>\$ 96,140</u>
Balance at January 1, 2018	\$ 743	\$ 69	\$ 9	\$ 93,966	\$ 186	\$ -	\$ 94,973
Increase (decrease)	<u>277</u>	<u>19</u>	<u>3</u>	<u>1,081</u>	<u>(54)</u>	<u>7</u>	<u>1,333</u>
Balance at December 31, 2018	<u>\$ 1,020</u>	<u>\$ 88</u>	<u>\$ 12</u>	<u>\$ 95,047</u>	<u>\$ 132</u>	<u>\$ 7</u>	<u>\$ 96,306</u>

4) Capital liquidity risk analysis:

Bank loans are important liquidity resource for Cathay Securities and its subsidiaries. As of December 31, 2019 and 2018, the unused credits of short-term bank loans of Cathay Securities and its subsidiaries amounted to \$7,100,772 thousand and \$9,901,801 thousand, respectively.

a) Cash flow analysis

Capital liquidity risk is the risk that Cathay Securities and its subsidiaries are unable to acquire sufficient capital at a reasonable cost within a reasonable time frame and which results in a cash flow gap, or the risk that Cathay Securities and its subsidiaries sell assets at a loss to meet the cash flow requirements.

December 31, 2019					
Cash Flows Analysis of Financial Liabilities					
	Payment Period				Total
	Less than 1 Month	1 to 3 Months	3 to 6 Months	More than 6 Months	
<u>Financial liabilities</u>					
Short-term borrowings	\$ 2,201,364	\$ -	\$ -	\$ -	\$ 2,201,364
Commercial paper payable	5,538,845	-	-	-	5,538,845
Financial liabilities at FVTPL	2,961,544	-	-	-	2,961,544
Liabilities for bonds with repurchase agreements	2,098,081	-	-	-	2,098,081
Short sale margins and payables for short sale collateral received	55,597	111,194	166,791	667,165	1,000,747
Futures trader's equity	7,358,470	-	-	-	7,358,470
Equity for each customer in the account	9,161	-	-	-	9,161
Accounts payable	5,821,287	-	192,171	136,016	6,149,474
Other financial liabilities	67,179	-	-	-	67,179
Lease liabilities - current	6,921	13,849	20,271	36,141	77,182
Others	36,008	-	-	-	36,008
Total	<u>\$ 26,154,457</u>	<u>\$ 125,043</u>	<u>\$ 379,233</u>	<u>\$ 839,322</u>	<u>\$ 27,498,055</u>
% to the total	<u>95.11%</u>	<u>0.45%</u>	<u>1.38%</u>	<u>3.06%</u>	<u>100%</u>

Short-term borrowings, commercial paper payable and repurchase bonds are fund procurement instruments of Cathay Securities and its subsidiaries with maturities within three months.

December 31, 2019					
Cash Flow Gap					
	Fund Receipt Period				Total
	Less than 1 Month	1 to 3 Months	3 to 6 Months	More than 6 Months	
<u>Financial assets</u>					
Cash and cash equivalents	\$ 2,598,923	\$ -	\$ -	\$ -	\$ 2,598,923
Financial assets at FVTPL					
Lent securities	353,945	-	-	-	353,945
Operation securities	8,739,503	-	-	-	8,739,503
Open-end funds and beneficiary certificates	14,918	-	-	-	14,918
Call option-futures	35,370	-	-	-	35,370
Futures trading margin	1,115,968	-	-	-	1,115,968
Structured products	67,448	-	-	-	67,448
Financial assets at FVTOCI - current	2,065,100	-	-	-	2,065,100
Securities financing receivables	185,432	366,560	549,840	2,199,355	3,301,187
Refinancing margin and refinancing deposits receivable	2,383	4,766	7,149	28,591	42,889
Security lending receivable	28,112	55,760	83,637	-	167,509
Customer's margin accounts	7,366,953	-	-	-	7,366,953
Security lending deposits price and security lending margin deposits paid	70,653	141,306	211,959	847,838	1,271,756
Receivables	5,582,125	-	-	12,742	5,594,867
Others	365,863	-	-	900,000	1,265,863
	<u>28,592,696</u>	<u>568,392</u>	<u>852,585</u>	<u>3,988,526</u>	<u>34,002,199</u>
Residual cash	<u>\$ 2,438,239</u>	<u>\$ 443,349</u>	<u>\$ 473,352</u>	<u>\$ 3,149,204</u>	<u>\$ 6,504,144</u>

December 31, 2018

Cash Flows Analysis of Financial Liabilities

	Payment Period				Total
	Less than 1 Month	1 to 3 Months	3 to 6 Months	More than 6 Months	
<u>Financial liabilities</u>					
Short-term borrowings	\$ 336,381	\$ -	\$ -	\$ -	\$ 336,381
Commercial paper payable	3,729,367	-	-	-	3,729,367
Financial liabilities at FVTPL	2,712,304	-	-	-	2,712,304
Liabilities for bonds with repurchase agreements	3,332,528	-	-	-	3,332,528
Deposits for securities borrowed	42,173	84,346	126,519	506,073	759,111
Securities lending margin - deposit received	731	1,462	2,193	8,773	13,159
Futures trader's equity	5,839,564	-	-	-	5,839,564
Ledgers of securities firms' settlement accounts customer's equity	7,653	-	-	-	7,653
Payables	4,863,717	-	-	345,795	5,209,512
Other financial liabilities	105,870	-	-	-	105,870
Others	44,731	647	-	-	45,378
Total	\$ 21,015,019	\$ 86,455	\$ 128,712	\$ 860,641	\$ 22,090,827
% to the total	95.13%	0.39%	0.58%	3.90%	100.00%

Short-term borrowings, commercial paper payable and repurchase bonds are fund procurement instruments of Cathay Securities and its subsidiaries with maturities within three months.

December 31, 2018

Cash Flow Gap

	Fund Receipt Period				Total
	Less than 1 Month	1 to 3 Months	3 to 6 Months	More than 6 Months	
<u>Financial assets</u>					
Cash and cash equivalents	\$ 3,158,088	\$ -	\$ -	\$ -	\$ 3,158,088
Financial assets at FVTPL					
Operation securities	4,634,086	-	-	-	4,634,086
Call option-futures	19,149	-	-	-	19,149
Futures trading margin	433,813	-	-	-	433,813
Structured products	272	-	-	-	272
Financial assets at FVTOCI - current	3,379,521	-	-	-	3,379,521
Securities financing receivables	146,700	293,400	440,100	1,760,405	2,640,605
Refinancing margin and refinancing deposits receivable	1,215	2,430	3,645	14,586	21,876
Security lending receivable	66,890	-	-	-	66,890
Customer's margin accounts	5,847,830	-	-	-	5,847,830
Security lending deposits price and security lending margin deposits paid	102,118	204,236	306,354	1,225,411	1,838,119
Receivables	4,721,054	-	-	25,942	4,746,996
Others	381,826	-	-	900,000	1,281,826
	<u>22,892,562</u>	<u>500,066</u>	<u>750,099</u>	<u>3,926,344</u>	<u>28,069,071</u>
Residual cash	\$ 1,877,543	\$ 413,611	\$ 621,387	\$ 3,065,703	\$ 5,978,244

b) Capital liquidity risk stress testing

Cathay Securities and its subsidiaries perform stress testing regularly to measure and evaluate the changes of capital liquidity under extreme and abnormal events to ensure that Cathay Securities and its subsidiaries maintain capital liquidity. Stress scenarios include significant fluctuations in the financial markets, the occurrence of various credit events, the unexpected tightening of capital liquidity in the financial markets and other assumptions that may cause financial liquidity stress, and are used to measure Cathay Securities and its subsidiaries' abilities to meet the demand for cash and the changes in cash flow gap.

If the cash flow gap arises under the specific stress scenario, the following procedures are performed to prevent the occurrence of the stress events:

- i. Cathay Securities and its subsidiaries make fund raising and balance sheet adjustments in accordance with the Crisis Management Principles and Regulations of Emergency Management.

ii. Financing: (i) short-term loan credit line (ii) collateralized time deposits (iii) issuance of commercial paper

iii. Balance sheet adjustments: (i) sale of securities (ii) recovery of short-term capital invested in the currency market.

i. Structured entities

1) Consolidated structured entities

The consolidated structured entities in Cathay Life and its subsidiaries' consolidated financial statements are the real estate investments and management organizations. As of December 31, 2019 and 2018, the Group provided loans amounting to GBP345,000 thousand as financial support to the entities for operation and investment needs.

2) Unconsolidated structured entities

a) Cathay Life and its subsidiaries hold interests in structured entities which are not consolidated in Cathay Life and its subsidiaries' consolidated financial statements and the Group does not provide financial support or other support to these structured entities. The maximum exposure to these structured entities is the carrying amount of the related assets held by Cathay Life and its subsidiaries. The information of these unconsolidated structured entities is disclosed as follows:

<u>Type of Structured Entity</u>	<u>Nature and Purpose</u>	<u>Interests Owned</u>
Private equity fund	Investment in private equity funds issued by external third parties to receive returns	Investment in units or limited partnership interests issued by the funds
Asset-backed securities	Investment in asset-backed securities to receive returns	Investment in asset-backed securities issued by the entities

b) As of December 31, 2019 and 2018, the carrying amounts of Cathay Life and its subsidiaries' assets related to its interests in unconsolidated structured entities are disclosed as follows:

	<u>December 31, 2019</u>	
	<u>Private Equity Funds</u>	<u>Asset-backed Securities</u>
Financial assets at FVTPL	\$ 94,120,839	\$ 33,447,848
Financial assets at FVTOCI	-	47,465,038
Financial assets measured at amortized cost	-	<u>191,072,559</u>
	<u>\$ 94,120,839</u>	<u>\$ 271,985,445</u>
	<u>December 31, 2018</u>	
	<u>Private Equity Funds</u>	<u>Asset-backed Securities</u>
Financial assets at FVTPL	\$ 77,198,514	\$ 29,059,383
Financial assets at FVTOCI	-	53,974,279
Financial assets measured at amortized cost	-	<u>152,673,283</u>
	<u>\$ 77,198,514</u>	<u>\$ 235,706,945</u>

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

<u>Type of Structured Entity</u>	<u>Nature and Purpose</u>	<u>Interests Owned</u>
Asset-based securities	Investment in asset-backed securities to receive returns	Investment in asset-based securities issued by the entity

As of December 31, 2019 and 2018, the carrying amounts of assets recognized by Cathay United Bank and its subsidiaries' asset relating to its interests in unconsolidated structured entities are disclosed as follows:

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Financial assets at FVTOCI	\$ 27,942,654	\$ 3,191,683
Investments in debt instruments measured at amortized cost	<u>38,848,276</u>	<u>47,970,374</u>
	<u>\$ 66,790,930</u>	<u>\$ 51,162,057</u>

- d) Cathay Century and its subsidiaries hold interests in structured entities which are not included in Cathay Century and its subsidiaries' consolidated financial statements. Cathay Century and its subsidiaries' does not provide financial support or other support to the unconsolidated structured entities. Cathay Century's maximum exposure to loss from its interests in these structured entities is limited to the carrying amount of assets Cathay Century recognized. The information of the recognized unconsolidated structured entities is disclosed as follows:

<u>Type of Structured Entity</u>	<u>Nature and Purpose</u>	<u>Interests Owned</u>
Asset-backed securities	Investment in asset-backed securities to receive returns	Investment in asset-backed securities issued by the entity

As of December 31, 2019 and 2018, the carrying amounts of assets recognized by Cathay Century relating to its interests in unconsolidated structured entities are disclosed as follows:

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Financial assets at FVTPL	\$ 79,951	\$ 96,907
Financial assets measured at amortized cost	<u>591,412</u>	<u>640,847</u>
	<u>\$ 671,363</u>	<u>\$ 737,754</u>

37. CAPITAL MANAGEMENT

The Group's capital adequacy ratios meet the statutory requirements currently. Under the pretext that the Group meets the statutory capital adequacy requirements, dynamic capital management mechanism is utilized to increase the capital efficiency of the subsidiaries. After reallocation of capital, the subsidiaries' capabilities of risk-taking are not affected due to lower level of retained core capital. Accordingly, the Company conducts overall planning based on the status of the subsidiaries' capital in order to improve the capital efficiency of the Group.

a. Capital adequacy ratio of the Group

Item	December 31, 2019		
	Shareholding Proportion of the Company	Eligible Capital	Statutory Capital Requirements
The Company	100.00%	\$ 771,484,510	\$ 849,255,228
Cathay United Bank	100.00%	261,880,481	182,170,074
Cathay Securities	100.00%	6,061,167	2,025,997
Cathay Life	100.00%	565,404,020	326,777,835
Cathay Century	100.00%	11,211,227	6,609,567
Cathay Venture	75.00%	4,208,591	2,126,349
Cathay Securities Investment Trust	100.00%	2,697,854	1,742,915
Less: Deduction items	100.00%	<u>(894,067,048)</u>	<u>(846,268,296)</u>
		<u>\$ 728,880,802</u>	<u>\$ 524,439,669</u>
Capital adequacy ratio of the Group			138.98%

Item	December 31, 2018		
	Shareholding Proportion of the Company	Eligible Capital	Statutory Capital Requirements
The Company	100.00%	\$ 519,377,399	\$ 584,547,133
Cathay United Bank	100.00%	247,142,545	162,837,923
Cathay Securities	100.00%	5,208,773	2,070,194
Cathay Life	100.00%	488,752,735	335,101,600
Cathay Century	100.00%	9,831,977	5,318,228
Cathay Venture	100.00%	3,735,531	1,901,290
Cathay Securities Investment Trust	100.00%	2,559,779	1,497,116
Less: Deduction items	100.00%	<u>(629,644,535)</u>	<u>(584,106,686)</u>
		<u>\$ 646,964,204</u>	<u>\$ 509,166,798</u>
Capital adequacy ratio of the Group			127.06%

b. Eligible capital

Item	December 31, 2019 Amount
Ordinary shares	\$ 131,692,102
Non-cumulative perpetual preferred stock and non-cumulative subordinated debt without maturity dates - qualifying as bank-level Tier I Capital	15,333,000
Other preferred stock and subordinated financial debentures	-
Capital received in advance	-
Capital surplus	177,256,976
Legal reserve	46,122,845
Special reserve	221,977,672
Retained earnings	58,181,890

(Continued)

	December 31, 2019
Items	Amount
Equity adjustments	\$ 121,182,880
Less: Goodwill	-
Less: Deferred assets	(262,855)
Less: Treasury stock	<u>-</u>
Total eligible capital	<u>\$ 771,484,510</u> (Concluded)

	December 31, 2018
Items	Amount
Ordinary shares	\$ 125,632,102
Non-cumulative perpetual preferred stocks and non-cumulative subordinated debts without maturity dates - qualifying as bank-level Tier I Capital	15,333,000
Other preferred stock and subordinated financial debentures	-
Capital received in advance	-
Capital surplus	165,449,364
Legal reserve	40,976,121
Special reserve	149,346,119
Retained earnings	95,553,376
Equity adjustments	(72,558,752)
Less: Goodwill	(1,330)
Less: Deferred assets	(352,601)
Less: Treasury stock	<u>-</u>
Total eligible capital	<u>\$ 519,377,399</u>

38. OTHERS

a. Significant assets and liabilities denominated in foreign currencies

The group entities' significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than the functional currencies and the related exchange rates between the foreign currencies and the respective functional currencies were as follows:

	December 31, 2019		
	Foreign Currency	Exchange Rate	New Taiwan Dollars
<u>Financial assets</u>			
Monetary items			
USD	\$ 127,152,972	30.1060	\$ 3,828,067,375
CNY	20,750,782	4.3231	89,707,706
Non-monetary items			
USD	9,432,882	30.1060	283,986,345

(Continued)

	December 31, 2019		
	Foreign Currency	Exchange Rate	New Taiwan Dollars
<u>Financial liabilities</u>			
Monetary items			
USD	\$ 14,070,997	30.1060	\$ 423,621,436 (Concluded)

	December 31, 2018		
	Foreign Currency	Exchange Rate	New Taiwan Dollars
<u>Financial assets</u>			
Monetary items			
USD	\$ 116,959,199	30.7330	\$ 3,582,521,193
CNY	21,336,446	4.4762	95,506,200
Non-monetary items			
USD	10,265,064	30.7330	315,476,212

<u>Financial liabilities</u>			
Monetary items			
USD	12,655,602	30.7330	388,944,616

It is not possible to disclose foreign exchange gains (losses) of monetary financial instruments by each significant foreign currency due to the variety of the foreign currencies of the Group. The foreign currency exchange (losses) gains for the years ended December 31, 2019 and 2018 were \$(52,147,418) thousand and \$57,450,748 thousand, respectively.

b. Information for discretionary investment

1) Cathay life and its subsidiaries

- a) As of December 31, 2019 and 2018, Cathay life contracts with securities investment trust companies for discretionary investment services and the related investments are as follows:

	December 31	
	2019	2018
Domestic shares	\$ 110,798,703	\$ 118,377,980
Overseas shares	51,029,574	60,215,861
Bonds purchased under resale agreements	14,812,000	12,410,000
Cash in banks	35,979,663	17,914,307
Beneficiary certificates	17,180	1,830,959
Futures and options	<u>435,322</u>	<u>216,603</u>
	<u>\$ 213,072,442</u>	<u>\$ 210,965,710</u>

The carrying amounts of the financial assets operated discretionarily by securities investment trust enterprises are equal to their fair values.

b) As of December 31, 2019 and 2018, the discretionary investments limits were as follows:

	December 31	
	2019	2018
NTD	\$ 64,358,163	\$ 97,872,589
USD	952,200	1,417,500
HKD	544,084	2,023,000

2) Cathay Century and its subsidiaries

Cathay Century contracts with securities investment trust companies or consulting companies for discretionary investment management. The investment details are disclosed as follows:

	December 31	
	2019	2018
Domestic shares	\$ 1,249,637	\$ 736,041
Bonds purchased under resale agreements	370,220	150,000
Cash in banks	216,196	640,437
Future margins	<u>2,010</u>	<u>2,009</u>
	<u>\$ 1,838,063</u>	<u>\$ 1,528,487</u>

The fair values of the Group's financial assets of discretionary account management contracts are as same as their carrying amounts.

As of December 31, 2019 and 2018, Cathay Century and its subsidiaries entered into discretionary management contracts with investment limits amounted to \$1,200,000 thousand.

c. Disclosure information as required by the Regulations Governing the Preparation of Financial Reports by Public Banks

1) Asset quality - loans

(In Thousands of New Taiwan Dollars, %)

Period		December 31, 2019					December 31, 2018				
Item		Nonperforming Loans (Note 1)	Loans	Ratio of Nonperforming Loans (Note 2)	Allowance for Possible 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	\$ 106,443	\$ 219,835,224	0.05%	\$ 2,799,559	2630.09%	\$ 592,658	\$ 233,463,729	0.25%	\$ 3,600,918	607.59%
	Unsecured	234,899	326,886,658	0.07%	8,132,940	3462.31%	321,166	372,650,615	0.09%	6,367,224	1,982.53%
Consumer banking	Residential mortgage (Note 4)	652,832	351,141,817	0.19%	5,628,075	862.10%	594,249	358,859,786	0.17%	5,649,230	950.65%
	Cash card	-	-	-	-	-	-	-	-	-	-
	Small-scale credit loans (Note 5)	211,673	87,272,712	0.24%	2,898,274	1369.22%	164,226	71,310,220	0.23%	1,876,794	1,142.81%
	Other (Note 6)	Secured	995,451	502,473,730	0.20%	6,105,424	613.33%	780,457	498,067,264	0.16%	5,946,347
Unsecured		84,867	26,291,790	0.32%	419,182	493.93%	110,551	23,068,954	0.48%	438,172	396.35%
Total Loan		\$ 2,286,165	\$ 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%
		Nonperforming Receivables (Note 1)	Receivables	Ratio of Nonperforming Receivables (Note 2)	Allowance for Credit Losses	Coverage Ratio (Note 3)	Nonperforming Receivables (Note 1)	Receivables	Ratio of Nonperforming Receivables (Note 2)	Allowance for Credit Losses	Coverage Ratio (Note 3)
Credit cards		\$ 131,125	\$ 89,442,948	0.15%	\$ 1,852,005	1412.39%	\$ 107,314	\$ 71,887,117	0.15%	\$ 1,466,464	1,366.52%
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-accrual 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.

Not reported as nonperforming loans or nonperforming receivables

Type	Items	December 31, 2019		December 31, 2018	
		Not Reported as Nonperforming Loans	Not Reported as Nonperforming Receivables	Not Reported as Nonperforming Loans	Not Reported as Nonperforming Receivables
	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).

2) Concentration of credit extensions

(In Thousands of New Taiwan Dollars, %)

December 31, 2019			
Rank	Industry Category of Company or Group	Credit Extension Balance	% to Net Asset Value
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	Industry Category of Company or Group	Credit Extension Balance	% to Net Asset Value
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 - others	3,963,056	1.96

3) Information on interest rate sensitivity

Interest Rate Sensitivity
December 31, 2019

(In Thousands of New Taiwan Dollars, %)

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					227,485,604
Ratio of interest rate-sensitive assets to liabilities					111.46%
Ratio of interest rate sensitivity gap to net worth					94.44%

December 31, 2018

(In Thousands of New Taiwan Dollars, %)

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					201,765,546
Ratio of interest rate-sensitive assets to liabilities					115.85%
Ratio of interest rate sensitivity gap to net worth					138.70%

Note 1: The above amounts included only New Taiwan dollar amounts held by Cathay United Bank (excluding foreign currencies).

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)
December 31, 2019**

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

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)	(2,344,934)	(1,967,562)	3,750,924	(3,469,425)
Net worth					7,556,155
Ratio of interest rate-sensitive assets to liabilities					82.95%
Ratio of interest rate sensitivity gap to net worth					(45.92%)

December 31, 2018

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

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	(3,624,621)	(1,900,106)	(2,119,637)	2,603,641	(5,040,723)
Net worth					6,565,111
Ratio of interest rate-sensitive assets to liabilities					74.80%
Ratio of interest rate sensitivity gap to net worth					(76.78%)

Note 1: The above amounts included only U.S. dollar amounts held by Cathay United 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)

4) Maturity analysis of assets and liabilities

Maturity Analysis of Assets and Liabilities
December 31, 2019

(In Thousands of New Taiwan Dollars)

	Total	Remaining Period to Maturity					
		0-10 Days	11-30 Days	31-90 Days	91-180 Days	181 Days - 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

(In Thousands of New Taiwan Dollars)

	Total	Remaining Period to Maturity					
		0-10 Days	11-30 Days	31-90 Days	91-180 Days	181 Days - 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
December 31, 2019

(In Thousands of U.S. Dollars)

	Total	Remaining Period to Maturity				
		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

(In Thousands of U.S. Dollars)

	Total	Remaining Period to Maturity				
		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.

d. Disclosures according to Article 46 of the Financial Holding Company Act

Ending balances of the transaction mentioned in Paragraph 2 of Article 46 of the Financial Holding Company Act, between all subsidiaries of a financial holding company and the same counterparties mentioned in Paragraph 1 at the same article.

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
1) Same person		
Central Bank of the Republic of China (Taiwan)	533,639,649	69.07
FREDDIE MAC	121,294,755	15.70
FANNIE MAE	110,248,384	14.27
Treasury Bond/Treasury Bills	79,321,112	10.27
United States Treasury Note/Bond	77,832,473	10.07
AT&T Inc.	69,080,356	8.94
Fubon Asset Management Co., Ltd.	66,607,830	8.62
Yuanta Securities Investment Trust Co., Ltd.	64,148,582	8.30
Citigroup Inc.	55,636,346	7.20
CTBC Securities Co., Ltd.	53,616,502	6.94
China Development Bank Corp.	53,318,131	6.90
Taiwan Semiconductor Manufacturing Company Limited	51,383,699	6.65
JPMorgan Chase & Co.	49,377,387	6.39
Barclays PLC	44,629,901	5.78
Bank Of America N.A.	44,311,862	5.74
BNP Paribas	42,213,619	5.46
Goldman Sachs Group Inc.	41,253,829	5.34
Verizon Communications Inc.	40,954,561	5.30
State of California	40,382,465	5.23
Indonesia Government International Bond	38,904,017	5.04
Qatar Government International Bond	37,175,436	4.81
Comcast Corp.	35,052,898	4.54
KGI Securities Investment Trust Co., Ltd.	34,850,158	4.51
Wells Fargo & Co.	34,344,748	4.45
Bank of China Ltd.	30,350,052	3.93
Southern Taiwan Science Park Administration	30,000,000	3.88
Panama Government International Bond	29,915,868	3.87
Russian Foreign Bond - Eurobond	29,853,368	3.86
Mexico Government International Bond	29,712,605	3.85
UBS AG	29,210,700	3.78
ELECTRICITE DE FRANCE	28,049,277	3.63
Industrial & Commercial Bank of China	26,472,672	3.43
Saudi Government International Bond	26,414,714	3.42
IBF securities Investment consulting Co., Ltd.	25,531,763	3.30
Central Taiwan Science Park Bureau	25,500,000	3.30
HSBC Holdings PLC	25,326,941	3.28
Bank of Taiwan	24,485,803	3.17

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Microsoft Corp	\$ 24,306,046	3.15
Government National Mortgage Association	24,220,407	3.13
Colombia Government International Bond	23,367,720	3.02
Credit Suisse Group AG	22,265,257	2.88
Lloyds Bank PLC	20,454,517	2.65
Societe Generale	20,365,841	2.64
ROYAL BANK OF SCOTLAND PLC	20,343,985	2.63
Agricultural Development Bank of China	20,326,289	2.63
China Construction Bank Corp	19,807,486	2.56
Mega Bills Finance Co., Ltd.	19,442,906	2.52
CTBC Bank Co., Ltd.	19,203,088	2.49
Vietnam Government Bond	19,049,223	2.47
Anheuser-Busch InBev Worldwide Inc.	18,939,504	2.45
Taipeifubon Commercial Bank Co., Ltd.	18,718,464	2.42
Amazon.com Inc.	18,702,745	2.42
China Steel Corporation	18,612,299	2.41
NATIONAL BANK OF CANADA	18,561,867	2.40
Fubon Financial Holding Co., Ltd.	18,502,994	2.39
CVS Health Corp.	18,476,516	2.39
Morgan Stanley	18,240,642	2.36
Sinopec Group Overseas Development Ltd.	18,182,018	2.35
Standard Chartered PLC	18,093,324	2.34
Anthem Inc.	17,879,255	2.31
CIGNA CORP.	17,400,301	2.25
Shin Kong Investment Trust Co., Ltd.	17,317,104	2.24
Vodafone Group PLC	17,237,456	2.23
Postal Savings Bank of China Co., Ltd.	17,104,019	2.21
China Cinda Asset Management Co., Ltd.	16,925,869	2.19
Ginnie Mae II pool	16,901,687	2.19
Alibaba Group Holding Ltd.	16,686,151	2.16
TransCanada PipeLines Ltd.	16,526,566	2.14
Apple Inc.	16,464,019	2.13
Chunghwa Telecom Co., Ltd.	16,292,988	2.11
LONDON CLEARING HOUSE	16,288,418	2.11
Dragon Steel Corporation	16,158,380	2.09
America Movil SAB de CV	16,116,853	2.09
Taiwan Mobile Co., Ltd.	16,106,261	2.08
European Investment Bank	15,967,912	2.07
CNOOC Ltd.	15,779,665	2.04
E.Sun Commercial Bank, Ltd.	15,613,475	2.02
CNOOC PETROLEUM NA ULC	15,567,863	2.01
Corp Nacional del Cobre de Chile	15,242,473	1.97
Export-Import Bank of China	15,153,657	1.96
Telefonica Emisiones SAU	15,032,321	1.95

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Australia and New Zealand Banking Group Limited	\$ 14,806,488	1.92
Land Bank of Taiwan Co., Ltd.	14,753,408	1.91
Far EasTone Telecommunications Co., Ltd.	14,545,048	1.88
CITIC LIMITED	14,528,893	1.88
SG Issuer	14,412,638	1.87
Westpac Banking Corp.	14,404,606	1.86
Occidental Petroleum Corp.	14,349,204	1.86
Cooperatieve Centrale Raiffeisen-Boerenleenbank BA/Netherlands	14,319,561	1.85
National Australia Bank Ltd.	14,184,042	1.84
PERTAMINA PT	13,967,452	1.81
BPCE SA	13,932,146	1.80
Commonwealth Bank of Australia	13,753,763	1.78
Credit Agricole SA	13,571,357	1.76
Prudential Financial Inc.	13,445,971	1.74
Taiwan Business Bank Co., Ltd.	13,441,853	1.74
Enel Finance International NV	13,368,223	1.73
UnitedHealth Group Inc.	13,348,597	1.73
Nationwide Building Society	13,322,555	1.72
Taiwan Cooperative Bank Co., Ltd.	12,979,652	1.68
Pfizer Inc.	12,859,550	1.66
Peruvian Government International Bond	12,631,815	1.63
Bristol-Myers Squibb Co	12,610,640	1.63
ASE Technology Holding Co., Ltd.	12,586,037	1.63
Oracle Corp.	12,572,872	1.63
American International Group Inc.	12,471,341	1.61
Credit Agricole Corporate & Investment Bank SA	12,448,843	1.61
Mega International Commercial Bank Co., Ltd.	12,358,078	1.60
Amgen Inc.	12,195,269	1.58
Southern Copper Corp.	12,063,045	1.56
Fuh Hwa Securities Investment Trust Co., Ltd.	12,037,762	1.56
China Bills Finance Corporation	12,033,074	1.56
REPUBLICA ORIENT URUGUAY	11,898,793	1.54
Bank of Nova Scotia	11,863,242	1.54
Altria Group Inc.	11,861,668	1.54
DBS Bank Limited	11,727,940	1.52
AIA Group Ltd.	11,683,037	1.51
Tencent Holdings Ltd.	11,551,635	1.50
Bank of Tokyo-Mitsubishi UFJ Ltd.	11,529,848	1.49
HSBC France SA	11,425,807	1.48
Bank of Communications Co., Ltd.	11,401,718	1.48
Comision Federal de Electricidad	11,318,122	1.46
Israel Government International Bond	11,096,164	1.44
BAT CAPITAL CORP.	10,985,823	1.42

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Hua Nan Commercial Bank Co., Ltd.	\$ 10,947,103	1.42
ROYAL BANK OF CANADA	10,819,613	1.40
Global Investors Series plc	10,717,303	1.39
AbbVie Inc.	10,488,727	1.36
Kommunalbanken AS	10,455,518	1.35
Banco Santander SA	10,331,882	1.34
BBVA Bancomer SA	10,327,932	1.34
Nan Ya Plastics Corporation	10,221,512	1.32
Natixis	10,142,395	1.31
MediaTek Inc.	10,138,220	1.31
Shinhan Bank	10,088,624	1.31
MetLife Inc.	10,074,751	1.30
AstraZeneca PLC	9,889,679	1.28
Yuanta Futures Co., Ltd.	9,847,402	1.27
Largan Precision Co., Ltd.	9,799,783	1.27
United Technologies Corp.	9,668,259	1.25
ABN AMRO Bank	9,609,717	1.24
ADCB Finance Cayman Ltd.	9,595,418	1.24
BANK OF MONTREAL	9,560,621	1.24
State Grid Overseas Investment Ltd.	9,512,351	1.23
Halliburton Co	9,450,975	1.22
Capital Futures Corp.	9,342,023	1.21
HSBC BANK PLC	9,216,671	1.19
Far East Horizon Limited	9,211,825	1.19
Yuanta Securities Co., Ltd.	9,138,371	1.18
BBVA Global Markets BV	9,076,189	1.17
China Construction Bank Corporation	9,031,800	1.17
Abbott Laboratories	8,990,876	1.16
CTBC Financial Holding Co., Ltd.	8,965,693	1.16
Taishin Financial Holding Co., Ltd.	8,944,961	1.16
Woori Bank	8,882,011	1.15
Srisawad Corp PCL	8,697,965	1.13
Japan Government Two Year Bond	8,620,581	1.12
Abu Dhabi Government International Bond	8,417,904	1.09
Thaioil Treasury Center Co., Ltd.	8,341,175	1.08
Intel Corp.	8,288,543	1.07
MDC-GMTN B.V.	8,226,399	1.06
Phillips 66	8,199,980	1.06
Shell International Finance BV	8,184,367	1.06
OVPH LTD.	8,014,035	1.04
Gilead Sciences Inc.	7,966,668	1.03
Formosa Plastics Corporation	7,959,922	1.03
UniCredit SpA	7,909,429	1.02

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
ING Groep NV	\$ 7,851,842	1.02
STANDARD LIFE INVESTMENTS	7,813,940	1.01
Taiwan Railways Administration	7,666,293	0.99
Rogers Communications Inc.	7,622,260	0.99
Quanta Computer Inc.	7,510,684	0.97
Bank of Communications Co., Ltd.	7,507,382	0.97
Spain Government International Bond	7,492,065	0.97
KAZMUNAYGAS NATIONAL	7,472,509	0.97
China Government Bond	7,452,789	0.96
First Commercial Bank Co., Ltd.	7,375,945	0.95
Enbridge Inc.	7,289,911	0.94
Intesa Sanpaolo SpA	7,249,669	0.94
DUKE ENERGY CORP.	7,169,792	0.93
BECTON DICKINSON AND CO	7,153,458	0.93
Alliance Bernstein S.à r.l	7,116,959	0.92
Yuanta Commercial Bank Co., Ltd.	7,095,809	0.92
IBM CORP	7,038,249	0.91
AXA Funds Management SA	7,018,349	0.91
Indonesia Treasury Bond	6,994,271	0.91
HKT Capital No 1 Ltd.	6,955,560	0.90
India Government	6,894,303	0.89
Mega Financial Holding Co., Ltd.	6,880,529	0.89
Reliance Industries Ltd.	6,865,156	0.89
Deutsche Bank AG	6,850,478	0.89
Brazilian Government International Bond	6,834,781	0.88
Sinopec Group Overseas Development 2018 Ltd.	6,824,923	0.88
Advanced Semiconductor Engineering, Inc.	6,814,840	0.88
Dow Chemical Co	6,785,794	0.88
Canadian Natural Resources Ltd.	6,760,106	0.87
SinoPac Financial Holdings Co., Ltd.	6,748,314	0.87
Aetna Inc.	6,746,101	0.87
Newmont Mining Corp.	6,709,651	0.87
Hon Han Investment Co., Ltd.	6,685,536	0.87
Kroger Co	6,663,930	0.86
BHP Billiton Finance USA Ltd.	6,602,400	0.85
Vanguard Fixed Income Securities Funds	6,599,336	0.85
Grupo Televisa SA	6,595,453	0.85
Saudi Arabian Oil Co	6,467,988	0.84
Landesbank Baden-Wuerttemberg	6,415,622	0.83
DowDuPont Inc.	6,383,199	0.83
DP World Ltd.	6,355,283	0.82
Hungary Government International Bond	6,340,112	0.82
JPMorgan Chase Bank, N.A.	6,338,257	0.82

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
IPIC GMTN Ltd.	\$ 6,289,633	0.81
Bank Nederlandse Gemeenten NV	6,261,602	0.81
Italy Buoni Poliennali Del Tesoro	6,247,959	0.81
Morgan Stanley Finance LLC	6,224,843	0.81
Chang Hwa Commercial Bank Co., Ltd.	6,185,337	0.80
SOUTHERN CO	6,181,867	0.80
Bayer US Finance LLC	6,149,613	0.80
Perusahaan Listrik Negara PT	6,146,338	0.80
MIZUHO SECURITIES CO., LTD.	6,141,840	0.79
ENI SpA	6,054,956	0.78
Fubon Life Insurance Co., Ltd.	6,040,264	0.78
Hua Nan Financial Holdings Co., Ltd.	6,009,189	0.78
Deutsche Telekom International Finance BV	5,901,256	0.76
Barrick North America Finance LLC	5,860,875	0.76
BANCO DE BOGOTA SA	5,834,180	0.76
Marathon Petroleum Corp.	5,803,652	0.75
Evergreen Marine Corporation	5,796,457	0.75
Reynolds American Inc.	5,768,704	0.75
Union Pacific Corp.	5,767,357	0.75
NATWEST MARKETS PLC	5,750,924	0.74
China Network Systems Co., Ltd.	5,701,955	0.74
China Development Financial Holding Corp.	5,632,367	0.73
Berkshire Hathaway Energy Co	5,624,307	0.73
Humana Inc.	5,614,072	0.73
Burlington Northern Santa Fe LLC	5,531,067	0.72
China Overseas Land & Investment Ltd.	5,511,834	0.71
Credit Suisse Group Funding Guernsey Ltd.	5,390,237	0.70
CNAC HK Finbridge Co., Ltd.	5,372,074	0.70
Fomento Economico Mexicano SAB de CV	5,347,157	0.69
QNB Finance Ltd.	5,263,481	0.68
Capital Investment Trust Corporation	5,224,018	0.68
Bangkok Bank PCL	5,218,998	0.68
QUALCOMM Inc.	5,172,706	0.67
Macquarie Group Ltd.	5,145,898	0.67
Hartford Financial Services Group Inc.	5,139,620	0.67
SHERWIN-WILLIAMS CO	5,135,694	0.66
Yuanta Financial Holding Co., Ltd.	5,107,252	0.66
MYRIAD INTL HOLDINGS BV	5,067,995	0.66
Cornell Capital LLC	5,063,654	0.66
Walt Disney Co/The	5,052,320	0.65
Visa Inc.	4,982,007	0.64
Berkshire Hathaway Finance Corp.	4,965,542	0.64
Molson Coors Brewing Co	4,920,717	0.64

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Kinder Morgan Inc/DE	\$ 4,824,000	0.62
Anheuser-Busch InBev Finance Inc.	4,822,507	0.62
Manulife Financial Corp.	4,816,498	0.62
ConocoPhillips	4,801,551	0.62
Consolidated Edison Co of New York Inc.	4,788,573	0.62
Valero Energy Corp.	4,720,100	0.61
Petronas Capital Ltd.	4,678,283	0.61
Santander International Products PLC	4,635,741	0.60
CBS Corp.	4,625,128	0.60
HSBC Bank (Taiwan) Limited	4,604,717	0.60
ALLERGAN FUNDING SCS	4,571,973	0.59
Top Luxury Investment Ltd.	4,564,995	0.59
CNPC HK Overseas Capital Ltd.	4,554,854	0.59
Caisse des Depots et Consignations	4,539,353	0.59
CIC	4,532,156	0.59
Siliconware Precision Industries Co., Ltd.	4,527,880	0.59
Grand Central Limit	4,515,900	0.58
Cyber Company Inc.	4,515,900	0.58
Formosa Petrochemical Corporation	4,510,157	0.58
Banco de Credito del Peru	4,507,473	0.58
Min Hue Co., Ltd.	4,490,000	0.58
ICICI Bank Ltd.	4,489,472	0.58
Grand Bills Finance Corporation	4,466,258	0.58
Aon PLC	4,463,008	0.58
Merck & Co Inc.	4,451,642	0.58
Formosa Chemicals & Fibre Corporation	4,446,982	0.58
Hon Hai Precision Industry Co., Ltd.	4,446,705	0.58
Taishin International Bank Co., Ltd.	4,442,937	0.58
Hong Long Co., Ltd.	4,440,000	0.57
Delta Electronics, Inc.	4,414,430	0.57
PTTEP Canada International Finance Ltd.	4,400,702	0.57
Suncor Energy Inc.	4,357,559	0.56
Chile Government International Bond	4,354,947	0.56
Standard Chartered Bank Taiwan	4,341,652	0.56
Deutsche Telekom AG	4,321,904	0.56
KGI Futures Co., Ltd.	4,282,120	0.55
United Overseas Bank Ltd.	4,276,794	0.55
Banco de Credito e Inversiones	4,269,408	0.55
Nisource Finance Corp.	4,258,607	0.55
Abu Dhabi National Energy Co	4,251,885	0.55
ProShares Short S&P500	4,212,230	0.55
Intesa Sanpaolo Bank Ireland PLC	4,211,912	0.55
UBAM	4,173,170	0.54

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Taiwan Cooperative Financial Holding Co., Ltd.	\$ 4,172,965	0.54
CSX CORP.	4,155,644	0.54
Lockheed Martin Corp.	4,153,038	0.54
Mitsubishi UFJ Financial Group Inc.	4,103,820	0.53
Formosa Ha Tinh (Cayman) Limited	4,094,416	0.53
Grupo Bimbo SAB de CV	4,072,508	0.53
Taishin Securities Investment Trust Co., Ltd.	3,991,125	0.52
Broadcom Ltd.	3,973,516	0.51
Qtel International Finance Ltd.	3,960,453	0.51
Sumitomo Mitsui Trust Holdings Inc.	3,930,648	0.51
Nucor Corp.	3,924,914	0.51
ChunYee Co., Ltd.	3,920,670	0.51
Principal Financial Group Inc.	3,919,392	0.51
Catcher Technology Co., Ltd.	3,907,980	0.51
NRW.BANK	3,887,164	0.50
BOC Aviation Pte Ltd.	3,884,579	0.50
Brookfield Asset Management Inc.	3,879,543	0.50
Banco Santander Mexico SA Institucion de Banca Multiple Grupo Financiero Santand	3,876,056	0.50
Dominion Resources Inc.	3,875,388	0.50
Marsh & McLennan Cos Inc.	3,812,272	0.49
Lowe's Cos Inc.	3,795,895	0.49
TELUS Corp.	3,789,421	0.49
The HongKong and Shanghai Banking Corporation Limited	3,787,273	0.49
Mastercard Inc.	3,772,768	0.49
PCCW Capital No 5 Ltd.	3,769,605	0.49
Blackstone Real Estate Advisors L.P.	3,767,174	0.49
Nederlandse Waterschapsbank NV	3,754,981	0.49
The Shanghai Commercial & Savings Bank, Ltd.	3,730,171	0.48
LEGAL & GENERAL GROUP	3,686,509	0.48
China Life Insurance Co., Ltd.	3,673,946	0.48
EVA Airways Corporation	3,622,010	0.47
Walgreens Boots Alliance Inc.	3,600,356	0.47
Shen Shawn Co., Ltd.	3,600,000	0.47
Malayan Banking Bhd	3,587,984	0.46
Shamrock Group Limited	3,576,593	0.46
Alexandria Real Estate Equities Inc.	3,561,850	0.46
Micro-star International Co., Ltd.	3,544,296	0.46
Huarong Finance 2017 Co	3,543,207	0.46
Taiwan Star Telecom Co., Ltd.	3,538,800	0.46
Enterprise Products Operating LLC	3,534,310	0.46
State Street Bank and Trust Company	3,533,430	0.46
Orange SA	3,526,732	0.46

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
HONGKONG ELECTRIC FIN	\$ 3,521,334	0.46
Discovery Communications LLC	3,499,716	0.45
Taiwan Cement Corp.	3,490,182	0.45
Citigroup Global Markets Holdings Inc.	3,485,755	0.45
Capital One Financial Corp.	3,484,272	0.45
SinoPac Futures Co., Ltd.	3,478,080	0.45
Gazprom OAO Via Gaz Capital SA	3,473,088	0.45
Bell Canada	3,462,015	0.45
Wealth Media Co., Ltd.	3,455,693	0.45
Global Infrastructure Management	3,452,002	0.45
Home Depot Inc.	3,451,411	0.45
Joint Stock Commercial Bank for Investment and Dev	3,447,137	0.45
Philippine Government International Bond	3,444,180	0.45
Eirles Two Ltd.	3,436,962	0.44
Apache Corp.	3,416,481	0.44
Enel Chile SA	3,414,845	0.44
Commercial Mortgage Pass Through Certificates	3,405,404	0.44
BARCLAYS BANK PLC	3,394,488	0.44
Dr Pepper Snapple Group Inc.	3,392,363	0.44
Allstate Corp.	3,373,195	0.44
South Africa Government International Bond	3,372,218	0.44
NOBLE ENERGY INC.	3,367,257	0.44
Uni-President Enterprises Corporation	3,362,145	0.44
Bank SinoPac Co., Ltd.	3,354,579	0.43
KWEICHOW MOUTAI CO LTD-A	3,341,844	0.43
FREMF Mortgage Trust	3,328,245	0.43
Minera Mexico SA de CV	3,322,883	0.43
PepsiCo Inc.	3,317,243	0.43
Realty Income Corp.	3,314,174	0.43
Adobe Systems Inc.	3,311,993	0.43
Blackstone Group LP	3,311,924	0.43
Nanya Technology Corporation	3,306,588	0.43
China Life Insurance Co., Ltd.	3,301,539	0.43
Barings Global Investment Fund plc	3,290,413	0.43
Insight Venture Management, LLC	3,288,485	0.43
Sumitomo Mitsui Banking Corp.	3,288,076	0.43
Dah Chung Bills Finance Corp.	3,270,000	0.42
Compal Electronics, Inc.	3,241,738	0.42
FIRST ABU DHABI BANK PJSC	3,199,355	0.41
General Mills Inc.	3,198,643	0.41
Kookmin Bank	3,194,783	0.41
Kimco Realty Corp.	3,194,540	0.41
Marathon Oil Corp.	3,192,848	0.41

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Far Eastern Electronic Toll Collection Co., Ltd.	\$ 3,183,693	0.41
Corp Andina de Fomento	3,181,301	0.41
Banco de Chile	3,170,410	0.41
MX GOVERNMENT	3,161,406	0.41
Realtek Semiconductor Corp.	3,160,047	0.41
Aquiline Holdings LLC	3,149,767	0.41
Embraer Netherlands Finance BV	3,137,214	0.41
PERUSAHAAN GAS NEGARA PT	3,131,020	0.41
Central American Bank for Economic Integration	3,128,764	0.40
Ecopetrol SA	3,126,070	0.40
Credit Suisse AG	3,112,880	0.40
EMERA US FINANCE LP	3,101,063	0.40
Foods Inc.	3,093,941	0.40
Petron Corporation	3,089,435	0.40
Pttep Treasury Center Co	3,088,053	0.40
Romanian Government International Bond	3,047,602	0.39
Thermo Fisher Scientific Inc.	3,038,214	0.39
General Electric Co	3,028,792	0.39
PT PERUSAHAAN LISTRIK NEGARA (PERSERO)	3,022,642	0.39
ServiceNow Inc.	3,019,754	0.39
ERAC USA Finance LLC	3,013,988	0.39
BlackRock Global Funds	3,013,597	0.39
Industrial & Commercial Bank of China Ltd./Hong Kong	3,012,000	0.39
2) Enterprises where the same natural person and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge		
Enterprises where Dong and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	19,424,990	2.51
Enterprises where Ko and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	11,429,755	1.48
Enterprises where Cheng and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	6,861,774	0.89
Enterprises where Lee and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	5,660,761	0.73
Enterprises where Lee and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	5,558,651	0.72

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Enterprises where Yang and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	\$ 5,362,451	0.69
Enterprises where Wu and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	4,490,096	0.58
Enterprises where Jiang and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	3,936,711	0.51
Enterprises where Su and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	3,490,182	0.45
Enterprises where Chen and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	3,489,957	0.45
Enterprises where Huang and his/her spouse, blood relative within the second degree of kinship, oneself or his/her spouse is the person-in-charge	3,295,266	0.43
3) Affiliates with same juridical person		
Government of the Republic of China and its supervisory agency	676,127,054	87.51
Government of the USA and its supervisory agency	350,497,706	45.36
Fubon Group	97,605,609	12.63
Group of Yuanta Financial Holdings	96,809,835	12.53
Citigroup Inc. and its related parties	58,654,828	7.59
JPMorgan and its related parties	56,710,780	7.34
TSMC Group	54,950,756	7.11
China Development Group	50,595,802	6.55
Bank of America Corporation and its related parties	46,594,049	6.03
BNP Paribas and its related parties	44,337,873	5.74
Government of Indonesia and its supervisory agency	42,035,567	5.44
Goldman Sachs Group Inc. and its related parties	41,528,756	5.37
State of Qatar and its related parties	41,135,889	5.32
China Steel Group	38,367,121	4.97
HSBC Bank PLC and its related parties	36,323,823	4.70
Government of Russia and its supervisory agency	33,326,456	4.31
Government of France and its supervisory agency	32,588,630	4.22
Hon Tai Group	31,051,742	4.02
UBS AG and its related parties	31,030,029	4.02
Bank of China and its related parties	30,425,372	3.94
IBF Group	29,006,419	3.75

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Group of ASE Technology Holding	\$ 28,462,957	3.68
Group of Mega Financial Holdings	28,407,408	3.68
The Far Eastern Group	26,720,959	3.46
Standard Chartered Bank and its related parties	23,417,422	3.03
Government of China and its supervisory agency	22,716,128	2.94
Group of Shin Kong Financial Holdings	21,065,234	2.73
Lloyds Banking Group PLC and its related parties	20,549,649	2.66
Morgan Stanley and its related parties	20,232,302	2.62
BBVA and its related parties	19,404,121	2.51
Anheuser-Busch InBev NV and its related parties	19,358,565	2.51
TACB Group	18,862,825	2.44
Yuen Foong Yu Group	18,454,537	2.39
Group of Taishin Financial Holdings	17,498,986	2.26
CHT Group	17,000,861	2.20
Capital Financial Group	15,999,754	2.07
Group of E.Sun Financial Holdings	15,627,808	2.02
Telefonica SA and its related parties	15,424,293	2.00
O-Bank Group	15,182,730	1.97
Westpac Banking Corp and its related parties	14,427,496	1.87
National Australia Bank Ltd. and its related parties	14,209,333	1.84
DBS and its related parties	14,010,362	1.81
Credit Agricole SA and its related parties	13,974,603	1.81
Nan Ya Plastics Group	13,702,049	1.77
Pfizer Inc. and its related parties	13,368,801	1.73
Evergreen Group	12,735,485	1.65
NOVA SCOTIA and its related parties	11,864,209	1.54
Uni-President Group	11,425,801	1.48
ING Group and its related parties	11,186,496	1.45
Foxconn Technology Group	10,073,833	1.30
Government of the UK and its supervisory agency	9,636,210	1.25
Group of CTBC Financial Holdings	9,255,403	1.20
Formosa Petrochemical Group	9,250,298	1.20
Triumph Transcend Group	8,572,071	1.11
China Network Group	8,464,136	1.10
Group of Hua Nan Financial Holdings	8,243,459	1.07
Quanta Computer Group	8,038,138	1.04
Deutsche Bank AG and its related parties	7,888,462	1.02
Barrick Gold Corp. and its related parties	7,796,238	1.01
Sumitomo Corp. and its related parties	7,627,774	0.99
Group of First Financial Holdings	5,944,178	0.77
Dominion Resources Inc./VA and its related parties	5,786,027	0.75
UMC Group	5,514,002	0.71
Taiwan Chemical Fiber Group	5,117,748	0.66

(Continued)

December 31, 2019		
Expressed in Thousands of New Taiwan Dollars; %		
Name	Total Balance	Total Balance to Financial Holding Company's Net Value (%)
Mitsubishi Chemical Holdings Corp. and its related parties	\$ 4,989,436	0.65
Suncor Energy Inc. and its related parties	4,962,370	0.64
Credit Suisse AG and its related parties	4,939,908	0.64
He Shin Group	4,641,429	0.60
Delta Group	4,494,916	0.58
BIDV Group	4,314,942	0.56
CT&D Group	4,299,488	0.56
Chow Tai Fook Group	4,101,530	0.53
BlackRock Inc. and its related parties	3,835,429	0.50
Walsin Lihwa Group	3,763,833	0.49
Kinpo Group	3,741,454	0.48
Ting Hsin Group	3,688,722	0.48
Charoen Pokphand Group	3,484,111	0.45
JUT Group	3,440,333	0.45
Asus Group	3,418,179	0.44
TBC Group	3,325,856	0.43
BenQ Group	3,303,346	0.43
HueTeng Group	3,248,000	0.42
Rio Tinto Ltd. and its related parties	3,024,835	0.39

(Concluded)

39. SUPPLEMENTAL DISCLOSURES

a. Information about significant transactions:

Code	Description	Explanation
1	Accumulated purchases and sales balance of specific investee's marketable securities over \$300 million or 10% of the paid-in capital	Note 28
2	Acquisition or disposal of individual real estate at prices over \$300 million or 10% of the paid-in capital	None
3	Discount on processing fee the transactions with related parties over \$5 million	None
4	Receivables from related parties over \$300 million or 10% of the paid-in capital	Table 1
5	Disposal of nonperforming loans by subsidiaries	None
6	Related information of financial assets securitization or real estate securitization by subsidiaries	None
7	Other significant transaction which may affect the decisions of users of the financial statements	None

b. Information of investees

Code	Description	Explanation
1	Information regarding investee companies and percentage of ownership	Table 3
2	Acquisition and disposal of real estate at prices over \$300 million or 10% of the paid-in capital	Tables 4 and 5
3	Discount on processing fee for transactions with related parties over \$5 million	None
4	Receivables from related parties over \$300 million or 10% of the paid-in capital	Table 1
5	Disposal of nonperforming loans by investees	None
6	Related information of financial assets securitization or real estate securitization by investees	None
7	Other significant transaction which may affect the decisions of users of the financial statements	None
8	Financing provided to others	Note
9	Endorsements/guarantees provided	None
10	Marketable securities held as of December 31, 2019	Table 2 (Note)
11	Marketable securities acquired or disposed of at costs or prices over \$300 million or 10% of the paid-in capital	None
12	Derivative transactions	Note 7

Note: Disclosure requirements are not applicable to Cathay Life, Cathay United Bank, Cathay Century and Cathay Securities.

c. Investments in mainland China

Code	Description	Explanation
1	Name of companies, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income, carrying amount of the investment, repatriation of investment income, and limit of investment in investees in the mainland China area.	Table 6
2	Significant transaction elements like price, disbursement condition and unrealizable income generated directly or indirectly through a third area, by investee in mainland China.	None
3	Notes, endorsements and collateral provided directly or indirectly through an investee in a third area in mainland China.	None
4	Capital financing directly or indirectly through an investee in a third area in mainland China.	None
5	Other significant transactions which may affect the decisions of users of the financial statements	None

d. The important intercompany transactions among the Group are disclosed in Table 7 following the Note 28 to consolidated financial statements.

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST \$300 MILLION OR 10% OF THE PAID-IN CAPITAL

DECEMBER 31, 2019

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

Company Name	Related Party	Nature of Relationship	Ending Balance	Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Bad Debts
					Amount	Action Taken		
Cathay Financial Holding Co., Ltd.	Cathay United Bank Co., Ltd.	Subsidiary	\$ 1,703,104	Note	\$ -	-	\$ -	\$ -
	Cathay Century Insurance Co., Ltd.	Subsidiary	362,812	Note	-	-	-	-
Cathay Life Insurance Co., Ltd.	Cathay Financial Holding Co., Ltd.	Parent company	10,147,500	Note	-	-	-	-

Note: The ending balance is consisted of receivables arising from consolidated income tax return, which is not applicable for the calculation of the turnover rate.

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD

DECEMBER 31, 2019

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

Holding Company Name	Marketable Securities Type and Name	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Number of Shares	Carrying Amount	Percentage of Ownership (%)	Fair Value	
Cathay Venture Inc.	<u>Corporate bonds</u>							
	SmartGames CB	N/A	Financial assets at fair value through profit or loss	-	\$ 7	-	\$ 7	
	Guanghe CBI	N/A	"	-	77,060	-	77,060	
	A2G CB	N/A	"	-	1,478	-	1,478	
	PT Cemerlang Multimedia CB	N/A	"	-	51,664	-	51,664	
	Huang Chieh Mental Composite Material Tech. Co., Ltd. CB	N/A	"	-	71,502	-	71,502	
	OneDegree CB	N/A	"	-	5,798	-	5,798	
	<u>Beneficiary certificates</u>							
	Mega Diamond Money Market Fund	N/A	"	31,861	401,166	-	401,166	
	Taishin 1699 Money Market Fund	N/A	"	29,531	401,152	-	401,152	
	Cathay Taiwan Money Market Fund	N/A	"	43,273	540,337	-	540,337	
	<u>Shares</u>							
	Tien-Tai Management Consulting Co., Ltd.	Investee accounted for using the equity method	Investments accounted for using the equity method	141	4,985	28.20	4,985	
	Dun-Yang Energy Corp.	Investee accounted for using the equity method	Investments accounted for using the equity method	3,897	43,810	32.20	43,810	
	Yong-Chang Energy Corp.	Investee accounted for using the equity method	Investments accounted for using the equity method	3,975	42,522	32.32	42,522	
	RI-Zhao Energy Corp.	Investee accounted for using the equity method	Investments accounted for using the equity method	4,040	46,460	32.32	46,460	
	Tien-Tai Optronics Corporation	Investee accounted for using the equity method	Investments accounted for using the equity method	10,646	136,988	33.64	136,988	
	Kwan's International Co., Ltd.	N/A	Financial assets at fair value through profit or loss	759	22,969	-	22,969	
	F - Rotam Global AgroSciences Limited (Cayman)	N/A	"	1,404	20,715	-	20,715	
	F- Yeong Guan Energy Technology Group Co., Ltd.	N/A	"	96	5,932	-	5,932	
	F- Fulgent Sun International (Holding) Co., Ltd.	N/A	"	680	91,120	-	91,120	
	F- Hiroca Holdings Ltd.	N/A	"	439	29,551	-	29,551	
	Min Aik Precision Industrial Co., Ltd.	N/A	"	240	6,072	-	6,072	
Man Zai Industrial Co., Ltd.	N/A	"	349	6,404	-	6,404		

(Continued)

Holding Company Name	Marketable Securities Type and Name	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Number of Shares	Carrying Amount	Percentage of Ownership (%)	Fair Value	
	Taisun - KY	N/A	Financial assets at fair value through profit or loss	139	\$ 18,975	-	\$ 18,975	
	Senhwa Biosciences, Inc.	N/A	"	1,200	77,400	1.61	77,400	
	Tanvex BioPharma, Inc. (F-Tanvex)	N/A	"	1,250	55,938	-	55,938	
	Kayee International Group Co., Ltd.	N/A	"	403	38,688	-	38,688	
	Global Tek Fabrication Co., Ltd.	N/A	"	812	41,412	1.23	41,412	
	Cryomax Cooling System Corp.	N/A	"	1,248	18,464	1.89	18,464	
	Shane Global Holdings Inc.	N/A	"	4,037	561,101	4.04	561,101	
	Ta Chen Stainless Pipe Co., Ltd.	N/A	"	5,573	156,044	-	156,044	
	Nan Pao Resins Chemical Co., Ltd.	N/A	"	323	48,658	-	48,658	
	Compal Broadband Networks, Inc.	N/A	"	78	2,270	-	2,270	
	Ching Chan Optical Technology Co., Ltd.	N/A	"	821	27,093	2.23	27,093	
	Fusheng Precision Co., Ltd.	N/A	"	800	143,600	-	143,600	
	WW Holding Inc.	N/A	"	888	48,307	1.48	48,307	
	Airmate (Cayman) International Co Limited	N/A	"	400	11,700	-	11,700	
	REMOTEK Corp.	N/A	"	480	6,502	2.20	6,502	
	TWi Biotechnology, Inc.	N/A	"	491	10,228	-	10,228	
	Smartdisplayer Technology Co., Ltd.	N/A	"	1,000	16,150	4.01	16,150	
	Sincere Group	N/A	"	700	21,112	3.50	21,112	
	BioGend Therapeutics Co., Ltd.	N/A	"	2,000	46,240	2.44	46,240	
	Winway Technology Co., Ltd.	N/A	"	823	103,120	2.72	103,120	
	Mars Semiconductor Limited	N/A	"	605	11,516	2.70	11,516	
	Senhwa Biosciences, Inc.	N/A	"	19	599	1.88	599	
	Proconn Technology Co., Ltd.	N/A	"	2,055	699	3.30	699	
	EasyCard Investment Holdings Co., Ltd.	N/A	"	1,430	39,688	1.37	39,688	
	Lian-an Service Co., Ltd.	N/A	"	125	1,668	5.00	1,668	
	Koatech Technology Corp.	N/A	"	101	1,081	-	1,081	
	Mega Union Technology Incorporated.	N/A	"	3,022	42,158	10.68	42,158	
	Cathay Healthcare Management Co., Ltd.	N/A	"	8,250	229,103	15.00	229,103	
	FashionGuide Digital Technology Co., Ltd.	N/A	"	714	2,521	4.26	2,521	
	Sunmile Group Holding Co., Limited	N/A	"	528	-	1.85	-	
	NARUKO Beauty Essentials Limited.	N/A	"	43,252	108,561	4.39	108,561	
	SMS Holdings One I	N/A	"	1	-	5.00	-	
	Shengzhuang Holdings	N/A	"	122	-	1.09	-	
	Bioengine Capital Inc.	N/A	"	10,800	121,392	7.58	121,392	
	Bravo Ideas Digital Co., Ltd.	N/A	"	1,600	6,464	3.58	6,464	
	Episonica Holding	N/A	"	2,255	49,446	11.12	49,446	
	Andros Pharmaceuticals Co., Ltd.	N/A	"	1,050	10,458	4.19	10,458	
	Transound Electronics Co., Ltd.	N/A	"	1,200	8,856	3.40	8,856	
	Hyper Crystal Inc.	N/A	"	2,000	26,920	13.80	26,920	
	Amaryllo International B.V.	N/A	"	1,000	3,700	5.68	3,700	

(Continued)

Holding Company Name	Marketable Securities Type and Name	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Number of Shares	Carrying Amount	Percentage of Ownership (%)	Fair Value	
	Noratech Pharmaceuticals, Inc.	N/A	Financial assets at fair value through profit or loss	1,000	\$ 14,700	-	\$ 14,700	
	Kuang Ming Shipping Corp.	N/A	"	157	424	-	424	
	Tot Biopharm Co., Ltd.	N/A	"	6,909	117,015	8.23	117,015	
	Grandsys, Inc.	N/A	"	1,860	23,380	7.77	23,380	
	SinoGreenergy	N/A	"	-	1	10.00	1	
	DTCO (Samoa)	N/A	"	325	3,108	2.87	3,108	
	Tennrich International Corp.	N/A	"	1,938	1,589	3.19	1,589	
	Allianz Pharmascience Limited	N/A	"	2,000	25,020	6.85	25,020	
	KKDAY	N/A	"	5,668	14,454	2.90	14,454	
	SmartGames	N/A	"	164	1,743	2.13	1,743	
	SSC Holdco Limited	N/A	"	100	68,316	-	68,316	
	PSS Co., Ltd.	N/A	"	330	15,573	-	15,573	
	Altek Semiconductor (Cayman) Co., Ltd.	N/A	"	800	30,288	1.80	30,288	
	World Known MFG (Cayman) Limited	N/A	"	1,500	65,775	5.00	65,775	
	Anywhere2Go	N/A	"	2	10,334	4.88	10,334	
	Yikon Genomics	N/A	"	1,340	45,493	3.55	45,493	
	Rani Therapeutics, LLC	N/A	"	119	6,638	-	6,638	
	ThinkPower Information Corporation	N/A	"	960	27,349	15.00	27,349	
	Mimetas B.V.	N/A	"	8	9,034	2.81	9,034	
	Yonggu Group Inc. (Cayman)	N/A	"	1,130	78,803	-	78,803	
	Xiongchuang (Samoa)	N/A	"	19	20,381	4.50	20,381	
	91APP	N/A	"	8,333	16,833	-	16,833	
	Acepodia Inc.	N/A	"	1,848	25,467	5.81	25,467	
	Greenway Environmental Technology Co., Ltd.	N/A	"	4,375	34,388	11.22	34,388	
	Emotibot Technology Limited	N/A	"	2,302	69,896	1.57	69,896	
	Pacific 8 Venture	N/A	"	-	80,761	-	80,761	
	Monk's hill Venture Fund	N/A	"	-	23,155	-	23,155	
	Validus	N/A	"	145	44,311	-	44,311	
	VIZIONFOCUS INC.	N/A	"	1,700	51,034	3.49	51,034	
	Finaxar	N/A	"	87	16,150	-	16,150	
	aetherAI CO., LTD.	N/A	"	582	11,950	9.23	11,950	
	King Point Enterprise Co., Ltd.	N/A	"	1,000	33,000	2.53	33,000	
	Tigerair Taiwan Co., Ltd.	N/A	"	1,829	74,989	-	74,989	
	Wendell Industrial Co., Ltd.	N/A	"	900	37,980	4.43	37,980	
	Weblink International Inc.	N/A	"	2,500	47,500	3.39	47,500	
	Cowearth Medical Holding Co., Ltd.	N/A	"	3,750	68,295	5.08	68,295	
	Evergreen Steel Corp.	N/A	"	1,500	52,500	-	52,500	
	Intudo Venture II,LP	N/A	"	-	17,442	-	17,442	
	Taiwan Aerospace Corp.	N/A	"	1	14	-	14	

(Continued)

Holding Company Name	Marketable Securities Type and Name	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Number of Shares	Carrying Amount	Percentage of Ownership (%)	Fair Value	
	Hua Zhi Venture Capital Co., Ltd.	N/A	"	-	\$ 2	-	\$ 2	
	HWA VI Venture Capital Corp.	N/A	"	-	2	-	2	
	CDIB BioScience Ventures I, Inc.	N/A	"	-	1	-	1	
	WK Technology Fund	N/A	"	-	1	-	1	
	WK Technology Fund IV	N/A	"	-	1	-	1	
	WK 5 Venture Capital Co., Ltd.	N/A	"	-	1	-	1	
	WK 8 Venture Capital Co., Ltd.	N/A	"	-	1	-	1	
	WK 6 Venture Capital Co., Ltd.	N/A	"	-	1	-	1	
	WK 7 Venture Capital Co., Ltd.	N/A	"	-	1	-	1	
	<u>Preference shares</u>							
	Winking Entertainment Co., Ltd.	N/A	"	1,418	31,757	15.25	31,757	
Cathay Futures Co., Ltd.	<u>Shares</u>							
	Taiwan Futures Exchange	N/A	Financial assets at fair value through other comprehensive income	5,401	537,790	1.52	537,790	

(Concluded)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

INFORMATION ON INVESTEEES AND COMBINED SHAREHOLDING PERCENTAGE
DECEMBER 31, 2019

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

Investor Company	Investee Company	Location	Main Businesses and Products	Shareholding Percentage at the End of the Period	Book Value of Investment	Investment Profits or Losses Recognized in the Current Period	Combined Shareholding of the Company and its Affiliates (Note 1)				Note
							Number of Existing Shares	Number of Phantom Shares (Note 2)	Total		
									Number of Shares (In Thousands)	Shareholding Percentage	
Cathay Financial Holding Co., Ltd	Cathay Life	R.O.C.	Life insurance	100.00%	\$ 554,763,867	\$ 37,773,502	5,851,527	-	5,851,527	100.00%	Note 3
	Cathay United Bank	R.O.C.	Commercial banking operations	100.00%	226,107,495	21,848,141	10,165,835	-	10,165,835	100.00%	Note 3
	Cathay Century	R.O.C.	Property and casualty insurance	100.00%	12,666,024	2,106,603	305,705	-	305,705	100.00%	Note 3
	Cathay Securities	R.O.C.	Securities	100.00%	8,617,105	700,525	600,000	-	600,000	100.00%	Note 3
	Cathay Venture	R.O.C.	Venture capital investment	75.00%	3,962,080	303,588	456,515	-	456,515	100.00%	Note 3
	Cathay Securities Investment Trust	R.O.C.	Securities investment trust	100.00%	4,288,046	701,416	150,000	-	150,000	100.00%	Note 3
	Conning Asia Pacific Ltd.	Hong Kong	Wealth management	17.15%	29,102	8,866	272,950	-	272,950	100.00%	Note 4

Note 1: The existing shares and phantom shares of the investees held by the Company, directors, supervisors, general managers, vice general managers, and affiliates meeting the requirements of the Company Act are included.

Note 2: a. "Phantom shares" refer to the shares acquired due to conversion under the assumption that the Company converts the marketable securities with equity characteristics or derivative instrument contracts (that have not been converted to shares) based on the transaction terms and the equity that the Company has the intention of linking to the reinvestment business, and meeting the reinvestment objectives as provided in Paragraph 2, Article 36 and Article 37 of Financial Holding Company Act.

b. The above-mentioned "marketable securities with equity characteristics" refer to the securities stated in Paragraph 1, Article 11 of the Securities and Exchange Act Enforcement Rules, such as convertible corporate bonds and call warrants.

c. The above-mentioned "derivative instrument contracts" refer to those that meet the definition related to derivative instruments under IFRS 9, such as stock options.

Note 3: Based on the investment profit or loss recognized in the respective company's audited financial statements for the same period.

Note 4: Based on the investment profit or loss recognized in the respective company's unaudited financial statements for the same period.

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST NTS300 MILLION OR 10% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Buyer	Property	Event Date (Note 2)	Transaction Amount (Note 1)	Payment Status	Counterparty	Relationship	Information on Previous Title Transfer If Counterparty Is A Related Party				Pricing Reference	Purpose of Acquisition	Other Terms
							Property Owner	Relationship	Transaction Date	Amount			
Cathay Life Insurance Co., Ltd.	Land located at Sanmin Section, Taoyuan City	2019.05.03	\$ 981,851	Installment payments according to contracts	Mr. Lu and other six natural person	Non-related party	-	-	-	\$ -	Valuation report of appraisers	Real estate investment in accordance with the Insurance Act.	None
	Land and buildings located at Sec. 3, Minsheng E. Rd., Zhongshan Dist., Taipei City	2019.05.31	323,890	Lump sum	Taipei	Non-related party	-	-	-	-	Valuation report of appraisers	Real estate investment in accordance with the Insurance Act.	None
	Land and buildings located at Sec. 3, Minsheng E. Rd., Zhongshan Dist., Taipei City	2019.05.31	389,855	Lump sum	Taipei	Non-related party	-	-	-	-	Valuation report of appraisers	Real estate investment in accordance with the Insurance Act.	None
	Land located at Sanmin Section, Taoyuan City	2019.07.10	397,327	Installment payments according to contracts	Mr. Yang	Non-related party	-	-	-	-	Valuation report of appraisers	Real estate investment in accordance with the Insurance Act.	None
	Land located at Erchungshi Section, Yangmei Dist., Taoyuan City	2019.11.13	3,259,000	Installment payments according to contracts	Tungya Transportation and Terminal Co., Ltd.	Non-related party	-	-	-	-	Valuation report of appraisers	Real estate investment in accordance with the Insurance Act.	None

Note 1: The transaction amount is the total contract price, not including the land registration fee, transcript expense, escrow fees and stamp duty.

Note 2: The term "event date" refers to the date of contract signing, date of payment, date of consignment trade, date of transfer, dates of boards of directors resolutions, or other date that can confirm the counterpart and monetary amount of the transaction, whichever date is earlier.

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

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	Event Date	Original Acquisition Date	Carrying Amount	Transaction Amount	Collection	Gain or Loss on Disposal	Counterparty	Relationship	Purpose of Disposal	Pricing Reference	Other Terms
Cathay United Bank Co., Ltd.	Land No. 5-13, 17-27, Ankeng Section Subsection 5 Xindian District, New Taipei City	2019.11.14	Acquired in succession from 1996 to 2009	\$ 541,000	\$ 560,001	Price for each period collected based on 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 Appraisal Firm	None

Note 1: The appraisal results of the assets which should be appraised when disposed of in accordance with the regulations should be indicated in the 'Pricing Reference' column.

Note 2: The event date refers to the date of contract signing, date of payment, date of consignment, date of transfer, dates of board resolution, or any other date that can confirm the counterparty and monetary amount of the transaction, whichever date occurs the earliest.

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

INFORMATION ON INVESTMENTS IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment (Note 1)	Accumulated Outward Remittance for Investments from Taiwan as of January 1, 2019	Remittance of Funds		Accumulated Outward Remittance for Investments from Taiwan as of December 31, 2019	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss) (Note 2)	Carrying Amount as of December 31, 2019	Accumulated Repatriation of Investment Income as of December 31, 2019
					Outflow	Inflow						
Cathay Lujiazui Life Insurance Co., Ltd.	Life insurance	\$ 13,497,155	a	\$ 6,748,578	\$ -	\$ -	\$ 6,748,578	\$ 612,551	50.0	\$ 306,275 (Note 2,b,2))	\$ 5,357,121	\$ -
Cathay Century (China)	Property and casualty insurance	12,196,844	a	5,908,393	-	-	5,908,393	(10,084)	49.0	(4,940) (Note 2,b,3))	4,462,182	-
Lin Yuan (Shanghai) Real Estate Co., Ltd.	Office equipment leasing company	7,223,435	a	7,223,435	-	-	7,223,435	274,320	100.0	205,253 (Note 2,b,2))	7,419,170	-
Cathay United Bank (China) Corporation Limited	Wholesale banking	14,377,562	a	14,377,562	-	-	14,377,562	223,397	100.0	223,397 (Note 2,b,2))	15,843,051	-
CDBS Cathay Asset Management Co., Ltd.	Fund management services	1,701,823	a	566,707	-	-	566,707	(65,954)	33.3	21,962 (Note 2,b,3))	421,059	-
CDBS Cathay Asset Management Co., Ltd. (Beijing) (Note 4)	Wealth management	468,290	c	-	-	-	-	32,247	33.3	10,738 (Note 2,b,3))	195,607	-
Cathay Investment Consulting (Shanghai) Co., Ltd. (Note 5)	Investment consulting	38,965	a	38,965	-	9,329	29,636	(737)	100.0	(737) (Note 2,b,3))	-	-

Accumulated Outward Remittance for Investments in Mainland China as of December 31, 2019	Investment Amount Authorized by the Investment Commission, MOEA	Upper Limit on the Amount of Investments Stipulated by the Investment Commission, MOEA
\$ 34,854,311	\$ 34,863,640	\$ 506,691,034

Note 1: The 3 methods of investment are as follows:

- Direct investment in China.
- Reinvestment in China through companies located in a third region
- Others.

Note 2: The column of investment profit or loss for the period:

- It should be indicated if the entity was in the preparation stage without profit or loss on investment.
- It should be indicated if the basis of recognizing the profit or loss on investment are of the following 3 types:
 - The financial statement is audited and certified by international accounting firms which have partnership with R.O.C. accounting firms.
 - The financial statement is audited and certified by the parent company's auditors in Taiwan.
 - Other basis.

Note 3: The related figure in the schedule should be expressed in New Taiwan dollars.

(Continued)

Note 4: CDBS Cathay Asset Management Co., Ltd. invested in CDBC Cathay Asset Management Co., Ltd. (Beijing) in the amount of CNY\$100 million in Mainland China.

Note 5: Cathay Investment Consulting (Shanghai) Co., Ltd has completed liquidation on February 26, 2019.

Note 6: Information on investments in mainland China

- a. On December 25, 2002 and July 24, 2003, the Investment Commission of the Ministry of Economic Affairs (“MOEAIC”) authorized Cathay Life to remit US\$22,850 thousand and US\$27,150 thousand, respectively, as the registered capital to establish a China-based company named Cathay Life Insurance Co., Ltd. (Guangzhou). The total amount of the registered capital was revised from US\$50,000 thousand to US\$48,330 thousand, approved by the MOEAIC on December 20, 2010. Also, MOEAIC authorized Cathay Life to remit US\$59,000 thousand as the registered capital again on May 16, 2008. MOEAIC authorized Cathay Life to remit US\$3,400 thousand as the registered capital again on April 2, 2012. MOEAIC also authorized the revision of the amount of US\$32,520 thousand of unexecuted project to CNY200,000 thousand to avoid currency risk on September 14, 2013. The total registered capital was US\$110,730 thousand. On September 25, 2003, MOEAIC authorized Cathay Life Insurance Co., Ltd. (Guangzhou) to change its location from Guangzhou to Shanghai. Cathay Life’s subsidiary, Cathay Life Insurance Ltd. (China) has acquired a business license of an enterprise as legal person on December 29, 2004 and changed its name to Cathay Lujiazui Life Insurance Company Ltd. following approval by the China Insurance Regulatory Commission on August 12, 2014. Cathay Life has remitted US\$48,330 thousand to the subsidiary as of December 31, 2009. Cathay Life injected additional US\$29,880 thousand on September 29, 2010 and CNY200,000 thousand on May 8, 2014. On August 23, 2017, MOEAIC authorized Cathay Life to remit CNY700,000 thousand and the amount was remitted on September 20, 2017. As of December 31, 2019, Cathay Life’s remittances to the subsidiary totaled approximately CNY900,000 thousand and US\$78,210 thousand.
- b. On October 17, 2007, MOEAIC authorized Cathay Life to remit US\$26,390 thousand as the registered capital to establish a China-based general insurance subsidiary (in the form of a joint venture with Cathay Century Insurance) of which was also approved by China Insurance Regulatory Commission on October 8, 2007. On March 6, 2008, MOEAIC authorized Cathay Life to increase the remittances from US\$26,390 thousand to US\$28,960 thousand. On August 15, 2008, MOEAIC further authorized Cathay Life to revise the remittance from US\$28,960 thousand to US\$28,140 thousand. The joint venture company named Cathay Insurance Company Ltd. (China) established by Cathay Life and Cathay Century Insurance in Shanghai has acquired a business license of an enterprise as legal person on August 26, 2008. On May 28, 2013, MOEAIC authorized Cathay Life to remit CNY200,000 thousand to increase the share capital. Also, MOEAIC authorized Cathay Life to remit CNY245,000 thousand on December 6, 2018. As of December 31, 2019, Cathay Life’s remittances to this general insurance company totaled approximately CNY445,000 thousand and US\$28,140 thousand.
- c. On November 1, 2011 and April 11, 2012, MOEAIC authorized Cathay Life to remit CNY300,000 (US\$47,000) thousand and CNY500,000 (US\$80,000) thousand, respectively. A total of US\$127,000 thousand was used as the registered capital to establish a China-based company named Lin Yuan (Shanghai) Real Estate Co., Ltd. Cathay Life’s subsidiary, Lin Yuan (Shanghai) Real Estate Co., Ltd. has acquired a business license of an enterprise as legal person on August 15, 2012. On April 1, 2013, MOEAIC authorized Cathay Life to remit CNY700,000 (US\$111,000) thousand to increase the share capital. As of December 31, 2019, Cathay Life’s remittances to Lin Yuan (Shanghai) Real Estate Co., Ltd. totaled approximately CNY1,500,000 thousand.
- d. On December 31, 2006, MOEAIC authorized Cathay Century to remit US\$28,960 thousand as the registered capital to establish an insurance subsidiary (in the form of a joint venture with Cathay Life) of which was also approved by China Insurance Regulatory Commission on October 8, 2007. The joint venture company named Cathay Insurance Company Ltd. (China) established by Cathay Life and Cathay Century in Shanghai has acquired a business license of an enterprise as a legal person on August 26, 2008. On May 28, 2013, MOEAIC authorized Cathay Life to remit CNY200,000 thousand to increase the share capital. On June 13, 2013 and March 18, 2014, a remittance of CNY100,000 and CNY100,000 as share capital were authorized by China Insurance Regulatory Commission. On November 23, 2018, MOEAIC authorized Cathay Century to remit CNY245,000 thousand as share capital. As of December 31, 2019, Cathay Life’s remittances to this general insurance company totaled approximately US\$97,290 thousand.
- e. MOEAIC approved Cathay United Bank to remit to China CNY400,000,000 (US\$60,067,239). According to the capital verification report issued by the local accountants in China, the approved working capital of Cathay United Bank’s Shanghai Branch was CNY400,000,000 (US\$59,768,397.46). The remaining amount of US\$298,841.54 was repatriated by Shanghai Branch, Cathay United Bank on November 5, 2010. The investment amounts were revised by Cathay United Bank by reporting to MOEAIC in January 18, 2011 and were approved on January 24, 2011. In addition, MOEAIC further approved Cathay United Bank to remit CNY600,000,000 (US\$95,024,128) to China. According to the capital verification report issued by the local accountants in China, the approved working capital of Cathay United Bank’s Shanghai Branch was CNY600,000,000 (US\$94,929,198.64). The remaining amount of US\$94,929.36 was repatriated by Cathay United Bank’s Shanghai Branch on February 1, 2012. The investment amounts were revised by Cathay United Bank by reporting to MOEAIC on March 20, 2012 and were approved on March 26, 2012. MOEAIC approved Cathay United Bank’s Shanghai Branch to increase the working capital of CNY1,000,000,000 (US\$164,000,000) on February 27, 2014. According to MOEAIC, further approved working capital of Cathay United Bank’s Qingdao Branch was CNY600,000,000 (US\$98,199,673) on January 21, 2014. And the approved working capital of Cathay United Bank’s Shamchun Branch was CNY400,000,000 (US\$60,708,160.7) on January 5, 2015.
- f. The registered capital of Cathay United Bank (China) Co., Ltd. was CNY3 billion, whose working capital was transferred from Cathay United Bank (Shanghai), Cathay United Bank (Qingdao), Cathay United Bank (Shenzhen) upon obtaining approval from the authorities.
- g. On January 9, 2012, MOEAIC authorized Cathay Securities Investments Trust to remit CNY66,600 thousand as the registered capital to establish a China-based company named CDBS Cathay Asset Management (in the form of a joint venture with China Development Bank Securities). Cathay Securities Investment Trust held 33.3% number of shares. CDBS Cathay Asset Management’s capital is CNY200,000 thousand, and has acquired a business license of an enterprise legal person on August 16, 2013. On November 9, 2016, the board of Cathay Securities Investments Trust approved to increase investment in CDBS Cathay Asset Management accounted for using the equity method as percentage of original ownership amounted to CNY53,280 thousand. The proposal was authorized by the FSC and MOEAIC on May 16, 2017 and June 9, 2017, respectively, on September 29, 2017 increase capital and will be executed after obtaining approval by the China authorities. As of December 31, 2019, Cathay Securities Investment Trust remittances to CDBS Cathay Asset Management totaled approximately CNY119,880 thousand.

(Concluded)

CATHAY FINANCIAL HOLDING CO., LTD. AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

No. (Note 1)	Investee Company	Counterparty	Relationship (Note b)	Transactions Details			
				Financial Statement Account	Amount	Payment Terms	% of Total Sales or Assets (Note 3)
0	Cathay Financial Holding	Cathay Life	a	Financial assets at fair value through profit or loss	\$ 35,000,000	Not significantly different with that of third parties	0.35
		Cathay Life	a	Income tax payable for consolidated income tax	10,147,500	"	0.10
		Cathay Life	a	Interest revenues	1,260,000	"	0.23
		Cathay United Bank	a	Income tax receivable for consolidated income tax	1,703,104	"	0.02
		Cathay Century	a	Income tax receivable for consolidated income tax	362,812	"	-
		Cathay Securities Investment Trust	a	Income tax receivable for consolidated income tax	176,613	"	-
1	Cathay Life	Cathay Financial Holding	b	Gain on investment property	100,535	"	0.02
		Cathay United Bank	c	Guarantee deposits received	188,158	"	-
		Cathay United Bank	c	Cash and cash equivalents	23,917,315	"	0.24
		Cathay United Bank	c	Gain on investment property	651,615	"	0.12
		Cathay United Bank	c	Other operating expense	5,941,484	"	1.06
		Cathay United Bank	c	Service fee and commission fee	1,397,501	"	0.23
		Cathay United Bank	c	Net other non-interest gain	168,589	"	0.03
		Cathay United Bank	c	Loss on financial assets and liabilities at fair value through profit or loss	2,074,629	"	0.37
		Cathay United Bank	c	Financial assets at fair value through profit or loss	1,147,443	"	0.01
		Cathay Century	c	Net other non-interest gain	676,617	"	0.12
		Cathay Century	c	Other operating expense	105,568	"	0.02
		Cathay Century	c	Gain on investment property	107,625	"	0.02
		Cathay Futures	c	Guarantee deposits paid	3,078,757	"	0.03
		Cathay Securities Investment Trust	c	Service fee and commission fee	182,830	"	0.03
		Cathay Walbrook Holding 1 Limited	c	Loans	12,963,581	"	-
		Cathay Walbrook Holding 1 Limited	c	Interest revenues	486,524	"	-
		Cathay Walbrook Holding 2 Limited	c	Loans	682,294	"	-
		Conning holding limited	c	Payables	317,571	"	-
		Conning holding limited	c	Service fee and commission fee	844,655	"	0.15

(Continued)

No. (Note 1)	Investee Company	Counterparty	Relationship (Note b)	Transactions Details			
				Financial Statement Account	Amount	Payment Terms	% of Total Sales or Assets (Note 3)
2	Cathay United Bank	Cathay Century	c	Deposits	\$ 2,474,304	//	0.02
		Cathay Century	c	Service fee and commission fee	154,046	//	0.03
		Cathay Century	c	Other operating expense	178,060	//	0.03
		Cathay Securities	c	Deposits	2,034,207	//	0.02
		Cathay Securities Investment Trust	c	Deposits	143,714	//	-
		Cathay Futures	c	Deposits	1,429,607	//	0.01
		Cathay Futures	c	Guarantee deposits paid	508,694	//	-
		Lin Yuan	c	Deposits	990,004	//	-
		Indovina Bank	c	Interest revenues	160,251	//	0.03
		Indovina Bank	c	Call loans to banks	5,991,094	//	0.06
		CUBC Bank	c	Call loans to banks	602,120	//	-
		CUBCN Bank	c	Call loans to banks	5,317,401	//	0.05
		CUBCN Bank	c	Due to commercial banks	9,514,745	//	0.09
		CUBCN Bank	c	Interest revenues	188,554	//	0.03
CUBCN Bank	c	Interest receivable	429,798	//	-		
3	Indovina Bank	Cathay Insurance (Vietnam)	c	Deposits	166,855	//	-
		Cathay Life (Vietnam)	c	Deposits	497,219	//	-
4	Cathay Securities Investment Trust	Conning Asia Pacific Ltd.	c	Service fee and commission fee	128,022	//	0.02

Note 1: Parent company is number 0; subsidiaries are sequentially numbered starting from 1.

Note 2: Categories of relationship:

- a. Parent company to subsidiary.
- b. Subsidiary to parent company.
- c. Between subsidiaries.

Note 3: Percentage of transaction amount to total consolidated operating income and assets is calculated as follows:

For balance sheet accounts: Transaction amount ÷ Total consolidated assets

For income statement accounts: Accumulated transaction amount ÷ Total consolidated profit from operations.

Note 4: Disclosure of the important intercompany transactions above is decided by the Company based on the materiality principle.

(Concluded)