Cathay Securities Corporation and Subsidiaries

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

DECLARATION OF CONSOLIDATION OF FINANCIAL STATEMENTS OF AFFILIATES

The companies required to be included in the consolidated financial statements of affiliates in accordance with the “Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises” for the year ended December 31, 2019 are all the same as the companies required to be included in the consolidated financial statements of parent and subsidiary companies as provided in International Financial Reporting Standard 10 “Consolidated Financial Statements”. Relevant information that should be disclosed in the consolidated financial statements of affiliates has all been disclosed in the consolidated financial statements of parent and subsidiary companies. Hence, we have not prepared a separate set of consolidated financial statements of affiliates.

Very truly yours,

CATHAY SECURITIES CORPORATION

By

CHUANG, SHUN-YU
Chairman

March 10, 2020

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Cathay Securities Corporation

Opinion

We have audited the accompanying consolidated financial statements of Cathay Securities Corporation and its subsidiaries (the "Group"), which comprise the consolidated balance sheets as of December 31, 2019, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

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 years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants, 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 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.

The key audit matter of the Group’s consolidated financial statements for the year ended December 31, 2019 is described as follows:

Revenue Recognition - Brokerage Fee Revenue

The Group’s main source of revenue is brokerage fee revenue, which is not calculated based on a standard rate but individually determined based on product and customer type. Hence, there may be a risk that the brokerage fee revenue would not be calculated at the rate approved by the authorities. Therefore, we determined the recognition of brokerage fee revenue as a key audit matter.

We carried out tests on the controls to understand the approval of the Group's brokerage fee rate and the design and implementation of the change process and related control standards. In addition, testing on the brokerage fee revenue was carried out, where we obtained the detailed receipts of the brokerage fee revenue and checked its completeness; and selected samples and checked the various transaction reports of marketable securities and certificates related to brokerage fee revenue as well as recalculated the brokerage fee revenue to verify the accuracy of the recognized revenue.

Other Matter

The consolidated financial statements of the Group for the year ended December 31, 2018 were audited by other auditors who issued an unmodified opinion with an emphasis of matter paragraph on March 20, 2019.

We have also audited the parent company only financial statements of Cathay Securities Corporation as of and for the year ended December 31, 2019 on which we have issued an unmodified opinion.

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 Securities Firms, Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants, 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 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 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 the 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 Chih-Ming Shao and Cheng-Hung Kuo.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 10, 2020

<u>*Notice to Readers*</u>

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 SECURITIES CORPORATION AND SUBSIDIARIES

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

	2019		2018	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 4, 6 and 29)	$ 2,598,923	7	$ 3,158,088	11
Financial assets at fair value through profit or loss (Notes 4, 7, 29 and 30)	10,327,152	29	5,087,320	17
Financial assets at fair value through other comprehensive income (Notes 4 and 8)	2,065,100	6	3,379,521	11
Securities margin loans receivable (Notes 4, 9 and 28)	3,301,187	9	2,640,605	9
Margin deposits for securities refinancing (Note 4)	23,325	-	11,793	-
Collateral for securities refinancing (Note 4)	19,564	-	10,083	-
Margin loans receivable - any use (Notes 4 and 28)	167,277	-	66,890	-
Customer margin accounts (Notes 4, 10 and 29)	7,366,953	20	5,847,830	20
Collateral for securities borrowed (Note 4)	123,587	-	368,190	1
Deposits for securities borrowed (Note 4)	1,148,169	3	1,469,929	5
Accounts receivable (Notes 4, 11 and 28)	5,413,839	15	4,618,729	16
Accounts receivable from related parties (Notes 4 and 11)	275	-	175	-
Prepayments	28,456	-	34,755	-
Other receivables (Notes 4, 11 and 28)	178,580	1	127,126	-
Other receivables from related parties (Notes 4 and 11)	2,173	-	966	-
Current tax assets (Notes 4 and 24)	87	-	2,983	-
Other current assets (Notes 4, 17 and 30)	1,266,095	4	1,281,826	4
Total current assets	34,030,742	94	28,106,809	94
NON-CURRENT ASSETS (Note 4)				
Financial assets at fair value through other comprehensive income (Note 8)	537,965	1	326,536	1
Investments accounted for using the equity method (Note 12)	-	-	9,293	-
Property, plant and equipment (Note 13)	189,382	1	212,608	1
Right-of-use assets (Notes 14 and 29)	125,681	-	-	-
Investment properties (Notes 15 and 30)	290,341	1	290,341	1
Intangible assets (Note 16)	90,556	-	89,785	-
Deferred tax assets (Note 24)	27,954	-	37,894	-
Other non-current assets (Notes 11, 17, 21, 28, 29 and 30)	913,067	3	786,960	3
Total non-current assets	2,174,946	6	1,753,417	6
TOTAL	$ 36,205,688	100	$ 29,860,226	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Note 18)	$ 2,201,364	6	$ 336,381	1
Commercial paper payable (Note 18)	5,538,845	15	3,729,367	13
Financial liabilities at fair value through profit or loss (Notes 4 and 7)	2,961,544	8	2,712,304	9
Liabilities for bonds with repurchase agreements (Notes 4, 8 and 19)	2,098,081	6	3,332,528	11
Short sale margins (Note 4)	477,788	1	362,968	1
Payables for short sale collateral received (Note 4)	522,959	2	396,143	1
Deposits for securities lended (Note 4)	-	-	13,159	-
Futures traders' equity (Notes 4, 10 and 29)	7,358,470	21	5,839,564	20
Equity for each customer in the account	9,161	-	7,653	-
Notes payable	1,386	-	1,370	-
Notes payable to related parties	4,560	-	5,075	-
Accounts payable	5,426,574	15	4,692,501	16
Accounts payable to related parties	-	-	2,728	-
Other payables	602,039	2	464,018	2
Other payables to related parties (Note 29)	114,915	-	43,820	-
Other financial liabilities (Notes 4 and 20)	67,179	-	105,870	-
Current tax liabilities (Notes 4 and 24)	-	-	3,630	-
Lease liabilities (Notes 4, 14 and 29)	77,182	-	-	-
Other current liabilities	36,170	-	44,949	-
Total current liabilities	27,498,217	76	22,094,028	74
NON-CURRENT LIABILITIES (Note 4)				
Lease liabilities (Notes 14 and 29)	49,488	-	-	-
Deferred tax liabilities (Note 24)	6,832	-	7,949	-
Guarantee deposits received	1,675	-	1,675	-
Net defined benefit liabilities (Note 21)	32,692	-	30,471	-
Total non-current liabilities	90,687	-	40,095	-
Total liabilities	27,588,904	76	22,134,123	74
EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT (Notes 4 and 22)				
Share capital	6,000,000	17	5,700,086	19
Capital surplus	498,167	1	491,766	2
Retained earnings				
Legal reserve	275,144	1	229,009	1
Special reserve	646,594	2	551,599	2
Unappropriated retained earnings	737,126	2	478,100	1
Total retained earnings	1,658,864	5	1,258,708	4
Other equity				
Exchange differences on translating foreign operations	(47,922)	-	(37,289)	-
Unrealized gain on investments in financial assets at fair value through other comprehensive income	516,771	1	318,668	1
Remeasurement of defined benefit plans	(9,230)	-	(5,950)	-
Total other equity	459,619	1	275,429	1
Total equity attributable to shareholders of the parent	8,616,650	24	7,725,989	26
NON-CONTROLLING INTERESTS (Notes 4 and 22)	134	-	114	-
Total equity	8,616,784	24	7,726,103	26
TOTAL	$ 36,205,688	100	$ 29,860,226	100

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

(With Deloitte & Touche auditors' report dated March 10, 2020)

CATHAY SECURITIES CORPORATION 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	%
REVENUE (Note 4)				
Brokerage handling fee revenue (Notes 23 and 29)	$ 2,552,943	67	$ 1,997,666	58
Revenue from borrowed securities	24,207	1	20,873	1
Revenue from the underwriting business (Notes 23 and 29)	44,594	1	84,916	3
Net gains on wealth management	17	-	6	-
Net gains (losses) from sale of securities held for operations (Note 23)	1,474,671	39	(644,806)	(19)
Interest income (Notes 23 and 29)	202,908	5	252,031	7
Dividend income (Note 8)	408,030	11	318,105	9
Net gains (losses) from measurement at fair value through profit or loss for securities held for operations (Note 23)	378,998	10	(114,268)	(3)
Net gains on the covering of securities borrowing and short sales of bonds with reverse repurchase agreements	40,417	1	106,608	3
Net gains (losses) on measurement at fair value through profit or loss for securities borrowing and short sales of bonds with reverse repurchase agreements	(534,067)	(14)	329,166	10
Realized gains from debt instruments at fair value through other comprehensive income	36,659	1	7,990	-
Futures trading margin - net gains from marketable securities measured at fair value through profit or loss	14,843	-	-	-
Net gains (losses) from issuance of call (put) warrants (Notes 7 and 23)	(33,603)	(1)	840,920	24
Net gains (losses) from derivative financial instruments - futures (Notes 7 and 23)	(888,863)	(23)	212,054	6
Net gains (losses) from derivative financial instruments - OTC (Note 23)	31,602	1	(101)	-
Advisory fee revenue	1,011	-	2,333	-
Gain on reversal of expected credit loss (impairment loss) (Notes 8 and 28)	166	-	(1,333)	-
Other operating revenue (Notes 23 and 29)	33,267	1	27,488	1
Total revenue	3,787,800	100	3,439,648	100
COSTS AND EXPENSES				
Broker's exchange fee expenses (Note 23)	(134,365)	(4)	(135,351)	(4)
Dealer's exchange fee expenses (Note 23)	(20,689)	(1)	(29,449)	(1)
Refinancing handling fee expenses (Note 23)	(1,097)	-	(950)	-
Underwriting handling fee expenses (Note 23)	(1,496)	-	(3,152)	-

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CATHAY SECURITIES CORPORATION 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**	**%**
Finance costs (Note 4)	$ (85,454)	(2)	$ (84,568)	(3)
Loss from securities borrowing transactions	(57,115)	(2)	(43,339)	(1)
Futures commission expense	(42,130)	(1)	(45,778)	(1)
Clearing and settlement service fee expenses	(28,824)	(1)	(34,414)	(1)
Other operating expenses	(3,542)	-	(2,654)	-
Employee benefits expense (Note 23)	(1,432,264)	(38)	(1,202,778)	(35)
Depreciation and amortization expense (Notes 14 and 23)	(170,307)	(4)	(105,484)	(3)
Other operating expenses (Notes 23 and 29)	(1,105,896)	(29)	(1,272,511)	(37)
Total costs and expenses	(3,083,179)	(82)	(2,960,428)	(86)
NON-OPERATING INCOME AND EXPENSES				
Share of profit or loss of associates accounted for using the equity method (Notes 4 and 12)	(737)	-	(1,498)	-
Other gains and losses (Notes 4, 16 and 23)	110,982	3	92,340	2
Total non-operating income and expenses	110,245	3	90,842	2
INCOME BEFORE INCOME TAX	814,866	21	570,062	16
INCOME TAX EXPENSE (Notes 4 and 24)	114,791	3	108,705	3
NET INCOME	700,075	18	461,357	13
OTHER COMPREHENSIVE INCOME (LOSS) (Notes 4 and 22)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Note 21)	(4,778)	-	391	-
Unrealized gain from equity instruments at fair value through other comprehensive income	211,429	6	(1,718)	-
Income tax expense relating to components that will not be reclassified subsequently to profit or loss (Note 24)	1,498	-	(78)	-
	208,149	6	(1,405)	-

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CATHAY SECURITIES CORPORATION 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**	**%**
Items that may be reclassified subsequently to profit or loss:				
Exchange differences resulting from translating the financial statements of foreign operations	$ (11,406)	-	$ 19,714	1
Unrealized gain (loss) from debt instruments at fair value through other comprehensive income	(13,307)	(1)	1,525	-
Share of the other comprehensive income of associates accounted for using the equity method	773	-	(228)	-
	(23,940)	(1)	21,011	1
Other comprehensive income for the year, net of income tax	184,209	5	19,606	1
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 884,284	23	$ 480,963	14
NET INCOME ATTRIBUTABLE TO:				
Shareholders of the parent	$ 700,070	18	$ 461,351	13
Non-controlling interests	5	-	6	-
	$ 700,075	18	$ 461,357	13
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:				
Shareholders of the parent	884,260	23	480,957	14
Non-controlling interests	24	-	6	-
	$ 884,284	23	$ 480,963	14
EARNINGS PER SHARE (Note 25)				
Basic earnings per share	$ 1.17		$ 0.77	

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

(With Deloitte & Touche auditors' report dated March 10, 2020) (Concluded)

CATHAY SECURITIES CORPORATION 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 Shareholders of the Parent												
	Share Capital			Retained Earnings			Other Equity						
	Number of Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Retained Earnings	Exchange Differences Resulting from Translating the Financial Statements of Foreign Operations	Unrealized Gain from Financial Assets at Fair Value Through Other Comprehensive Income	Unrealized Gain (Loss) from Available-for-sale Financial Assets	Remeasurement of Defined Benefit Plans	Total	Non-controlling Interests	Total Equity
BALANCE AT JANUARY 1, 2018	551,000	$ 5,510,000	$ 491,766	$ 201,622	$ 495,202	$ 312,036	$ (56,775)	$ -	$ 297,708	$ (6,263)	$ 7,245,296	$ 110	$ 7,245,406
Effect on retrospective application	-	-	-	-	-	(21,417)	-	318,861	(297,708)	-	(264)	-	(264)
BALANCE AT JANUARY 1, 2018 (ADJUSTED)	551,000	5,510,000	491,766	201,622	495,202	290,619	(56,775)	318,861	-	(6,263)	7,245,032	110	7,245,142
Appropriation and distribution for 2017													
Legal reserve	-	-	-	27,387	-	(27,387)	-	-	-	-	-	-	-
Special reserve	-	-	-	-	56,397	(56,397)	-	-	-	-	-	-	-
Share dividends of ordinary shares	19,009	190,086	-	-	-	(190,086)	-	-	-	-	-	-	-
Net income for the year ended December 31, 2018	-	-	-	-	-	461,351	-	-	-	-	461,351	6	461,357
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-	-	-	-	-	-	19,486	(193)	-	313	19,606	-	19,606
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	461,351	19,486	(193)	-	313	480,957	6	480,963
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	(2)	(2)
BALANCE AT DECEMBER 31, 2018	570,009	5,700,086	491,766	229,009	551,599	478,100	(37,289)	318,668	-	(5,950)	7,725,989	114	7,726,103
Appropriation and distribution of 2018													
Legal reserve	-	-	-	46,135	-	(46,135)	-	-	-	-	-	-	-
Special reserve	-	-	-	-	94,995	(94,995)	-	-	-	-	-	-	-
Share dividends of ordinary shares	29,991	299,914	-	-	-	(299,914)	-	-	-	-	-	-	-
Net income for the year ended December 31, 2019	-	-	-	-	-	700,070	-	-	-	-	700,070	5	700,075
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	-	-	(10,633)	198,103	-	(3,280)	184,190	19	184,209
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	700,070	(10,633)	198,103	-	(3,280)	884,260	24	884,284
Share-based payment of Cathay Financial Holdings' common stock	-	-	6,401	-	-	-	-	-	-	-	6,401	-	6,401
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	(4)	(4)
BALANCE AT DECEMBER 31, 2019	600,000	$ 6,000,000	$ 498,167	$ 275,144	$ 646,594	$ 737,126	$ (47,922)	$ 516,771	$ -	$ (9,230)	$ 8,616,650	$ 134	$ 8,616,784

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

(With Deloitte & Touche auditors' report dated March 10, 2020)

CATHAY SECURITIES CORPORATION 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		
Income before income tax	$ 814,866	$ 570,062
Adjustments for:		
Depreciation expense	139,485	68,086
Amortization expense	30,822	37,398
Expected credit loss recognized (reversed)	(166)	1,333
Net gain on fair value changes of financial assets and liabilities at fair value through profit or loss	(1,191,210)	(198,989)
Interest expense	85,454	84,568
Interest income (including finance income)	(282,694)	(302,681)
Dividend income	(426,632)	(335,655)
Compensation costs of share-based payments	6,401	-
Share of loss of associates accounted for using the equity method	737	1,498
Gain on disposal of property, plant and equipment, net	-	(4)
Gain on disposal of investments, net	(36,659)	(7,382)
Impairment loss on non-financial assets	8,629	-
Gain on modification of leases	(8)	-
Net changes in operating assets and liabilities:		
Decrease (increase) in financial assets at fair value through profit or loss	(4,888,535)	6,082,000
Decrease (increase) in securities margin loans receivable	(660,655)	1,590,841
Decrease (increase) in margin deposits for securities refinancing	(11,532)	5,874
Decrease (increase) in collateral for securities refinancing	(9,481)	5,743
Increase in margin loans receivable - any use	(100,396)	(61,386)
Increase in customer margin accounts	(1,519,123)	(1,927,996)
Decrease (increase) in collateral for securities borrowed	244,603	(3,002)
Decrease (increase) in deposits for securities borrowed	321,760	(222,565)
Decrease (increase) in accounts receivable	(802,321)	223,986
Decrease (increase) in accounts receivable from related parties	(100)	25
Decrease (increase) in prepayments	1,092	(17,670)
Increase in other receivables	(63,549)	(47,598)
Increase in other receivables from related parties	(1,275)	(678)
Decrease in other current assets	11,637	316,327
Increase (decrease) in liabilities for bonds with repurchase agreements	(1,234,447)	630,371
Increase in financial liabilities at fair value through profit or loss	1,047,516	346,718
(Decrease) increase in short sale margins	114,820	(71,910)
(Decrease) increase in payables for short sale collateral received	126,816	(88,991)
Decrease in deposits for securities lended	(13,159)	(269,881)
Increase in futures traders' equity	1,518,906	1,923,684
Increase in notes payable	16	939
Increase (decrease) in notes payable to related parties	(515)	1,124
Increase (decrease) in accounts payable	744,963	(752,127)
Increase (decrease) in accounts payable to related parties	(2,728)	2,728
Increase in other payables	136,364	110,070

(Continued)

CATHAY SECURITIES CORPORATION AND SUBSIDIARIES

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

	2019	2018
Increase (decrease) in other payables to related parties	$ 20,634	$ (210,107)
Increase in net defined benefit liabilities	747	6,377
Increase (decrease) in other financial liabilities	(39,911)	105,870
Increase in equity for each customer in the account	1,508	7,653
Decrease in other current liabilities	(8,779)	(64,564)
Cash generated from (used in) operations	(5,916,099)	7,540,089
Interest received	299,146	315,243
Dividends received	425,815	335,655
Interest paid	(79,372)	(82,931)
Income tax paid	(55,305)	(8,704)
Net cash generated from (used in) operating activities	(5,325,815)	8,099,352
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
Proceeds from disposal of financial assets at fair value through profit or loss	-	9,391
Acquisition of property, plant and equipment	(35,474)	(37,808)
Proceeds from disposal of property, plant and equipment	-	4
Net cash inflow from disposal of subsidiaries	9,329	-
Acquisition of intangible assets	(35,233)	(26,235)
Increase in other non-current assets	(130,835)	(2,378)
Net cash generated from (used in) investing activities	1,142,066	(3,413,251)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term loans	25,402,919	22,537,652
Decrease in short-term loans	(23,491,483)	(22,654,481)
Increase in commercial paper payable	109,290,000	88,460,000
Decrease in commercial paper payable	(107,480,000)	(93,260,000)
Repayment of the principal of lease liabilities	(82,820)	-
Cash dividends paid	(4)	(2)
Net cash generated from (used in) financing activities	3,638,612	(4,916,831)
EFFECTS OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(14,028)	31,171

(Continued)

CATHAY SECURITIES CORPORATION AND SUBSIDIARIES

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

	2019	2018
NET DECREASE IN CASH AND CASH EQUIVALENTS	$ (559,165)	$ (199,559)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD	3,158,088	3,357,647
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	$ 2,598,923	$ 3,158,088

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

(With Deloitte & Touche auditors' report dated March 10, 2020) (Concluded)

CATHAY SECURITIES CORPORATION 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

Cathay Securities Corporation (the "Company") was incorporated in Taipei on May 12, 2004 under the provisions of the Company Act (the "Company Act") of the Republic of China ("ROC") and started operations on August 13 of the same year. The Company is mainly engaged in the dealing, brokerage and underwriting of marketable securities, margin trading and short sale of marketable securities, provision of introducing brokerage services for futures, securities-related futures dealing and trust businesses on the centralized exchange and over-the-counter market. As of December 31, 2019, the Company had an offshore securities unit branch and 10 local branch offices.

The parent company and ultimate parent company of the Company is Cathay Financial Holdings Co., Ltd.

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

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company's board of directors and authorized for issue on March 10, 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 Securities Firms, the Regulations Governing the Preparation of Financial Reports by Futures Commission Merchants and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC)

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

IFRS 16 "Leases"

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

Definition of a lease

The 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 be 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 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 presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the 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 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. Lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liabilities. The Group applies IAS 36 to all right-of-use assets.

The Group also applies the following practical expedients:

1) The Group applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

2) The Group accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

3) The Group excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.

4) The Group uses hindsight, such as in determining lease terms, to measure lease liabilities.

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 lessee's weighted average incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 1.65%. The difference between the lease liabilities recognized and operating lease commitments on December 31, 2018 is explained as follows:

The total future minimum lease payments of non-cancellable operating leases on December 31, 2018	$ 183,946
Less: Short-term leases and low-value asset leases with exemptions	(550)
Undiscounted gross amount on January 1, 2019	$ 183,396
Discounted amount using the incremental borrowing rate and lease liabilities recognized on January 1, 2019	$ 178,934

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	$ -	$ 178,934	$ 178,934
Total effect on assets	$ -	$ 178,934	$ 178,934
Lease liabilities - current	$ -	$ 74,555	$ 74,555
Lease liabilities - non-current	-	104,379	104,379
Total effect on liabilities	$ -	$ 178,934	$ 178,934

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.

As of the date the consolidated financial statements were authorized for issue, the Group assessed that the amendments to the above standards and interpretations will not have a significant impact on the Group's financial position and financial performance.

c. New IFRSs issued by International Accounting Standards Board (IASB) 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 reporting periods beginning on or after their respective effective dates.

As of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of the above 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

a. Statement of compliance

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

b. Basis of preparation

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

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

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

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

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

c. Classification of current and non-current assets and liabilities

Current assets include:

- Assets held primarily for the purpose of trading;

- Assets expected to be realized within 12 months after the reporting period; and

- Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include

- Liabilities held primarily for the purpose of trading;

- Liabilities due to be settled within 12 months after the reporting period; and

- Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

Assets and liabilities that are not classified as current are classified as non-current.

d. 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). When necessary, 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.

See Note 12 and Tables 1 and 8 for detailed information on subsidiaries (including the percentages of ownership and main businesses).

e. Foreign currencies

In preparing the financial statements of each individual consolidated 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 on 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 case, 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 its foreign operations (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).

f. Investments in associates

The Group uses the equity method to account for its investments in associates. Under the equity method, an investment in an associate is 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 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, 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 is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized 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 it ceases to be an associate. Any retained investment is measured at fair value at that date and the fair value is regarded as its 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 if that associate had directly disposed of the related assets or liabilities.

g. Property and equipment

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment loss. Freehold land is not depreciated.

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

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

h. Investment properties

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

Freehold investment properties are measured initially at cost, including transaction costs. 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 of the period in which they arise.

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

i. Goodwill

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

For the purposes of impairment testing, goodwill is allocated to each of the 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 attributable 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 to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. An 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 disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal.

j. Intangible assets

1) Intangible assets acquired separately

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

2) 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.

k. 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 smallest group of cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of 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 to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss.

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

l. Financial instruments

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

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

1) Financial assets

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

a) Measurement categories

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

i. Financial assets at FVTPL

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

Financial assets at FVTPL are subsequently measured at fair value, and any dividends, interest earned and remeasurement gains or losses on such financial assets are recognized in other gains or losses; any remeasurement gains or losses on such financial assets are recognized in other gains or losses. Fair value is determined in the manner described in Note 28.

ii. 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.

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

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

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

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

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

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

i) Significant financial difficulty of the issuer or the borrower;

ii) Breach of contract, such as a default;

iii) It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization.

Cash equivalents include time deposits with original maturities within 12 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. 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 whose objective is achieved by both the collecting of contractual cash flows and the selling of such financial assets

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.

iv. 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.

b) Impairment of financial assets

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

The Group always recognizes lifetime expected credit losses (i.e. ECLs) for trade 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 measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

For 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 measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

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

For internal credit risk management purposes, the Group determines that the following situations indicate that a financial asset is in default (without taking into account any collateral held by the Group):

i. Internal or external information show that the debtor is unlikely to pay its creditors.

ii. When a financial asset is due longer than the collection period as stated in the contract, unless the Company has reasonable and corroborative information to support a more lagged default criterion.

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.

c) 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 a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the consideration received and receivable is recognized in profit and loss. On derecognition of an investment in a debt instrument at FVTOCI in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit and loss. On derecognition of an investment in an equity instrument at FVTOCI in its entirety, 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.

2) Equity instruments

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

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

The 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, issuance or cancellation of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

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

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

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

Fair value is determined in the manner described in Note 28.

b) Derecognition of financial liabilities

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

4) Derivative financial instruments

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the 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 hedge relationship. When the fair value of derivative financial instruments is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instruments 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.

5) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated balance sheets if, and 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.

m. Purchase and sale of bonds under repurchase/reverse repurchase agreements

Repurchase and reverse repurchase bond transactions are deemed as financing activities, and their risk and rewards are shown as belonging to the seller after judgment. When a reverse repurchase transaction occurs, a “reverse repurchase bond investments” account is setup, and when a repurchase transaction occurs, a “repurchase bond liabilities” account is setup. The difference between the book value and the strike price is recognized as interest revenue or interest expense.

n. Margin loans and stock loans

Margin loans extended to stock investors are recorded as “receivable amount for margin loans” and the stocks purchased by the investors are held by the Group as collateral. The collateral is recorded in a memorandum and is returned to the investors when the loans are repaid.

Guarantee deposits received from stock investors on short sales are recorded as “securities financing guarantee deposits-in”. The proceeds from short sales (less the securities transaction tax and processing fees) are held by the Group as guarantee deposits and recorded as “deposit payable for securities financing”. The stocks lent to the investors are recorded in a memorandum. When the stocks are returned to the Group, the guarantee deposits and proceeds from the short sales are returned to the investors accordingly.

Loans borrowed by the Group from other securities lenders when the Group has insufficient funds to conduct margin trading are recorded as “margin loans from other securities lenders”. When the Group has insufficient stocks to conduct securities lending, the Group borrows stocks from other securities lenders and the guarantee deposits paid are recorded as “deposits paid to other securities lenders”. The proceeds from short sales are then paid to the securities lenders as additional guarantee deposits and are recorded as “securities refinancing margin deposits”.

o. Guaranteed price deposits for security borrowings and borrowing of marketable securities

The receivables generated by the borrowing of securities from securities investors are recognized as guaranteed price deposits; and the allowance for bad debt of the receivables are recognized based on lifetime expected credit losses (i.e. ECLs) The collateral obtained from the guaranteed price deposits of the securities business is recorded in a memorandum. Securities rented by the Group could be self-owned securities, securities borrowed from TWSE’s security borrowing system and guaranteed securities received from stock investors on short sales. If the securities rented out are self-owned securities, such securities should be reclassified as securities lent and measured at fair value at the date of measurement. If the securities rented are from TWSE’s security borrowing system, it only needs to be recorded in a memorandum. If the securities rented were received from stock investors on short sales as source of securities, it should be recorded in a memorandum when it is rented. The latter two sources of securities’ rental are not presented in the consolidated financial statements but only in the business report. If the collateral received from the borrowing of securities are marketable securities, it would only be recorded in a memorandum on an individual customer basis and related trading events should be recorded. If the collateral received is in the form of cash, it is recognized as deposits for securities borrowed as current liabilities. The handing fees and service fees are recognized as revenue from the borrowing of securities.

p. Client margin accounts

The Group is in the futures brokerage business, and collects margin payments, premiums and differences settled based on market prices, which includes bank deposits and balances settled by the futures clearing house and other futures commission merchants.

q. Futures clients’ equity

The premium received from futures trading clients is recorded under futures clients’ equity (liabilities). The difference between each day’s market price and the related commission is reflected directly in the futures clients’ equity.

r. Revenue recognition

The Group identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

The Group’s contract revenue mainly comes from providing brokerage, underwriting and advisory services. The services are based on standalone or negotiated prices, and are based on the number of times services are provided. The services are considered as performance obligations that are satisfied at a point in time, hence, revenue is recognized when performance obligations are satisfied.

The majority of the contractual agreement price of the group is received on average during the contract period. The contracted asset is recognized when it has the right to transfer the service to the customer but has not yet received the unconditional consideration. In some contracts, since the contract is initially charged to the customer, the group is obligated to provide services after the contract and is recognized as a contract liability. The period in which the contract liability is transferred to income is usually not more than one year and does not result in a significant financial component.

s. Leases

2019

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

1) The Group as lessor

All leases are classified as operating leases. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

2) 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, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities.

Right-of-use assets are 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, a change in the amounts expected to be payable under a residual value guarantee, 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

All leases are classified as operating leases.

1) The Group as lessor

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

2) The Group as lessee

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

t. Employee benefits

1) 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.

2) Retirement benefits

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

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

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

u. Share-based payment arrangements

The ultimate parent company issued ordinary shares for cash which are reserved for the Group's employees. The fair value at the grant date of the employee share options is expensed on a straight-line basis over the vesting period, based on the Group's best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in capital surplus - employee share options. It is recognized as an expense in full at the grant date if vested immediately. The grant date of issued ordinary shares for cash which are reserved for employees is the date on which the number of shares that the employees have subscribed for is confirmed.

v. Taxation

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

1) Current tax

According to the Income Tax Law, an additional tax on unappropriated earnings is provided for as income tax 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.

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

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

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

3) Current and deferred tax

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

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 estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future years.

6. CASH AND CASH EQUIVALENTS

	December 31 2019	December 31 2018
Cash on hand	$ 452	$ 452
Demand deposits	852,887	1,274,895
Checking accounts	8,917	13,881
Time deposits	1,703,682	862,186
Cash equivalents		
Futures trading excess margins	32,985	1,006,674
	$ 2,598,923	$ 3,158,088

The market rate intervals of time deposits at the end of the reporting period are as follows:

	December 31 2019	December 31 2018
Time deposits	0.14%-3.9%	0.12%-0.14%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31 2019	December 31 2018
Financial assets at fair value through profit or loss - current		
Financial assets mandatorily classified as at fair value through profit or loss		
Securities lent (a)	$ 353,945	$ -
Open-end funds and currency market instruments (b)	14,918	-
Securities held for operations - dealing (c)	6,613,937	3,930,967
Securities held for operations - underwriting (d)	21,933	11,510
Securities held for operations - hedging (e)	2,103,633	691,609
Long options - futures (f)	35,370	19,149
Futures trading margins - securities (g)	489,361	-
Futures trading margins - own funds (h)	626,607	433,813
Derivative instrument assets - OTC		
Asset swap option contracts (i)	66,664	-
Structured instruments	784	272
	$ 10,327,152	$ 5,087,320
Financial liabilities at fair value through profit or loss - current		
Held-for-trading financial liabilities - current		
Short options - futures (f)	$ 26,849	$ 38,037
Liabilities for issuance of call (put) warrants (j)	4,396,538	2,570,142
Repurchase of issuance of call (put) warrants (j)	(3,971,962)	(2,417,653)
Liabilities for securities and bonds borrowings - hedging (k)	182,888	380,186
Liabilities for securities and bonds borrowings - non-hedging (k)	2,327,231	2,141,592
	$ 2,961,544	$ 2,712,304

a. Securities lent

	December 31	
	2019	2018
Listed shares	$ 278,499	$ -
OTC shares	35,846	-
Adjustment of valuation	39,600	-
	$ 353,945	$ -

b. Open-end funds and currency market instruments

	December 31	
	2019	2018
Open-end funds	$ 15,000	$ -
Adjustment of valuation	(82)	-
	$ 14,918	$ -

c. Securities held for operations - dealing

	December 31	
	2019	2018
Listed shares	$ 2,877,279	$ 1,760,028
OTC shares	786,430	172,646
Emerging market shares	138,779	154,622
Convertible bonds	1,010,072	1,342,555
Foreign securities	1,435,455	424,810
Exchange traded funds (ETF)	232,956	255,695
Open-end funds	4,535	5,209
Others	-	40
	6,485,506	4,115,605
Adjustment of valuation	128,431	(184,638)
	$ 6,613,937	$ 3,930,967

Refer to Note 30 for the amount of guarantees provided by the Group as a result of securities borrowing transactions.

d. Securities held for operations - underwriting

	December 31	
	2019	2018
Convertible bonds	$ 21,676	$ 4,509
Listed shares	-	6,780
	21,676	11,289
Adjustment of valuation	257	221
	$ 21,933	$ 11,510

e. Securities held for operations - hedging

	December 31 2019	December 31 2018
Listed shares	$ 1,364,988	$ 492,858
OTC shares	552,056	148,145
Exchange traded funds (ETF)	157,870	51,120
Call (put) warrants	20,954	17,191
	2,095,868	709,314
Adjustment of valuation	7,765	(17,705)
	$ 2,103,633	$ 691,609

f. Futures and options

1) The contract amount and fair value of futures and options

The futures and options transactions that were still open are as follows:

December 31, 2019

Item		Open Position Buy/Sell	Open Position Number of Contracts	Contract Amount or Option Premium Payable (Receivable)	Fair Value
Futures	FIXI	Buy	35	$ 43,869	$ 44,027
Futures	FIXI	Sell	11	13,814	13,837
Futures	FIXXF	Buy	3,613	667,310	663,970
Futures	FIXXF	Sell	25,420	4,086,500	4,162,076
Futures	FITG	Buy	8	4,390	4,414
Futures	FITF	Buy	28	37,818	38,033
Futures	FITF	Sell	12	16,275	16,301
Futures	FITX	Buy	180	430,282	431,294
Futures	FITX	Sell	269	642,872	645,179
Futures	FIMTX	Buy	19	11,170	11,389
Futures	FIMTX	Sell	16	9,584	9,594
Futures	FITE	Buy	191	406,621	402,772
Futures	FITE	Sell	88	186,728	185,592
Futures	Foreign exchange futures	Buy	2	1,205	1,205
Futures	Foreign exchange futures	Sell	12	7,363	7,239
Options	Index options - call	Buy	2,401	16,709	25,643
Options	Index options - call	Sell	3,684	(9,263)	13,896
Options	Index options - put	Buy	3,086	9,585	8,938
Options	Index options - put	Sell	13,675	(20,358)	11,927
Options	Stock options -call	Buy	15	18	37
Options	Stock options -call	Sell	73	(114)	114
Options	Stock options -put	Buy	6	6	3
Options	Stock options -put	Sell	48	(8)	7
Options	Product options - call	Buy	1	1	1
Options	Product options - call	Sell	26	(75)	80

(Continued)

Item		Open Position Buy/Sell	Number of Contracts	Contract Amount or Option Premium Payable (Receivable)	Fair Value
Options	Product options - put	Buy	1	$ 5	$ 4
Options	Product options - put	Sell	2	(4)	2
Options	Foreign options - call	Buy	92	521	168
Options	Foreign options - call	Sell	51	(199)	118
Options	Foreign options - put	Buy	54	518	576
Options	Foreign options - put	Sell	51	(558)	705
Futures	FITX	Buy	303	586,225	585,417
Futures	FITX	Sell	358	691,330	691,831
Futures	FIMTX	Buy	505	240,360	244,142
Futures	FIMTX	Sell	5	2,410	2,413
Futures	FIxxF	Buy	7,458	673,673	673,527
Futures	FIxxF	Sell	21,998	2,186,802	2,196,986
Futures	FITE	Buy	737	1,122,143	1,133,999
Futures	FITE	Sell	5	7,637	7,695
Futures	FIXI	Buy	55	64,309	64,105
Futures	FITF	Buy	25	29,457	29,464
Futures	FITF	Sell	67	79,782	78,965
Futures	Foreign futures	Sell	90	148,606	140,895
Futures	Foreign exchange futures	Buy	4	12,269	12,232
Futures	Foreign exchange futures	Sell	3	9,170	9,168
Options	Stock options - call	Buy	14	61	12

(Concluded)

December 31, 2018

Item		Open Position Buy/Sell	Number of Contracts	Contract Amount or Option Premium Payable (Receivable)	Fair Value
Options	Stock options - call	Sell	10	$ (19)	$ 14
Options	Stock options - put	Buy	1	1	2
Options	Stock options - put	Sell	1	(2)	3
Options	Index options - call	Buy	1,619	7,622	7,637
Options	Index options - call	Sell	3,082	(13,418)	15,071
Options	Index options - put	Buy	2,511	11,827	8,356
Options	Index options - put	Sell	2,918	(22,093)	20,930
Options	Foreign options - call	Buy	216	1,965	1,441
Options	Foreign options - call	Sell	130	(1,581)	1,108
Options	Foreign options - put	Buy	197	1,705	1,701
Options	Foreign options - put	Sell	130	(1,041)	911

The fair values were determined based on the year-end settled prices of the products multiplied by the number of open contracts, and individually calculated for the futures and option contracts.

2) Profit and loss on futures and options

	For the Year Ended December 31	
	2019	2018
Gains (losses) from futures contracts		
Realized losses (non-hedging)	$ (77,665)	$ (24,339)
Unrealized gains (losses) (non-hedging)	(4,196)	255
Realized gains (losses) (hedging)	(821,832)	56,747
Unrealized gains (losses) (hedging)	(90,092)	28,051
	(993,785)	60,714
Gains (losses) from Options transactions		
Realized gains (non-hedging)	89,271	153,997
Unrealized gains (losses) (non-hedging)	15,651	(974)
Realized losses (hedging)	-	(1,683)
	104,922	151,340
	$ (888,863)	$ 212,054

g. Futures trading margins - securities

The details of the futures trading margins - marketable securities in the Group's futures department are summarized as follows:

	December 31	
	2019	2018
Listed shares	$ 201,459	$ -
OTC shares	273,059	-
	474,518	-
Adjustment of valuation	14,843	-
	$ 489,361	$ -

h. Futures trading margins - own funds

The status of the accounts of the futures trading margins - own funds in the Group of the future department is summarized as follows:

	December 31	
	2019	2018
Account balance	$ 687,585	$ 420,534
Gains (losses) on open positions	(60,978)	13,279
Net account value	$ 626,607	$ 433,813

i. Asset swap option contracts

As of December 31, 2019, the book value and fair value of the asset swap option contracts which are unexpired convertible bonds based on the content of the contracts are as follows:

	December 31, 2019		
	Contract Amount	**Premium Payable**	**Fair Value**
Asset swap option contracts - convertible bonds options transactions	$ 537,100	$ 51,869	$ 66,664

j. Liabilities for issuance of call (put) warrants/repurchase of issued call (put) warrants

	December 31	
	2019	**2018**
Liabilities of call (put) warrants issued	$ 4,371,084	$ 4,377,201
Add: Loss (gain) on change in fair value	25,454	(1,807,059)
Fair value liabilities	4,396,538	2,570,142
Repurchased call (put) warrants	3,603,919	3,381,953
Add: Gain (loss) on change in fair value	368,043	(964,300)
Fair value of repurchase	3,971,962	2,417,653
Net call (put) warrants issued	$ 424,576	$ 152,489

The call (put) warrants issued by the Group typically had contract periods of six to twelve months commencing from the date the warrants were listed. The call (put) warrants can be settled by delivery of securities or, at the election of the Group, in cash.

The gains and losses arising from the issuance of the call (put) warrants in the Group are as follows:

	For the Year Ended December 31	
	2019	**2018**
Gains on changes in fair value of call (put) warrant liabilities	$ 11,650,543	$ 12,668,120
Losses on changes in fair value for repurchase of call (put) warrants - realized	(12,954,683)	(12,372,817)
Gains on changes in fair value for repurchase of call (put) warrants - unrealized	1,332,342	600,126
Expenses arising from the issuance of call (put) warrants	(61,805)	(54,509)
	$ (33,603)	$ 840,920

k. Liabilities for securities and bond borrowings

	December 31 2019	December 31 2018
Liabilities for securities and bond borrowings - hedged		
Listed shares	$ 126,292	$ 295,475
OTC shares	45,739	100,333
Exchange traded funds (ETF)	-	1,154
	172,031	396,962
Adjustment of valuation	10,857	(16,776)
	$ 182,888	$ 380,186
Liabilities for securities and bond borrowings - non-hedged		
Listed shares	$ 1,656,211	$ 2,043,400
OTC shares	207,785	407,876
Exchange traded funds (ETF)	275,187	8,702
	2,139,183	2,459,978
Adjustment of valuation	188,048	(318,386)
	$ 2,327,231	$ 2,141,592

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31 2019	December 31 2018
Current		
Investments in debt instruments at FVTOCI	$ 2,065,100	$ 3,379,521
Non-current		
Investments in equity instruments at FVTOCI	$ 537,965	$ 326,536

a. Investments in debt instruments at FVTOCI

	December 31 2019	December 31 2018
Debt instrument investments at fair value through other comprehensive income - current		
Corporate bonds	$ 1,957,219	$ 2,938,418
Financial bonds	-	200,020
Government bonds	99,360	219,424
	2,056,579	3,357,862
Adjustment of valuation	8,521	21,659
	$ 2,065,100	$ 3,379,521

The face value of the Group’s investments in debt instruments measured at fair value through other comprehensive income - current provided for repurchase transactions was $2,050,000 thousand and $3,325,000 thousand on December 31, 2019 and 2018, respectively.

The expected credit impairment losses on debt instruments reversed (recognized) in 2019 and 2018 were $168 thousand and $(277) thousand, respectively.

For information related to the credit risk management and impairment assessment of investments in debt instruments measured at fair value through other comprehensive income, refer to Note 28.

b. Investments in equity instruments at FVTOCI

	December 31	
	2019	**2018**
Investments in equity instruments at fair value through other comprehensive income - non-current		
Taiwan Futures Exchange	$ 30,518	$ 30,518
Adjustment of valuation	507,447	296,018
	$ 537,965	$ 326,536

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

Dividends of $18,602 thousand and $17,549 thousand were recognized during the years ended December 31, 2019 and 2018, respectively, and are related to investments in equity instruments measured at fair value through other comprehensive income held during the years ended December 31, 2018 and 2017.

9. SECURITIES MARGIN LOANS RECEIVABLE

	December 31	
	2019	**2018**
Securities margin loans receivable	$ 3,301,353	$ 2,640,737
Less: Allowance for impairment loss	(166)	(132)
	$ 3,301,187	$ 2,640,605

The aforementioned securities margin loans receivable were handled in accordance with the Operating Rules for Securities Firms Handling Margin Purchases and Short Sales of Securities, had a credit period of six months, and were secured by the shares bought by customers through margin loans.

10. CLIENT MARGIN ACCOUNTS AND FUTURES TRADERS' EQUITY

	December 31	
	2019	2018
Bank deposits	$ 5,029,719	$ 2,895,448
Marking to market from the clearing house	1,381,179	2,071,523
Marking to market from other futures brokers	956,055	880,859
	7,366,953	5,847,830
Client margin account		
Less: Brokerage commission	(8,483)	(8,266)
Futures traders' equity	$ 7,358,470	$ 5,839,564

11. ACCOUNTS RECEIVABLE

a. Accounts receivable

	December 31	
	2019	2018
Accounts receivable - settlement	$ 4,365,984	$ 3,817,314
Cash and cash equivalents - settlement account	286,220	229,968
Accounts receivable from the sale of securities	433,283	491,477
Accounts receivable from the purchase of securities	291,239	3,235
Others	37,209	76,823
Less: Allowance for impairment loss	(96)	(88)
	5,413,839	4,618,729
Accounts receivable - related parties	275	175
	$ 5,414,114	$ 4,618,904

The aging analysis of receivables was as follows:

	December 31	
	2019	2018
Not overdue	$ 5,413,935	$ 4,618,817
Overdue		
Up to 30 days	-	-
31 days - 60 days	-	-
61 days - 120 days	-	-
Over 120 days	-	-
	$ 5,413,935	$ 4,618,817

The above aging schedule was based on the number of past due days from the record date.

b. Other receivables

	December 31	
	2019	2018
Other receivables	$ 178,597	$ 127,138
Less: Allowance for impairment loss	(17)	(12)
	178,580	127,126
Other receivables - related parties	2,173	966
	$ 180,753	$ 128,092

c. Overdue receivables (included in other non-current assets)

	December 31	
	2019	2018
Overdue receivables	$ 94,993	$ 95,047
Less: Allowance for impairment loss	(94,993)	(95,047)
	$ -	$ -

The Group adopted a policy of only dealing with entities that are rated the equivalent of investment grade or higher and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group uses other publicly available financial information or its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by the risk management committee annually.

The expected credit losses on trade receivables are measured by reference to the past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecasted direction of economic conditions at the reporting date.

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. For trade receivables that have been written off, the Group continues to engage in enforcement activity to attempt to recover the receivables due.

Please refer to Note 28 for information on changes in allowance for impairment loss.

12. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

		Proportion of Ownership (%)	
		December 31	
Subsidiary	Nature of Activities	2019	2018
Cathay Futures Co., Ltd.	Futures related business	99.99	99.99
Cathay Securities (Hong Kong) Corporation Limited	Securities related business	100.00	100.00

b. Subsidiaries excluded from the consolidated financial statements

Subsidiary	Nature of Activities	Proportion of Ownership (%) December 31 2019	Proportion of Ownership (%) December 31 2018
Cathy Investment Consulting (Shanghai) Co., Ltd.	Investment advisory services	-	100.00

As the total assets and operating income of Cathay Investment Consulting (Shanghai) Co., Ltd do not account for a significant proportion of the Group's corresponding accounts, they were not included in the consolidated financial statements.

Except for Cathay Investment Consulting (Shanghai) Co., Ltd. which was calculated based on the unaudited financial statements, the rest of the subsidiaries were recognized based on the subsidiaries' financial statements that were audited for the same period. The Group determines that there is no significant impact from the aforementioned subsidiary's financial statements which have not been audited.

On November 7, 2017, Cathay Investment Consulting (Shanghai) Co., Ltd. was dissolved by the board of directors. And the liquidation was completed on February 26, 2019.

13. PROPERTY AND EQUIPMENT

	Land	Buildings	Machinery Equipment	Leasehold Improvement	Total
Cost					
Balance at January 1, 2019	$ 48,087	$ 4,322	$ 408,867	$ 230,439	$ 691,715
Additions	-	-	20,204	15,270	35,474
Disposals	-	-	(2,294)	-	(2,294)
Effects of exchange rate changes	-	-	(545)	(137)	(682)
Balance at December 31, 2019	$ 48,087	$ 4,322	$ 426,232	$ 245,572	$ 724,213
Accumulated depreciation					
Balance at January 1, 2019		$ 2,134	$ 309,902	$ 167,071	$ 479,107
Depreciation		107	32,604	25,876	58,587
Disposals		-	(2,294)	-	(2,294)
Effects of exchange rate changes		-	(435)	(134)	(569)
Balance at December 31, 2019		$ 2,241	$ 339,777	$ 192,813	$ 534,831
Carrying amount at December 31, 2019	$ 48,087	$ 2,081	$ 86,455	$ 52,759	$ 189,382
Cost					
Balance at January 1, 2018	$ 48,087	$ 4,322	$ 384,484	$ 221,758	$ 658,651
Additions	-	-	26,272	11,536	37,808
Disposals	-	-	(2,589)	(3,072)	(5,661)
Effects of exchange rate changes	-	-	700	217	917
Balance at December 31, 2018	$ 48,087	$ 4,322	$ 408,867	$ 230,439	$ 691,715

(Continued)

	Land	Buildings	Machinery Equipment	Leasehold Improvement	Total
Accumulated depreciation					
Balance at January 1, 2018		$ 2,027	$ 273,215	$ 141,020	$ 416,262
Depreciation		107	38,966	29,013	68,086
Disposals		-	(2,589)	(3,072)	(5,661)
Effects of exchange rate changes		-	310	110	420
Balance at December 31, 2018		$ 2,134	$ 309,902	$ 167,071	$ 479,107
Carrying amount at December 31, 2018	$ 48,087	$ 2,188	$ 98,965	$ 63,368	$ 212,608

(Concluded)

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

Item	Useful life
Buildings	32 to 40 years
Equipment	3 to 10 years
Leasehold improvement	3 to 6 years

Property and equipment of the Group are for their own use.

14. OPERATING LEASES

a. Right-of-use assets - 2019

	December 31, 2019
Carrying amounts	
Buildings	$ 122,792
Office equipment	861
Transportation equipment	2,028
	$ 125,681

	For the Year Ended December 31, 2019
Additions to right-of-use assets	$ 31,243
Depreciation of right-of-use assets	
Buildings	$ 79,260
Office equipment	256
Transportation equipment	1,382
	$ 80,898

b. Lease liabilities - 2019

	December 31, 2019
Carrying amounts	
Current	$ 77,182
Non-current	$ 49,488

Range of discount rate for lease liabilities was as follows:

	December 31, 2019
Buildings	1.37%-4.155%
Office equipment	0.71%
Transportation equipment	3.61%

c. Material lease activities and terms

The Group leases certain buildings for the use of offices with lease terms of 104 to 112 years. The Group does not have bargain purchase options to purchase the buildings at the end of the lease terms.

d. Other lease information

2019

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	$ 2,912
Total cash outflow for leases	$ 85,732

2018

Operating lease commitments - the Group is lessee

The future minimum lease payments of non-cancellable operating lease commitments at December 31, 2018 are as follows:

	December 31, 2018
Not later than 1 year	$ 75,561
Later than 1 year and not later than 5 years	107,835
	$ 183,396

The expenses recognized in operating leases are as follows:

	For the Year Ended December 31, 2018
Minimum lease payments	$ 79,587

15. INVESTMENT PROPERTIES

	Land	Buildings	Total
Balance at January 1, 2019	$ 256,813	$ 33,528	$ 290,341
Gains (losses) generated from fair value adjustments	1,405	(1,405)	-
Balance at December 31, 2019	$ 258,218	$ 32,123	$ 290,341
Balance at January 1, 2018	$ 255,381	$ 34,960	$ 290,341
Gains (losses) generated from fair value adjustments	1,432	(1,432)	-
Balance at December 31, 2018	$ 256,813	$ 33,528	$ 290,341

The Group as a lessor

The Group has entered into commercial property leases with remaining terms of less than five years. Part of the leases include a clause to enable upward revision of the rental charge on an annual basis according to prevailing market conditions.

The future lease payments receivable of operating lease commitments at December 31, 2019 and 2018 are as follows:

	December 31	
	2019	2018
Not later than 1 year	$ 7,141	$ 3,261
Later than 1 year and not later than 5 years	10,402	-
	$ 17,543	$ 3,261

Valuation on the investment property of the Group 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
Expected future cash inflows	$ 435,307	$ 436,792
Expected future cash outflows	(16,601)	(18,314)
Estimated net cash inflows	$ 418,706	$ 418,478
Discount rate	2.045%	2.045%
Direct capitalization rate	2.56%	2.56%

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

All of the investment properties are leased by operating leases, generating rental income of $7,160 thousand and $7,158 thousand, respectively, for the year 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.

For the amount of investment properties provided as guarantee for short-term bank loans, please refer to Note 30.

16. INTANGIBLE ASSETS

	December 31	
	2019	2018
Goodwill	$ -	$ 8,629
Other intangible assets		
Patents	1,901	1,881
Computer software	88,655	79,275
	90,556	81,156
	$ 90,556	$ 89,785

	Goodwill	Patents	Computer Software	Total
Cost				
Balance at January 1, 2019	$ 8,629	$ 1,881	$ 238,581	$ 249,091
Additions	-	-	35,233	35,233
Disposals	-	-	(10,827)	(10,827)
Impairment losses recognized	(8,629)	-	-	(8,629)
Reclassification	-	-	5,026	5,026
Exchange differences	-	20	(57)	(37)
Balance at December 31, 2019	$ -	$ 1,901	$ 267,956	$ 269,857
Accumulated amortization and impairment				
Balance at January 1, 2019	$ -	$ -	$ 159,306	$ 159,306
Amortization expenses	-	-	30,822	30,822
Disposals	-	-	(10,827)	(10,827)
Balance at December 31, 2019	$ -	$ -	$ 179,301	$ 179,301
Carrying amount at December 31, 2019	$ -	$ 1,901	$ 88,655	$ 90,556
Cost				
Balance at January 1, 2018	$ 8,629	$ 1,881	$ 201,085	$ 211,595
Additions	-	-	26,235	26,235
Reclassification	-	-	11,204	11,204
Exchange differences	-	-	57	57
Balance at December 31, 2018	$ 8,629	$ 1,881	$ 238,581	$ 249,091
Accumulated amortization and impairment				
Balance at January 1, 2018	$ -	$ -	$ 121,908	$ 121,908
Amortization expenses	-	-	37,398	37,398
Balance at December 31, 2018	$ -	$ -	$ 159,306	$ 159,306
Carrying amount at December 31, 2018	$ 8,629	$ 1,881	$ 79,275	$ 89,785

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

Computer software	2-10 years

After the Group acquired 100% equity of Hongyuan Securities (Hong Kong) on September 4, 2015 and completed changing the name, they 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 from the benefits on the expected growth of operating income in Hong Kong. In 2019, the assessed recoverable amount of the Hong Kong subsidiary was less than its carrying amount, and impairment loss of $8,629 thousand was recognized accordingly (recorded as other gains and losses).

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

17. OTHER CURRENT AND NON-CURRENT ASSETS

	December 31	
	2019	**2018**
Current		
Restricted assets	$ 900,000	$ 900,000
Settlement amounts	321,610	344,933
Credit trading account	20,720	12,864
Service on credit	14,339	4,170
Underwriting receipts under custody and separated account for customer	9,161	7,653
Receivable of securities business money lending	232	-
Custodies of underwriting securities	33	12,206
	$ 1,266,095	$ 1,281,826
Non-current		
Operating funds	$ 444,807	$ 420,554
Settlement/clearance funds	268,152	246,439
Prepayments for equipment	96,897	20,393
Reserve funds of trust	50,000	50,000
Refundable deposits	32,011	25,200
Restricted assets - noncurrent	21,200	21,200
Prepaid pension cost - noncurrent	-	3,174
Overdue receivables	94,993	95,047
Less: Allowance for impairment loss - overdue receivables	(94,993)	(95,047)
	$ 913,067	$ 786,960

As stipulated in the Regulations Governing Securities Firms (“RGSF”), Regulations Governing the Operation of Futures Introducing Broker Business by Securities Firms, Regulations Governing Futures Advisory Enterprises, Regulations Governing Futures Commission Merchants and Regulations Governing the Conduct of Discretionary Investment Business by Securities Investment Trust Enterprises, the Group shall lodge operating funds with banks designated by the Financial Supervisory Commission (“FSC”) after its registration. The Group provided time deposits of $390,000 thousand as operating guarantees as of both December 31, 2019 and 2018. The overseas operating guarantees were $54,807 thousand and $30,554 thousand as of December 31, 2019 and 2018, respectively.

Based on the requirements of RGSF, Taipei Exchange Rules for Administration of Joint Responsibility System Clearing and Settlement Fund, and Taiwan Futures Exchange Corporation Criteria for Clearing Membership, the Group deposited settlement funds of $268,152 thousand and $246,439 thousand as of both December 31, 2019 and 2018, respectively.

Based on the requirements of Regulations Governing Concurrent Conduct of Trust Business by Securities Investment Trust Enterprises, Securities Investment Consulting Enterprises, and Securities Firms, the Group deposited reserve funds of trust in the Central Bank of ROC of $50,000 thousand as of both December 31, 2019 and 2018.

For the differences generated from the disposal of shares provided as guarantee for financing due to the client's breach of settlement and insufficient financing guarantee maintenance ratio, or compensation due to breach of credit transactions generated due to the inability to dispose of the marketable securities in the client's credit transaction account, the Company has carried out compensation claims in accordance with the relevant regulations, and transferred the default receivables to overdue receivables and recognized the full amount as impairment loss, please refer to Note 28 for the details.

Please refer to Note 30 for related information on the Group's assets pledged as collateral for the application of provisional attachment.

18. SHORT-TERM BORROWINGS

a. Short-term borrowings

	December 31	
	2019	2018
Unsecured bank loans	$ 2,201,364	$ 336,381
Annual interest rates	0.85%-8.9%	1.80%-9.05%

b. Short-term bills payable

	December 31	
	2019	2018
Commercial paper	$ 5,540,000	$ 3,730,000
Less: Unamortized discounts on bills payable	(1,155)	(633)
	$ 5,538,845	$ 3,729,367
Annual interest rates	0.51%-0.69%	0.77%-0.86%

19. LIABILITIES FOR BONDS UNDER REPURCHASE AGREEMENTS

	December 31	
	2019	2018
Government bonds	$ 100,000	$ 206,085
Corporate bonds and financial bonds	1,998,081	3,126,443
	$ 2,098,081	$ 3,332,528

As of December 31, 2019 and 2018, the bonds under repurchase agreements which will be repurchased at the agreed price in the respective agreements plus accrued interest amounted to $2,098,996 thousand and $3,333,850 thousand, respectively.

20. OTHER FINANCIAL LIABILITIES

	December 31	
	2019	2018
Principal value of structured products		
Equity-linked products	$ 67,179	$ 105,870

21. POST-EMPLOYMENT BENEFITS

a. Defined contribution plan

The Company and its domestic subsidiary Cathay Futures Co., Ltd. adopted a defined contribution plan in accordance with the Labor Pension Act of the R.O.C. Under the Labor Pension Act, the Company and its domestic subsidiary will make monthly contributions of no less than 6% of the employees' monthly wages to the employees' individual pension accounts. The overseas subsidiaries make contributions to the plan based on the requirements of local regulations.

b. Defined benefits plan

The Company and its domestic subsidiary Cathay Futures Co., Ltd. adopted a defined benefit plan in accordance with the Labor Standards Act of the R.O.C. The Bank adopted the defined benefit plan under the Labor Standards Law, under which pension benefits are calculated on the basis of the length of service and average monthly salaries of the six months before retirement. Under the Labor Standards Act, the Company and its domestic subsidiary should contribute an amount equivalent to 2% of the employees' total salaries and wages on a monthly basis to the pension fund deposited at the Bank of Taiwan in the name of the administered pension fund committee. Before the end of each year, the Company and its domestic subsidiary assess the balance in the designated labor pension fund. If the amount is inadequate to pay pensions calculated for workers retiring in the same year, the Company and its domestic subsidiary will make up for the difference in one appropriation before the end of March the following year. The pension fund is managed by the Bureau of Labor Funds (the "Bureau") under the Ministry of Labor; the Bank has no right to influence the investment policy and strategy.

Expenses under the defined benefits plan which were determined by the actuarially determined pension cost rates of the previous year were $4,340 thousand and $4,303 thousand for the years ended December 31, 2019 and 2018, respectively.

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 funded defined benefit obligation	$ 50,899	$ 44,543
Fair value of plan assets	(18,207)	(17,246)
Net defined benefit liabilities (Note)	$ 32,692	$ 27,297

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Note)
Balance at January 1, 2018	$ 43,395	$ (22,174)	$ 21,221
Service cost			
Current service cost	4,081	-	4,081
Net interest expense (income)	480	(258)	222
Recognized in profit or loss	4,561	(258)	4,303
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(606)	(606)
Actuarial (gain) loss			
Experience adjustments	706	-	706
Changes in financial assumptions	(491)	-	(491)
Recognized in other comprehensive income	215	(606)	(391)
Contributions from the employer	-	(1,032)	(1,032)
Benefits paid	(3,628)	6,824	3,196
Balance at December 31, 2018	44,543	(17,246)	27,297
Service cost			
Current service cost	4,072	-	4,072
Net interest expense (income)	444	(176)	268
Recognized in profit or loss	4,516	(176)	4,340
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(718)	(718)
Actuarial (gain) loss			
Experience adjustments	1,519	-	1,519
Changes in financial assumptions	3,977	-	3,977
Recognized in other comprehensive income	5,496	(718)	4,778
Contributions from the employer	-	(4,267)	(4,267)
Contributions from plan participants	3,818	-	3,818
Benefits paid	(7,474)	4,200	(3,274)
Balance at December 31, 2019	$ 50,899	$ (18,207)	$ 32,692

Note: The amount includes defined benefit assets (recorded as non-current assets) of the subsidiary Cathay Futures Co., Ltd. of $3,174 thousand.

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

1) Investment risk: The discount rate of the present value of the defined benefit obligation of pension plans is determined by considering the yield of government bonds. If the return on investment of pension fund assets is lower than this rate, the insufficient amount of defined benefit liabilities will increase. The pension fund is fully deposited in the labor pension fund account under the old system which is operated and whose investments are managed by the government. The Company has no right to control the content of the investment of the pension fund.

2) Interest risk: A decrease in the government bond interest will increase the present value of defined benefit obligation. The interest risk is the main source of risk from the pension plan.

3) Longevity risk: When calculating the present value of the defined benefit obligation of pension plans, the fifth life table (2011TSO)100% in the life insurance business is adopted in the estimation of the mortality rate during the service period of the employees. If the actual mortality rate is lower than the assumed rate, the present value of the defined benefit obligation will increase.

4) Salary risk: The present value of the defined benefit obligation is calculated by estimating the salary of employees after retirement based on the assumed annual growth rate of salary. Therefore, if the actual future salary adjustment rate is higher than the assumed rate, 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	0.73%-0.81%	0.99%-1.00%
Expected rates of salary increase	2.50%-3.00%	2.50%-3.00%

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

	December 31	
	2019	**2018**
Discount rates		
0.5% increase	$ (2,946)	$ (2,711)
0.5% decrease	$ 3,156	$ 2,939
Expected rates of salary increase		
0.5% increase	$ 3,001	$ 2,804
0.5% decrease	$ (2,793)	$ (2,664)

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	$ 1,047	$ 1,053
Average duration of the defined benefit obligation	11.2 years - 16 years	11.2 years - 11.8 years

22. EQUITY

a. Ordinary shares

	December 31	
	2019	2018
Shares authorized (in thousands of shares)	700,000	700,000
Shares authorized	$ 7,000,000	$ 7,000,000
Shares issued and fully paid (in thousands of shares)	600,000	570,009
Shares issued	$ 6,000,000	$ 5,700,086

The shares issued are ordinary shares with a par value of $10, and each share has voting rights and the right to receive dividends.

The resolution to recapitalize the undistributed earnings by the issuance of 29,991 thousand shares was passed in the board of directors' meeting on May 3, 2019 on behalf of the shareholders' meeting, and the record date for the issuance of new shares was set as August 7, 2019. The issued share capital increased to $6,000,000 thousand, and the number of shares was 600,000 thousand with par value of $10.

The resolution to recapitalize the undistributed earnings by the issuance of 19,009 thousand shares was passed in the board of directors' meeting on April 25, 2018 on behalf of the shareholders' meeting, and the record date for the issuance of new shares was set as July 30, 2018. The issued share capital increased to $5,700,086 thousand, and the number of shares was 570,009 thousand with par value of $10.

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)		
Premiums on issuance of ordinary shares	$ 491,766	$ 491,766
May not be used for any purpose (2)		
Share-based payments	$ 6,401	$ -

1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital.

2) On October 3, 2019, Cathay Financial Holding Co., Ltd. passed the resolution for the capital increase in cash in the board of directors' meeting, and retained 10% of the new shares for subscription by the employees of Cathay Financial Holding Co., Ltd. and its subsidiaries in accordance with the law. In December 2019, the Company had recognized salary expenses and capital surplus of $6,401 thousand from the parent company's granting of share-based payments to employees based on the fair value of the shares on the grant date.

c. Retained earnings and dividend policy

According to the Company's Articles of Incorporation, the current year's earnings, if any, shall be distributed in the following order:

1) Payment of all taxes and dues;

2) Offset prior years' operating losses;

3) After deducting items (a) and (b), 10% of the remaining amount should be set aside as legal reserve;

4) Set aside or reverse a special reserve in accordance with the law and regulations; and

5) The distribution of the remaining portion, if any, will be proposed by the board of directors based on the dividend policy and resolved in the shareholders' meeting.

For the policies on the distribution of employees' compensation, please refer to Note 23 (j) employee benefits expense.

Based on the Company's Articles of Incorporation, the dividend policy should take into consideration the external environment and its growth stage of the Company's products, business and services. Other than as stipulated by law, in the maintenance of stable dividends, the distribution of cash dividends should take precedence over share dividends, and the percentage of share dividends distributed should not exceed 50% of the total dividends distributed. However, adjustments can be made for factors such as business needs and the earnings status.

The legal reserve can be used to offset the deficit of the Company.

When the Company incurs no loss, it may distribute the portion of legal reserve which exceeds 25% of the paid-in capital by issuing dividends in the form of shares or cash in proportion to the number of shares being held by each of the shareholders.

According to the Rules Governing Securities Firms and Regulations Governing Futures Commission Merchants, if the Company has already issued securities pursuant to the Act, the Company shall set aside 20 percent of the annual after-tax profit as special reserve. However, if the amount has reached the amount of paid-in capital (appropriated working capital), no further deposits are allowed. The special reserve may not be used for any other purpose other than for offsetting deficit, or by using the remaining half of the amount to replenish capital when the accumulated amount has reached 50% of the paid-in capital. The Company has appropriated special reserve amounting to $140,014 thousand and $92,270 thousand of the net income, which were for the years ended December 31, 2019 and 2018, respectively.

The Company appropriates or reverses a special reserve in accordance with Article No. 1010028514 issued by the Financial Supervisory Commission and the directive entitled "Questions and Answers on Special Reserves Appropriated Following the Adoption of IFRSs".

According to Article No. 10500278285 issued by the Financial Supervisory Commission, when distributing the retained earnings from 2016 to 2018, the Company shall appropriate to the special reserve equal to 0.5% to 1% of the net income of continued operations in order to protect the rights of the employees in response to the development of financial technology.

Starting 2017, expenses from employee training, transfers, and placements generated for the purposes of financial technology development can be reversed from the aforementioned special reserve.

The Company has appropriated 0.5% of the after-tax net profit for the year ended December 31, 2018 amounting to $2,307 thousand as special reserve, which will be used for covering the expenses from employee training, transfers and placements starting from January 1, 2017.

According to Article No.1030009577 issued by the Financial Supervisory Commission, the Company's subsidiary should appropriate as special reserve the same amount as the portion of the net increase in fair value transferred to retained earnings with respect to the adoption of the fair value model for the subsequent measurement of investment properties. The Company has appropriated as special reserve $220 thousand and $418 thousand based on its shareholding proportion as a result of the net increase in fair value of the subsidiary's investment properties for the years ended December 31, 2019 and 2018, respectively.

Details of the appropriation of earnings and dividends per share in 2018 and 2017 as approved in the board of directors' meetings on behalf of the shareholders' meetings on May 3, 2019 and April 25, 2018, respectively, are as follows:

	Appropriation of Earnings		Dividends Per Share (In Dollars)	
	2018	2017	2018	2017
Legal reserve	$ 46,135	$ 27,387		
Special reserve	94,995	56,397		
Stock dividends	299,914	190,086	$0.53	$0.34

The appropriation of earnings for 2019, which had been proposed by the Company's board of directors on March 10, 2020 was as follows:

	For the Year Ended December 31, 2019
Legal reserve	$ 70,007
Special reserve	$ 140,234
Share dividends	$ 500,000
Share dividends per share (NT$)	$ 0.83

The appropriation of earnings for 2019 is subject to the resolution of the shareholders in the board of directors' meeting on behalf of the shareholders' meeting to be held on April 29, 2020.

d. Other equity items

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

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (37,289)	$ (56,775)
Recognized for the year		
Exchange differences on translating the financial statements of foreign operations	(11,406)	19,714
Share from associates accounted for using the equity method	773	(228)
Balance at December 31	$ (47,922)	$ (37,289)

2) Unrealized gains from financial assets at fair value through other comprehensive income

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 318,668	$ 318,861
Recognized for the year		
Unrealized gains and losses		
Debt instrument	23,352	9,515
Equity instrument	211,410	(1,718)
Reclassification		
Disposal of investments in debt instruments	(36,659)	(7,990)
Balance at December 31	$ 516,771	$ 318,668

3) Remeasurement of defined benefit plans

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (5,950)	$ (6,263)
Remeasurement of defined benefit plans	(3,280)	313
Balance at December 31	$ (9,230)	$ (5,950)

e. Non-controlling interests

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 114	$ 110
Share in profit for the year	5	6
Other comprehensive income (loss) during the year		
Unrealized gain on financial assets at FVTOCI	19	-
Cash dividends distributed by subsidiary	(4)	(2)
Balance at December 31	$ 134	$ 114

23. COMPONENTS OF OTHER COMPREHENSIVE INCOME

a. Brokerage commission

	2019	2018
Consignment handling fee revenue - TWSE	$ 1,001,597	$ 1,049,836
Consignment handling fee revenue - OTC	315,192	234,555
Handling revenue from short sale of securities	7,408	10,481
Handling revenue from the borrowing of securities	55,779	16,284
Sub-brokerage handling revenue	1,157,587	676,298
Others	15,380	10,212
	$ 2,552,943	$ 1,997,666

b. Revenue from the underwriting business

	2019	2018
Compensation from the underwriting of securities	$ 22,330	$ 20,519
Revenue from underwriting proceeding fees	14,752	55,357
Revenue from underwriting and counseling fees	5,350	7,995
Others	2,162	1,045
	$ 44,594	$ 84,916

c. Net (losses) gains from the sale of securities held for operations

	2019	2018
Sale of securities held for operations - dealing	$ 1,172,159	$ (131,033)
Sale of securities held for operations - underwriting	3,795	4,054
Sale of securities held for operations - hedging	298,717	(517,827)
	$ 1,474,671	$ (644,806)

d. Interest revenue

	2019	2018
Margin loans	$ 152,110	$ 204,031
Bonds	43,468	45,200
Others	7,330	2,800
	$ 202,908	$ 252,031

e. Net gains (losses) from securities held for operations measured at fair value through profit or loss

	2019	2018
Securities held for operations - dealing	$ 353,493	$ (165,198)
Securities held for operations - underwriting	35	(3,818)
Securities held for operations - hedging	25,470	54,748
	$ 378,998	$ (114,268)

f. Gains (losses) on issuance of call (put) warrants

	2019	2018
Unrealized gains from liabilities for issuance of call (put) warrants	$ 11,650,543	$ 12,668,120
Unrealized losses from repurchase warrants	(11,622,341)	(11,772,691)
Expenses from the issuance of warrants	(61,805)	(54,509)
	$ (33,603)	$ 840,920

g. Gains (losses) from derivative instruments

	2019	2018
Gains (losses) from derivative instruments - futures		
Gains (losses) from futures contracts	$ (993,785)	$ 60,714
Gains from option transactions	104,922	151,340
	(888,863)	212,054
Gains (losses) from derivative instruments - OTC	31,602	(101)
	$ (857,261)	$ 211,953

h. Other operating income

	2019	2018
Loss on foreign exchange	$ (9,991)	$ (4,725)
Others	43,258	32,213
	$ 33,267	$ 27,488

i. Handling fee expenses

	2019	2018
Brokerage handling fee expenses	$ 134,365	$ 135,351
Dealer's handling fee expenses	20,689	29,449
Underwriting handling fee expenses	1,496	3,152
Refinancing transaction fee expenses	1,097	950
	$ 157,647	$ 168,902

j. Employee benefits expense

	2019	2018
Short-term employee benefits		
Salaries	$ 1,259,632	$ 1,013,490
Insurance expense	80,035	70,618
Post-employee benefits		
Defined contribution plan	37,095	35,476
Defined benefit plan	4,340	4,303
Remuneration of directors	20,871	13,366
Other employee benefits expense	30,291	65,525
	$ 1,432,264	$ 1,202,778

The number of the Group's employees during the years ended December 31, 2019 and 2018 were 786 and 771, respectively. The average number of the Group's employees for the years ended December 31, 2019 and 2018 were 771 and 752, respectively. Among them, the number of directors who were not concurrently serving as employees were 7 for both years.

According to the Company's Articles of Incorporation, should there be profit in the year, 0.01% to 0.05% of the profit should be distributed as employees' compensation. However, if there are accumulated losses, an amount should be first set aside for offset of the loss. The aforementioned employees' compensation should be distributed in the form of shares or cash, and approved by at least half of the board of directors in the board meeting with at least two-thirds of the board of directors present at the meeting.

The Company estimated the amounts of the employees' compensation to be 0.01% of profit of the current year, and the employees' compensation estimated for the years ended December 31, 2019 and 2018 are as follows:

	2019	**2018**
Employees' compensation	$ 87	$ 56

If there are changes in the amount after the annual consolidated financial statements have been released, it will be treated as a change in the accounting estimate and adjusted in the following year.

The employees' compensation for 2018 and 2017 which were resolved in the board of directors' meetings on March 20, 2019 and March 14, 2018, respectively, are as follows:

	2018	**2017**
Employees' compensation	$ 56	$ 35

There was no significant difference between the estimated amount and the actual employees' compensation distributed for the years ended December 31, 2018 and 2017.

For information on employees' compensation and remuneration of directors and supervisors resolved in the board of directors' meeting, please refer to the "Market Observation Post System" website of the TWSE.

a. Depreciation and amortization expenses

	2019	**2018**
Depreciation	$ 139,485	$ 68,086
Amortization	30,822	37,398
	$ 170,307	$ 105,484

b. Other operating expenses

	2019	**2018**
Taxes	$ 447,475	$ 638,300
Computer information	149,991	124,865
Postage	74,294	55,948
Securities borrowed	48,156	42,099
Advertisement	47,492	42,961
TDCC	33,605	35,962
Renovation	23,250	17,475
Professional services	22,833	29,228
Rental	2,912	79,587
Others	255,888	206,086
	$ 1,105,896	$ 1,272,511

c. Other gains and losses

	2019	2018
Interest revenue	$ 83,447	$ 57,002
Dividend revenue	18,602	17,550
Gain (loss) on valuation of open-end funds and currency market instruments at FVTPL	(82)	343
Impairment loss	(8,629)	-
Others	17,644	17,445
	$ 110,982	$ 92,340

24. INCOME TAXES

a. Income tax recognized in profit or loss

Major components of income tax expense are as follow:

	For the Year Ended December 31	
	2019	2018
Current tax		
In respect of the current year	$ 104,471	$ 150,310
Adjustments for prior year	(1)	25
	104,470	150,335
Deferred tax		
In respect of the current year	10,004	(43,232)
Adjustments for prior year	317	-
Effect of change in tax rate	-	1,602
	10,321	(41,630)
Income tax expense	$ 114,791	$ 108,705

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

	For the Year Ended December 31	
	2019	2018
Profit before tax from continuing operations	$ 814,866	$ 570,062
Income tax expense calculated at the statutory rate (20%)	$ 162,973	$ 114,012
Nondeductible expenses in determining taxable income	-	1
Tax-exempt income	(48,498)	(2,247)
Effect of tax rate changes	-	1,602
Unrecognized loss carryforwards/deductible temporary differences	-	(4,688)
Adjustments for prior years' current tax expense	316	25
Income tax expense recognized in profit or loss	$ 114,791	$ 108,705

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings was reduced from 10% to 5%.

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2019	**2018**
Deferred tax		
In respect of the current year		
Remeasurement of defined benefit plans	$ 1,498	$ (78)

c. Current tax assets and liabilities

	December 31	
	2019	**2018**
Current tax assets		
Tax refund receivable	$ 87	$ 2,983
Current tax liabilities		
Income tax payable	$ -	$ 3,630

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

Deferred Tax Assets	**Opening Balance**	**Recognized in Profit or Loss**	**Recognized in Other Comprehensive Income**	**Closing Balance**
Temporary differences				
Valuation of financial products at FVTPL	$ 26,200	$ (11,927)	$ -	$ 14,273
Unrealized loss on foreign exchange	-	1,102	-	1,102
Net defined benefit pension plan	6,094	(638)	1,082	6,538
Other	5,600	441	-	6,041
	$ 37,894	$ (11,022)	$ 1,082	$ 27,954

Deferred Tax Liabilities	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Temporary differences				
Unrealized loss on foreign exchange	$ 1,129	$ (1,129)	$ -	$ -
Net defined benefit pension plan	416	3	(416)	3
Investment properties	6,404	425	-	6,829
	$ 7,949	$ (701)	$ (416)	$ 6,832

For the year ended December 31, 2018

Deferred Tax Assets	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Temporary differences				
Valuation of financial products at FVTPL	$ -	$ 26,200	$ -	$ 26,200
Unrealized loss on foreign exchange	1,247	(1,247)	-	-
Net defined benefit pension plan	4,163	2,035	(104)	6,094
Other	-	5,600	-	5,600
	$ 5,410	$ 32,588	$ (104)	$ 37,894

Deferred Tax Liabilities	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Temporary differences				
Valuation of financial products at FVTPL	$ 10,463	$ (10,463)	$ -	$ -
Unrealized loss on foreign exchange	-	1,129	-	1,129
Net defined benefit pension plan	376	66	(26)	416
Investment properties	6,179	225	-	6,404
	$ 17,018	$ (9,043)	$ (26)	$ 7,949

e. Income tax assessments

The income tax returns of the Company and its subsidiary Cathay Futures Co., Ltd. through 2014 and 2017, respectively, have been assessed by the tax authorities.

The Company disagreed with the tax authorities' assessment of the 2011 to 2014 tax returns with respect to the portion allocated to operating expenses and applied for administrative remedy in accordance with the law and regulations.

25. EARNINGS PER SHARE

Unit: NT$

	For the Year Ended December 31	
	2019	**2018**
Basic earnings per share	$ 1.17	$ 0.77

The earnings per share computation was adjusted retrospectively for the issuance of bonus shares on August 7, 2019. The basic earnings per share adjusted retrospectively for the year ended December 31, 2018 were as follows:

Unit: NT$ Per Share

	Before Retrospective Adjustment	**After Retrospective Adjustment**
Basic earnings per share	$ 0.81	$ 0.77

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

Net Profit for the Year

	For the Year Ended December 31	
	2019	**2018**
Profit for the year attributable to owners of the Company	$ 700,070	$ 461,351

Number of Shares (In Thousands of Shares)

	For the Year Ended December 31	
	2019	**2018**
Weighted average number of ordinary shares used in the computation of basic earnings per share	600,000	600,000

26. CASH FLOW INFORMATION

Changes in Liabilities Arising from Financing Activities

For the year ended December 31, 2019

Financial Liabilities	Opening Balance	Cash Flows	Non-cash Changes: Discount Amortization /Interest Method Amortization	Non-cash Changes: Exchange Rate/Others	Closing Balance
Short-term borrowings	$ 336,381	$ 1,911,436	$ -	$ (46,453)	$ 2,201,364
Commercial papers payable	3,729,367	1,810,000	(522)	-	5,538,845
Lease liabilities (note 3)	178,934	(82,820)	3,063	27,493	126,670
	$ 4,244,682	$ 3,638,616	$ 2,541	$ (18,960)	$ 7,866,879

For the year ended December 31, 2018

Financial Liabilities	Opening Balance	Cash Flows	Non-cash Changes: Discount Amortization /Interest Method Amortization	Non-cash Changes: Exchange Rate/Others	Closing Balance
Short-term borrowings	$ 441,199	$ (116,829)	$ -	$ 12,011	$ 336,381
Commercial papers payable	8,528,158	(4,800,000)	1,209	-	3,729,367
	$ 8,969,357	$ (4,916,829)	$ 1,209	$ 12,011	$ 4,065,748

27. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance. The Group’s overall strategy remains unchanged.

The capital structure of the Group consists of the Group’s net debt and equity. The Group’s risk management committee regularly reviews the capital structure. As part of this review, the committee considers the cost of capital and the risks associated with each class of capital. The Company establishes the capital adequacy index and compiles the report on a monthly basis to evaluate the appropriateness of the capital adequacy ratio and to ensure a robust capital structure.

The capital adequacy ratio at end of the reporting period was as follows:

	December 31, 2019	December 31, 2018
Capital adequacy ratio	449%	377%

28. FINANCIAL INSTRUMENTS

a. Fair value information - fair value of financial instruments not measured at fair value

The management of the Group considered the carrying amounts of the financial assets and financial liabilities which were not measured at fair value as close to their fair value.

b. Fair value information - fair value of financial instruments measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2019

Financial Instruments at Fair Value	Level 1	Level 2	Level 3	Total
Non-derivative financial assets and liabilities				
Assets				
Financial assets at FVTPL				
Shares	$ 6,202,617	$ -	$ -	$ 6,202,617
Bonds	2,488,915	-	-	2,488,915
Others	410,429	-	-	410,429
Financial assets at FVTOCI				
Investments in equity instruments	-	-	537,965	537,965
Investments in debt instruments	2,065,100	-	-	2,065,100
Liabilities				
Financial liabilities at FVTPL	2,510,119	-	-	2,510,119
Derivative financial assets and liabilities				
Assets				
Financial assets at FVTPL	1,157,743	67,448	-	1,225,191
Liabilities				
Financial liabilities at FVTPL	438,482	12,943	-	451,425

December 31, 2018

Financial Instruments at Fair Value	Level 1	Level 2	Level 3	Total
Non-derivative financial assets and liabilities				
Assets				
Financial assets at FVTPL				
Shares	$ 2,649,674	$ -	$ -	$ 2,649,674
Bonds	1,680,038	-	-	1,680,038
Others	298,346	-	-	298,346

(Continued)

Financial Instruments at Fair Value	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Investments in equity instruments	$ -	$ -	$ 326,536	$ 326,536
Investments in debt instruments	3,379,521	-	-	3,379,521
Liabilities				
Financial liabilities at FVTPL	2,521,778	-	-	2,521,778
Derivative financial assets and liabilities				
Assets				
Financial assets at FVTPL	459,262	-	-	459,262
Liabilities				
Financial liabilities at FVTPL	189,577	949	-	190,526

(Concluded)

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

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

For the year ended December 31, 2019

Financial Assets	Financial Assets at FVTOCI Equity Instruments
Balance at January 1	$ 326,536
Recognized in other comprehensive income	211,429
Balance at December 31	$ 537,965

For the year ended December 31, 2018

Financial Assets	Financial Assets at FVTOCI Equity Instruments
Balance at January 1	$ 328,254
Recognized in other comprehensive income	(1,718)
Balance at December 31	$ 326,536

3) Valuation techniques and inputs applied for Level 2 fair value measurement

Financial Instrument	Valuation Technique and Inputs
Derivatives - warrants	Closed form solution valuation model: Formula valuation is derived using academic theory based on the observable prices and contract terms of the underlying assets, to reasonably reflect the value of cash flows generated from the dynamic hedging carried out from such contracts.
Derivatives - convertible bonds asset swap-options	The bond value is calculated based on the deal exercise rate at the beginning of the year, and the embedded option value is subsequently derived by the market closing rate of convertible bonds.
Derivatives - structured instruments	Closed form solution valuation/Monte Carlo method model: Formula valuation is derived using academic theory based on the observable prices and contract terms of the underlying assets and the cost of internal capital adjustments and hedging.

4) Valuation techniques and inputs applied for Level 3 fair value measurement

Quantitative data of significant unobservable inputs is as follows:

Item Measured at Fair Value on A Recurring Basis	Fair Value on December 31, 2019	Valuation Techniques	Significant Unobservable Inputs	Intervals (Weighted Average)	Relationship Between Inputs and Fair Value	Sensitivity Analysis of Relationship Between Inputs and Fair Value
Non-derivative financial instruments						
Equity instruments at FVTOCI	$ 537,965	Market comparison approach	Discount for lack of marketability	15%-20%	The higher the market approach, the lower the fair value.	Discount for lack of marketability (3%)-3%, Floating rate of fair value 3.67%-(3.67%)

Item Measured at Fair Value on A Recurring Basis	Fair Value on December 31, 2018	Valuation Techniques	Significant Unobservable Inputs	Intervals (Weighted Average)	Relationship Between Inputs and Fair Value	Sensitivity Analysis of Relationship Between Inputs and Fair Value
Non-derivative financial instruments						
Equity instruments at FVTOCI	$ 326,536	Market comparison approach	Discount for lack of marketability	15%-20%	The higher the market approach, the lower the fair value.	Discount for lack of marketability (3%)-3%, Floating rate of fair value 3.67%-(3.67%)

c. Categories of financial instruments

	December 31	
	2019	**2018**
Financial assets		
FVTPL		
Mandatorily classified as at FVTPL (1)	$ 10,327,152	$ 5,087,320
Financial assets at amortized cost (2)	22,059,570	19,983,345
Financial assets at FVTOCI		
Debt instruments	2,065,100	3,379,521
Equity instruments	537,965	326,536
Financial liabilities		
Financial liabilities at amortized cost (3)	24,357,817	19,228,950
Financial assets at FVTOCI		
Held for trading	2,961,544	2,712,304
Other financial liabilities	67,179	105,870

1) The balances include securities lent, open-end funds and currency market instruments, securities held for operations, net, long option - futures, futures trading margin - securities, futures trading margin - own funds, assets of derivative instruments assets - OTC.

2) The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents (excludes cash on hand), securities margin loans receivable, guaranteed deposits for refinancing, guaranteed proceeds receivable from refinancing, margin loans receivable - any use, client margin account, security borrowing deposits, guaranteed price deposits for security borrowings, accounts receivable, restricted assets - current, operating funds, settlement funds, reserve fund of trust, refundable deposits, restricted assets - noncurrent.

3) The balances include financial liabilities measured at amortized cost, which comprise short-term loans, commercial papers payable, liabilities for bonds under repurchase agreements, short sale margins, payables for short sale collateral received, deposits for securities lent, futures traders' equity, equity for each customer in the account, accounts payable, guarantee deposits received.

d. Financial risk management objectives and policies

1) Risk management system

a) Risk management objectives

Adhering to the risk management policies of the parent company, the Group 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

The company 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 the Group 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, the Group should identify the relevant risks and have an integrated plan 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 heads 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 the 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 the Group.

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 regularly 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 on a regular basis.

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 on a monthly basis.

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 the Group include 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 the Group' investment positions, including shares, bonds, and derivatives etc. arising from changes in the market prices of financial instruments.

ii) Controls

The Group sets 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 implements those control procedures efficiently through the front desk risk control staff and on-line monitoring system. Furthermore, the Group provides 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 for different extreme scenarios to control the risks that the Group faces and manages the overall risk efficiently.

ii. Credit risk

i) Definition

Credit risk is the risk of loss incurred by the Group 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

The Group checks and reviews the credit position of each counterparty before trading and manages 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 parent 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

The Group establishes authority levels and the segregation of duties for the processes, including trading, confirmation, settlement, financial accounting, and trading documents archiving for future reference, etc., 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. The Group 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 on a regular basis to reduce the loss arising from operational failures.

iv. Liquidity risk

i) Definition

Fund liquidity refers to the Group' 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 the Group 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 for drafting and reviewing legal documentation are established. All 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

The Group manages capital to maintain an appropriate capital adequacy ratio, promote business growth and ensure a robust capital structure.

ii) Controls

The Group 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 the Group' operations, leading to the loss of customers or revenue, and the need for the Group 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, the Group established 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. The Group also established the constraints for each risk and reviews 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 the Group' 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 the Company 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.

The Group 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

The Group assesses, monitors, and manages 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 the Group. 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 change volatility 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. The Group 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	$ 21,893	$ 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

The Group performs stress testing on a monthly basis to assess the degree of impact on the asset portfolio arising from foreign and domestic significant events and finds 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 the Group 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

The Group assesses 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 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. Hypothetical Scenario

The Group makes reasonable expected hypotheses on possible future extreme market fluctuations, includes the related risk factors in the current investment portfolio, and measures 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

(In Thousands of New Taiwan Dollars)

Risk Factor	Change (+/-)	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

(In Thousands of New Taiwan Dollars)

Risk Factor	Change (+/-)	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 the Group 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 the Group 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 the Group 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 the Group may encounter when the credit quality of the target financial instrument deteriorates, credit charges increase, credit rating reduces or when the terms of the contracts are violated.

Financial assets that expose the Group to credit risk include bank accounts, debt securities, trading of over-the-counter derivatives, repurchase and reverse repurchase 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. The Group assesses, 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, the Group 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. 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 the Group 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 factors: 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 the 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 the Group, 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, the Group measures the loss allowance for such 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, the Group measures the loss allowance for such financial instruments at an amount equal to the lifetime expected credit losses.

To measure expected credit losses, the Group 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. The Group 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. The loss given default is the loss rate that results from the default of issuers, guarantee agencies and borrowers. The loss given default used by the Group in impairment assessment is based on information regularly issued by Moody's. The 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. The exposure at default is measured at the amortized cost and interest receivables of the financial assets.

ii. Consideration of forward-looking information

The Group takes into consideration forward-looking information while measuring expected credit losses of the financial assets.

e) Loss allowance of accounts receivable

The movements of the loss allowance of accounts receivable were as follows:

	Debt Instrument Investments	Accounts Receivable	Other Receivables	Overdue Receivables	Margin Deposits for Securities Refinancing	Securities Margin Loans Receivable	Total
Balance at January 1, 2019	$ 1,020	$ 88	$ 12	$ 95,047	$ 132	$ 7	$ 96,306
Recognized (reversed)	(168)	8	5	(54)	34	9	(166)
Balance at December 31, 2019	$ 852	$ 96	$ 17	$ 94,993	$ 166	$ 16	$ 96,140
Balance at January 1, 2018	$ 743	$ 69	$ 9	$ 93,966	$ 186	$ -	$ 94,973
Recognized (reversed)	277	19	3	1,081	(54)	7	1,333
Balance at December 31, 2018	$ 1,020	$ 88	$ 12	$ 95,047	$ 132	$ 7	$ 96,306

4) Capital liquidity risk analysis:

Bank loans are an important source of liquidity for the Group. As of December 31, 2019 and 2018, the unused credits of short-term bank loans of the Group amounted to $7,100,772 thousand and $9,910,801 thousand, respectively.

a) Cash flow analysis

Capital liquidity risk is the risk that the Group is 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 the Group sells assets at a loss to meet the cash flow requirements.

As of December 31, 2019
Cash Flow Analysis of Financial Liabilities

	Payment Terms				
Financial liabilities	Less than 1 Month	1-3 Months	3-6 Months	More than 6 Months	Total
Short-term loans	$ 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 under 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 traders' 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
	$ 26,154,457	$ 125,043	$ 379,233	$ 839,322	$ 27,498,055
Percentage to the total	95.11%	0.45%	1.38%	3.06%	100%

Short-term loans, commercial paper payable and liabilities for bonds under repurchase agreements are fund procurement instruments and with maturities within 3 months.

As of December 31, 2019
Cash Flow Gap

Financial assets	Receivable Terms: Less than 1 Month	1-3 Months	3-6 Months	More than 6 Months	Total
Cash and cash equivalents	$ 2,598,923	$ -	$ -	$ -	$ 2,598,923
Financial assets at FVTPL - current					
Securities lent	353,945	-	-	-	353,945
Securities held for operation	8,739,503	-	-	-	8,739,503
Open-end funds and currency market instruments	14,918	-	-	-	14,918
Call option	35,370	-	-	-	35,370
Future trading margins	1,115,968	-	-	-	1,115,968
Derivative instruments assets - OTC	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
Guaranteed deposits for refinancing and guaranteed proceeds receivable from refinancing	2,383	4,766	7,149	28,591	42,889
Guaranteed price deposits for security borrowings	28,112	55,760	83,637	-	167,509
Client margin accounts	7,366,953	-	-	-	7,366,953
Guaranteed price deposits security borrowing and security borrowing deposits - refund	70,653	141,306	211,959	847,838	1,271,756
Accounts receivable	5,582,125	-	-	12,742	5,594,867
Others	365,863	-	-	900,000	1,265,863
	28,592,696	568,392	852,585	3,988,526	34,002,199
Residual cash	$ 2,438,239	$ 443,349	$ 473,352	$ 3,149,204	$ 6,504,144

As of December 31, 2018
Cash Flow Analysis of Financial Liabilities

Financial liabilities	Payment Terms: Less than 1 Month	1-3 Months	3-6 Months	More than 6 Months	Total
Short-term loans	$ 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 under repurchase agreements	3,332,528	-	-	-	3,332,528
Deposits received from securities borrowers and guarantee price deposits received from securities borrowers	42,173	84,346	126,519	506,073	759,111
Deposits for securities borrowed	731	1,462	2,193	8,773	13,159
Futures traders' equity	5,839,564	-	-	-	5,839,564
Equity for each costumer in the account	7,653	-	-	-	7,653
Accounts payable	4,863,717	-	-	345,795	5,209,512
Other financial liabilities	105,870	-	-	-	105,870
Others	44,731	647	-	-	45,378
	$ 21,015,019	$ 86,455	$ 128,712	$ 860,641	$ 22,090,827
Percentage to the total	95.13%	0.39%	0.58%	3.90%	100.00%

Short-term loans, commercial paper payable and liabilities for bonds under repurchase agreements are fund procurement instruments and with maturities within 3 months.

As of December 31, 2018
Cash Flow Gap

	Receivable Terms				
	Less than 1 Month	1-3 Months	3-6 Months	More than 6 Months	Total
Financial assets					
Cash and cash equivalents	$ 3,158,088	$ -	$ -	$ -	$ 3,158,088
Financial assets at FVTPL - current					
Securities held for operation	4,634,086	-	-	-	4,634,086
Call option	19,149	-	-	-	19,149
Future trading margins	433,813	-	-	-	433,813
Derivative instruments assets - OTC	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
Guaranteed deposits for refinancing and guaranteed proceeds receivable from refinancing	1,215	2,430	3,645	14,586	21,876
Guaranteed price deposits for security borrowings	66,890	-	-	-	66,890
Client margin accounts	5,847,830	-	-	-	5,847,830
Guaranteed price deposits security borrowing and security borrowing deposits - refund	102,118	204,236	306,354	1,225,411	1,838,119
Accounts receivable	4,721,054	-	-	25,942	4,746,996
Others	381,826	-	-	900,000	1,281,826
	22,892,562	500,066	750,099	3,926,344	28,069,071
Residual cash	$ 1,877,543	$ 413,611	$ 621,387	$ 3,065,703	$ 5,978,244

b) Capital liquidity risk stress testing

The Group performs stress testing regularly to measure and evaluate the changes of capital liquidity under extreme and abnormal events to ensure that the Group maintains 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 the Group's ability 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. The Group raises funds and makes 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.

e. Transfers of financial assets

Transferred financial assets that are part of the Group' 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 the Group is obligated to buy back the transferred financial assets according to fixed prices in future periods. With respect to such transactions, the Group will not be able to use, sell or pledge the said transferred financial assets during the effective period. However, the Group is still exposed to interest rate risk and credit risk, hence the assets are not fully derecognized.

The following table analyses the Group' 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
Financial assets at fair value through other comprehensive income					
Bonds issued under repurchase agreements	$ 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
Financial assets at fair value through other comprehensive income					
Bonds issued under repurchase agreements	$ 3,379,521	$ 3,332,528	$ 3,379,521	$ 3,332,528	$ 46,993

f. Offsetting financial assets and financial liabilities

The Group enters into secured repurchase agreements with counterparties, for which the Group provides securities as collateral. Only in the event of default, insolvency or bankruptcy, are these transactions 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 the offsetting of financial assets and financial liabilities of the Group 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	Related Amount Not Offset in the Balance Sheets		Net Amount
				Financial Instruments (Note)	Cash Collateral Received	
Bonds issued under repurchase agreements	$ 2,098,081	$ -	$ 2,098,081	$ 2,065,100	$ -	$ 32,981

Note: Master netting arrangement 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	Related Amount Not Offset in the Balance Sheets		Net Amount
				Financial Instruments (Note)	Cash Collateral Received	
Bonds issued under repurchase agreements	$ 3,332,528	$ -	$ 3,332,528	$ 3,379,521	$ -	$ (46,993)

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

29. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Company and its subsidiaries have been eliminated on consolidation and are not disclosed in this note. The details of transactions between the Group and other related parties are disclosed below.

a. Related parties

Name	Nature of the relationship
Cathay Financial Holding Co., Ltd.	The Company's parent company
Cathay United Bank Co., Ltd.	Subsidiary of the parent company
Cathy Life Insurance Co., Ltd.	Subsidiary of the parent company
Cathay Century Insurance Co., Ltd.	Subsidiary of the parent company
Cathay Securities Investment Trust Co., Ltd.	Subsidiary of the parent company
Symphox Information Co., Ltd.	Associate
Cathay FTSE China A50 Daily Leveraged 2X ETF	Other related party (Note)
Cathay FTSE China A50 Daily Inversed ETF	Other related party (Note)
Cathay FTSE Japan Daily Leveraged 2X ETF	Other related party (Note)
Cathay FTSE Japan Daily Inversed ETF	Other related party (Note)

Note: Investment trust funds managed by Cathay Securities Investment Trust Co., Ltd.

b. Significant transactions above $3,000 thousand are summarized as follows:

1) Cash in banks

	December 31	
	2019	2018
Subsidiary of the parent company		
Cathay United Bank Co., Ltd.	$ 2,399,307	$ 3,836,853

Cash in bank include cash and cash equivalents, payments from the custody of underwriting securities recorded under other current assets, amounts awaiting settlement, and restricted assets. Restricted assets are pledged time deposits. For information on the assets pledged as collateral, please refer to Note 30. The terms of the above transactions are similar to that of non-related parties.

2) Financial assets at fair value through profit and loss

	December 31	
	2019	2018
Other related party		
Cathay FTSE China A50 Daily Inversed ETF	$ 33,199	$ 53,615
Cathay FTSE China A50 Daily Leveraged 2X ETF	21,593	30,956
Cathay FTSE Japan Daily Leveraged 2X ETF	-	87,755
Cathay FTSE Japan Daily Inversed ETF	-	70,113
	$ 54,792	$ 242,439

3) Guarantee deposits received in futures contracts

	December 31	
	2019	2018
Subsidiary of the parent company		
Cathay United Bank Co., Ltd.	$ 1,064,570	$ 910,355

4) Guarantee deposits (recorded as other noncurrent assets)

	December 31	
	2019	2018
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	$ 12,451	$ 10,985

5) Customers' equity accounts - futures

	December 31	
	2019	2018
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	$ 3,078,757	$ 1,511,584
Cathay Securities Investment Trust Co., Ltd.(Note)	1,218,446	994,480
Cathay United Bank Co., Ltd.	508,694	78,095
Others	21,836	21,825
	$ 4,827,733	$ 2,605,984

Note: The counter party includes the investment trust fund managed by Cathay Securities Investment Trust.

6) Lease agreements

	For the Year Ended December 31	
	2019	2018
Acquisition of right-of-use assets		
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	$ 20,624	$ -

	December 31	
	2019	2018
Lease liabilities		
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	$ 78,915	$ -
Cathay United Bank Co., Ltd.	9,685	-
	$ 88,600	$ -

	For the Year Ended December 31	
	2019	2018
Lease expenses		
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	$ -	$ 45,615
Cathay United Bank Co., Ltd.	-	9,679
	$ -	$ 55,294

The rents on the above rental properties were comparable with those in the surrounding area and were payable monthly.

7) Other payables

	December 31	
	2019	2018
The parent company		
Cathay Financial Holding Co., Ltd. (Note)	$ 74,712	$ 24,916
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	27,050	14,012
Cathay United Bank Co., Ltd.	8,065	3,262
Associate		
Symphox Information Co., Ltd.	3,844	999
	$ 113,671	$ 43,189

Note: Income tax payable calculated due to adoption of the consolidated income tax system.

8) Brokerage handling fee revenue

	For the Year Ended December 31	
	2019	2018
Subsidiary of the parent company		
Cathy Life Insurance Co., Ltd.	$ 213,844	$ 152,341
Cathay United Bank Co., Ltd.	9,409	9,413
Cathay Century Insurance Co., Ltd.	4,422	3,316
	$ 227,675	$ 165,070

9) Revenue from the underwriting business

	For the Year Ended December 31	
	2019	2018
The parent company		
Cathay Financial Holding Co., Ltd.	$ 7,300	$ 700

10) Interest revenue

	For the Year Ended December 31	
	2019	2018
Subsidiary of the parent company		
Cathay United Bank Co., Ltd.	$ 12,140	$ 12,036

11) Other operating revenue

	For the Year Ended December 31	
	2019	2018
Subsidiary of the parent company		
Cathay Securities Investment Trust Co., Ltd.	$ 6,372	$ 6,905

12) Other operating expenses

	For the Year Ended December 31	
	2019	2018
Associate		
Symphox Information Co., Ltd.	$ 16,488	$ 18,836
Subsidiary of the parent company		
Cathay United Bank Co., Ltd.	80,628	67,593
Cathy Life Insurance Co., Ltd.	42,655	34,123
	$ 139,771	$ 120,552

The above-mentioned operating expenses are mainly cable services, joint marketing fees, and insurance fees, etc., and the terms of these transactions are the same as those of non-related parties.

13) Other non-operating income and expenses

	For the Year Ended December 31	
	2019	2018
Subsidiary of the parent company		
Cathay United Bank Co., Ltd.	$ 1,975	$ 3,335

c. Compensation of key management personnel

	For the Year Ended December 31	
	2019	2018
Short-term employee benefits	$ 143,661	$ 91,513
Post-employment benefits	1,747	1,466
Share-based payments	567	-
	$ 145,975	$ 92,979

The key management personnel of the Company include the chairman, director, supervisor, general manager, senior vice general manager and vice general manager.

30. PLEDGED OR MORTGAGED ASSETS

The following assets are pledged to deposits for securities borrowing, futures trading margin settling, deposits for securities settling, short-term loan, and application for security of provisional attachments:

	December 31	
	2019	2018
Financial assets at fair value through profit or loss - current		
Securities held for operations - dealing	$ 700,698	$ 1,179,454
Futures trading margins - securities	489,361	-
Restricted assets - current (recorded as other current assets)	900,000	900,000
Investment properties		
Land	258,218	256,813
Building	35,123	33,528
Restricted assets - noncurrent (recorded as other non-current assets)	21,200	21,200

31. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Group’s significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies of the entities in the Group and the related exchange rates between the foreign currencies and the respective functional currencies were as follows:

(Foreign Currencies and carrying Amounts in Thousands)

December 31, 2019

	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 97,098	30.106	$ 2,923,220
Financial liabilities			
Monetary items			
USD	85,338	30.106	2,569,184

December 31, 2018

	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 116,586	30.733	$ 3,583,038
Financial liabilities			
Monetary items			
USD	109,848	30.733	3,375,959

For the years ended December 31, 2019 and 2018, net foreign exchange losses were $9,991 thousand and $4,725 thousand, respectively. It is impractical to disclose net foreign exchange gains (losses) by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the entities in the Group.

32. ADDITIONAL DISCLOSURES

a. The significant transactions and b. the related information of investees:

1) Financing provided to others: None.

2) Endorsements/guarantees provided: None.

3) Acquisition of individual real estates at costs of at least NT$300 million or 20% of the paid-in capital: None.

4) Disposal of individual real estates at prices of at least NT$300 million or 20% of the paid-in capital: None.

5) Total discount of commissions and fees to related parties amounting to at least NT$5 million: None.

6) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital: None.

7) Names, locations, and related information on investees: Table 1.

8) Intercompany relationships and significant intercompany transactions: Table 7.

b. Information on established branch units or representative offices overseas: None.

c. Information on investments in mainland China: Table 8.

d. According to Rule No. 10703209011 issued by the FSC, the business operations of foreign investment enterprises should be disclosed: Table 2 to Table 6.

33. SEGMENTS INFORMATION

Information reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance focuses on the types of goods or services delivered or provided. The Group's operating segments for 2019 and 2018 are as follows:

Securities brokerage: Buying and selling of securities on behalf of others on a centralized securities exchange market.

Securities dealing: Buying and selling of securities for own account on a centralized securities exchange market.

Securities underwriting: Raising of funds and delivering securities in the market.

Other segments: Other business activities other than securities brokers, securities dealers, and securities underwriters.

Segment revenue and results

	Securities Brokerage	Securities Underwriting	Securities Dealing	Other Segments	Total
For the year ended December 31, 2019					
Revenue					
Revenue from external customers	$ 2,600,774	$ 42,770	$ 941,012	$ 336	$ 3,584,892
Interest revenue	157,872	-	45,036	-	202,908
	2,758,646	42,770	986,048	336	3,787,800
Expenses					
Interest expense	16,961	-	32,129	36,364	85,454
Depreciation and amortization	92,270	2,422	13,297	62,318	170,307
Operating expenses and other expenses	1,734,813	84,393	613,061	395,151	2,827,418
	1,844,044	86,815	658,487	493,833	3,083,179

(Continued)

	Securities Brokerage	Securities Underwriting	Securities Dealing	Other Segments	Total
Share of profit of associates and joint ventures accounted for using the equity method	$ -	$ -	$ -	$ (737)	$ (737)
Other gains and losses	100,373	-	2,368	8,241	110,982
Profit before tax	1,014,975	(44,045)	329,929	(485,993)	814,866
Income tax expense	-	-	-	114,791	114,791
Segment profit (loss)	$ 1,014,975	$ (44,045)	$ 329,929	$ (600,784)	$ 700,075
For the year ended December 31, 2018					
Revenue					
Revenue from external customers	$ 2,035,157	$ 81,262	$ 1,071,198	$ -	$ 3,187,617
Interest revenue	213,041	-	38,990	-	252,031
	2,248,198	81,262	1,110,188	-	3,439,648
Expenses					
Interest expense	23,548	-	18,228	42,792	84,568
Depreciation and amortization	56,081	3,215	8,513	37,675	105,484
Operating expenses and other expenses	1,454,337	96,183	814,289	405,567	2,770,376
	1,533,966	99,398	841,030	486,034	2,960,428
Share of profit of associates and joint ventures accounted for using the equity method	-	-	-	(1,498)	(1,498)
Other gains and losses	75,644	-	(146)	16,842	92,340
Profit before tax (continuing operations)	789,876	(18,136)	269,012	(470,690)	570,062
Income tax expense	-	-	-	(108,705)	(108,705)
Segment profit (loss)	$ 789,876	$ (18,136)	$ 269,012	$ (579,395)	$ 461,357

(Concluded)

The Group's operating decision-makers do not use the segment assets and liabilities as the basis for decision-making, hence, only information on segment profit and loss are disclosed.

34. FINANCIAL RATIO RESTRICTIONS AND ITS STATUS OF COMPLIANCE BASED ON THE RELATED FUTURES DEALING REGULATIONS

Futures dealing segment of the Company

In accordance with: "Regulations Governing Futures Commission Merchants"

		December 31					
		2019		2018			
No.	Calculation Formula	Calculation Formula	Ratio	Calculation Formula	Ratio	Standard	Status of compliance
17	Total Equity / (Total liabilities - Futures traders' equity)	$1,340,302 / $85,838	15.61 times	$1,341,635 / $119,009	11.27 times	≧1	In compliance
17	Total Current assets / Total Current liabilities	$2,239,762 / $84,559	26.49 times	$2,208,327 / $118,781	18.59 times	≧1	In compliance
22	Total Equity / Common stock	$1,340,302 / $400,000	335.08%	$1,341,635 / $400,000	335.41%	≧60% ≧40%	In compliance
22	ANC / Total Customer margin accounts after offsetting futures traders' equity	$758,543 / $626,607	121.06%	$1,083,742 / $433,813	249.82%	≧20% ≧15%	In compliance

Cathay Futures Co., Ltd. (the Company's subsidiary)

In accordance with: "Regulations Governing Futures Commission Merchants"

		December 31					
		2019		2018			
No.	Calculation Formula	Calculation Formula	Ratio	Calculation Formula	Ratio	Standard	Status of compliance
17	Total Equity / (Total liabilities - Futures traders' equity)	$1,434,927 / $52,425	27.37 times	$1,207,919 / $51,045	23.66 times	≧1	In compliance
17	Total Current assets / Total Current liabilities	$8,611,192 / $8,235,094	1.05 times	$7,515,226 / $7,159,143	1.05 times	≧1	In compliance
22	Total Equity / Common stock	$1,434,927 / $600,000	239.15%	$1,207,919 / $600,000	201.32%	≧60% ≧40%	In compliance
22	ANC / Total Customer margin accounts after offsetting futures traders' equity	$1,035,112 / $1,324,319	78.16%	$799,657 / $1,434,752	55.73%	≧20% ≧15%	In compliance

35. SPECIFIC RISK FROM FUTURES DEALING AND BROKERAGE

a. Futures dealing

When engaging in futures trading, the Group must pay a certain amount as security deposit. In addition, if the seller's position is held and the Group engages in option trading, a certain percentage of the amount must also be paid as security deposit. The Group calculates daily changes in its margin and premium accounts based on the market settlement price of open futures contracts and option contracts held by the Group. When the margin gradually decreases to the regulated amount due to the market price decline, the Group immediately repays the deposit or reverse write-offs.

b. Futures brokerage

When entering into futures transactions, customers must pay a certain percentage of the transaction amount as margin deposit. Due to the leverage effects of the margin deposits, customers may earn either huge profits or conversely suffer immense losses. To prevent the customers' losses from impacting the Group's financial security, the Group should calculate the changes in the margin deposit and premium accounts based on the market closing prices of the customers' open futures contracts and immediately notify the customer to top up the margin account should the margin deposit fall below a certain amount (the "maintenance margin") due to a gradual decline in market prices. If the customers fail to do so within the allotted time, the Group will close their futures position.

36. TRUST BUSINESS UNDER THE TRUST ENTERPRISE ACT

According to Article 17 of the Trust Enterprise Act, the balance sheets, income statements and trust estate catalogs of trust accounts which should be disclosed were as follows:

a. Balance sheet of trust business

Balance Sheets of Trust Accounts
December 31, 2019 and 2018

	2019	2018
Trust assets		
Bank deposits	$ 74	$ 17
Funds	3,927	909
	$ 4,001	$ 926
Trust liabilities		
Trust capital	$ 3,905	$ 1,026
Profit (loss) for current year	96	(100)
Accumulated loss	-	-
	$ 4,001	$ 926

b. Income statement of trust accounts

Income Statements of Trust Accounts
Years Ended December 31, 2019 and 2018

	2019	2018
Trust income		
Dividends	$ 57	$ 17
Investment income - realized	16	-
Investment income - unrealized	45	-
Investment loss - unrealized	(22)	(117)
Income before income tax	96	(100)
Income tax expense	-	-
Net income (loss) after tax	$ 96	$ (100)

c. Trust estate catalog

Trust Estate Catalog of Trust Accounts
December 31, 2019 and 2018

Investment Portfolio	2019	2018
Bank deposits	$ 74	$ 17
Funds	3,927	909
	$ 4,001	$ 926

The Company is entrusted to manage and use the trust funds, independently setting up accounts and preparing the financial statements. The trust assets and the profit or loss of such assets are not included in the Company's consolidated statements of comprehensive income.

TABLE 1

CATHAY SECURITIES CORPORATION AND SUBSIDIARIES

NAMES, LOCATIONS, AND RELATED INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Investor Company	Investee Company	Location	Date of Incorporation	Approval Date of Financial Supervisory Commission and Ref. No.	Main Businesses and Products	Original Investment Amount		As of December 31, 2019			Operating Revenues (Loss) of the Investee	Net Income (Loss) of the Investee	Share of Profit (Loss)	Cash Dividends	Note
						December 31, 2019	December 31, 2018	Number of Shares (In Thousands)	Proportion	Carrying Amount					
Cathay Securities Corporation	Cathay Futures Co., Ltd.	19th Floor, No. 333, Section 2, Dunha South Road, Da'an South Road, Da'an District, Taipei city, Taiwan R.O.C.	December 29, 1993	N/A	Futures related business	$ 710,406	$ 710,406	66,694	99.99%	$ 1,434,793	$ 284,517	$ 56,031	$ 56,026	$ 41,708	Subsidiary
	Cathay Securities (Hong Kong) Corporation Limited	Room 1001, 10th Floor, China Building 29 Queen's Road Central, Hong Kong	March 22, 2007	Rule No. 1040009705, issued by the FSC	Securities agent related business	902,723	902,723	270	100.00%	639,932	101,414	(46,497)	(46,497)	-	Subsidiary

Note: All intercompany transactions have been eliminated upon consolidation.

TABLE 2

CATHAY INVESTMENT CONSULTING (SHANGHAI) CO., LTD.

BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(In CNY Dollars)

	2019 (Note)		2018	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents	$ -	-	$ 2,091,081	100
Prepayments	-	-	-	-
Total current assets	-	-	2,091,081	100
NON-CURRENT ASSETS				
Intangible assets	-	-	-	-
TOTAL	$ -	-	$ 2,091,081	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Other payables	$ -	-	$ 15,000	1
Total liabilities	-	-	15,000	1
EQUITY				
Capital stock	-	-	8,000,000	383
Capital surplus	-	-	4,205	-
Accumulated deficit	-	-	(5,928,124)	(284)
Total equity	-	-	2,076,081	99
TOTAL	$ -	-	$ 2,091,081	100

Note: The board of directors of Cathay Investment Consulting (Shanghai) Co., Ltd. resolved to dissolve the company on November 7, 2017, and obtained approval from the FSC based on letter No. 1060046018 on November 29, 2017, and completed the cancellation procedures on February 26, 2019.

TABLE 3

CATHAY INVESTMENT CONSULTING (SHANGHAI) CO., LTD.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2018 AND
PERIOD FROM JANUARY 1, 2019 TO FEBRUARY 26, 2019
(In CNY Dollars)

	2019 (Note)		2018	
	Amount	**%**	**Amount**	**%**
OPERATING REVENUE	$ -	-	$ (1,984)	(100)
OPERATING EXPENSES	(188,465)	-	(250,582)	(12,630)
OPERATING LOSS	(188,465)	-	(252,566)	(12,730)
NON-OPERATING INCOME AND EXPENSES	-	-	(119,074)	(6,002)
NET LOSS BEFORE TAX	(188,465)	-	(371,640)	(18,732)
INCOME TAX EXPENSE	-	-	-	-
NET LOSS FOR THE YEAR	(188,465)	-	(371,640)	(18,732)
OTHER COMPREHENSIVE LOSS (NET LOSS AFTER TAX)	-	-	-	-
TOTAL COMPREHENSIVE LOSS FOR THE YEAR	$ (188,465)	-	$ (371,640)	(18,732)

Note: The board of directors of Cathay Investment Consulting (Shanghai) Co., Ltd. resolved to dissolve the company on November 7, 2017, and obtained approval from the FSC based on letter No. 1060046018 on November 29, 2017, and completed the cancellation procedures on February 26, 2019.

CATHAY SECURITIES CORPORATION AND SUBSIDIARIES

SECURITIES HELD
DECEMBER 31, 2019
(In H.K. Dollars, Unless Stated Otherwise)

Holding Company Name	Name and Type of Marketable Securities	Financial Statement Account	December 31, 2019				Note
			Number of Shares	Carrying Value	Percentage of Ownership (%)	Fair Value	
Cathay Securities (Hong Kong) Corporation Limited	Foreign bonds						
	MASQUH 4 11/15/24	Financial assets at fair value through profit or loss	58,070,000	$ 64,742,131		$ 64,609,350	-
	MASQH3 3/4 11/15/24	Financial assets at fair value through profit or loss	41,220,000	45,443,917		45,517,020	-
	JXWCIG 304 12/05/22	Financial assets at fair value through profit or loss	30,000,000	232,735,320		232,852,157	-
	Others		11,010,000	19,601,369		19,894,992	Note
				362,522,737		$ 362,873,519	
	Valuation adjustments			350,782			
	Net balance			$ 362,873,519			

Note: The balance of each item under “others” does not exceed 5% of the total.

TABLE 5

CATHAY SECURITIES (HONG KONG) LIMITED

BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(In H.K. Dollars)

	2019		2018	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents	$ 180,761,853	26	$ 161,406,916	45
Pending settlement cash	53,303,465	8	48,724,503	14
Financial assets at fair value through profit or loss	362,873,519	52	85,417,726	24
Securities margin loans receivable	563,426	-	593,972	-
Trade and other receivables	77,840,879	11	45,950,294	13
Deposits and prepayments	737,113	-	756,760	-
Total current assets	676,080,255	97	342,850,171	96
NON-CURRENT ASSETS				
Property and equipment	2,887,189	-	4,577,623	1
Right-of-use assets	5,707,252	1	-	-
Intangible assets	497,800	-	497,800	-
Statutory deposits	15,509,169	2	9,050,568	3
Total non-current assets	24,601,410	3	14,125,991	4
TOTAL	$ 700,681,665	100	$ 356,976,162	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans	$ 400,985,645	57	$ 86,450,913	24
Trade and other payables	125,477,795	18	90,700,901	25
Accruals	836,821	-	478,260	-
Lease liabilities - current	4,094,042	1	-	-
Total current liabilities	531,394,303	76	177,630,074	49
NON-CURRENT LIABILITIES				
Lease liabilities - non-current	1,721,887	-	-	-
Total liabilities	533,116,190	76	177,630,074	49
EQUITY				
Share capital	270,000,000	39	270,000,000	76
Accumulated losses	(102,434,525)	(15)	(90,653,912)	(25)
Total equity	167,565,475	24	179,346,088	51
TOTAL	$ 700,681,665	100	$ 356,976,162	100

TABLE 6

CATHAY SECURITIES (HONG KONG) LIMITED

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In H.K. Dollars)

	2019		2018	
	Amount	**%**	**Amount**	**%**
REVENUE AND EXPENSE				
Brokerage fee revenue	$ 19,622,384	76	$ 16,889,377	91
Net gains from sale of securities held for operations	1,945,084	8	1,531,679	8
Interest revenue	3,706,136	14	2,138,120	12
Dividend income	-	-	18,350	-
Net (losses) gains from securities held for operations at fair value through profit or loss	209,189	1	(358,447)	(2)
Net gains from derivative financial instruments - futures	-	-	380,199	2
Other operating income	211,666	1	(2,077,004)	(11)
Total revenues	25,694,459	100	18,522,274	100
Broker handling fees	(802,553)	(3)	(999,156)	(5)
Dealer handling fees	(23)	-	(47,487)	-
Finance costs	(5,168,059)	(20)	(4,209,504)	(23)
Employee benefits expenses	(12,026,435)	(47)	(11,012,659)	(59)
Depreciation and amortization expenses	(5,893,881)	(23)	(1,635,637)	(9)
Other operating expenses	(15,232,093)	(59)	(19,424,591)	(105)
Total expenses	(39,123,044)	(152)	(37,329,034)	(201)
OPERATING LOSS	(13,428,585)	(52)	(18,806,760)	(101)
NON-OPERATING INCOME AND EXPENSES	1,647,972	6	936,810	6
NET LOSS BEFORE TAX	(11,780,613)	(46)	(17,869,950)	(95)
INCOME TAX EXPENSE	-	-	-	-
NET LOSS	(11,780,613)	(46)	(17,869,950)	(95)
TOTAL OTHER COMPREHENSIVE INCOME (LOSSES), NET OF TAX	-	-	-	-
TOTAL COMPREHENSIVE LOSS	$ (11,780,613)	(46)	$ (17,869,950)	(95)

CATHAY SECURITIES CORPORATION 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 2)	Transaction Details			
				Financial Statement Accounts	Amount	Payment Terms	% of Total Operating Revenue or Assets
0	Cathay Securities Corporation	Cathay Futures Co., Ltd.	a	Financial assets at fair value through profit or loss - current	$ 833,206	Note 4	2.30
		Cathay Futures Co., Ltd.	a	Other receivables	6,232	Note 4	0.02
		Cathay Futures Co., Ltd.	a	Other payables	3,693	Note 4	0.01
		Cathay Futures Co., Ltd.	a	Other non-operating income	8,753	Note 4	0.23
		Cathay Futures Co., Ltd.	a	Futures commission income	28,495	Note 4	0.75
		Cathay Futures Co., Ltd.	a	Clearing and settlement service fee expenses	3,739	Note 4	0.10
		Cathay Futures Co., Ltd.	a	Other operating expenses	60,259	Note 4	1.59
		Cathay Securities (Hong Kong) Corporation Limited	a	Other non-operating income	4,039	Note 4	0.11
		Cathay Securities (Hong Kong) Corporation Limited	a	Brokerage fee revenue	19,849	Note 4	0.52

Note 1: Parent company is numbered 0; subsidiaries are sequentially numbered starting from 1.

Note 2: Categories of relationships:

a. Parent to subsidiary.
b. Subsidiary to parent.
c. Between subsidiaries.

Note 3: Percentage of transaction amount to total consolidated operating revenue and assets is calculated as follows:

For balance sheet accounts: Transaction amount ÷ Total consolidated assets
For income statement accounts: Accumulated transaction amount in current period ÷ Total consolidated operating revenues.

Note 4: Terms and conditions of related party transactions are made on arm’s length basis. There is no difference in the terms and conditions between related party and non-related party transactions.

Note 5: All intercompany transactions have been eliminated upon consolidation.

Note 6: The table discloses transactions over $3,000 thousand.

CATHAY SECURITIES CORPORATION 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	Principal Business Activities	Paid-in Capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2019	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2019	% Ownership of Direct or Indirect Investment	Investment Gain (Loss) (Note 1)	Carrying Amount as of December 31, 2019	Accumulated Repatriation of Investment Income as of December 31, 2019
					Outflow	Inflow					
Cathay Investment Consulting (Shanghai) Co., Ltd. (Note 2)	Investment advisory services	$ 38,965	Direct investment in China	$ 38,965	$ -	$ 9,329	$ 29,636	100	$ (737)	$ -	$ -

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2019	Investment Amount Authorized by the Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by the Investment Commission, MOEA
$29,636 (US$998 thousand)	$38,965 (US$1,301 thousand)	$5,170,070

Note 1: Calculated based on the unaudited financial statements for the period.

Note 2: Cathay Investment Consulting (Shanghai) Co., Ltd. was liquidated on February 26, 2019.