TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS AND REPORT OF INDEPENDENT ACCOUNTANTS
DECEMBER 31, 2018 AND 2017

For the convenience of readers and for information purpose only, the auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. In the event of any discrepancy between the English version and the original Chinese version or any differences in the interpretation of the two versions, the Chinese-language auditors' report and financial statements shall prevail.

REPORT OF INDEPENDENT ACCOUNTANTS TRANSLATED FROM CHINESE

To the Board of Directors and Stockholders of Taiwan Stock Exchange Corporation

Opinion

We have audited the accompanying consolidated balance sheets of Taiwan Stock Exchange Corporation and its subsidiaries ("the Company and its subsidiaries") as at December 31, 2018 and 2017, and the related consolidated statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the reports of other independent accountants (refer to *Other matter* section of our report), the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as at December 31, 2018 and 2017, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the "Criteria Governing Preparation of Financial Reports by Company-Type Stock Exchanges" and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the Financial Supervisory Commission.

Basis for opinion

We conducted our audits in accordance with the "Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants" and generally accepted auditing standards in the Republic of China (ROC GAAS). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Company and its subsidiaries in accordance with the Code of Professional Ethics for Certified Public Accountants in the Republic of China (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. Based on our audits and the reports of other independent accountants, we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

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

Financial assets - measurement of fair value of unlisted stocks without active market

Description

Refer to Notes 4(8) and 6(3) for accounting policy on and details of unlisted stocks without active market recognized as financial assets at fair value through other comprehensive income, Note 12(3) H and I for accounting estimates and assumption uncertainty in relation to unlisted stocks without active market.

The Company and its subsidiaries invest in stocks in Taiwan Futures Exchange (TAIFEX) and Taipei Financial Center Corp. which are financial instruments without active market, thus, the Company and its subsidiaries obtain the fair value of financial instruments by valuation techniques, and valuation method by using cash dividend discount models and discounted cash flow method.

The fair value of abovementioned Taiwan Futures Exchange's and Taipei Financial Center Corp.'s stock is determined based on estimates involving many assumptions including compound growth rate of dividends, discount rate, discount on liquidity, etc., involves subjective judgement and high uncertainty which affect the measurement of fair value significantly. Thus, we consider the measurement of fair value of Taiwan Futures Exchange's and Taipei Financial Center Corp.'s stocks a key audit matter.

How our audit addressed the matter

Our audit procedures on the above key audit matter included assessing appropriateness of significant assumptions on compound growth rate of dividends, discount rate and discount on liquidity, etc. by:

- 1. Comparing compound growth rate of dividends with historical data.
- 2. For discount rate, checking cost assumptions on cash-generating units, and comparing with similar return on assets ratio in the market.
- 3. Assessing the reasonableness of discount on liquidity.
- 4. Checking the reasonableness of valuation model parameters and calculation formula.

Accuracy of operating revenue

Description

Refer to Note 4(23) for accounting policy on revenue recognition and Note 6(22) for details of "Trading fees". Operating revenue for the year ended December 31, 2018 amounted to \$11,175,833 thousand. The Company and its subsidiaries have various categories of operating revenue, consisting of trading fee revenue, securities listing fee revenue, securities settlement and account maintenance service fee revenue, securities recording service fees and payment transfer service fee revenue, etc. Each type of revenue is recognized based on the pricing method in accordance with regulations or contracts. As the operating revenue is significant, we consider the accuracy of operating revenue as a key audit matter.

How our audit addressed the matter

Our audit procedures on the above key audit matter included:

- 1. Understanding the the Company and its subsidiaries' operations and industry, evaluating the internal control flow of operating revenue, understanding the information environment management to calculate related revenue, and testing the effectiveness of internal controls.
- 2. Verifying the pricing method used by management to calculate each revenue and ascertaining whether it is in compliance with the related regulations or contracts.
- 3. Recalculating accuracy of amount for critical operating revenue classification.

Existence and classification of cash and cash equivalents, clearing funds and default damages fund

Description

Refer to Note 4(6) for accounting policy on cash equivalents and Notes 6(1)(8)(7) for details of "cash and cash equivalents", "other current financial assets", "settlement and clearing funds" and "default damages fund". Cash and cash equivalents amounted to \$34,960,862 thousand, other current financial assets amounted to \$22,024,072 thousand, settlement and clearing funds amounted to \$3,416,203 thousand and default damages fund amounted to \$11,658,178 thousand as of December 31, 2018.

The Company's and its subsidiaries' cash in bank are deposited mostly in domestic banks, and recognized as cash and cash equivalents or other current financial assets based on deposit period. In accordance with the "Securities and Exchange Act" and "Regulations Governing Securities Firms", securities firms should appropriate certain amount for settlement and clearing funds in the Company and

its subsidiaries. If securities firms default on Settlement Obligations, all price differences and expenses arising from aforementioned defaults, credit the settlement and clearing funds which is appropriated by each securities firm. In addition, the Company and its subsidiaries distribute default damages fund in proportion to trading fee revenue in accordance with Securities and Exchange Act and related regulations, and used all to purchase time deposit.

As the amount of cash and cash equivalents, other current financial assets, settlement and clearing funds and default damages fund were significant, we consider the existence and classification of cash and cash equivalents a key audit matter.

How our audit addressed the matter

Our audit procedures on the above key audit matter included:

- 1. Understanding the internal control workflow, and testing the effectiveness of material internal controls.
- 2. Sending out confirmations to financial institutions, to confirm the existence, accuracy of financial assets, and verifying rights and obligations of the financial assets.
- 3. Checking whether cash in bank which has specific purposes or limitation has been transferred to proper account items.
- 4. Performing counts of time deposit and verifying details against accounting records.
- 5. Performing test of material cash collection transactions to confirm whether it was for operations purpose and determining whether these were any significant unusual transactions.

Other matter

We did not audit the financial statements of certain subsidiaries and investees recognized under the equity method that are included in the consolidated financial statements. Total assets of the subsidiaries and the investees (including investments accounted for using equity method) was \$29,252,267 thousand and \$27,207,496 thousand, constituting 26% and 28% of consolidated total assets, as at December 31, 2018 and 2017, respectively, and operating income of the subsidiaries and the investees was \$5,014,679 thousand and \$4,224,520 thousand, constituting 45% and 46% of consolidated total operating income for the years ended December 31, 2018 and 2017, respectively. Those financial statements were audited by other independent accountants whose reports thereon have been furnished to us, and our opinion expressed herein is based solely on the audit reports of the other independent accountants.

We have audited and expressed an unqualified opinion on the parent company only financial statements of Taiwan Stock Exchange Corporation as at and for the years ended December 31, 2018 and 2017.

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 "Criteria Governing Preparation of Financial Reports by Company-Type Stock Exchanges" and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the Financial Supervisory Commission, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company and its subsidiaries' ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company and its subsidiaries or to cease operations, or has no realistic alternative but to do so.

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

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 ROC GAAS 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 ROC GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements,
 whether due to fraud or error, design and perform audit procedures responsive to those risks, and
 obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk
 of not detecting a material misstatement resulting from fraud is higher than for one resulting from
 error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the
 override of internal control.
- 2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company and its subsidiaries' internal control.
- 3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- 4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company and its subsidiaries' ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the Company and its subsidiaries 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 financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 6. Obtain sufficient appropriate audit evidence regarding the consolidated financial information of the entities or business activities within the Company and its subsidiaries to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's 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.

PricewaterhouseCoopers, Taiwan

March 26, 2019

The accompanying consolidated financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying consolidated financial statements and report of independent accountants are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2018 AND 2017 (Expressed in thousands of New Taiwan dollars)

		 December 31, 2018	3			
Assets	Notes	 AMOUNT	<u>%</u>		AMOUNT	%
Current Assets						
Cash and cash equivalents	6(1)	\$ 34,960,862	31	\$	20,105,876	21
Financial assets at fair value through profit	6(2) and 12(4)					
or loss - current		5,133,853	4		2,201,103	2
Available-for-sale financial assets - current	12(4)	-	-		2,193,207	2
Held-to-maturity financial assets - current	12(4)	-	-		3,756,276	4
Current financial assets at amortized cost	6(4)	3,453,188	3		-	-
Accounts receivable, net	6(5) and 7	732,123	1		770,699	1
Other receivables		134,901	-		136,838	-
Other current financial assets	6(1)	22,024,072	20		18,301,155	19
Securities settlement debit	6(8)	10,245,195	9		13,698,091	14
Other current assets	6(6)	 1,536,392	1		1,296,037	1
Total Current Assets		 78,220,586	69		62,459,282	64
Non-current Assets						
Non-current financial assets at fair value	6(3)					
through other comprehensive income		5,668,034	5		-	-
Available-for-sale financial assets - non-	12(4)					
current		-	-		5,097,636	5
Held-to-maturity financial assets - non-	12(4)					
current		-	-		12,460,683	13
Non-current financial assets at amortized	6(4)					
cost		11,115,236	10		-	-
Default damages fund	6(7)	11,658,178	10		11,336,174	12
Non-current financial assets at cost	12(4)	-	_		18,000	-
Investments accounted for using equity	6(9)					
method		54,190	-		58,393	-
Property and equipment	6(10)	3,757,869	3		3,786,648	4
Investment property, net	6(11)	445,173	1		451,480	-
Intangible assets	6(12)	951,451	1		603,842	1
Other non-current assets	6(13)	714,150	1		896,794	1
Total Non-current Assets		 34,364,281	31		34,709,650	36
TOTAL ASSETS		\$ 112,584,867	100	\$	97,168,932	100

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2018 AND 2017

(Expressed in thousands of New Taiwan dollars)

Liabilities and Equity	Notes	-	December 31, 2018 AMOUNT	 %	December 31, 201' AMOUNT	7 %	
Current Liabilities	Trotes		AMOONI		AMOUNT		
Securities lending and borrowing collateral	6(14)						
payable		\$	28,206,367	25	\$ 13,515,655	14	
Accrued expenses		,	1,542,820	1	1,634,561	2	
Current income tax liabilities			809,276	1	416,581	-	
Securities settlement credit	6(8)		10,245,195	9	13,698,091	14	
Other current liabilities	6(15)		3,658,092	3	2,820,526	3	
Total Current Liabilities	` ,		44,461,750	39	32,085,414	33	
Non-current Liabilities							
Deferred income tax liabilities	6(26)		79,702	_	78,606	_	
Net defined benefit liabilities - non-current	·		638,914	1	603,091	1	
Guarantee deposits received			131,783	_	139,869	_	
Other non-current liabilities			37,462	_	-	-	
Total Non-current Liabilities			887,861	1	821,566	1	
Total Liabilities			45,349,611	40	32,906,980	34	
Equity Attributable to Owners of the							
Parent							
Share Capital	6(17)						
Share capital - common stock			6,938,692	6	6,938,692	7	
Capital Surplus	6(18)						
Capital surplus			1,977	_	2,196	-	
Retained Earnings							
Legal reserve	6(19)		5,480,537	5	5,195,112	5	
Special reserve	6(19)		34,283,412	30	33,261,592	34	
Unappropriated retained earnings	6(20)		4,065,842	4	3,050,933	3	
Other Equity Interest	6(21)						
Other equity interest			3,494,405	3	3,557,991	4	
Equity Attributable to Owners of the							
Parent			54,264,865	48	52,006,516	53	
Non-controlling Interest			12,970,391	12	12,255,436	13	
Total Equity			67,235,256	60	64,261,952	66	
TOTAL LIABILITIES AND EQUITY		\$	112,584,867	100	\$ 97,168,932	100	

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

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME YEARS ENDED DECEMBER 31, 2018 AND 2017 (Expressed in thousands of New Taiwan dollars, except for earnings per share)

			Yea	ır ended D	l December 31				
			2018		2017				
Items	Notes		AMOUNT	<u>%</u>	AMOUNT	_%_			
Operating Revenue	6(22) and 7								
Trading fees		\$	3,322,097	30	\$ 2,667,914	29			
Listing fees			1,378,042	12	1,135,442	12			
Securities settlement service fees			1,352,486	12	1,150,728	13			
Securities recording service fees			1,105,422	10	913,191	10			
Transfer process service fees			519,550	5	460,980	5			
Account maintenance service fees			393,823	4	388,320	4			
Futures clearing service fees			376,267	3	321,864	3			
License fees			366,537	3	298,174	3			
Market data fees			361,195	3	349,876	4			
Mutual fund service fees			275,808	2	207,942	2			
Lending and borrowing service fees			216,722	2	188,662	2			
Data processing fees			205,122	2	187,662	2			
Others			1,302,762	12_	927,618	11			
Total Operating Revenue			11,175,833	100	9,198,373	_100			
Operating Expenses	6(23)								
Personnel		(2,751,286)	(25)(2,749,096)	(30)			
General and administrative		(3,192,953)	$(\underline{28})$	3,193,343)	(35)			
Total Operating Expenses		(5,944,239)	(<u>53</u>) (5,942,439)	(<u>65</u>)			
Operating Profit			5,231,594	<u>47</u>	3,255,934	35			
Non-operating Income and Expenses									
Interest income			523,899	5	543,232	6			
Other income			356,175	3	317,102	4			
Share of profit of associates	6(9)								
accounted for using equity method			14,847	-	14,861	-			
Gain on disposal of investments	12(4)		-	-	580,400	6			
Finance costs	6(25)	(1,751)	- (3,763)	-			
Other gains and losses	6(26)	(_185,669)	(181,592)				
Total Non-operating Income and		_							
Expenses			707,501	6	1,270,240	14			
Profit before income tax			5,939,095	53	4,526,174	49			
Income tax expense	6(26)	(1,125,550)	(<u>10</u>) ((663,424)	(7)			
Profit for the year		\$	4,813,545	43	\$ 3,862,750	<u>42</u>			
•									

(Continued)

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME YEARS ENDED DECEMBER 31, 2018 AND 2017 (Expressed in thousands of New Taiwan dollars, except for earnings per share)

			Year	r ended I				
			2018			2017		
Items	Notes		AMOUNT	%	_	AMOUNT	%	
Other comprehensive income								
Components of other comprehensive								
income (loss) that will not be								
reclassified to profit or loss								
Unrealized gain from investments in	6(3)							
equity instruments measured at fair								
value through other comprehensive		φ.	555 506	_	ф			
income	((0)	\$	557,526	5	\$	-	-	
Share of other comprehensive loss of	6(9)							
associates accounted for using equity		,	720	_	,	004)		
method	((16)	(738)	5	(894)	-	
Gains (losses) on remeasurement of	6(16)	,	20.050\			106 100	2	
defined benefit plan		(30,252)	-		186,188	2	
Income tax related to components of								
other comprehensive (loss) income that will not be reclassified to profit								
or loss			149		,	142)	_	
		-	177		` —	142)		
Total other comprehensive income that will not be								
reclassified to profit or loss			526,685	5		185,152	2	
Components of other comprehensive			320,003		_	105,152		
loss that will be reclassified to profit								
or loss								
Unrealized loss on valuation of	12(4)							
available-for-sale financial assets	12(1)		-	_	(53,538)(1)	
Total other comprehensive loss that			<u></u>		`—			
will be reclassified to profit or loss			<u>.</u>	-	(53,538)(1)	
Total comprehensive income for the					`—			
year		\$	5,340,230	48	\$	3,994,364	43	
Profit attributable to:		<u></u>						
Owners of the parent		\$	3,535,071	32	\$	2,854,246	31	
Non-controlling interest		Ψ	1,278,474	11	•	1,008,504	11	
Tion commoning measure		\$	4,813,545	43	\$	3,862,750	42	
Comprehensive income attributable								
-								
to: Owners of the parent		\$	4,004,250	36	\$	2,883,429	31	
Non-controlling interest		*	1,335,980	12		1,110,935	12	
HOR COMMONING MICHOCOC		\$	5,340,230	48	\$	3,994,364	43	
		<u>*</u>	- / /			·		
Earnings per share (in dollars)	6(27)							
Basic earnings per share	- \- · /	\$		5.09	\$		4.11	
mane carmings her amure		<u>.+</u>						

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

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY YEARS ENDED DECEMBER 31, 2018 AND 2017 (Expressed in thousands of New Taiwan dollars)

				Equity attr	Equity attributable to owners of the parent	f the parent				
			Capital surplus,		Retained Earnings	Unappropriated retained earnings			;	
	Notes	Share capital - common stock	additional paid-in capital	Legal reserve	Special reserve	(accumulated deficit)	Other equity	Total	Non-controlling interest	Total equity
2017										
Balance at January 1, 2017		\$ 6,769,456	\$ 3,525	\$ 5,079,925	\$ 33,244,314	\$ 1,151,870	\$ 3,721,509	\$ 49,970,599	\$ 11,182,327	\$ 61,152,926
Net income for 2017		ι	•	•	i	2,854,246	ŀ	2,854,246	1,008,504	3,862,750
Other comprehensive income (loss) for 2017	6(20)(21)	1		,	1	192,701	(163,518)	29,183	102,431	131,614
Total comprehensive income (loss)		1	'	1		3,046,947	(163,518)	2,883,429	1,110,935	3,994,364
Appropriations of 2016 earnings:										
Legal reserve	(61)9	•	•	115,187	i	(115,187)	,	•	•	
Special reserve	(61)9	•	•	•	17,278	(17,278)	,	•	•	•
Cash dividends	6(20)	•	•	1	İ	(846,183)	,	(846,183)	•	(846,183)
Stock dividends	(20)	169,236	•	1	ı	(169,236)	ì	•	•	•
Changes in ownership in subsidiaries		•	(1,329)	1	•	•	1	(1,329)	(1,298)	(2,627)
Changes in non-controlling interests							-	1	(36,528)	(36,528)
Balance at December 31, 2017		\$ 6,938,692	\$ 2,196	\$ 5,195,112	\$ 33,261,592	\$ 3,050,933	\$ 3,557,991	\$ 52,006,516	\$ 12,255,436	\$ 64,261,952
2018										
Balance at January 1, 2018		\$ 6,938,692	\$ 2,196	\$ 5,195,112	\$ 33,261,592	\$ 3,050,933	\$ 2,998,213	\$ 51,446,738	\$ 12,255,436	\$ 63,702,174
Effect of retrospective application and retrospective restatement		1			1	552,222		552,222	(4,918)	547,304
Balance at January 1 after adjustments		6,938,692	2,196	5,195,112	33,261,592	3,603,155	2,998,213	51,998,960	12,250,518	64,249,478
Net income for 2018		•	•	•	•	3,535,071	•	3,535,071	1,278,474	4,813,545
Other comprehensive income (loss) for 2018	6(20)(21)					(27,013)	496,192	469,179	57,506	526,685
Total comprehensive income				'	r	3,508,058	496,192	4,004,250	1,335,980	5,340,230
Appropriations of 2017 earnings:										
Legal reserve	(61)9	1	•	285,425	٠	(285,425)	1	•	ī	•
Special reserve	6(19)	ı	•	•	1,021,820	(1,021,820)	1	•	ı	•
Cash dividends	6(20)	•	•	•	•	(1,734,673)	1	(1,734,673)	1	(1,734,673)
Difference between consideration and carrying amount of subsidiaries acquired or disposed		•	(437)			3,453)	•	(3,890)	(26,542)	(30,432)
Capital surplus, other adjustments		1	218	•	•	•	•	218	•	218
Changes in non-controlling interests		1	-		'!	•	•	•	(589,565)	(589,565)
Balance at December 31, 2018		\$ 6,938,692	\$ 1,977	\$ 5,480,537	\$ 34,283,412	\$ 4,065,842	\$ 3,494,405	\$ 54,264,865	\$ 12,970,391	\$ 67,235,256

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

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2018 AND 2017

(Expressed in thousands of New Taiwan dollars)

	Notes		2018		2017
CASH FLOWS FROM OPERATING ACTIVITIES					
Profit before tax		\$	5,939,095	\$	4,526,174
Adjustments		Ψ	3,737,073	Ψ	7,520,117
Adjustments to reconcile profit (loss)					
Interest income		(523,899)	(543,232)
Dividend income		ì	257,495)		193,686)
Finance costs	6(25)	`	1,751	`	3,763
Depreciation (including investment property)	6(23)		521,468		558,850
Amortization	6(23)		224,765		195,039
Equity in net income of investee companies-net of cash	0(20)		221,705		175,057
dividends received			3,465	(1,623)
Loss (gain) on financial assets at fair value through profit or	6(24)		2,.02	`	1,020 /
loss	-()		99,515	(4,975)
Provision for bad debts	12(4)			`	3,215
Gain on reversal of expected credit impairment loss	12(2)	(2,521)		-
Gain on disposal of investments	12(4)	•	-,,	(580,400)
Gain on disposal of property and equipment	(.,	(18)	ì	35,863)
Changes in operating assets and liabilities			/	`	,,
Changes in operating assets					
Accounts receivable			39,576	(274,313)
Other receivables		ſ	24,631)	ì	7,483)
Other current assets		(240,355)	ì	636,575)
Default damages fund		ì	322,004)	i	233,145)
Changes in operating liabilities		•	, , , ,	•	,
Securities lending and borrowing collateral payable			14,690,712		3,782,411
Accrued expenses		(90,720)		158,642
Other current liabilities		•	837,566		1,103,264
Net defined benefit liabilities			5,570		70,972
Increase in other non-current liabilities			37,462		-
Cash inflow generated from operations		-	20,939,302		7,891,035
Interest received			550,467		598,950
Interest paid		(2,554)	(3,855)
Income tax paid		ì	725,449)	ì	358,847)
Net cash flows from operating activities		`	20,761,766	`	8,127,283
CASH FLOWS FROM INVESTING ACTIVITIES					
Net increase in financial assets at fair value through profit of loss		(839,058)	(90,892)
Decrease in available-for-sale financial assets-net		•	-	•	2,077,307
Decrease in held-to-maturity financial assets-net			-		2,072,203
Net decrease in financial assets at amortized cost			1,642,710		
Increase in other current financial assets		((5,905,072)
Proceeds from disposal of subsidiaries		•	_	·	222,328
Acquisition of property, equipment and intangible assets	6(28)	(855,008)	(643,967)
Proceeds from disposal of property and equipment	/	`	99		47,788
Decrease (increase) in refundable deposits			1,980	(5,232)
Increase in operation guarantee deposits			-	(8,900)
Increase in other non-current assets		(29,325)		-
Dividends received		-	257,495		193,686
Net cash flows used in investing activities		(3,544,024)	(2,040,751)
CASH FLOWS FROM FINANCING ACTIVITIES		`-			
Cash dividends paid		(1,734,673)	(846,183)
Increase (decrease) in guarantee deposits received		ì	8,086)	•	24,691
Changes in non-controlling interests		į	619,997)	(39,155)
Net cash flows used in financing activities		;——	2,362,756)	(860,647)
Net increase in cash and cash equivalents		`	14,854,986	-	5,225,885
Cash and cash equivalents at beginning of year			20,105,876		14,879,991
Cash and cash equivalents at obgaining or year Cash and cash equivalents at end of year		\$	34,960,862	\$	20,105,876
Cash and cash equivalents at end of year		Ψ			

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS YEARS ENDED DECEMBER 31, 2018 AND 2017

(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. HISTORY AND ORGANIZATION

Taiwan Stock Exchange Corporation (the Company) was established in December 1961. The main activities of the Company and its subsidiaries are providing location and facilities for trading and settlement of securities, and other services as approved by the Competent Authority.

On October 11, 2011, the Competent Authority authorized the Company to continue existing in its current corporate form for the next ten years until a change into a membership-type organization is approved.

2. THE DATE OF AUTHORIZATION FOR ISSUANCE OF THE FINANCIAL STATEMENTS AND PROCEDURES FOR AUTHORIZATION

These consolidated financial statements were authorized for issuance by the Board of Directors on March 26, 2019.

3. APPLICATION OF NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting

Standards ("IFRS") as endorsed by the Financial Supervisory Commission ("FSC")

New standards, interpretations and amendments endorsed by the FSC effective from 2018 are as follows:

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	Standards Board
Amendments to IFRS 2, 'Classification and measurement of share-based	January 1, 2018
payment transactions'	
Amendments to IFRS 4, 'Applying IFRS 9 Financial instruments with	January 1, 2018
IFRS 4 Insurance contracts'	
IFRS 9, 'Financial instruments'	January 1, 2018
IFRS 15, 'Revenue from contracts with customers'	January 1, 2018
Amendments to IFRS 15, 'Clarifications to IFRS 15 Revenue from	January 1, 2018
contracts with customers'	
Amendments to IAS 7, 'Disclosure initiative'	January 1, 2017
Amendments to IAS 12, 'Recognition of deferred tax assets for	January 1, 2017
unrealised losses'	
Amendments to IAS 40, 'Transfers of investment property'	January 1, 2018
IFRIC 22, 'Foreign currency transactions and advance consideration'	January 1, 2018
Annual improvements to IFRSs 2014 - 2016 cycle - Amendments to	January 1, 2018
IFRS 1, 'First-time adoption of International Financial Reporting	
Standards'	

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	Standards Board
Annual improvements to IFRSs 2014 - 2016 cycle - Amendments to	January 1, 2017
IFRS 12, 'Disclosure of interests in other entities' Annual improvements to IFRSs 2014 - 2016 cycle - Amendments to	January 1, 2018
IAS 28, 'Investments in associates and joint ventures'	

Except for the following, the above standards and interpretations have no significant impact to the Company and its subsidiaries' financial condition and financial performance based on the Company and its subsidiaries' assessment.

A. IFRS 9, 'Financial instruments'

- (a) Classification of debt instruments is driven by the entity's business model and the contractual cash flow characteristics of the financial assets, which would be classified as financial asset at fair value through profit or loss, financial asset measured at fair value through other comprehensive income or financial asset measured at amortized cost. Equity instruments would be classified as financial asset at fair value through profit or loss, unless an entity makes an irrevocable election at inception to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument that is not held for trading.
- (b) The impairment losses of debt instruments are assessed using an 'expected credit loss' approach. An entity assesses at each balance sheet date whether there has been a significant increase in credit risk on that instrument since initial recognition to recognize 12-month expected credit losses or lifetime expected credit losses (interest revenue would be calculated on the gross carrying amount of the asset before impairment losses occurred); or if the instrument that has objective evidence of impairment, interest revenue after the impairment would be calculated on the book value of net carrying amount (i.e. net of credit allowance). The Company and its subsidiaries shall always measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables that do not contain a significant financing component.

In adopting the new standards endorsed by the FSC effective from 2018, the Company and its subsidiaries have elected not to restate prior period financial statements using the modified retrospective approach under IFRS 9 from January 1, 2018, with the practical expedients permitted under the statement. The significant effects of applying the standard as of January 1, 2018 are summarized below:

Consolidated balance sheet				Effect of			
	2	017 version	á	adoption of	2	018 version	
Affected items	<u>IF</u>	RSs amount	ne	w standards	<u>IF</u>	RSs amount	Remark
January 1, 2018	_						
Financial assets at fair value	\$	2,201,103	\$	2,193,207	\$	4,394,310	В
through profit or loss							
Available-for-sale financial assets		7,290,843	(7,290,843)		-	A, B
Financial assets at fair value through							
other comprehensive income		-		5,110,508		5,110,508	Α
Held-to-maturity financial assets		16,216,959	(16,216,959)		-	C
Financial assets at cost		18,000	(18,000)		-	Α
Financial assets at amortized cost			_	16,209,613		16,209,613	C, D
Total affected assets	\$	25,726,905	<u>(\$</u>	12,474)	\$	25,714,431	
Unappropriated retained earnings	\$	3,050,933	\$	552,222	\$	3,603,155	A, B, C
Other equity interest		3,557,991	(559,778)		2,998,213	A, B
Non-controlling interest		12,255,436	(_	4,918)		12,250,518	A, D
Total affected equity	\$	18,864,360	(<u>\$</u>	12,474)	\$	18,851,886	
Total affected liabilities and equity	\$_	18,864,360	(\$_	12,474)	\$	18,851,886	

Explanation:

- A. In accordance with IFRS 9, the Company and its subsidiaries reclassified available-for-sale financial assets and financial assets at cost in the amount of \$5,097,639 and \$18,000, respectively, and made an irrevocable election at initial recognition on equity instruments not held for dealing or trading purpose, by increasing financial assets at fair value through other comprehensive income, increasing retained earnings, decreasing other equity interest and decreasing non-controlling interest in the amounts of \$5,110,508, \$416,876, \$419,279 and \$2,725, respectively.
- B. In accordance with IFRS 9, the Company and its subsidiaries reclassified available-for-sale financial assets in the amount of \$2,193,207, by increasing financial assets at fair value through profit or loss, increasing retained earnings and decreasing other equity interest in the amounts of \$2,193,207, \$140,499 and \$140,499, respectively.
- C. In accordance with IFRS 9, the Company and its subsidiaries reclassified held-to-maturity financial assets of \$16,216,959 by increasing financial assets at amortized cost in the amount of \$16,216,959.
- D. In line with the regulations under IFRS 9 on provision for impairment, financial assets at amortized cost was reduced by \$7,346, retained earnings decreased by \$5,153 and non-controlling interest decreased by \$2,193.

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Company and its subsidiaries

New standards, interpretations and amendments endorsed by the FSC effective from 2019 are as follows:

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	Standards Board
Amendments to IFRS 9, 'Prepayment features with negative compensation'	January 1, 2019
IFRS 16, 'Leases'	January 1, 2019
Amendments to IAS 19, 'Plan amendment, curtailment or settlement'	January 1, 2019
Amendments to IAS 28, 'Long-term interests in associates and joint ventures'	January 1, 2019
IFRIC 23, 'Uncertainty over income tax treatments'	January 1, 2019
Annual improvements to IFRSs 2015 - 2017 cycle	January 1, 2019

Except for the following, the above standards and interpretations have no significant impact to the Company and its subsidiaries' financial condition and financial performance based on the Company and its subsidiaries' assessment. The quantitative impact will be disclosed when the assessment is complete.

IFRS 16, 'Leases'

IFRS 16, 'Leases', replaces IAS 17, 'Leases' and related interpretations and SICs. The standard requires lessees to recognize a 'right-of-use asset' and a lease liability (except for those leases with terms of 12 months or less and leases of low-value assets). The accounting stays the same for lessors, which is to classify their leases as either finance leases or operating leases and account for those two types of leases differently. IFRS 16 only requires enhanced disclosures to be provided by lessors.

The Company and its subsidiaries expects to recognize the lease contract of lessees in line with IFRS 16. However, the Company and its subsidiaries do not intend to restate the financial statements of prior period (referred herein as the "modified retrospective approach"). On January 1, 2019, it is expected that 'right-of-use asset' and lease liability will be both increased by \$1,816,414.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by IASB but not yet included in the IFRSs as endorsed by the FSC are as follows:

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	Standards Board
Amendments to IAS 1 and IAS 8, 'Disclosure Initiative-Definition of Material'	January 1, 2020
Amendments to IFRS 3, 'Definition of a business'	January 1, 2020
Amendments to IFRS 10 and IAS 28, 'Sale or contribution of assets between an investor and its associate or joint venture'	To be determined by International Accounting Standards Board
IFRS 17, 'Insurance contracts'	January 1, 2021

The above standards and interpretations have no significant impact to the Company and its subsidiaries' financial condition and financial performance based on the Company and its subsidiaries' assessment.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

These consolidated financial statements of the Company and its subsidiaries have been prepared in accordance with the "Criteria Governing Preparation of Financial Reports by Company - Type Stock Exchange" and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the FSC (collectively referred herein as the "IFRSs"). However, the Company and its subsidiaries comply with orders issued by the Financial Supervisory Commission (FSC) if different from standards.

(2) Basis of preparation

- A. Except for the following items, these consolidated financial statements have been prepared under the historical cost convention:
 - (a) Financial assets at fair value through profit or loss.
 - (b) Financial assets at fair value through other comprehensive income/Available-for-sale financial assets measured at fair value.
 - (c) Defined benefit liabilities recognized based on the net amount of pension fund assets less present value of defined benefit obligation.
- B. In adopting IFRS 9 and IFRS 15 effective January 1, 2018, the Company and its subsidiaries have elected to apply modified retrospective approach whereby the cumulative impact of the adoption was recognized as retained earnings or other equity as of January 1, 2018 and the financial statements for the year ended December 31, 2017 were not restated. The financial statements for the year ended December 31, 2017 were prepared in compliance with International Accounting Standard 39 ('IAS 39'), International Accounting Standard 11, International Accounting Standard

18 and related financial reporting interpretations. Please refer to Notes 12(4) and (5) for details of significant accounting policies and details of significant accounts.

(3) Basis of consolidation

- A. Basis for preparation of consolidated financial statements:
 - (a) All subsidiaries are included in the consolidated financial statements. Subsidiaries are all entities controlled by the Company. The Company and its subsidiaries control an entity when the Company and its subsidiaries' is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Consolidation of subsidiaries begins from the date the Company and its subsidiaries obtain control of the subsidiaries and ceases when the Company and its subsidiaries lose control of the subsidiaries.
 - (b) Inter-company transactions, balances and unrealized gains or losses on transactions between companies within the Company and its subsidiaries are eliminated. Accounting policies of subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Company.
 - (c) Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the non-controlling interests. Total comprehensive income is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.
- B. For the years ended December 31, 2018 and 2017, the details of consolidated subsidiaries are as follows:
 - (a) Taiwan Depository & Clearing Corporation (TDCC)
 - i. TDCC was established in October 1989. It provides the following services: (a) custody of securities certificates; (b) maintenance of records of securities settled or pledged; (c) electronic processing of records for securities; (d) service in connection with book-entry distribution of securities; (e) book-entry registration of non-certificated securities; (f) depository and clearing of short-term bills; and (g) other services approved by the Competent Authority.
 - ii. The Company's ownership percentage as of December 31, 2018 and 2017 was 50.59%
 - (b) Taiwan Ca Inc. (TWCA)
 - i. TWCA was incorporated on December 17, 1999 and is mainly engaged in internet certification, retail and wholesale of information software and related services.
 - ii. TWCA was 30.23% owned by the Company as of December 31, 2018 and 2017. Although the Company and its subsidiaries do not directly or indirectly hold more than 50% of TWCA's voting shares, the Company and TDCC together hold more than half of all the Board of Directors' seats. Therefore, the Company and its subsidiaries exercise significant control over TWCA.

- (c) Taiwan Index Plus Corporation (TIP)
 - i. TIP was established on January 20, 2016, with main operations in compilation, maintenance, calculation, dissemination and authorization of domestic and foreign index.
 - ii. As of December 31, 2018 and 2017, the Company's shareholding ratio was 100%.
- (d) Fundrich Securities Co., Ltd.
 - i. Fundrich Securities Co., Ltd. was established on December 18, 2015, and obtained license of securities brokerage business authorized by the Securities and Futures Bureau, Financial Supervisory Commission on January 27, 2016. Fundrich Securities Co., Ltd. is primarily engaged in sales of funds.
 - ii. Through the subsidiary, TDCC, the Company's shareholding ratio as of December 31, 2018 and 2017 was 56.64% and 53.07%, respectively.
- C. Subsidiaries not included in the consolidated financial statements: None.
- D. Adjustments for subsidiaries with different balance sheet dates: None.
- E. Nature and extent of the restrictions on fund remittance from subsidiaries to the parent company: None.
- F. Subsidiaries that have non-controlling interests that are material to the Company and its subsidiaries: As of December 31, 2018 and 2017, the non-controlling interest amounted to \$12,970,391 and \$12,255,436, respectively. The information on non-controlling interest and respective subsidiaries is as follows:

1		 	Non-cont	rolling	intere	est	
	Principal	 December 3	31, 2018		De	cember 3	31, 2017
Name of subsidiary TDCC and its subsidiaries	place of business Taiwan	\$ Amount 12,799,522	Ownership (%) 49.41%	\$ - \$	Amo 12,0	ount 97,389	Ownership (%) 49.41%
Balance sheets				rdcc	and it	s subsidi	aries
			Decemb	er 31,	2018	Decem	ber 31, 2017
Current assets			\$	14,577	7,070	\$	12,490,795
Non-current asse	ets			14,010	,408		14,103,259
Current liabilities	3		(2,393	3,523)	(1,912,864)
Non-current liab	ilities		(572	2 <u>,388</u>)	(531,497)
Total net assets			\$ 2	25 <u>,62</u> 1	<u>,567</u>	\$	24,149,693

Statements of comprehensive income

	TDCC and its subsidiaries				
	Years ended December 31,				
		2018 201			
Revenue	<u>\$</u>	5,337,137	\$	4,484,691	
Profit before income tax		3,188,853		2,477,808	
Income tax expense	(621,443)		425,850)	
Profit for the year		2,567,410		2,051,958	
Other comprehensive income, net of tax		117,351		206,586	
Total comprehensive income for the year	<u>\$</u>	2,684,761	\$	2,258,544	
Comprehensive income attributable to					
non-controlling interest	(\$	26,910)	(\$	43,645)	
Dividends paid to non-controlling interest	\$	580,203	\$	261,254	

Statements of cash flows

	TDCC and its subsidiaries				
	Years ended December 31,				
		2018	2017		
Net cash provided by operating activities	\$	2,553,195	\$	2,145,765	
Net cash used in investing activities	(1,209,088)	(1,605,948)	
Net cash used in financing activities	(1,206,453)	(279,393)	
Increase in cash and cash equivalents		137,654		260,424	
Cash and cash equivalents, beginning of year		3,023,076		2,762,652	
Cash and cash equivalents, end of year	\$	3,160,730	\$	3,023,076	

(4) Foreign currency translation

Items included in the financial statements of each of the Company and subsidiaries' entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in New Taiwan dollars, which is the Company and subsidiaries' functional and presentation currency.

Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon retranslation at the balance sheet date are recognized in profit or loss. All other foreign exchange gains and losses based on the nature of those transactions are presented in the statement of comprehensive income within "other gains and losses".

(5) Classification of current and non-current items

- A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:
 - (a) Assets arising from operating activities that are expected to be realized, or are intended to be sold or consumed within the normal operating cycle;

- (b) Assets held mainly for trading purposes;
- (c) Assets that are expected to be realized within twelve months from the balance sheet date;
- (d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to pay off liabilities more than twelve months after the balance sheet date.
- B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:
 - (a) Liabilities that are expected to be paid off within the normal operating cycle;
 - (b) Liabilities arising mainly from trading activities;
 - (c) Liabilities that are to be paid off within twelve months from the balance sheet date;
 - (d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

(6) Cash equivalents

Cash and cash equivalents in the consolidated statement of cash flows of the Company and its subsidiaries including cash on hand, deposits and other short-term investment with high liquidity that will expire within three months since acquisition and can be transferred into fixed amount of cash and the risk of change in value is minor. Time deposits that meet the definition above and are held for the purpose of meeting short-term cash commitments in operations are classified as cash equivalents.

(7) Financial assets at fair value through profit or loss

- A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortized cost or fair value through other comprehensive income.
- B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognized and derecognized using settlement date accounting.
- C. At initial recognition, the Company and its subsidiaries measure the financial liabilities at fair value. All related transaction costs are recognized in profit or loss. The Company and its subsidiaries subsequently measure these financial liabilities at fair value with any gain or loss recognized in profit or loss.
- D. Dividends are recognized as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and its subsidiaries and the amount of the dividend can be measured reliably.

(8) Financial assets at fair value through other comprehensive income

A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Company and its subsidiaries have made an irrevocable election at initial recognition to recognize changes in fair value in other comprehensive income and debt instruments which meet all of the following criteria:

- (a) The objective of the Company and its subsidiaries' business model is achieved both by collecting contractual cash flows and selling financial assets; and
- (b) The assets' contractual cash flows represent solely payments of principal and interest.
- B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognized and derecognized using settlement date accounting.
- C. At initial recognition, the Company and its subsidiaries measure the financial assets at fair value plus transaction costs. The Company and its subsidiaries subsequently measure the financial assets at fair value:
 - (a) The changes in fair value of equity investments that were recognized in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognized as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and its subsidiaries and the amount of the dividend can be measured reliably.
 - (b) Except for the recognition of impairment loss, interest income and gain or loss on foreign exchange which are recognized in profit or loss, the changes in fair value of debt instruments are taken through other comprehensive income. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss.

(9) Financial assets at amortized cost

- A. Financial assets at amortized cost are those that meet all of the following criteria:
 - (a) The objective of the Company and its subsidiaries' business model is achieved by collecting contractual cash flows.
 - (b) The assets' contractual cash flows represent solely payments of principal and interest.
- B. On a regular way purchase or sale basis, financial assets at amortized cost are recognized and derecognized using settlement date accounting.
- C. At initial recognition, the Company and its subsidiaries measure the financial assets at fair value plus transaction costs. Interest income from these financial assets is included in finance income using the effective interest method. A gain or loss is recognized in profit or loss when the asset is derecognized or impaired.

(10) Accounts receivable

Accounts receivable entitle the Company and its subsidiaries a legal right to receive consideration in exchange for transferred rendered services. The short-term accounts receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(11) Impairment of financial assets

For debt instruments measured at fair value through other comprehensive income and financial assets at amortized cost including accounts receivable that have a significant financing component,

at each reporting date, the Company and its subsidiaries recognize the impairment provision for 12 months expected credit losses if there has not been a significant increase in credit risk since initial recognition or recognizes the impairment provision for the lifetime expected credit losses (ECLs) if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable or contract assets that do not contain a significant financing component, the Company and its subsidiaries recognize the impairment provision for lifetime ECLs.

(12) Derecognition of financial assets

The Company and its subsidiaries derecognize a financial asset when the contractual rights to receive the cash flows from the financial asset expire.

(13) Operating leases

Lease income from an operating lease (net of any incentives given to the lessee) and payments made under an operating lease (net of any incentives received from the lessor) are recognized in profit or loss on a straight-line basis over the lease term.

(14) Investments accounted for using the equity method / associates

- A. Associates are all entities over which the Company and its subsidiaries have significant influence but not control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for using the equity method and are initially recognized at cost.
- B. The Company and its subsidiaries' share of its associates' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income.

(15) Property and equipment

- A. Property and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalized.
- B. Land is not depreciated and computer equipment is depreciated using the fixed percentage on declining balance method. Other property and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.
- C. The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each balance sheet date. If expectations for the assets' residual values and useful lives differ from previous estimates or the patterns of consumption of the assets' future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', from the date of the change.

(16) Investment property

An investment property is stated initially at its cost and measured subsequently using the cost model.

Except for land, investment property is depreciated on a straight-line basis.

(17) Intangible assets

A. Computer software

Computer software is stated at cost and amortized on a straight-line basis.

B. Goodwill

Goodwill arises in a business combination accounted for by applying the acquisition method. The amount recognized at acquisition date is considered as the cost of goodwill that arises in a business combination, and is then measured based on the amount of cost less accumulated impairment loss.

(18) <u>Impairment of non-financial assets</u>

- A. The Company and its subsidiaries assess at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. Except for goodwill, when the circumstances or reasons for recognizing impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortized historical cost would have been if the impairment had not been recognized
- B. The recoverable amounts of goodwill shall be evaluated periodically. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. Impairment loss of goodwill previously recognized in profit or loss shall not be reversed in the following years.
- C. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units, or groups of cash-generating units, that is/are expected to benefit from the synergies of the business combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

(19) Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability specified in the contract is discharged or cancelled or expires.

(20) Pensions

A. Defined contribution plans

For defined contribution plans, the contributions are recognized as pension expenses when they are due on an accrual basis. Prepaid contributions are recognized as an asset to the extent of a cash refund or a reduction in the future payments.

B. Defined benefit plan

(a) Net obligation under a defined benefit plan is defined as the present value of an amount of

pension benefits that employees will receive on retirement for their services with the Company and its subsidiaries in current period or prior periods. The liability recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The net defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method.

- (b) Remeasurements arising on defined benefit plans are recognized in other comprehensive income in the period in which they arise and recorded as retained earnings.
- (c) Past service costs are recognized immediately in profit or loss.

(21) Income tax

- A. The tax expense for the period comprises current and deferred tax. Tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or items recognized directly in equity, in which cases the tax is recognized in other comprehensive income or equity.
- B. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.
- C. Deferred income tax is recognized, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated balance sheet.
- D. Current income tax assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously.

(22) Dividends

Dividends are recorded in the Company's financial statements in the period in which they are resolved by the Company's shareholders. Cash dividends are recorded as liabilities; stock dividends are recorded as stock dividends to be distributed and are reclassified to ordinary shares on the effective date of new shares issuance.

(23) Revenue recognition

The Company and its subsidiaries allocate transaction price to each performance obligation when the performance obligation of customer contracts were identified. Revenue is recognized when the performance obligation is satisfied, and is classified as service revenue, dividend income, interest income and rental income.

A. Service revenue

Service revenue is recognized at the end of month when the service was provided.

B. Dividend income and interest income

The Company and its subsidiaries recognize the dividend income arising from investments when the shareholders' right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and its subsidiaries and the amount of the dividend can be measured reliably.

Interest income arising from financial assets is recognized when it is probable that future economic benefits will flow to the entity and these benefits can be measured reliably. Interest income is calculated over time based on outstanding principle discounted by applicable effective interest rate, and is accounted for under the accrual basis. The effective interest rate is estimated by discounting the expected cash that will be received during the financial assets' expected option life, which will be equal to the rate of the net carrying amount at initial recognition.

C. Rental income

Rental income arising from operating lease is recognized in profit or loss on a straight-line basis over the lease term.

(24) Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker.

5. CRITICAL ACCOUNTING JUDGEMENTS, ESTIMATES AND KEY SOURCES OF

ASSUMPTION UNCERTAINTY

The preparation of these consolidated financial statements requires management to make critical judgements in applying the Company and its subsidiaries' accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. The above information is addressed below:

Financial assets-fair value measurement of unlisted stocks without active market

The fair value of unlisted stocks held by the Company and its subsidiaries that are not traded in an active market is determined considering related financial information and reference. Any changes in these judgements and estimates will impact the fair value measurement of these unlisted stocks.

As of December 31, 2018, the carrying amount of unlisted stocks was \$5,668,034.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	December 31, 2018		Dece	ember 31, 2017
Checking accounts and demand deposits		28,731,063	\$	13,758,362
Cash equivalents				
Time deposits with maturity within three months				
from initial date		2,472,334		2,799,934
Commercial papers		3,757,465		2,837,997
Repo bonds		-		709,583
nopo sonos	\$	34,960,862	\$	20,105,876

A. As of December 31, 2018 and 2017, the time deposits with maturity of more than three months from initial date was \$22,024,072 and \$18,301,155, respectively, and were shown as 'other financial assets – current'.

B. The details of cash and cash equivalents pledged to off (2) Financial assets at fair value through profit or loss	icis aic pic	ovided in 140	ic 6.
Items		Dece	mber 31, 2018
Current items: Financial assets mandatorily measured at fair value through profit or loss Beneficiary certificates		\$	5,133,853
A. Amounts recognized in profit or loss in relation to fin loss are listed below:	ancial asse	ets at fair val	ue through profit o
	_Year	ended Decer	nber 31, 2018
Financial assets mandatorily measured at fair value through profit or loss	(\$		99,515)
Beneficiary certificates	`		
B. Information on financial assets at fair value through provided in Note 12(4).(3) Financial assets at fair value through other comprehensive		oss as of De	ecember 31, 2017 i
Items		Dece	mber 31, 2018
Non-current items:			
Equity instruments			
Unlisted stocks		\$	1,385,493
Valuation adjustment		\$	4,282,541 5,668,034
A. Amounts recognized in profit or loss and other compr	ehensive ii	ncome in rela	ation to the financia
assets at fair value through other comprehensive incor	ne are liste	ed below:	
			ber 31, 2018
Equity instruments at fair value through other comprehensive income			
Fair value change recognised in other comprehensive income	\$		557,526
B. Information on available-for-sale financial assets and 2017 is provided in Note 12(4).	financial a	assets at cost	as of December 3

(4) Financial assets at amortized cost

Items	December 31, 2018	
Current items:		
Financial bonds	\$ 3,153,038	
Corporate bonds	201,057	
Government bonds	100,436	
	3,454,531	
Less: Accumulated impairment	(1,343)	
	\$ 3,453,188	
Non-current items:		
Financial bonds	\$ 10,216,017	
Corporate bonds	503,936	
Government bonds	399,765	
	11,119,718	
Less: Accumulated impairment	(4,482)	
-	\$ 11,115,236	

A. Amounts recognized in profit or loss in relation to financial assets at amortized cost are listed below:

	Year ended	December 31, 2018
Interest income	\$	233,612
Gain on reversal of impairment		1,521
•	\$	235,133

- B. Information relating to credit risk of financial assets at amortized cost is provided in Note 12(2).
- C. Information on held-to-maturity financial assets as of December 31, 2017 is provided in Note 12(4).

(5) Accounts receivable

	December 31, 2018		December 31, 2017		
Accounts receivable	\$	732,123	\$	773,939	
Less: Allowance for doubtful accounts			(_3,240)	
	\$	732,123	\$	770,699	

- A. The Company and its subsidiaries do not hold any collateral as security.
- B. Ageing analysis of accounts receivable and information relating to credit risk are provided in Note 12(2).

(6) Other current assets

	Decer	nber 31, 2018	December 31, 2017		
Payments under cross-border custody	\$	895,377	\$	532,296	
Receipt and payment for bills and bonds on behalf					
ofothers		289,090		290,829	
Receipt and payment for mutual funds on behalf of					
others		253,850		273,183	
Others		98,075		199,729	
	\$	1,536,392	\$	1,296,037	

Since November 2015, the Company's subsidiaries began to provide receipt and payment services for foreign securities under cross-border custody on behalf of others. The amount pertains to payments received and paid on behalf of others for custody of cross-border securities.

The Company's subsidiaries provide receipt and payment services for bills and bonds on behalf of others. The amount pertains to payments received and paid on behalf of others for redemption of bills and repayment of bonds.

Since August 2006 and July 2016, the Company's subsidiaries began to provide receipt and payment services for mutual funds on behalf of others. The amount pertains to payments received and paid on behalf of others for purchasing or redeeming offshore mutual funds.

(7) Default damages fund

- A. The Company, as required by Securities and Exchange Law and related regulations, makes cash contributions to a default damages fund (DDF) at certain percentages of trading fees within 15 days at the end of each quarter (Dr. default damages fund; Cr. cash), except for the first draft of \$50,000. However, the Company stops making cash contributions to the DDF when the accumulated amount of the DDF is equal to or greater than the total amount of the Company's capital. In addition, following the regulations of the Competent Authority No. 00480 bulletin (1986), an equivalent amount of default damages reserve has been recontributed starting from 1986. Additionally, following Article 6 of "Taiwan Stock Exchange Corporation Securities Borrowing and Lending Rules", and the regulations of the Competent Authority No. 0920129756 bulletin (2003), the Company contributes 3% of each loan service fee it receives as default damages fund.
- B. As the accumulated amount of the DDF has exceeded the total amount of the Company's capital, the Company has stopped making contributions to the DDF and default damages reserve since November 2006. However, in accordance with the Competent Authority No. 0980026755 bulletin (June 2009), the Company has contributed 5% of trading fees to the DDF within 15 days after the end of every quarter since January 1, 2010.
- C. Taiwan Depository & Clearing Corporation (TDCC) allocates 5% of revenue from securities settlement services, accounts transferring services, accounts maintenance and other services to default damages fund (Debit: default damages fund, credit: cash) 15 days after the end of each

quarter until the accumulated fund balance equals TDCC's paid-in capital.

- D. For the preparation of financial statements in accordance with IFRSs from January 1, 2013, following the regulatory authority, the default damages reserve the Company and its subsidiaries have contributed should be reclassified to 'special reserve', which cannot be used for other purposes except for the use to cover accumulated deficit or for other uses approved by the Financial Supervisory Commission. In addition, contribution to the default damages fund was no more effective from October 30, 2012.
- E. Under regulations of the competent authority, if losses occur when the Company pay the settlement on behalf of others by Securities and Exchange Act Article 153, as reported to and approved by the competent authority, the losses will be directly offsetted against the above special reserve and no expense will be recognized.
- F. Under regulations of the competent authority, if TDCC uses above special reserve in the future and receives approval from the competent authority, TDCC will directly write down the amount and will not be recognized as expense.
- G. In September 1996, the Competent Authority approved a common fund, the Securities Settlement Fund ("SSF"), to be used in settling defaults by securities companies. The Company established the special settlement fund ("SF") with an initial funding of \$1,000,000. If the Company's DDF exceeds \$1,000,000, the excess should be contributed to the SF until the contribution reaches \$2,000,000. As of December 31, 2018 and 2017, the balance of the SF was \$3,000,000.
- H. The movements of the Default damages fund are as follows:

	Years ended December 31,			
	2018			2017
Balance, beginning of year (Note)	\$	8,336,174	\$	8,103,029
Contributions				
5% of trading fees		168,787		116,006
5% of securities settlements, securities recording and custodial service fees		146,982		111,131
3% of securities lending and borrowing service fees		6,235		6,008
		8,658,178		8,336,174
Settlement fund (SF)	_	3,000,000		3,000,000
Balance, end of year	\$	11,658,178	\$	11,336,174

Note: The beginning balance of SF was \$3,000,000 and the balance of DDF was \$11,336,174 and \$11,103,029 as of January 1, 2018 and 2017, respectively.

I. As of December 31, 2018, the DDF is invested in time deposits.

(8) Securities settlement credit (debit)

As required by the Criteria Governing Preparation of Financial Reports by Company - Type Stock Exchanges, securities settlement debit (credit) includes Securities Settlement Fund ("SSF") and

settlement consideration, and related descriptions are as follows:

A. Securities settlement fund

- (a) As required by the Competent Authority, securities companies make cash deposits to the SSF, which is administered by a committee and deposited in the name of the Company, and this account is distinguished from the others owned by the Company. Under the Securities and Exchange Law, the SSF can only be (a) invested in government bonds; (b) deposited in banks or in the postal savings system; or (c) invested in other instruments as approved by the Competent Authority. The income on the SSF, less related expenses and taxes, is distributed to the securities companies every six months.
- (b) The obligation of a defaulting securities company and expenses incurred in meeting obligations are settled using the balance of the defaulting company's contributions to the SSF and any undistributed income thereon.
 - i. If the obligation of the defaulting company still cannot be fully settled, the SF portion in excess of \$1,000,000 will be used.
 - ii. If any obligation remains, then the initial SF of \$1,000,000 plus the contributions to the SSF by other securities companies will be used proportionately.
- (c) As of December 31, 2018 and 2017, the balances of the SSF were \$3,416,203 and \$3,410,060, respectively, and the balance of the SF was \$3,000,000. The funds are invested in time deposits pursuant to the regulation. In addition, as of December 31, 2018, the Company had entered into a loan agreement with financial institutions in the amount of \$12,800,000 and Ten million U.S. dollars and provided time deposit of \$2,000,000 to financial institutions as collateral for the need of Securities firms' application of the advance settlements for finalizing the funds to the Company and emergency revolving fund due to Securities firms violation of settlement obligation or natural disaster. As of December 31, 2018, the loan amount had not been drawn down. The foregoing time deposit was recognized as DDF of \$750,000, SF of \$550,000, and SSF of \$700,000.
- (d) As the Company is only responsible for the custodianship of the SSF deposited by security dealers, yield and income from the funds belong to the security dealers, the Company does not bear any related expenses and losses, and charge or return the SSF to individual security dealers. Therefore, the assets and liabilities are expressed in net of \$0.

B. Settlement consideration

Because the Company net settles the listing securities, the Company shall receive or pay settlement payment from/ to each security dealers and shown as 'securities settlement debit' and 'securities settlement credit. Pursuant to 'Operating Rules of the Taiwan Stock Exchange Corporation', net settlement is employed on the second business day following the trade date. Balance of securities settlement debit (credit) as of December 31, 2018 and 2017 is as follows:

	December 31, 2018		Dece	ember 31, 2017
Securities settlement debit	\$	10,245,195	\$	13,698,091
Securities settlement credit	\$	10,245,195	\$	13,698,091
(9) Investments accounted for using the equity method				
	De	cember 31, 2018	De	cember 31, 2017
Taiwan Ratings Co. (TRC)	\$	54,190	\$	58,393

The carrying amount of the Company and its subsidiaries' interests in all individually immaterial associates and the Company and its subsidiaries' share of the operating results are summarized below:

	Taiwan Ratings Co.			
	Years ended December 31,			
		2018		2017
Share of profit of associates accounted for using equity method	\$	14,847	\$	14,861
Share of other comprehensive loss of associates accounted for using equity method.	(\$	738)	(\$	894)

The Company and its subsidiaries' percentage of ownership in the above associate is 39% as of December 31, 2018 and 2017.

Recognition of the share in profit is based on the financial statements audited by other independent accountants.

(10) Property and equipment

,	Land	Buildings	Computer equipment	Other equipment	Rental assets	Total
<u>Cost</u>						
At January 1, 2018 (including revaluation of \$45,374)	\$ 938,888	\$1,267,992	\$2,440,255	\$1,328,082	\$ 267,099	\$6,242,316
Additions	-	5,886	220,656	99,767	_	326,309
Disposals	_	-	(430,001)	•	_	(444,990)
Transfer (Note)	-		158,804	832	518	160,154
Closing book			-			
amount	\$ 938,888	\$1,273,878	\$2,389,714	\$1,413,692	\$ 267,617	\$6,283,789
(including revaluation of \$45,374)						
Accumulated depreciation						
At January 1, 2018	\$ -	\$ 130,119	\$1,961,187	\$ 326,252	\$ 38,110	\$2,455,668
Depreciation	-	23,629	310,943	147,163	33,426	515,161
Disposals			(_429,920)	(14,989)		(444,909)
Closing book						
amount	<u>\$ -</u>	<u>\$ 153,748</u>	<u>\$1,842,210</u>	<u>\$ 458,426</u>	\$ 71,536	<u>\$2,525,920</u>
At January 1, 2018 net book amount At December 31,	\$ 938,888	\$1,137,873	\$ 479,068	\$1,001,830	\$ 228,989	\$3,786,648
2018 net book amount	\$ 938,888	\$1,120,130	\$ 547,504	\$ 955,266	<u>\$ 196,081</u>	\$3,757,869

	Land	Buildings	Computer equipment	Other equipment	Rental assets	Total
Cost At January 1, 2017 (including revaluation	\$ 1,012,833	\$1,389,621	\$2,915,409	\$1,576,509	\$ 80,751	\$6,975,123
of \$81,622)		400	1 4	CC 10C		0.41.055
Additions	-	490	174,371	66,196	-	241,057
Disposals	(2,352)	-	(665,841)	(129,799)	-	(797,992)
Transfer (Note)	$(_{71,593})$	$(\underline{122,119})$	16,316	(184,824)	186,348	(175,872)
Closing book						
amount	\$ 938,888	\$1,267,992	\$2,440,255	\$1,328,082	<u>\$267,099</u>	<u>\$6,242,316</u>
(including revaluation of \$45,374)						
Accumulated depreciation						
At January 1, 2017	\$ -	\$ 175,787	\$2,275,889	\$ 300,740	\$ 5,888	\$2,758,304
Depreciation	-	24,718	351,077	145,800	32,222	553,817
Disposals	-	-	(665,779)	(120,288)	-	(786,067)
Transfer (Note)	-	(70,386)	<u>-</u>			(70,386)
Closing book						
amount	\$ -	\$ 130,119	\$1,961,187	\$ 326,252	\$ 38,110	\$2,455,668
At January 1, 2017 net book amount At December 31,	\$ 1,012,833	\$1,213,834	\$ 639,520	\$1,275,769	\$ 74,863	\$4,216,819
2017 net book amount	\$ 938,888	<u>\$1,137,873</u>	\$ 479,068	\$1,001,830	\$228,989	\$3,786,648

Note: Transfer pertains to prepayments for equipment transferred from other non-current assets and property and equipment transferred to investment property.

The estimated useful lives of property and equipment are as follows:

Buildings	55 years		
Computer equipment	3 years ∼ 5 years		
Other equipment	3 years ∼ 15 years		
Rental assets	3 years ~ 8 years		

(11) Investment property

		Land		Buildings	Total		
Cost							
At January 1, 2018	\$	248,749	<u>\$</u>	352,932	\$	601,681	
(At December 31, 2018)							
(including revaluation of \$36,24	8)						
Accumulated depreciation							
At January 1, 2018	\$	-	\$	150,201	\$	150,201	
Depreciation				6,307		6,307	
Closing book amount	\$		\$	156,508	\$	156,508	
At January 1, 2018 net							
book amount	\$	248,749	\$	202,731	\$	451,480	
At December 31, 2018							
net book amount	\$	248,749	\$	196,424	\$	445,173	
		Land		Buildings		Total	
Cost							
At January 1, 2017	\$	177,156	\$	230,816	\$	407,972	
Transfer in property and							
equipment		71,593		122,119		193,712	
At December 31, 2017	\$	248,74 <u>9</u>	\$	352,935	\$	601,684	
(including revaluation of \$36,24	8)						
Accumulated depreciation							
At January 1, 2017	\$	-	\$	74,785	\$	74,785	
Depreciation		-		5,033		5,033	
Transfer in property and							
equipment				70,386		70,386	
Closing book amount	\$		\$	150,204	\$	150,204	
At January 1, 2017 net							
book amount	\$	177,156	<u>\$</u>	156,031	\$	333,187	
At December 31, 2017							
net book amount	<u>\$</u>	248,749	\$	202,731	<u>\$</u>	451,480	

A. Rental revenue and direct operating expenses arising from the investment property are shown below:

	Years ended December 31,				
		2018	2017		
Rental income from investment property	\$	31,277	\$	21,390	
Direct operating expenses arising from the					
investment property that generated rental income					
during the year (depreciation expense)	\$	3,972	\$	2,676	

- B. The fair value of the investment property held by the Company and its subsidiaries as of December 31, 2018 and 2017 was \$1,107,850 and \$1,156,123, respectively. The fair value was revalued by independent appraisers and compared with similar transaction information traded in markets and have been applied appropriate correction after estimation, and comparative law and income approach are used for estimation which are categorized within Level 3 in the fair value hierarchy.
- C. Except for land, investment property is depreciated on a straight-line basis over its estimated useful life of 55 years.

(12) Intangible assets

		oodwill		Software		Others		Total
Cost								
At January 1, 2018	\$	237,545	\$	844,318	\$	2,574	\$	1,084,437
Additions		-		286,561		854		287,415
Disposals		-	(182,646)	(1,759)	(184,405)
Transfer from prepayments								
for equipment				284,959				284,959
Closing book amount	\$	237,545	\$	1,233,192	\$_	1,669	<u>\$</u>	1,472,406
Accumulated amortization								
At January 1, 2018	\$	-	\$	479,013	\$	1,582	\$	480,595
Amortization		-		223,706		1,059		224,765
Disposals			(_	182,646)	(1,759)	(_	<u>184,405</u>)
Closing book amount	\$		\$	520,073	<u>\$</u>	882	<u>\$</u>	520,955
At January 1, 2018 net book amount	<u>\$</u>	237,545	<u>\$</u>	365,305	<u>\$</u>	992	<u>\$</u>	603,842
At December 31, 2018 net book amount	<u>\$</u>	237,545	\$	713,119	<u>\$</u>	787	<u>\$</u>	951,451

	 Goodwill		Software	 Others		Total
Cost						
At January 1, 2017	\$ 237,545	\$	1,039,098	\$ 1,721	\$	1,278,364
Additions	-		144,700	853		145,553
Disposals	_	(368,533)		(368,533)
Transfer from prepayments						
for business facilities	_		29,053			29,053
Closing book amount	\$ 237,545	<u>\$</u>	844,318	\$ 2,574	\$	1,084,437
Accumulated amortization						
At January 1, 2017	\$ _	\$	653,605	\$ 484	\$	654,089
Amortization	-		193,941	1,098		195,039
Disposals	 _	(_	368,533)		(368,533)
Closing book amount	\$ <u> </u>	\$	479,013	\$ 1,582	<u>\$</u>	480,595
At January 1, 2017 net book						
amount	\$ 237,545	\$	365,305	\$ 1,237	<u>\$</u>	604,087
At December 31, 2017 net book amount	\$ 237,545	\$	365,305	\$ 992	<u>\$</u>	603,842

Computer software is stated at historical cost and amortized on a straight-line basis over their estimated useful life of 3 years.

(13) Other non-current assets

	December 31, 2018		December 31, 2017	
Operations guarantee deposits	\$	417,400	\$	417,400
Refundable deposits and other assets		257,489		236,304
Prepayments for equipment and intangible assets		39,261		243,090
	\$	714,150	\$	896,794

- A. As at December 31, 2018 and 2017, the Company and its subsidiaries has deposited time deposits and financial bonds amounting to \$347,400 with the Central Bank of the Republic of China (Taiwan) as guaranty bond.
- B. As of December 31, 2018 and 2017, Fundrich Securities Co., Ltd. has deposited time deposits amounting to \$70,000 with the bank designated by Securities and Futures Bureau, based on the Regulations Governing Securities Firms and other laws.

(14) Securities lending and borrowing collateral payable

The Company has provided securities lending and borrowing services since June 2003. The borrower is required to deposit collaterals based on certain percentages (the stipulated collateral ratio) of borrowed securities daily market prices to the Company. In addition, individual collateral maintenance ratio of each transaction will be calculated on a daily basis, and further collateral will be required if the maintenance ratio is below the collateral ratio. As at December 31, 2018 and 2017,

the Company has received collaterals as follows:

	Dece	December 31, 2017		
Cash (Note A)	<u>\$</u>	28,206,367	\$	13,515,655
Bank draft (Note B)	\$	8,068,219	\$	6,907,958
Securities (Notes B and C)	\$	40,779,397	\$	42,211,620

Note A: Interest will be added based on the bank's current interest rate on refund of cash collateral.

Note B: Pursuant to 'Taiwan Stock Exchange Corporation Securities Borrowing and Lending Rules,' bank draft, securities and collaterals are to be returned to borrowers upon the completion of the transaction. Accordingly, these are not reflected as assets of the Company. The Company is only responsible for the custodianship of these collaterals.

Note C: Securities are revalued according to their closing prices at December 31, 2018 and 2017.

(15) Other current liabilities

	Dece	mber 31, 2018	Dec	ember 31, 2017
Security borrowing performance bond payable (Note A)	\$	1,431,549	\$	844,849
Receipts under custody (Note B)		1,437,851		1,095,345
Contract liabilities (Note C)		525,654		-
Deposits received for borrowing securities collateral		110,000		90,000
Temporary receipt at offering price		-		157,670
Advance receipts (Note C)		-		461,827
Others		153,038		170,835
	\$	3,658,092	\$	2,820,526

- Note A: Since February 1, 2016, in order to meet the requirement of market participants and improve the liquidity of whole market, securities firm can lent out marketable securities to customers or other security firms, and securities finance enterprises can also borrow marketable securities from customers or other security firms, and securities finance enterprises. If marketable security is borrowed from customer, the security firm should appropriate securities firm performance guarantee in proportion to total amount of borrowed marketable securities, and aforementioned performance guarantee should be reserved in the Company.
- Note B: Receipt on behalf of others pertains to payments received and paid by the subsidiaries on behalf of others for purchasing or redeeming offshore and domestic mutual funds and for custody of cross-border securities starting from August 2006, July 2016 and November 2015 for such services, respectively.
- Note C: Contract liabilities and advance receipts refer to call (put) warrant listing fees received in advance, system construction service fees received in advance, internet user authorization service fees received in advance and others.

(16) Pensions

A. Defined benefit plan

As of December 31, 2018 and 2017, amounts recognised based on actuarial report are as follows:

	Dece	mber 31, 2018	December 31, 2017		
Present value of defined benefit obligations	\$	4,794,507	\$	4,758,257	
Fair value of plan assets	(4,155,593)	(4,155,166)	
Net defined benefit liability	\$	638,914	\$	603,091	

(a) Movements in net defined benefit liabilities are as follows:

	Pre	sent value of				
	defined benefit		Fair value of		Net defined	
	C	bligations	1	olan assets	benefit liability	
Year ended December 31, 2018			-			
Balance at January 1	\$	4,758,257	\$	4,155,166	\$	603,091
Current service cost		301,152		-		301,152
Past service cost		33,897		-		33,897
Gain on settlement	(571)		-	(571)
Interest (expense) income		49,752		44,907		4,845
,		5,142,487		4,200,073		942,414
Remeasurements:						
Return on plan assets (Note)		-		61,817	(61,817)
Change in demographic						
assumptions	(43)		-	(43)
Change in financial assumptions		56,181		-		56,181
Experience adjustments		35,931		<u> </u>		35,931
1		92,069		61,817		30,252
Pension fund contribution		_		288,661	(288,661)
Paid pension	(440,049)	(394,958)	(45,091)
Balance at December 31	\$	4,794,507	\$	4,155,593	\$	638,914

	Present value of defined benefit obligations		Fair value of plan assets			let defined nefit liability
Year ended December 31, 2017						
Balance at January 1	\$	4,731,560	\$	4,013,395	\$	718,165
Current service cost		321,817		-		321,817
Interest (expense) income		58,214		50,958		7,256
		5,111,591		4,064,353		1,047,238
Remeasurements:						
Return on plan assets (Note)		-	(12,451)		12,451
Change in demographic						
assumptions	(320)		-	(320)
Change in financial assumptions	(120,993)		-	(120,993)
Experience adjustments	(77,326)			(77,326)
	(198,639)	(12,451)	(186,188)
Pension fund contribution		-		255,678	(255,678)
Paid pension	(154,695)	(152,414)	(2,281)
Balance at December 31	\$	4,758,257	\$	4,155,166	\$	603,091

Note: Excluding amounts included in interest income or expense.

- (b) Based on the Company and TDCC and its subsidiaries' internal regulations for employee hiring and management, both the Company and TDCC and its subsidiaries and their employees contribute monthly to the workers' pension fund and employees' retirement fund, respectively. The Company and TDCC and its subsidiaries contribute based on certain percentages of salary expenses to a common retirement fund. These funds are administered by the independent pension fund committee and employees' retirement fund committee, respectively. The contributed amounts are deposited with the Bank of Taiwan under the name of the respective committees. Employees who have retired and resigned will receive benefits from the relevant pension fund, retirement fund and common fund.
- (c) TWCA has a pension plan covering all regular employees. Under the pension plan, two units are accrued for each year of service for the first 15 years and one unit for each additional year thereafter. Pension benefits are based on the number of units accrued and the average monthly salaries and wages of the last 6 months prior to retirement.
 - TWCA has an employee long-service bonus plan. Under the plan, TWCA provides monthly a certain percentage of the employees' monthly salaries and wages as reserve for severance pay.
- (d) The Bank of Taiwan was commissioned to manage the Fund of the Company and its subsidiaries' defined benefit pension plan that was administered by the independent retirement fund committee in accordance with the Fund's annual investment and utilisation plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilisation of the Labor Retirement Fund" (Article 6: The scope of utilisation for the Fund includes deposit in domestic or foreign

financial institutions, investment in domestic or foreign listed, over-the-counter, or private placement equity securities, investment in domestic or foreign real estate securitization products, etc.). With regard to the utilisation of the Fund, its minimum earnings in the annual distributions on the final financial statements shall be no less than the earnings attainable from the amounts accrued from two-year time deposits with the interest rates offered by local banks. If the earnings is less than aforementioned rates, government shall make payment for the deficit after being authorized by the Regulator. The Company and its subsidiaries has no right to participate in managing and operating that fund and hence the Company and its subsidiaries is unable to disclose the classification of plan asset fair value in accordance with IAS 19 paragraph 142. The composition of fair value of plan assets as of December 31, 2018 and 2017 is given in the Annual Labor Retirement Fund Utilisation Report announced by the government. As of December 31, 2018 and 2017, the Company and its subsidiaries' fund that was administered by employees' retirement fund committee was bank deposits.

(e) The principal actuarial assumptions used were as follows:

	2018	2017
Discount rate	0.75%~1.375%	1%~1.625%
Future salary increases	2%~3%	2%~3%

Assumptions regarding future mortality experience are set based on actuarial advice in accordance with published statistics and experience in each territory.

Because the main actuarial assumption changed, the present value of defined benefit obligation is affected. The analysis was as follows:

	Discou	int rate	Future salar	y increases
	Increase 0.25%	Decrease 0.25%	Increase 0.25%	Decrease 0.25%
December 31, 2018				
Effect on present value of				
defined benefit obligation	(<u>\$ 104,810</u>)	<u>\$ 108,385</u>	<u>\$ 75,867</u>	(\$ 69,944)
<u>December 31, 2017</u>				
Effect on present value of				
defined benefit obligation	(<u>\$ 107,433</u>)	\$ 111,154	<u>\$ 86,554</u>	(<u>\$ 81,168</u>)

The sensitivity analysis above is based on one assumption which changed while the other conditions remain unchanged. In practice, more than one assumption may change all at once.

(f) Expected contributions to the defined benefit pension plan of the Company and its subsidiaries for the year ending December 31, 2019 are \$304,123.

B. Defined contribution plan

(a) Effective July 1, 2005, the Company and its subsidiaries have established a defined contribution pension plan (the "New Plan") under the Labor Pension Act (the "Act"), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company and its

subsidiaries contribute monthly an amount based on 6% of the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. Employees receive the pension based on the law and each pension act. The benefits accrued are paid monthly or in lump sum upon termination of employment.

(b) The pension costs under the defined contribution pension plan of the Company and its subsidiaries for the years ended December 31, 2018 and 2017 were \$121,888 and \$114,880, respectively.

(17) Share capital

- A. In accordance with the resolution adopted at the stockholders' meeting on June 15, 2017, the Company and its subsidiaries issued common stock by capitalizing the unappropriated retained earnings totaling 16,924 thousand shares. The registration of this capital increase was approved by the Competent Authority.
- B. As of December 31, 2018, the Company's authorized and paid-in capital was \$6,938,692 with a par value of \$10 (in dollars) per share. All proceeds from shares issued have been collected.
- C. Under an amendment to Article 128 of the Securities and Exchange Law promulgated on July 19, 2000, the Company's common stocks can only be sold to authorized securities companies starting January 15, 2001.

(18) Capital reserve

Pursuant to the R.O.C. Company Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stocks and donations can be used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership, provided that the Company has no accumulated deficit. However, capital surplus should not be used to cover accumulated deficit unless the legal reserve is insufficient.

(19) Legal reserve / Special reserve

- A. According to the R.O.C. Company Law, the annual net income should be used initially to cover any accumulated deficit; thereafter 10% of the annual net income should be set aside as legal reserve until it has reached 100% of contributed capital. Legal reserve shall be exclusively used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership and shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the balance of the reserve exceeds 25% of the Company's paid-in capital.
- B. Special reserve, as required by regulations of the Securities and Futures Bureau (SFB), of at most 80% of the annual net income was determined by the Competent Authority; pursuant to regulations of the Competent Authority, the Company and its subsidiaries have transferred default damages fund to special reserve in preparation of financial statements since 2013 in accordance with IFRSs. The special reserve as resolved by the stockholders can only be used, upon the Competent Authority's approval, to offset deficit or transferred to capital.

(20) Unappropriated retained earnings

		2018	2017	
At January 1	\$	3,050,933	\$	1,151,870
Effect of retrospective application and retrospective restatement		552,222		
Balance at January 1 after adjustments		3,603,155		1,151,870
Profit for the year		3,535,071		2,854,246
(Losses) gains on remeasurements of defined benefit plans	(26,275)		193,595
Losses on remeasurements of defined benefit plans, associates accounted for using equity method	(738)	(894)
Legal reserve	(285,425)	(115,187)
Special reserve	(1,021,820)	(17,278)
Cash dividends	(1,734,673)	(846,183)
Stock dividends			(169,236)
Difference between consideration and carrying amount	(3,453)		
At December 31	\$	4,065,842	\$	3,050,933

- A. The annual net income should be used initially to cover any accumulated deficit; 10% of the annual net income should be set aside as legal reserve and special reserve upon the Competent Authority's approval. The remaining amount can be distributed by a resolution passed during a meeting of the Board of Directors and approved at the stockholders' meeting.
- B. As approved by the stockholders during their meeting, cash dividends declared for 2017 and 2016 were \$2.5 (in dollars) per share and \$1.25 (in dollars) per share, respectively, and the stock dividends for 2017 and 2016 were \$0 (in dollars) per share and \$0.25 (in dollars) per share, respectively.

(21) Other equity items

				2018					
Unrealized gains (losses) on available-for-sale financial assets				Unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income					
January 1	\$	3,557,991	\$	-	\$	3,557,991			
Effects of retrospective application and retrospective									
restatement		3,557,991)		2,998,213		559,778)			
Balance at January 1 after adjustments Revaluation		<u>-</u>		2,998,213 496,192		2,998,213 496,192			
December 31	\$		\$	3,494,405	\$	3,494,405			
			_	2017 Unrealized gains	(losse	es) on			
			_	available-for-sale fi	nanci	al assets			
January 1			\$			3,721,509			
Unrealised losses on val available-for-sale finan			(_			163,518)			
December 31			<u>\$</u>			3,557,991			

(22) Trading fees

Trading fees mainly represent fees collected for the use of the Company's facilities for trading and settlement of securities. The fees are computed as a percentage of the value of the transactions of securities traded and the rate is 0.000065 per dollar for dealers and brokers. After reaching an agreement with Taiwan Securities Association, which was approved by the Board of Directors of the Company and the Competent Authority in No. 0950156625 bulletin (December 14, 2006), the rate has been reduced by 12% during the time that the Company stopped to make cash contributions to the DDF. Effective December 1, 2011, as approved by the Board of Directors of the Company and the Competent Authority per No. 1000058644 bulletin (November 29, 2011), the rate (0.000065 per dollar) has been reduced by 20%.

(23) Expenses by nature

	Operating expenses				
	Years ended December 31,				
	2018			2017	
Employee benefit expense					
Salaries	\$	2,259,599	\$	2,274,921	
Insurance		138,074		128,683	
Pension		461,211		443,953	
Others		28,853		33,468	
	\$	2,887,737	\$	2,881,025	
Depreciation	\$	521,468	\$	558,850	
Amortization	\$	224,765	\$	195,039	

- A. Under the Company's Articles of Incorporation, the Company shall distribute 1%~12% of annual profit as employees' compensation for each accounting year. However, the distribution shall be firstly reserved to offset accumulated deficit if there is any.
- B. For the years ended December 31, 2018 and 2017, employees' compensation was accrued at \$130,368 and \$126,468, respectively. The aforementioned amounts were recognized in salary expenses. Employees' compensation for 2018 was accrued based on profit of current year distributable for the year ended December 31, 2018, and actual distribution amount of employees' compensation is resolved by the Board of Directors.

(24) Other gains and losses

(21) Outer cums und redees					
	Years ended December 31,				
		2018	2017		
(Losses) gains on financial assets at fair value					
through profit or loss	(\$	99,515) \$	4,975		
Foreign exchange gains (losses)		16,982 (82,255)		
Others	(103,136) (104,312)		
V	(\$	185,669) (\$	181,592)		
(25) Finance costs					
	•	Years ended Decem	iber 31,		
		2018	2017		
Interest expense -Securities lending and borrowing collateral	\$	1,751 \$	3,763		

(26) Income tax

A. Income tax expense

(a) Components of income tax expense

	Years ended December 31,						
	2018			2017			
Current tax:							
Current tax on profits for the year	\$	1,153,537	\$	657,160			
Tax on undistributed surplus earnings		503		70			
Prior year income tax (over) under estimation	(35,896)		6,586			
Total current tax		1,118,144		663,816			
Deferred tax:							
Origination and reversal of temporary							
differences		15,380	(392)			
Impact of change in tax rate	(7,974)					
Total deferred tax		7,406		392)			
Income tax expense	<u>\$</u>	1,125,550	\$	663,424			
) Details of income tax expense and accounting	profit						
		Years ended	l Decei	nber 31,			

(b)

	Years ended December 31,						
Tax calculated based on profit before tax and statutory tax rate (Note)		2018		2017			
		1,458,299	\$	953,656			
Tax on undistributed surplus earnings		503		70			
Effect from permanent differences of income							
tax	(306,302)	(306,733)			
Taxable loss not recognized		13,491		16,679			
Impact of change in tax rate	(7,974)		-			
Deferred tax assets underestimation		3,429	(6,834)			
Prior year income tax (over) under estimation	(35,896)		6,586			
Tax expense	\$	1,125,550	\$	663,424			

Note: The basis for computing the applicable tax rate is the rate applicable in the parent company's country.

B. Amounts of deferred tax assets or liabilities as a result of temporary differences are as follows:

	Year ended December 31, 2018						
				Recognized in			
		January 1		profit or loss	December 31		
-Deferred tax assets (recorded							
as 'other non-current assets')							
Employees' welfare	\$	1,708	(\$	204)	\$	1,504	
Unused expenses of employee							
compensated absences		21,346	(4,664)		16,682	
Unrealized exchange loss		10,919	(1,291)		9,628	
Others		1,256		2)		1,254	
	\$	35,229	<u>(\$</u>	6,161)	\$	29,068	
-Deferred tax liabilities							
Goodwill	\$	34,007	\$	1,096	\$	35,103	
Reserve for land value		•					
increment tax		44,599		<u>-</u>		44,599	
	\$	78,606	\$	1,096	\$	79,702	
		Year	· end	ded December 31,	201	.7	
				Recognized in			
		January 1		profit or loss		December 31	
-Deferred tax assets (recorded							
as 'other non-current assets')							
Employees' welfare	\$	1,656	\$	52	\$	1,708	
Unused expenses of employee							
compensated absences		9,946		11,400		21,346	
Unrealized exchange loss		19,923	(9,004)		10,919	
Others	_	1,127	_	129	_	1,256	
	<u>\$</u>	32,652	<u>\$</u>	2,577	\$	35,229	
-Deferred tax liabilities							
Goodwill	\$	31,680	\$	2,327	\$	34,007	
Reserve for land value							
increment tax		44,599		↔		44,599	
		76,279	\$	2,327	\$	78,606	

C. The amounts of deductible temporary differences that were not recognized as deferred tax assets are as follows:

December 31, 2018 December 31, 2017 $\frac{559,596}{$} = \frac{503,607}{$}$

D. The Company's income tax returns through 2015 have been assessed and approved by the Tax Authority.

E. Under the amendments to the Income Tax Act which was promulgated by the President of the Republic of China on February 7, 2018, the Company's applicable income tax rate was raised from 17% to 20% effective from January 1, 2018. The Company and its subsidiaries have assessed the impact of the change in income tax rate.

(27) Earnings per share

	Year ended December 31, 2018					
	Am	ount after tax	at the	nding shares e end of the n thousands)		nings per share (in dollars)
Basic earnings per share						
Profit attributable to ordinary shareholders of the parent	\$	3,535,071		693,869	\$	5.09
		Year	ended	December 31,	2017	
	_Am	ount after tax	at the	e end of the n thousands)		nings per share (in dollars)
Basic earnings per share						
Profit attributable to ordinary shareholders of the parent	\$	2,854,246		693,869	\$	4.11
(28) Supplemental cash flow informa	<u>tion</u>					
				Years ended	Decen	mber 31,
				2018		2017
Additions and transfers from programment	perty aı	nd	\$	486,463	\$	258,897
Additions and transfers from inta	mgible	assets		572,374		174,606
Add: Opening balance of payable				-		2,150
Less: Opening balance of prepay and intangible assets			(243,090)	(34,776)
Add: Ending balance of prepaym and intangible assets	ents fo	r equipment		39,261		243,090
Cash paid during the year			\$	855,008	\$	643,967

7. RELATED PARTY TRANSACTIONS

(1) Names of related parties and relationship

Names of related parties	Relationship with the Company
Yuanta Securities Co., Ltd. (YUANTA)	Corporate Director
Bank of Taiwan Co., Ltd.	"
Land Bank of Taiwan Co., Ltd.	"
CDIB Capital Group (Note)	"
Taiwan Cement Corporation	<i>"</i>
Fubon Securities Co., Ltd.	"
SinoPac Securities Corporation	"
Mega International Commercial Bank Co., Ltd.	"
Yuanta Securities Finance Co., Ltd.	"
Taipei Financial Center Corporation (TFCC)	Other related party
Taiwan Futures Exchange Corporation (TAIFEX)	"
Jih Sun Securities Co., Ltd.	"
First Commercial Bank, Ltd.	"
Taipei Exchange Corporation (TPEx)	"

Note: China Development Industrial Bank has changed company name to CDIB Capital Group since April 2017.

(2) Significant related party transactions

	 Years ended December 31,			
	 2018		2017	
A. Trading fees:				
Corporate Directors				
YUANTA	\$ 410,668	\$	341,442	
Others	410,779		343,106	
Other related parties	 115,464		92,683	
,	\$ 936,911	\$	777,231	
B. Listing fees:				
Corporate Directors				
YUANTA	\$ 229,010	\$	158,820	
Others	144,291		121,866	
Other related parties	 28,350		27,225	
7	\$ 401,651	<u>\$</u>	307,911	

		Years ended I	December 31,		
		2018	2017		
C. Securities recording service fees:					
Corporate Directors					
YUANTA	\$	139,263	\$	120,502	
Others		130,681		147,080	
Other related parties		41,304			
	\$	311,248	\$	267,582	
D. Transfer process service fees:					
Corporate Directors	\$	102,445	\$	104,554	
Other related parties		9,497		2	
	\$	111,942	\$	104,556	
E. Future clearing fees:					
Other related parties					
TAIFEX	\$	376,267	\$	321,864	
F. License fees:					
Other related parties					
TAIFEX	\$	317,334	\$	249,329	
Others		630		300	
Corporate Directors		1,050	-	1,530	
-	\$	319,014	\$	251,159	
G. Data processing fees:					
Other related parties					
TPEx	\$	200,650	\$	183,675	
H. Securities settlement service fees					
(recorded as operating revenue-others):					
Other related parties					
TPEx	\$	201,238	\$	189,290	
I. Rental and administrative expenses					
(recorded as general and administrative expenses):					
Other related parties					
TFCC	\$	183,753	\$	183,631	
	Dece	ember 31, 2018	Decer	mber 31, 2017	
J. Receivables from related parties:					
Other related parties	\$	100,558	\$	106,174	
Corporate Directors		95,151		121,529	
Corporate Directors	\$	195,709	\$	227,703	

(3) Key management compensation

	Years ended December 31,				
		2018		2017	
Salaries and other short-term employee benefits	\$	102,271	\$	102,188	
Pensions		9,505		9,554	
	\$	111,776	\$	111,742	

8. PLEDGED ASSETS

Please refer to Notes 6(8) and 6(13) for the information on time certificates and operation guarantee funds pledged as collateral for the settlement prices the Company and its subsidiaries had applied for payment on behalf of others and applied for credit limit with banks.

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED CONTRACT

COMMITMENTS

(1) Contingencies

None.

(2) Commitments

A. As of December 31, 2018 and 2017, the Company and its subsidiaries leased certain offices. The total future minimum lease payments and administrative expense under these operating lease agreements are as follows:

	Decem	ber 31, 2018	December 31, 2017			
	Rental expenses	Administrative expenses	Rental expenses	Administrative expenses		
Not later than one year	\$ 299,443	\$ 27,104	\$ 298,070	\$ 26,984		
Later than one year but not later than five years	276,028 \$ 575,471	\$ 24,403 \$ 51,507	525,488 \$ 823,558	51,176 \$ 78,160		

B. Future payments required for the contracts in relation to the acquisitions of computer equipment and information system are as follows:

	Decem	iber 31, 2018	December 31, 2017		
Computer equipment and other equipment	\$	67,933	\$	408,916	

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

None.

12. OTHERS

(1) Capital management

The Company and its subsidiaries' objectives of capital management:

- A. Ensure to continue operating and to continue to contribute returns for shareholders.
- B. Support stability and growth of the Company.

C. Offer capital to improve risk management ability.

(2) Financial instruments

A. Fair value information of financial instruments

	December 31, 2018		Dece	ember 31, 2017
Financial assets		•		
Financial assets at fair value through profit or	\$	5,133,853	\$	2,201,103
loss				
Financial assets measured at fair value through				
other comprehensive income		5,668,034		-
Available-for-sale financial assets				7,290,843
Held-to-maturity financial assets		-		16,216,959
Financial assets at cost		-		18,000
Financial assets at amortised cost (Note)		94,323,755		
	\$	105,125,642	\$	25,726,905
Financial liabilities				
Financial liabilities at amortised cost (Note)	\$	40,126,165	\$	

Note: Financial assets at amortised cost include cash and cash equivalents, financial assets at amortised cost, accounts receivable, other receivables, other financial assets, securities settlement debit and compensation reserve fund. Financial liabilities at amortised cost include securities lending and borrowing collateral payable, accrued expenses, securities settlement credit and guarantee deposits received.

B. Financial risk management policies

- (a) The targets of financial risk management are to manage the following financial risks: market risk (including foreign exchange risk and securities price risk), credit price risk and liquidity risk.
- (b) The Company and its subsidiaries have mechanism to control all financial risks the Company and its subsidiaries are exposed to. Except for market risk that is controlled by external factors, other risks can be controlled internally or eliminated and the target is to minimize the risks to zero. The Company and its subsidiaries' overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company and its subsidiaries' financial performance.
- (c) Risk management is carried out by a central financial department (Financial Department) in accordance with the policies approved by the Board of Directors. The Company and its subsidiaries' Financial Department identifies and evaluates a variety of financial instruments, the procedure of the transaction, and transaction parties. Moreover, the Financial Department regularly proposes recommendation reports and reviews the business performance. The internal auditor is in charge of conducting the audit of the business function.

C. Significant financial risks and degrees of financial risks

(a) Market risk

The market risk is caused by losses resulting from changes in exchange rate and securities prices.

Foreign exchange risk

Foreign exchange risk refers to impact from value changes to assets and liabilities denominated in foreign currencies. The Company and its subsidiaries provide services for securities borrowing and lending transactions, and according to regulations, specific security borrowers can deposit cash denominated in United States Dollars, Japan Yen and European Union as collateral. The Company and its subsidiaries had its own funds partly constituted by foreign currency.

	December 31, 2018								
	Foreign				Sensitivit	y an	alysis		
	Currency					·	Effect		
(Foreign currency:	Amount	Exchange	Во	ok Value	Degree of	on	profit		
functional currency)	(In Thousands)	Rate_	((NTD)	variation		or loss		
Financial assets									
Monetary items									
USD:NTD	23,760	30.715	\$	729,788	1%	\$	7,298		
RMB:NTD	43,484	4.472		194,460	1%		1,945		
JPY:NTD	50,243,192	0.2782	13	,977,656	1%		139,777		
EUR:NTD	347,515	35.2	12	2,232,528	1%	•	122,325		
Financial liabilities									
Monetary items									
USD:NTD	2,729	30.715		83,821	1%		838		
JPY:NTD	50,243,133	0.2782	13	3,977,640	1%		139,776		
EUR:NTD	347,511	35.2	12	2,232,387	1%		122,324		

December 31, 2017

				·	
	Foreign		· · · ·	Sensitivit	y analysis
	Currency				Effect
(Foreign currency:	Amount	Exchange	Book Value	Degree of	on profit
functional currency)	(<u>In Thousands</u>)	Rate	(NTD)	variation	or loss
Financial assets					
Monetary items					
USD:NTD	66,519	29.76	\$ 1,979,546	1%	\$ 19,795
RMB:NTD	77,320	4.565	352,966	1%	3,530
JPY:NTD	14,247,603	0.2642	3,764,217	1%	37,642
EUR:NTD	190,182	35.57	6,764,774	1%	67,648
Financial liabilities					
Monetary items					
USD:NTD	48,885	29.76	1,454,818	1%	14,548
JPY:NTD	12,247,586	0.2642	3,764,212	1%	37,642
EUR:NTD	190,181	35.57	6,764,738	1%	67,647

The total exchange gain (loss) arising from significant foreign exchange variation on the monetary items held by the Company and its subsidiaries for the years ended December 31, 2018 and 2017 amounted to \$16,987 and (\$82,255), respectively.

Interest rate risk

Interest rate risk refers to changes in fair value of financial instruments resulting from changes in market interest rates, and the risk mainly comes from security investment and investment in money market. As of December 31, 2018 and 2017, the financial assets at amortized cost and held-to-maturity that belongs to fixed-rate product were \$14,568,424 and \$16,216,959, respectively. The change in market interest rates will also fluctuate the fair value of the financial instruments, however, the financial instruments are held until maturity in order to receive effective rate compensation in duration, and there is no disposal or valuation loss arising from the fluctuation.

The Company and its subsidiaries are exposed to risk of net value of funds arising from investment in money market. If the net value of funds had increased/decreased by 1% for the years ended December 31, 2018 and 2017, profit or loss, net of tax due from fair value movement of financial assets at fair value through profit or loss for the year would increase/decrease by \$29,889 and \$22,011, respectively, and other comprehensive income due from fair value movement of available-for-sale financial assets for the year would increase/decrease by \$0 and \$8,116, respectively.

Price risk of other equity interest

The price risk of other equity interest of equity instruments arise from financial assets classified as financial assets at fair value through profit or loss and financial assets at fair

value through other comprehensive income for the year ended December 31, 2018. The price risk of other equity interest of equity instruments arise from investments classified as available-for-sale financial assets for the year ended December 31, 2017, including beneficiary certificates and unlisted stocks but excluding money market fund.

The market risk of holding equity security includes individual risk fluctuated by changes in quoted prices in active markets of individual equity security and general market risk fluctuated by quoted prices in overall active markets. For risk of security management, beneficiary certificates are in accordance with the Company and its subsidiaries' related regulations on capital usage, and the Company and its subsidiaries choose appropriate investment objects, sets maximum amount for prudent investment and related limitation, and prepares summary of investment gain/ loss and capital usage reports regularly. Equity investment has to be approved by the Company's Board of Directors before initialization.

Except for money market funds, sensitivity analysis of price risk of beneficiary certificates refers to calculation based on changes in fair value at the end of the reporting period. If the price of equity instruments had increased/ decreased by 1% for the year ended December 31, 2018, profit or loss, net of tax due from fair value movement of financial assets at fair value through profit or loss for the year would increase/decrease by \$21,449. If the price of equity instruments had increased/ decreased by 1% for the year ended December 31, 2017, other comprehensive income due from fair value movement of available-for-sale financial assets for the year would increase/decrease by \$13,816.

The Company and its subsidiaries' unlisted stocks are susceptible to market price risk arising from uncertainties about future values of the investment objectives. The fair value level of these unlisted stocks belong to level 3. The sensitivity analysis is provided in Notes 12(3)H and 12(3)I.

(b) Credit risk

- i. Credit risk refers to the risk of financial loss to the Company and its subsidiaries arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is cash and cash equivalents, other financial assets and accounts receivable that counterparties could not repay in full based on the agreed terms, and the contract cash flows of debt instruments stated at amortized cost.
- ii. The Company and its subsidiaries' policy requires that all transactions be conducted with the counterparties that meet the specified credit rating requirement. As the counterparties are all well-known domestic financial institutions with good credit standing, defaults by the counterparties are not expected to occur. As for transaction objects, the default on financial assets investment objects held by the Company and its subsidiaries might cause the Company and its subsidiaries' losses.
- iii. The Company and its subsidiaries adopt the assumptions under IFRS 9, that is, the default occurs when the contract payments are past due over 90 days.

- iv. If the credit rating grade of an investment target degrades two scales, there has been a significant increase in credit risk on that instrument since initial recognition.
- v. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:
 - (i) It becomes probable that the issuer will enter bankruptcy or other financial reorganization due to their financial difficulties;
 - (ii) Default or delinquency in interest or principal repayments;
 - (iii) Adverse changes in national or regional economic conditions that are expected to cause a default.
- vi. The credit quality information of financial assets is as follows:

Cash and cash equivalents

The Company and its subsidiaries associate with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote, therefore, the Company and its subsidiaries recognize the impairment provision for 12 months expected credit losses. No loss allowance was provided by the Company and its subsidiaries for the year ended December 31, 2018.

Accounts receivable

- (i) The Company and its subsidiaries apply the simplified approach using loss rate methodology to estimate expected credit loss under the provision matrix basis.
- (ii) The Company and its subsidiaries used the forecastability to adjust historical and timely information to assess the default possibility of accounts receivable. On December 31, 2018, the loss rate methodology and provision matrix are as follows:

The Co	mnany	and	other	subsidiaries
1 11111 1 1	11111111111	711111	1311111	autaiuiai iva

				Froup 1			iroup 2	2_		Total
At December 31, 2018 Expected loss rate Total book value			\$	0% 336,7	68	\$	100%	_	\$	336,768
Loss allowance			\$		-	\$		-	\$	-
TDCC:	No	t past due		180 day	•		81~36 days oast du			Over 365 days past due
At December 31, 2018 Expected loss rate Total book value Loss allowance	\$ \$	0% 395,339 -	\$ \$	0%	-	\$ \$	0%	16	\$	0% 395,355

(iii) Movements in loss allowance for accounts receivable are as follows:

	2018			
At January 1_IAS 39	\$	3,240		
Adjustments under new standards		-		
January 1_IFRS 9		3,240		
Write-offs	(2,240)		
Reversal of impairment loss	(1,000)		
At December 31	\$	<u>.</u>		

(iv) The ageing analysis of accounts receivable that were past due but not impaired is as follows:

	Decen	December 31, 2018		
Not past due	\$	724,416	\$	757,947
Up to 30 days		5,258		5,476
31 to 90 days		1,146		6,506
91 to 180 days		1,287		795
Over 180 days		16		3,215
·	<u>\$</u>	732,123	\$	773,939

Other financial assets

The Company and its subsidiaries associate with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote, therefore, the Company and its subsidiaries recognize the impairment provision for 12 months expected credit losses. No loss allowance was provided by the Company and its subsidiaries for the year ended December 31, 2018.

Debt instruments at amortized cost

(i) The Company and its subsidiaries' investments in debt instruments at amortized cost all were issued by banks which have high credit quality or companies which have been rated as investment grades, and they all were classified as Group 1. Because the probability of default is remote, therefore, the Company and its subsidiaries recognize the impairment provision for 12 months expected credit losses.

Internal credit risk ratings	Company credit ratings by Taiwan Ratings
Group 1	twAAA~twA-
Group 2	$twBBB+\sim twBBB-$
Group 3	$twBB+\sim twC$
Impaired	twD

(ii) Movements in loss allowance for investments in debt instruments carried at amortized cost are as follows:

		2018					
			I	time			
			Significant				
			increase in		Impairm	ent	
	12 r	nonths	credit risk		of credit		
At January 1_IAS 39	\$	-	\$	-	\$	-	
Adjustments under new standards		7,346		_			
At January 1_IFRS 9		7,346		-		-	
Reversal of impairment loss	(1,521)		_			
At December 31	\$	5,825	\$		\$		

(c) Liquidity risk:

Liquidity risk refers to responsibilities that the Company and its subsidiaries are unable to repay financial debts with cash or another financial asset. The Company and its subsidiaries apply expected cash flow approach to manage liquidity risk, and ensures the amount to be paid for all maturing debt and all known requirement for capital through expectations of cash needed.

The Company and its subsidiaries' non-derivative financial liabilities all mature within 1 year, excluding quarantee deposit received which matures over 1 year.

(3) Fair value estimation

- A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:
 - Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Company and its subsidiaries' investment in beneficiary certificates is included in Level 1.
 - Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. The fair value of the Company and its subsidiaries' investment in bank debentures, bonds and government bonds is included in Level 2.
 - Level 3: Unobservable inputs for the asset or liability. The fair value of the Company and its subsidiaries' investment in unlisted stocks is included in Level 3.
- B. Financial instruments not measured at fair value

Except for those listed in the table below, the carrying amounts of the Company and its subsidiaries' financial instruments not measured at fair value (including cash and cash equivalents, accounts receivable, net, other receivables, other financial assets, compensation reserve fund, securities settlement debit, securities lending and borrowing collateral payable,

accrued expenses and securities settlement credit) approximate to their fair values.

	December 31, 2018						
			Fair value				
	Book value	Level 1	Level 2	Level 3			
Financial assets: Financial assets at amortised cost	\$14,568,424	\$ -	\$14,695,798	<u>\$</u>			
		December 31, 2017					
			Fair value				
	Book value	Level 1	Level 2	Level 3			
Financial assets: Held-to-maturity financial assets	\$16,216,959	<u>\$</u>	\$16,337,939	<u>\$</u>			

The methods and assumptions of fair value measurement are as follows:

Financial assets at amortized cost and held-to-maturity financial assets: If there is a quoted price in an active market, the fair value is based on the market price; if there is no quoted market price available, the fair value is determined by using valuation techniques or counterparty quotes.

C. The related information of financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:

<u>December 31, 2018</u>	Level 1	Level 2	_	Level 3	_	Total
Assets						
Recurring fair value measurements						
Financial assets at fair value						
through profit or loss:						
Beneficiary certificates	\$ 5,133,853	\$	-	\$ -	\$	5,133,853
Financial assets at fair value						
through other comprehensive						
income:						
Unlisted (OTC) stocks			<u>-</u>	5,668,034	_	5,668,034
	<u>\$ 5,133,853</u>	\$	_	\$ 5,668,034	<u>\$</u>	10,801,887

<u>December 31, 2017</u>	Level 1	Level 2		_ Level 3	_	Total
Assets						
Recurring fair value measurements						
Financial assets at fair value through						
profit or loss:						
Beneficiary certificates	\$ 2,201,103	\$	-	\$ -	-	\$ 2,201,103
Available-for-sale financial						
assets:						
Beneficiary certificates	\$ 2,193,207	\$	-	\$ -	-	\$ 2,193,207
Unlisted (OTC) stocks			_	5,097,636	5	5,097,636
	<u>\$ 4,394,310</u>	\$	<u>-</u>	\$ 5,097,636	<u> </u>	<u>\$ 9,491,946</u>

- D. The methods and assumptions the Company and its subsidiaries used to measure fair value are as follows:
 - (a) The instruments the Company and its subsidiaries used market quoted prices as their fair values (that is, Level 1) are listed below by characteristics:

	Closed-end fund	Open-end fund
Market quoted price	Closing price	Net asset value

- (b) Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques. The fair value of financial instruments measured by using valuation techniques can be referred to current fair value of instruments with similar terms and characteristics in substance, discounted cash flow method or other valuation methods, including calculated by applying model using market information available at the consolidated balance sheet date.
- (c) When assessing non-standard and low-complexity financial instruments the Company and its subsidiaries adopt valuation technique that is widely used by market participants. The inputs used in the valuation method to measure these financial instruments are normally observable in the market.
- (d) The output of valuation model is an estimated value and the valuation technique may not be able to capture all relevant factors of the Company and its subsidiaries' financial and non-financial instruments. Therefore, the estimated value derived using valuation model is adjusted accordingly with additional inputs, for example, model risk or liquidity risk and etc. In accordance with the Company and its subsidiaries' management policies and relevant control procedures relating to the valuation models used for fair value measurement, management believes adjustment to valuation is necessary in order to reasonably represent the fair value of financial and non-financial instruments at the consolidated balance sheet. The inputs and pricing information used during valuation are carefully assessed and adjusted based on current market conditions.

- E. For the years ended December 31, 2018 and 2017, there was no transfer between Level 1 and Level 2.
- F. For the years ended December 31, 2018 and 2017, there was no transfer into or out from Level 3.
- G. Financial segment and commissioned appraisers are in charge of valuation procedures for fair value measurements being categorized within Level 3, which is to verify independent fair value of financial instruments. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources and represented as the exercisable price, and frequently calibrating valuation model, performing back-testing, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.
- H. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at				
	December 31, 2018	Valuation Significant technique unobservable input		Relationship of inputs to fair value	
Unlisted (OTC) shares:					
Taiwan Futures Exchanges Corporation	\$ 3,065,928	Discount cash dividend method	Dividend growth rate	1.75%	The higher the dividend growth rate, the higher the fair value
•			Discount rate (Note)	7.38%	The lower the discount rate, the higher the fair value
Taipei Financial Center Corporation	2,590,213	Discount cash flow method	Discount rate (Note)	4.12%	The lower the discount rate, the higher the fair value
Taiwan Mobile Payment Co., Ltd.	11,893	Net asset value	N/A	-	N/A

	Fair value at December 31, 2017	Valuation technique	Significa unobservable		Relationship of inputs to fair value
Unlisted (OTC) shares:					
Taiwan Futures Exchanges Corporation	\$ 2,843,673	Discount cash dividend method	Dividend growth rate	1.5%	The higher the dividend growth rate, the higher the fair value
-			Discount rate (Note)	7.38%	The lower the discount rate, the higher the fair value
Taipei Financial Center Corporation	2,253,963	Discounted cash flow method	Discount rate (Note)	4.51%	The lower the discount rate, the higher the fair value

Note: Discount rate is estimated taking into consideration the capital cost structure and operational risk of Taiwan Futures Exchange (TAIFEX) and Taipei Financial Center Corp., respectively.

I. The Company and its subsidiaries have carefully assessed the valuation models and assumptions used to measure fair value; therefore, the fair value measurement is reasonable. However, use of different valuation models or assumptions may result in different measurement. The following is the effect of profit or loss or of other comprehensive income from financial assets and liabilities categorized within Level 3 if the inputs used to valuation models have changed:

			December 31, 2018				
			Recog	nized in	Recogniz	ed in other	
			profit	or loss	compreher	sive income	
			Favourable	Unfavourable	Favourable	Unfavourable	
	Input	Change	Change	Change	Change	Change	
Financial assets							
Taiwan Futures	Dividend	±1%	<u> </u>	<u> </u>	\$ 335,431	<u>\$ 234,458</u>	
Exchanges	growth rate						
Corporation	Discount rate	±1%	<u>\$</u>	<u>\$</u>	\$ 317,837	<u>\$ 222,219</u>	
Taipei Financial							
Center					* 600.046	ф 511 500	
Corporation	Discount rate	±1%	<u>\$</u>	<u> </u>	\$ 680,046	<u>\$ 511,502</u>	

			December 31, 20 <u>17</u>				
			_	nized in or loss	Recognized in other comprehensive income		
	Input	Change	Favourable Change	Unfavourable Change	Favourable Change	Unfavourable Change	
Financial assets							
Taiwan Futures Exchanges	Dividend growth rate	±1%	<u>\$ -</u>	<u> </u>	\$ 270,619	<u>\$ 191,599</u>	
Corporation	Discount rate	±1%	<u> </u>	<u> </u>	\$ 255,829	<u>\$ 181,137</u>	
Taipei Financial							
Center							
Corporation	Discount rate	±1%	<u> </u>	<u> </u>	\$ 629,735	<u>\$ 472,091</u>	

J. Changes belonging to level 3 financial instruments for the years ended December 31, 2018 and 2017 are as follows:

	Equity in strument			
At January 1, 2018_IAS 39	\$	5,097,636		
Adjustments under new standards		12,872		
At January 1, 2018_IFRS 9		5,110,508		
Gains recognized in other comprehensive income		557,526		
At December 31, 2018	\$	5,668,034		
	Available-fo	r-sale financial assets		
At January 1, 2017	\$	4,768,784		
Gains recognized in other comprehensive income	<u></u>	328,852		
At December 31, 2017	\$	5,097,636		

(4) Effects on initial application of IFRS 9, 'Financial instruments'

- A. Summary of significant accounting policies adopted in 2017:
 - (a) Financial assets at fair value through profit or loss
 - i. They are financial assets held for trading or financial assets designated as at fair value through profit or loss on initial recognition. Financial assets are classified in this category of held for trading if acquired principally for the purpose of selling in the short-term.
 - ii. On a regular way purchase or sale basis, financial assets held for trading are recognised and derecognised using settlement date accounting.
 - iii. Financial liabilities at fair value through profit or loss are initially recognised at fair value. Related transaction costs are expensed in profit or loss. These financial liabilities are subsequently remeasured and stated at fair value, and any changes in the fair value of these financial liabilities are recognised in profit or loss.
 - (b) Available-for-sale financial assets
 - i. Available-for-sale financial assets are non-derivatives that are either designated in this

category or not classified in any of the other categories.

- ii. On a regular way purchase or sale basis, available-for-sale financial assets are recognised and derecognized using settlement date accounting.
- iii. Available-for-sale financial assets are initially recognized at fair value plus transaction costs. These financial assets are subsequently remeasured and stated at fair value, and any changes in the fair value of these financial assets are recognized in other comprehensive income. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured or derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are presented in 'financial assets measured at cost'.

(c) Held-to-maturity financial assets

- i. Held-to-maturity financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturity date that the Company and its subsidiaries have the positive intention and ability to hold to maturity other than those that meet the definition of loans and receivables and those that are designated as at fair value through profit or loss or as available-for-sale on initial recognition.
- ii. On a regular way purchase or sale basis, held-to-maturity financial assets are recognized and derecognized using settlement date accounting.
- iii. Held-to-maturity financial assets are initially recognized at fair value on the trade date plus transaction costs and subsequently measured at amortized cost using the effective interest method, less provision for impairment. Amortization of a premium or a discount on such assets is recognized in profit or loss.

(d) Accounts receivable

Accounts receivable are loans and receivables originated by the entity. They are created by the entity by selling goods or providing services to customers in the ordinary course of business. Accounts receivable are initially recognized at fair value and subsequently measured at amortized cost using the effective interest method, less provision for impairment. However, short-term accounts receivable without bearing interest are subsequently measured at initial invoice amount as effect of discounting is immaterial.

(e) Impairment of financial assets

- i. The Company and its subsidiaries assess at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.
- ii. The criteria that the Company and its subsidiaries use to determine whether there is objective evidence of an impairment loss is as follows:
 - (i) Significant financial difficulty of the issuer or debtor; a breach of contract, such as a

default or delinquency in interest or principal payments;

- (ii) Information about significant changes with an adverse effect that have taken place in the technology, market, economic or legal environment in which the issuer operates, and indicates that the cost of the investment in the equity instrument may not be recovered;
- (iii) A significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.
- iii. When the Company and its subsidiaries assess that there has been objective evidence of impairment and an impairment loss has occurred, accounting for impairment is made as follows according to the category of financial assets:
 - (i) Financial assets measured at amortized cost

The amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate, and is recognized in profit or loss. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognized, the recognized impairment loss will reverse to be recognized in profit or loss by adjusting allowance account. However, the reversal shall not make the book value of the financial assets greater than the amortized cost if no recognition occurred at the reversal date.

(ii) Financial assets at cost

The amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at current market return rate of similar financial asset, and is recognized in profit or loss. Impairment loss recognized for this category shall not be reversed subsequently. Impairment loss is recognized by adjusting the carrying amount of the asset directly.

(iii) Available-for-sale financial assets

The amount of the impairment loss is measured as the difference between the asset's acquisition cost (less any principal repayment and amortization) and current fair value, less any impairment loss on that financial asset previously recognized in profit or loss, and is reclassified from 'other comprehensive income' to 'profit or loss'. Impairment loss of an investment in an equity instrument recognized in profit or loss shall not be reversed through profit or loss. Impairment loss is recognized and reversed by adjusting the carrying amount of the asset through the use of an impairment allowance account.

B. The reconciliations of carrying amount of financial assets transferred from December 31, 2017, IAS 39, to January 1, IFRS 9, were as follows:

	Measured	<u>-s</u> :	vailable-for ale - equity Measured	Held-to maturity				Effects	
	at fair value through profit or loss	a thi	t fair value rough other mprehensive	Measured at amortised cost	Measured at cost	Total	Retained earnings	Other equity	Non- controlling interest
IAS 39	\$2,201,103	\$	7,290,843	\$16,216,959	\$ 18,000	\$25,726,905	\$3,050,933	\$3,557,991	\$12,255,436
Transferred into and measured at fair value through profit or loss Transferred into and measured at fair value through other comprehensive	2,193,207	(2,193,207)	-	-	-	557,375	(557,375)	-
income-equity	-		18,000	=	(18,000)	-	-	-	-
Fair value adjustment	-	(5,128)	-	-	(5,128)	-	(2,403)	(2,725)
Impairment loss adjustment	<u> </u>	<u> </u>	5 110 500	(<u>7,346</u>) \$16,209,613		(<u>7,346)</u> \$25,714,431	(<u>5,153</u>) \$3,603,155	\$2,998,213	(<u>2,193</u>) \$12,250,518
IFRS 9	<u>\$4,394,310</u>	<u>\$</u>	5,110,508	\$10,209,013	Φ -	φ2J,/17, 7 J1	Ψ3,003,133	12 Tago 7 7 Com	<u> </u>

- C. The significant accounts as of and for the year ended December 31, 2017 are as follows:
 - (a) Current financial assets at fair value through profit or loss

Items	 Decem	ber 31, 2017
Financial assets held for trading		
Beneficiary certificates	<u>\$</u>	2,201,103

- i. For the year ended December 31, 2017, the Company and its subsidiaries recognized net gain of \$4,975 (shown as 'other income').
- ii. The Company and its subsidiaries do not have financial assets at fair value through profit or loss pledged to others as collateral.

(b) Available-for-sale financial assets

<u>Items</u>	December 31, 2017	
Current items:		
Beneficiary certificate	\$	2,052,607
Valuation adjustment of available-for-sale financial assets		140,600
•	\$	2,193,207
Non-current items:		
Unlisted stocks	\$	1,367,493
Valuation adjustment of available-for-sale financial assets		4,147,019
Accumulated impairment	(416,8 <u>76</u>)
•	\$	5,097,636

- i. The Company and its subsidiaries recognized (\$53,538) in other comprehensive income (loss) for fair value change and reclassified \$580,400 from equity to profit or loss for the year ended December 31, 2017.
- ii. The Company and its subsidiaries have no available-for-sale financial assets pledged to others.

(c) Held-to-maturity financial assets

Items	<u>December 31, 2017</u>
Current items:	\$ 3,454,864
Financial bonds Corporate bonds	301,412
002p	\$ 3,756,276
Non-current items:	\$ 11,451,559
Financial bonds	505,161
Corporate bonds	503,963
Government bonds	\$ 12,460,683

The Company and its subsidiaries have no held-to-maturity financial assets pledged to others.

(d) Financial assets at cost

Items	Decem	ber 31, 2017
	Φ	10 000
Unlisted stocks	\$	18,000

- i. The aforementioned unlisted stocks held by the Company's subsidiaries, whose fair value cannot be reliably measured, are measured at amortised cost. The range of the estimated fair value was significant and cannot be reasonably evaluated. Therefore, the management of the Company's subsidiaries considered it cannot be evaluated reliably.
- ii. The Company's subsidiaries have no financial assets measured at cost pledged to others.
- D. Credit risk information for the year ended December 2017 are as follows:

Credit risk refers to financial loss resulting from counterparties' breach of contract, and is mainly receivables generated from operating activities and bank deposits, time deposits and fixed income

of security investment generated from investing activities. Operating related credit risk and financial credit risk are managed separately. The maximum amounts of credit risk of accounts receivable and other receivables equal to their book value.

Operating related credit risk

i. Accounts receivable that were neither past due nor impaired

All the accounts receivable that were neither past due nor impaired have outstanding payment history, and the counterparties have steady capability to pay for the receivables. Therefore, even if the paying parties face significant uncertain factors or are exposed to adverse conditions, the Company and its subsidiaries still estimate them to maintain capability to pay. As of December 31, 2017, accounts receivable that were neither past due nor impaired were \$757,947.

ii. Accounts receivable that were past due but not impaired

The ageing analysis of accounts receivable that were past due but not impaired is listed according to overdue time as follows:

	Decemb	per 31, 2017
Less than 6 months	\$	12,752

iii. Accounts receivable that were impaired

As of December 31, 2017, the Company and its subsidiaries' accounts receivable that were impaired amounted to \$3,240.

Movements on the Company and its subsidiaries' provision for impairment of accounts receivable are as follows:

	Year ended D	December 31, 201/
At January 1	\$	1,583
Provision for bad debts		3,215
Write-offs	(1,558)
At December 31	\$	3,240

Financial credit risk

The Company and its subsidiaries' policy requires that all transactions be conducted with the counterparties that meet the specified credit rating requirement. As the counterparties are all well-known domestic financial institutions with good credit standing, defaults by the counterparties are not expected to occur. As for transaction objects, the default on financial assets investment objects held by the Company and its subsidiaries might cause the Company and its subsidiaries' losses.

However, the Company and its subsidiaries control such risk by setting transaction ceiling and assessing their credit condition strictly. Thus, the Company and its subsidiaries expect no significant credit risk would arise.

The Company and its subsidiaries' internal and external credit risk ratings are as follows:

Internal credit risk ratings	Company credit ratings by Taiwan Ratings
Group 1	twAAA~twA-
Group 2	twBBB+~twBBB-
Group 3	$twBB+\sim twC$
Impairment of loss	twD

The credit quality of financial assets held by the Company and its subsidiaries are classified as Group 1.

(5) Effects on initial application of IFRS 15

A. The significant accounting policies applied on revenue recognition for the year ended December 31, 2017 are set out below.

Revenue recognition

Revenue is recognized when the earning process is substantially completed and the payment is realized or realizable. Costs and expenses are recognized as incurred.

- B. There is no significant impact to the current balance sheet and comprehensive income statement if the Company and its subsidiaries continue adopting above accounting policies.
- (6) <u>Financial information on custodian and clearing services for short-term bills</u>

 The balance sheets and statements of comprehensive income for the custodian and clearing services provided by TDCC for short-term bills are set forth below:

A. Balance sheets

TAIWAN DEPOSITORY & CLEARING CORPORATION - DEPOSITORY AND CLEARING OF SHORT-TERM BILLS

BALANCE SHEETS DECEMBER 31, 2018 AND 2017

(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

	Dece	December 31, 2018	2018	Д	December 31, 2017	2017		December 31, 2018	, 2018	December 31, 2017	2017
	Am	Amount	%		Amount	%		Amount	%	Amount	%
ASSETS	ı						<u>LIABILITIES AND</u>				
CURRENT ASSETS							STOCKHOLDER'S EQUITY				
Cash	6/9	3,196	€⁄9	6 9	316,200	\$ 27	CURRENT LIABILITIES				
Accounts receivable		117,449	Ξ	C	119,200	01	Accounts payable	2,471	1	6,604	-
Other current assets		41,685		w	31,570	3	Accrued expenses	92,056	00	86,833	7
Total current assets		162,330	T	ر اع	466,970	40	Current tax liabilities	77,215	9	46,596	4
		;] 			Other current liabilities	17,897	-	43,093	4
NON-CURRENT ASSETS							Total current liabilities	189,639	15	183,126	16
Property and equipment		9,677		_	13,614	-					
Refundable deposits		98,112		∞	97,460	6	NON-CURRENT LIABILITIES				
Intangible assets		38,021		6	58,352	5	Net defined benefit liability	54,470	S	41,183	3
Other non-current assets		895,557	75	ائ. 	526,238	45	Total liabilities	244,109	20	224,309	19
Total non-current assets	1	1,041,367	87	F-	695,664	09					
	İ						EQUITY				
							Appropriated working capital	500,000	42	500,000	43
							Unappropriated retained earnings	459,588	38	438,325	38
							Total equity	959,588	80	938,325	81
							TOTAL LIABILITIES AND				
TOTAL ASSETS	6/3	\$ 1,203,697 100 \$	2	\$ ∥	1,162,634	100	STOCKHOLDER'S EQUITY	\$ 1,203,697	100	\$ 1,162,634	20

B. Statements of comprehensive income

TAIWAN DEPOSITORY & CLEARING CORPORATION DEPOSITORY AND CLEARING OF SHORT-TERM BILLS STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017 (EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

	Years ended December 31,						
		2018			2017		
	-	Amount	%		Amount	%	
OPERATING REVENUES							
Bills clearing and settlement	\$	855,678	99	\$	833,534	98	
Others		12,711	1		13,606	2	
Total operating revenues		868,389	100	_	847,140	100	
OPERATING EXPENSES							
Personnel	(152,652) (17)	(140,191) (16)	
General and administrative	(144,878) (<u>17</u>)	(_	182,996) (_	22)	
Total operating expenses	(297,530) (34)	(_	323,187) (_	38)	
OPERATING INCOME		570,859	66	_	523,953	62	
NON-OPERATING							
INCOME AND EXPENSES							
Interest income		3,655	-		4,228	-	
Other income		4	-		-	-	
Other expenses	(33)		(_	<u>79</u>) _		
Total non-operating income							
and expenses		3,626			4,149		
INCOME BEFORE INCOME TAX		574,485	66		528,102	62	
INCOME TAX EXPENSES	(_	114,897) ((13)	(_	89,777) (_	<u>10</u>)	
NET INCOME	\$	459,588	<u>\$ 53</u>	<u>\$</u>	438,325	52	

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

- A. Loans to others: None.
- B. Provision of endorsements and guarantees to others: None.
- C. Holding of marketable securities at the end of the period (not including subsidiaries and associates): Please refer to table 1.
- D. Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company and its subsidiaries's paid-in capital: Please refer to table 2.
- E. Acquisition of real estate reaching \$300 million or 20% of paid-in capital or more: None.

- F. Disposal of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- G. Purchases or sales of goods from or to related parties reaching \$100 million or 20% of paid-in capital or more: None.
- H. Receivables from related parties reaching \$100 million or 20% of paid-in capital or more: None.
- I. Trading in derivative instruments undertaken during the reporting periods: None.
- J. Significant inter-company and its subsidiaries transactions during the reporting periods: Please refer to Note 7 on the parent company only financial statement.

(2) Information on investees

Names, locations and other information of investee companies: Please refer to table 3.

14. SEGMENT INFORMATION

(1) General information

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker.

(2) Segment information

The segment information provided to the chief operating decision-maker for the reportable segments is as follows:

		Year	ended	December 31,	2018	
	Sto	ck exchange	Sto	ck custodian		_Total
Revenue from external customers Inter-segment revenue	\$	6,157,010	\$	4,640,122 697,015	\$	10,797,132 697,015
Total segment revenue	\$	6,157,010	\$	5,337,137	\$	11,494,147
Segment income before tax	\$	4,020,411	\$	3,188,853	\$	7,209,264
	Year ended December 31, 2017					
	Sto	ck exchange	Sto	ck custodian		Total
Revenue from external customers	\$	4,971,239	\$	3,922,134	\$	8,893,373
Inter-segment revenue				562,557		562,557
Total segment revenue		4,971,239		4,484,691		9,455,930
Segment income before tax	\$	3,081,018	\$	2,477,808	\$	5,558,826

(3) Reconciliation for reportable segment revenue and income (loss)

Sales between segments are carried out at arm's length. The revenue from external parties reported to the chief operating decision-maker is measured in a manner consistent with that in the income statement. A reconciliation of reportable segment revenue and operating revenue and reportable segment profit or loss to the profit before tax and discontinued operations for the years ended December 31, 2018 and 2017 is provided as follows:

		Years ended	Decer	nber 31,
Revenue		2018		2017
Reportable segments revenue	\$	11,494,147	\$	9,455,930
Other segments revenue		378,701		305,000
Elimination of revenue among segments	(697,015)	(562,557)
Operating revenue	\$	11,175,833	\$	9,198,373
		Years ended	Dece	mber 31,
Profit (loss)		2018		2017
Reportable segments profit and loss	\$	7,209,264	\$	5,558,826
Other segments profit and loss		82,226		13,163
Elimination of profit and loss among segments	(1,352,395)	(1,045,815)
Profit before tax and continued operation	\$	5,939,095	\$	4,526,174

(4) <u>Information on product</u>

The Company and its subsidiaries' product information agrees with operating revenue information in comprehensive statements of income. Details are provided in the comprehensive statements of income.

(5) Geographical information

The major location where services are rendered by the Company and its subsidiaries is Taiwan.

(6) Major customer information

The Company and its subsidiaries have no customer with sales exceeding 10% of the consolidated revenue.

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES
Hoking of marketable securities at the end of the period (not including subsidiaries and associates)
December 31, 2018

Table 1

Expressed in thousands of NTD (Except as otherwise indicated)

	ď	Deletionetin with		As	As of December 31, 2018		
	W .	the securities		Number of shares			
Securities held by	Marketable securities	issuer	General ledger account	(in thousands)	Book value	Fair value	Footnote
Taiwan Stock Exchange Corporation	Beneficiary Certificates	•					
=	Sinopac TWD Money Market Fund	None	Financial assets at fair value through profit or loss - current	21,926 \$	304,838 \$	304,838	None
τ	Sinopac TALEX ETF	ŧ	Financial assets at fair value through profit or loss - current	1,913	91,212	91,212	
t	Fubon TWSE Corporate Governance 100 ETF	£	Financial assets at fair value through profit or loss - current	1,767	34,156	34,156	:
•	Mega Taiwan Blue Chip 30 ETF	ŧ	Financial assets at fair value through profit or loss - current	1,111	21,554	21,554	:
	Cathay Korea/Taiwan IT Premier ETF	ŧ	Financial assets at fair value through profit or loss - current	1,220	20,337	20,337	£
Ξ	FSITC Taiwan Industry Elite 30 ETF		Financial assets at fair value through profit or loss - current	666	17,328	17,328	E
=	Fubon Taiwan Strategy 1 ETF Private Equity Fund	2	Financial assets at fair value through profit or loss - current	12,983	193,192	193,192	2
:	Fubon Taiwan Strategy 2 ETF Private Equity Fund	=	Financial assets at fair value through profit or loss - current	22,963	334,348	334,348	
r	SinoPac Strategies Fund No.1		Financial assets at fair value through profit or loss - current	46,989	562,453	\$62,453	
r	Cathay Non-Finances Non-Electronics Sub-index Fund	=	Financial assets at fair value through profit or loss - current	25,000	283,000	283.000	
=	Yuanta/P-shares Taiwan Top 50 ETF	=	Financial assets at fair value through profit or loss - current	7,315	552,283	552,283	£
Taiwan Depository & Clearing Corporation	Mega Diamond Bond Fund	=	Financial assets at fair value through profit or loss-current	19,087	239,009	239,009	£
-	FSITC Taiwan Money Market Fund	-	Financial assets at fair value through profit or loss-current	32,732	500,023	500,023	£
Ξ	Franklin Templeton Sinoam Money Market Fund		Financial assets at fair value through profit or loss-current	24,224	250,012	250,012	
£	Hua Nan Kirin Money Market Fund		Financial assets at fair value through profit or loss-current	41,821	500,017	500,017	t
ŧ	Capital Money Market Fund	=	Financial assets at fair value through profit or loss-current	815,51	250,011	250,011	:
r	Yuanta De-Li Money Market Fund	=	Financial assets at fair value through profit or loss-current	15,356	250,012	250,012	ŧ
	Teb-Bank Money Market Fund	=	Financial assets at fair value through profit or loss-current	42,877	435,013	435,013	
-	CTBC Hwa-win Money Market Fund		Financial assets at fair value through profit or loss-current	20,357	224,006	224,006	:
-	Yuanta/P-shares Taiwan Top 50	=	Financial assets at fair value through profit or loss-current	294	22.197	22,197	
=	Yuanta/P-shares Talwan Dividend Plus ETF	=	Financial assets at fair value through profit or loss-current	535	12,808	12,808	
Taiwan-Ca Inc.	Capital Money Market Fund	=	Financial assets at fair value through profit or loss-current	1,181	19,023	19,023	
t	UPAMC James Bond Fund	ŧ	Financial assets at fair value through profit or loss-current	1,020	17,021	17,021	
			Total financial assets at fair value through profit or loss - current	κl	5,133,853 \$	5,133,853	
	Stock						
Taiwan Stock Exchange Corporation	Taiwan Futures Exchange Corporation	None	Financial assets at fair value through other comprehensive income - non-current	16,705 \$	\$ 850,655,1	1,339,038	None
r	Taipei Financial Center Corporation		Financial assets at fair value through other comprehensive income - non-current	83,853	2,590,213	2,590,213	
Taiwan Depository & Clearing Corporation	Taiwan Futures Exchange Corporation		Financial assets at fair value through other comprehensive income - non-current	21,543	1,726,890	1,726,890	ı.
=	Taiwan Mobile Payment Co., Ltd.	t	Financial assets at fair value through other comprehensive income - non-current	1,200	7,929	7,929	
Taiwan-Ca Inc.	Taiwan Mobile Payment Co., Ltd.		Financial assets at fair value through other comprehensive income - non-current	009	3,964	3,964	
			Total financial assets at fair value through other comprehensive income - non-current	ent S	5,668,034 \$	5,668,034	

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As of December 31, 2018

			3	As	As of December 31, 2018	-	
		Kelationship with	₫ ,	Number of charee			
Securities held by	Marketable securities	issuer	General ledger account	(in thousands)	Book value	Fair value	Footnote
	Financial bonds					I	
Taiwan Stock Exchange Corporation	E. Sun Bank 101-1 Subordinate Classes Financial Bond	None	Financial assets at amortised cost - current	•	200,461 \$	200,632	None
=	SinoPac Bank 101-1 Subordinate Financial Debentures-A	1	Financial assets at amortised cost - current		199,817	201,119	=
-	Taiwan Agribank 101-1 Subordinate Classes Financial Bond (G13103)	£	Financial assets at amortised cost - current	•	99,972	100,653	
=	Land Bank 101-3 Subordinate Classes Financial Bond (G12717)		Financial assets at amortised cost - current	•	199,934	201,201	
2	SinoPac Bank 103-2 Subordinate Financial Debentures (G11096)	•	Financial assets at amortised cost - current		100,443	100,757	-
Taiwan Depository & Clearing Corporation	101 Taipei Fubon Bank 1		Financial assets at amortised cost - current	•	199,905	966'661	=
ŧ	Cathay United Bank 1st Subordinate Financial Debentures Issue in 2012	=	Financial assets at amortised cost - current	•	199,905	199,995	=
ŧ	Land Bank of Taiwan 2nd Subordinate Financial Debentures Issue in 2012	•	Financial assets at amortised cost - current	•	199,937	200,090	=
=	101 First Bank 1	=	Financial assets at amortised cost - current	,	199,905	200,158	
=	Hua Nan Commercial Bank the First Subordinate Financial Debentures Issue in 2012	ŧ	Financial assets at amortised cost - current	•	199,905	200,837	=
=	The Shanghai Commercial & Savings Bank Ltd 1st Unsecured Subordinate Financial Debentures-Issue in 2012	£	Financial assets at amortised cost - current		49,995	50,004	
ŧ	The Shanghai Commercial & Savings Bank Ltd 4th Unsecured Subordinate Financial Debentures A Issue in 2012		Financial assets at amortised cost - current	٠	199,936	201,306	=
£	101 Land Bank of Taiwan 1	£	Financial assets at amortised cost - current	•	100,018	100,041	=
z.	Shanghai Commercial 101-2 Subordinate Classes Financial Bond		Financial assets at amortised cost - current	1	400,121	401,084	-
ı	Bank SinoPac 2nd Unsecured Subordinate Financial Debentures Issue in 2014	•	Financial assets at amortised cost - current	•	301,175	301,883	=
=	Bank Sinopac 1st Unsecured Subordinate Financial Debenture Issue in 2014		Financial assets at amortised cost - current	•	100,343	101,549	
=	100 Land Bank of Taiwan 2	=	Financial assets at amortised cost - current	,	200,000	200,004	
	Government bonds			ν.I	3,151,772 \$	3,161,309	
Taiwan Depository & Clearing Corporation	88 Yi Bond	None	Financial assets at amortised cost - current	φl ,	100,409 \$	101,710	None
	Corporate bonds						
Taiwan Stock Exchange Corporation	Taipower 101 3 Corporate bond (B903UY)	None	Financial assets at amortised cost - current	\$.		100,525	None
ā	Taipower 101 5A Corporate bond (B903V2)		Financial assets at amortised cost - current		100,555	100,629	ŧ
			Total financial assets at amortised cost - current	. ₩1	3,453,188 \$	3,464,173	

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	je G	Poloticachin utith		As	As of December 31, 2018	3	
		the securities		Number of shares		·	
Securities held by	Marketable securities	issuer	General ledger account	(in thousands)	Book value	Fair value	Footnote
	Financial bonds						
Taiwan Stock Exchange Corporation	Tcb-Bank 102-1 Subordinate Financial Debentures-B (G12425)	None	Financial assets at amortised cost - non-current	ν 3		201,741	None
=	Deutsche Bank Aktiengesellschaft Acting Through Its Singapore Branch as Issuer		Financial assets at amortised cost - non-current	•	178,824	180,211	=
=	Taipei Fubon Subordinated Bank Bond 102-1	•	Financial assets at amortised cost - non-current	٠	199,902	202,397	=
=	Hua Nan Bank 99-1 Subordinate Classes Financial Bond (G189AB)		Financial assets at amortised cost - non-current	•	499,755	508,512	=
E	Mega International 103-1 Financial bonds G11836	=	Financial assets at amortised cost - non-current	•	303,161	305,926	=
ŧ	CTBC Bank 3rd Unsecured Subordinate Financial Debentures-Tranche A Issue in 2015		Financial assets at amortised cost - non-current	•	199,902	206,696	=
ē.	SinoPac Bank 101-1 Subordinate Financial Debentures-B		Financial assets at amortised cost - non-current	•	200,519	204,721	=
=	Taiwan Agribank 101-1 Subordinate Classes Financial Bond-B (G13104)	-	Financial assets at amortised cost - non-current	,	99,972	102,616	=
Ξ	Taipei Agribank 101-1 Financial Bond-B (G13104-1)		Financial assets at amortised cost - non-current	•	202,006	205,232	=
=	Land Bank 4th Financial Bond-Tranche B Issue in 2012 (G12719)		Financial assets at amortised cost - non-current	•	202,832	204,912	=
=	Shin Kong 101-1 Financial bonds-B (G11649)		Financial assets at amortised cost - non-current	1	202,051	205,167	=
ŧ	Cathay Bank 102-1 Financial bonds (G179C1)		Financial assets at amortised cost - non-current	í	305,583	309,642	=
r	Taishin International Bank 3rd Financial Bond-Tranche A Issue in 2015 (G19983)	=	Financial assets at amortised cost - non-current	•	104,605	105,807	=
Taiwan Depository & Clearing Corporation	102 Taipei Fubon Bank 1A	=	Financial assets at amortised cost - non-current	•	199,905	199,994	=
· · · · · · · · · · · · · · · · · · ·	Taiwan Cooperative Bank 102 1B		Financial assets at amortised cost - non-current		49,835	49,936	=
	Taiwan Cooperative Bank 102 1A		Financial assets at amortised cost - non-current	•	199,905	200,000	F
-	102 Land Bank of Taiwan 1		Financial assets at amortised cost - non-current	٠	199,937	200,000	£
-	Taiwan Business Bank 1st Unsecured Subordinate Financial Debentures - Issue in 2013	:	Financial assets at amortised cost - non-current	,	300,553	303,311	ŧ
Ξ	101 E.Sun Bank 2		Financial assets at amortised cost - non-current	ı	201.845	205,164	ŧ
٤	102 Carbay United Bank 1B	•	Financial assets at amortised cost - non-current	1	202.477	206.221	ŧ
t	10f Taiwan Chonestive Bank 2B	=	Financial assets at amortised cost - non-cultent	•	202.033	204 277	
E	103 MFGA Bank 2	=	Financial assets at amortised cost a non-current	•	201.891	204 135	-
z		±	The same of the sa		303 145	***************************************	=
:	103 MEGA Bank 1	: :	rinancial assets at amortised cost - non-current	•	202,145	202,824	r i
F	101 Cathay United Bank 2		financial assets at amortised cost - non-current	,	203,125	203,190	=
				ı	5.062.665	5,122,627	
	Financial bonds						
Taiwan Depository & Clearing Corporation	105 Taiwan Cooperative Bank 1A	None	Financial assets at amortised cost - non-current				None
=	105 Chang Hwa Commercial Bank 1A	=	Financial assets at amortised cost - non-current	•	497,645	498,042	Ŧ
=	101 Land Bank of Taiwan 4B	=	Financial assets at amortised cost - non-current	•	404,521	409,831	ŧ
=	101 Shanghai Commercial Bank 3B	-	Financial assets at amortised cost - non-current	i	203,613	203,015	t
-	105 Taiwan Business Bank 2	=	Financial assets at amortised cost - non-current	1	199,925	203,453	ż
=	106 Shanghai Commercial Bank I		Financial assets at amortised cost - non-current	•	166,661	199,994	:
=	Bank Sinopac 1nd Unsecured Subordinate Financial Debentures-B Issue in 2012		Financial assets at amortised cost - non-current		201,355	204,831	=
£	106 Taiwan Business Bank 1	-	Financial assets at amortised cost - non-current	•	199,925	966'661	
ŧ	106 Chang Hwa Commercial Bank 1A	-	Financial assets at amortised cost - non-current	•	199,937	966'661	
ż	First Commercial Bank 1st Issue B Tranche Subordinate Financial Debentures Issue in 20	-	Financial assets at amortised cost - non-current	ì	201,635	204,901	=
ŧ	106 Cathay United Bank 2A		Financial assets at amortised cost - non-current	ì	199,905	199,995	
Ē	104 Shanghai Commercial Bank 1	-	Financial assets at amortised cost - non-current	•	102,341	102,380	£
2	106 Shanghai Commercial Bank 2	-	Financial assets at amortised cost - non-current	•	199,937	199,999	t
Ξ	106 Taipei Futon Bank 3	-	Financial assets at amortised cost - non-current	•	199,905	199,997	ż
£	106 Taiwan Cooperative Bank 1A		Financial assets at amortised cost - non-current	1	199,905	199,997	±
£	104 Taiwan Business Bank 3		Financial assets at amortised cost - non-current		209,936	210,028	=
=	107 E.Sun Bank 1A		Financial assets at amortised cost - non-current	1	199,937	166,661	
z.	106 Taiwan Business Bank 4	±	Financial assets at amortised cost - non-current	•	207,002	209,133	=
ż	107 Shanghai Commercial Bank 1	ŧ	Financial assets at amortised cost - non-current	•	299,905	299,994	=
=	103 Chang Hwa Commercial Bank 1B		Financial assets at amortised cost - non-current		208,230	208,137	r
Ŀ	107 Taipei Fubon Bank 2A		Financial assets at amortised cost - non-current		506,991	199,997	

Table 1, Page 4

				4	As of December 31, 2018	31, 2018		
		Relationship with	4					
		the securities		Number of shares				
Securities held by	Marketable securities	issuer	General ledger account	(in thousands)	Book value		Fair value	Footnote
Taiwan Depository & Clearing Corporation 103 Taipei Fubon Bank 2	103 Taipei Pubon Bank 2	Ŧ.	Financial assets at amortised cost - non-current		\$ 210,371	371 \$	210,598	-
t	105 Taiwan Business Bank 2		Financial assets at amortised cost - non-current	•	203,423	423	203,453	=
					5,149,100	100	5,167,762	
	Corporate bonds							
Taiwan Stock Exchange Corporation	Taiwan Power Company 4th Unsecured Corporate Bond-B Issue in 2011 (B903UK)	None	Financial assets at amortised cost - non-current	1	\$ 102,	102,029 \$	102,545	None
-	CPC Corporation 101-2 Secured C (B71872)	-	Financial assets at amortised cost - non-current	•	100	100,968	102,089	=
Ξ	Taiwan Power Company 5th Unsecured Corporate Bond-B Issue in 2012 (B903V3)		Financial assets at amortised cost - non-current	•	100,871	871	102,343	-
Taiwan Depository & Clearing Corporation Taipower 106 1A Corporate Bond	Taipower 106 1A Corporate Bond		Financial assets at amortised cost - non-current	•	199,946	946	202,298	
					503,814	814	509,275	
	Government bonds							
Taiwan Stock Exchange Corporation	Taiwan Government Bond A097105	None	Financial assets at amortised cost - non-current	•	\$ 53,	53,225 \$	57,920	None
Taiwan Depository & Clearing Corporation 92 Jia 3 Bond	92 Jia 3 Bond	=	Financial assets at amortised cost - non-current	•	244,570	570	268,042	=
=	89 Jia 7 Bond	£	Financial assets at amortised cost - non-current	i	101,862	862	105,999	=
					399,657	657	431.961	
			Total financial access at amorticad cost - non-current		\$ 11.115.236	236 \$	11.231.625	

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES

Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital Year ended December 31, 2018

(Except as otherwise indicated) Expressed in thousands of NTD

Table 2

				. 1	Balance as at January 1, 2018	s at 1018	Addition	<u> </u>		Disposal	sai		Balance as at December 31, 2018	is at 1, 2018	
				Relationship	Number of		Number of		Number of		Ē	Gain (fose) on	Number of		
Investor	Marketable securities	General ledger account	Counterparty	i	(in thousands)	Amount (ir	(in thousands)	Amount	(in thousands)	Selling price	Book value		(in thousands)	Amount	
Taiwan Stock Sinop Exchange Corporation Fund	Sinopac TWD Money Market n Fund	Financial assets at fair value through profit or loss - current	ı	•	\$ 619.85	811,614	1	•	(36,693)	\$ \$00,008 \$	\$ (800,605) \$		21,926	\$ 304,838 1	Note
• •	Yuanta/P-shares Taiwan Top 50 ETF	Financial assets at fair value through profit or loss - current			2,457	201,842	4,858	395,073	1	1		•	7,315	552,283	t
Taiwan Depository & Clearing Corporation	Taiwan Depository & Mega Diamond Bond Fund Clearing Corporation	Financial instrument at fair value through profit or loss-current	ı	ı	40,111	500,012	443,946	5,546,499	(464,970)	5,809,642	(5,809,642)	•	19,087	239,009	t
	FSITC Taiwan Money Market Fund	Financial instrument at fair value through profit or loss-current	•		32,880	010,008	393,615	000'000'9	(393,763)	6,002,264	(6,002,264)		32,732	500,023	ŧ
£	Franklin Templeton Sinoam Money Market Fund	Financial instrument at fair value through profit or loss-current	•	1	24,336	250,007	291,315	3,000,000	(291,427)	3,001,151	(3,001,151)	•	24,224	250,012	t
=	Hua Nan Kirin Money Market Fund	Financial instrument at fair value through profit or loss-current	•	ı	33,596	400,004	452,696	5,401,999	(444,471)	5,302,891	(5,302,891)		41,821	500,017	ŧ
z	Capital Money Market Fund	Financial instrument at fair value through profit or loss-current	•	,	15,587	250,006	186,607	3,000,000	(186,676)	3,001,097	(3,001,097)	•	15,518	250,011	t
£	Yuanta De-Li Money Market Fund	Financial instrument at fair value through profit or loss-current			15,425	250,006	184,667	3,000,000	(184,736)	3,001,116	(3,001,116)		15,356	250,012	r
F	Sinopac TWD Money Market Fund	Financial instrument at fair value through profit or loss-current	•	ı		i	145,939	2,022,999	(145,939)	2,023,469	(2,023,469)		•		
	Taiwan Cooperative Bank Money Market Fund	Financial instrument at fair value through profit or loss-current	1	•	•	ı	534,951	5,418,186	(492,074)	4,984,587	(4,984,587)	•	42,877	435,013	=
τ	CTBC Hwa-win Money Marke Fund	CTBC Hwa-win Money Market Financial instrument at fair value through profit or Fund		•	1		39,806	438,000	(19,449)	214,022	(214,022)	•	20,357	224,006	-

Note; The difference between the ending balance and the beginning balance add/less purchase/selling amount for this period is due to valuation adjustment or unwinding of premium.

TAIWAN STOCK EXCHANGE CORPORATION AND SUBSIDIARIES

Information on investees

Year ended December 31, 2018

Table 3

Expressed in thousands of NTD (Except as otherwise indicated)

				Initial investment amount	ent amount	Shares hel	Shares held as at December 31, 2018	er 31, 2018		Investment	
								_	income (loss) Net profit (loss) of recognised by the the investee for the Company for the	income (loss) recognised by the Company for the	
				Balance as at	Balance as at	Number of				year ended	
				31,	December 31,		Ownership		December 31,	December 31,	
Investor	Investee	Location	Main business activities	2018	2017	thousands)	(%)	Book value	2018	2018	Footnote
Taiwan Stock Exchange Corporation	Taiwan Stock Exchange Taiwan Depository & Corporation Clearing Corporation (TDCC)	11F, No. 363, Fusing N. Rd., Taipei City	Custodian of securities and other services	\$ 583,107	\$ 583,107	187,366	50.59% \$	12,822,045	\$ 2,594,320 \$	\$ 1,312,481	I,312,481 The Company's subsidiaries
<u>=</u>	Taiwan-Ca Inc. (TWCA)	10F, No. 85, Yanping S. Rd., Taipei City	Online verification services	87,720	87,720	7,557	30.23%	102,900	45,550	13,769	¢
F	Taiwan Index Plus Corporation	11F1, No.36, Songren Rd., Taipei City	Index compilation, maintenance and dissemination	150,000	150,000	15,000	100.00%	168,755	17,908	17,908	t
Ŧ	Taiwan Ratings Corporation	49F, No. 7, Sec. 5, Sinyi Rd., Taipei City	Credit rating services	15,045	15,045	1,399	%66'61	27,780	38,079	7,612	7,612 The investee company accounted for using equity method
Taiwan Depository & Clearing Corporation	Fundrich Securitites Co., Ltd.	8F, No. 365, Fusing N. Rd., Songshan Sales of funds Dis., Taipei City	n Sales of funds	439,834	409,404	33,985	56.64%	361,265	57,259)	•	
£	Taiwan-Ca Inc. (TWCA)	10F, No. 85, Yanping S. Rd., Taipei City	Online verification services	9,700	9,700	4,521	18.08%	59,783	45,550	'	
÷	Taiwan Ratings Corporation	49F, No. 7, Sec. 5, Sinyi Rd., Taipei Credit rating services City	Credit rating services	13,300	13,300	1,330	19.00%	26,405	38,079	•	
Taiwan- Ca Inc.	Taiwan Ratings Corporation	49F, No. 7, Sec. 5, Sinyi Rd., Taipei City	Credit rating services	4	4		0.01%	4	38,079	1	ı