
***THE STOCK EXCHANGE OF THAILAND
AND ITS SUBSIDIARIES***

Financial Statements

Year ended December 31, 2019

REPORT OF THE INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

TO THE MEMBERS OF THE STOCK EXCHANGE OF THAILAND AND THE STOCK EXCHANGE OF THAILAND

Opinion

We have audited the consolidated financial statements of The Stock Exchange of Thailand and its subsidiaries (the Group) and the separate financial statements of The Stock Exchange of Thailand (the “SET”), which comprise the consolidated and separate statements of financial position as at December 31, 2019, and the related consolidated and separate statements of comprehensive revenues and expenses, changes in fund balances and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of The Stock Exchange of Thailand and its subsidiaries and of The Stock Exchange of Thailand as at December 31, 2019, and financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (“TFRSs”).

Basis for Opinion

We conducted our audit in accordance with Thai Standards on Auditing (“TSAs”). Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of our report. We are independent of the Group in accordance with the Federation of Accounting Professions’ Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to the audit of the consolidated and separate financial statements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matter is the matter that, in our professional judgment, was of most significance in our audit of the consolidated and separate financial statements of the current period. This matter was addressed in the context of our audit of the consolidated and separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on this matter.

Key Audit Matter	Audit Response
<p>Revenue recognition - Trading fees</p> <p>Trading fees have terms and conditions to charge the fees based on trading volume. The Group makes use of information and technology system in storing of trading volume and calculating trading fees.</p> <p>We focused our and if on the following are as of trading fees specifically relating of :</p> <ul style="list-style-type: none"> • Storing of securities trading data and processing of the information and technology system, • Accuracy and completeness of information used to revenue recognition. <p>The accounting policies of revenue recognition, the details of trading fees and operating segment information were disclosed in Note 2.18, Note 6 and Note 26 to the financial statements respectively.</p>	<p>Our key audit procedures were as follows:</p> <ul style="list-style-type: none"> • Understand the revenue recognition - trading fees process and related internal control procedures • Review the design and implementation of the internal control procedures • Perform the operating effectiveness testing over the internal control procedures around revenue recognition process including related information and technology system • Perform substantive testing as follows: <ul style="list-style-type: none"> - Examine the trading volume information of the customers and trading fees rates, recalculate the trading fees and examine the related supporting documents of those revenues whether the trading fees have been completely and accurately recognized - Perform substantive analytical procedures relating to the trading fees.

Other Information

Management is responsible for the other information. The other information comprises information in the annual report, which is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and the management of the SET.

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

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

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

Those charged with governance are responsible for overseeing the Group's financial reporting process.

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

Our objectives are to obtain reasonable assurance about whether the consolidated and separate 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 TSAs 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 and separate financial statements.

As part of an audit in accordance with TSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated and separate 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.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the SET's 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 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 Group and the SET to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and the separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



Dr. Suphamit Techamontrikul
Certified Public Accountant (Thailand)
Registration No. 3356

BANGKOK
February 19, 2020

DELOITTE TOUCHE TOHMATSU JAIYOS AUDIT CO., LTD.

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION
AS AT DECEMBER 31, 2019

(Unit : Thousand Baht)

		Consolidated		Separate	
		Financial Statements		Financial Statements	
	Notes	2019	2018	2019	2018
Assets					
Current assets					
Cash and cash equivalents	8	2,329,358	1,118,595	2,092,736	948,769
Cash at banks for financial benefits payable		85,569	69,086	-	-
Assets for margin deposits and benefits	17	13,384,662	15,510,404	-	-
Short-term investments, net	9	5,383,557	7,838,876	3,183,195	7,838,876
Trade and other receivables	10	518,753	611,915	525,182	573,599
Short-term loans to a joint venture entity	7	-	7,500	-	7,500
Other current assets	11	217,505	94,326	184,849	62,523
Total current assets		21,919,404	25,250,702	5,985,962	9,431,267
Non-current assets					
Investments in subsidiaries	12	-	-	1,697,291	1,697,291
Investments in associates and joint venture entity, net	13	988,420	968,228	791,015	800,620
Long-term investments, net	14	7,903,958	8,837,845	7,903,958	8,837,845
Assets for clearing system protection and benefits	18	2,205,298	1,982,549	147,916	144,156
Securities Investor Protection Fund	25	832,028	798,473	832,028	798,473
Derivatives Investor Protection Fund	25	110,237	104,150	-	-
Long-term loans to a subsidiary	7	-	-	5,440,834	5,240,834
Reserve Fund for clearing and settlement	19	5,590,438	5,328,576	-	-
Property, plant and equipment, net	15	4,737,773	4,979,082	4,737,156	4,978,197
Intangible assets, net	16	612,385	375,757	609,788	372,279
Deferred tax assets	20	91,768	139,821	91,743	137,655
Refundable deposits		2,485	5,485	2,485	5,485
Total non-current assets		23,074,790	23,519,966	22,254,214	23,012,835
Total assets		44,994,194	48,770,668	28,240,176	32,444,102

Notes to the financial statements form an integral part of these financial statements

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION (CONTINUED)
AS AT DECEMBER 31, 2019

(Unit : Thousand Baht)

		Consolidated		Separate	
		Financial Statements		Financial Statements	
	Notes	2019	2018	2019	2018
Liabilities and fund balances					
Current liabilities					
Margin deposits and benefits payable	17	13,384,662	15,510,404	-	-
Trade and other payables	21	1,490,467	1,317,727	1,296,758	1,119,754
Fees received in advance		353,399	335,255	318,156	298,559
Income tax payable		90,638	151,593	-	49,194
Short-term borrowings from subsidiaries	7	-	-	1,918,713	3,783,500
Other current liabilities	22	172,997	136,350	98,423	110,884
Total current liabilities		15,492,163	17,451,329	3,632,050	5,361,891
Non-current liabilities					
Assets for clearing system protection and benefits payable	18	2,057,869	1,838,393	-	-
Contributions and benefits to Securities Investor Protection Fund	25	336,254	322,847	336,254	322,847
Contributions and benefits to Derivatives Investor Protection Fund	25	54,041	48,802	-	-
Employee benefits obligation	23	613,393	436,321	613,393	436,321
Deferred tax liabilities	20	12,676	-	-	-
Other non-current liabilities		9,849	7,712	9,849	7,712
Total non-current liabilities		3,084,082	2,654,075	959,496	766,880
Total liabilities		18,576,245	20,105,404	4,591,546	6,128,771
Fund balances					
Funds	24	26,090,633	28,679,406	23,313,433	26,321,432
Other components of fund balances		327,315	(14,143)	335,197	(6,101)
Non-controlling interests		1	1	-	-
Total fund balances		26,417,949	28,665,264	23,648,630	26,315,331
Total liabilities and fund balances		44,994,194	48,770,668	28,240,176	32,444,102

Notes to the financial statements form an integral part of these financial statements

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF COMPREHENSIVE REVENUES AND EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2019

(Unit : Thousand Baht)

		Consolidated		Separate	
		Financial Statements		Financial Statements	
	Notes	2019	2018	2019	2018
Revenues					
Operating revenues	26	5,883,591	5,722,355	2,652,268	2,601,316
Investment income, net	27	947,954	586,185	1,549,021	862,130
Other income	28	454,253	269,999	2,060,116	1,901,827
Total revenues		<u>7,285,798</u>	<u>6,578,539</u>	<u>6,261,405</u>	<u>5,365,273</u>
Expenses					
Employee benefit expenses	29	1,939,471	1,687,752	1,938,260	1,687,555
Directors' remuneration	7	27,714	27,252	24,200	23,692
Direct service expenses		344,368	292,846	-	-
Building and office expenses		192,513	183,063	192,118	182,654
Technology expenses		191,142	230,164	190,933	230,036
Marketing expenses		172,390	160,839	158,446	139,939
Educational activity expenses		64,603	164,079	64,698	164,134
SEC fees	30	521,154	567,203	519,154	565,203
Depreciation and amortisation	15 and 16	524,849	482,615	523,700	482,052
Other expenses	31	238,615	182,272	214,870	164,246
Total expenses		<u>4,216,819</u>	<u>3,978,085</u>	<u>3,826,379</u>	<u>3,639,511</u>
Share of profit of investments in associates and joint venture entity, net of tax	13	45,383	8,630	-	-
Revenues over expenses		<u>3,114,362</u>	<u>2,609,084</u>	<u>2,435,026</u>	<u>1,725,762</u>
Non-operating revenues (expenses)					
Income derived from Securities Investor Protection Fund, net	25	13,930	9,937	13,930	9,937
Income derived from Derivatives Investor Protection Fund, net	25	848	686	-	-
Transfer money to the Capital Market Development Fund	32	(5,700,000)	-	(5,700,000)	-
Reversal (contributions) to the Stock Exchange of Thailand Foundation	7	186,132	(186,132)	186,132	(186,132)
Revenues over (under) expenses before income tax expense		(2,384,728)	2,433,575	(3,064,912)	1,549,567
Income tax (expense) revenue	33	(214,271)	(478,662)	46,687	(236,286)
Revenues over (under) expenses		<u>(2,598,999)</u>	<u>1,954,913</u>	<u>(3,018,225)</u>	<u>1,313,281</u>
Revenues over (under) expenses for the years attributable to:					
Owners of the parent		(2,598,999)	1,954,913	(3,018,225)	1,313,281
Non-controlling interests		-	-	-	-
		<u>(2,598,999)</u>	<u>1,954,913</u>	<u>(3,018,225)</u>	<u>1,313,281</u>

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF COMPREHENSIVE REVENUES AND EXPENSES (CONTINUED)
FOR THE YEAR ENDED DECEMBER 31, 2019

(Unit : Thousand Baht)

		Consolidated Financial Statements		Separate Financial Statements	
	Notes	2019	2018	2019	2018
Revenues over (under) expenses		(2,598,999)	1,954,913	(3,018,225)	1,313,281
Other comprehensive revenues and expenses:					
Items that will be reclassified subsequently to revenues and expenses					
Share of other comprehensive profit (loss) of investments in associates	13	158	(103)	-	-
Change in value of available-for-sale investments managed by SET	25.2	417,992	(825,957)	417,992	(825,957)
Change in value of available-for-sale investments from Securities Investor Protection Fund	25.2	6,218	(10,646)	6,218	(10,646)
Income tax relating to items that will be reclassified subsequently to revenues and expenses	25.2	(82,910)	171,725	(82,912)	170,698
Total items that will be reclassified subsequently to revenues and expenses		<u>341,458</u>	<u>(664,981)</u>	<u>341,298</u>	<u>(665,905)</u>
Items that will not be reclassified subsequently to revenues and expenses					
Remeasurements of post-employment benefits obligations	25.2	10,226	606	10,226	-
Income tax relating to items that will not be reclassified subsequently to revenues and expenses	25	-	(121)	-	-
Total items that will not be reclassified subsequently to revenues and expenses		<u>10,226</u>	<u>485</u>	<u>10,226</u>	<u>-</u>
Other comprehensive revenues and expenses		<u>351,684</u>	<u>(664,496)</u>	<u>351,524</u>	<u>(665,905)</u>
Total comprehensive revenues and expenses		<u>(2,247,315)</u>	<u>1,290,417</u>	<u>(2,666,701)</u>	<u>647,376</u>
Total comprehensive revenues and expenses for the years attributable to:					
Owners of the parent		(2,247,315)	1,290,418	(2,666,701)	647,376
Non-controlling interests		-	(1)	-	-
		<u>(2,247,315)</u>	<u>1,290,417</u>	<u>(2,666,701)</u>	<u>647,376</u>

Notes to the financial statements form an integral part of these financial statements

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENT OF CHANGES IN FUND BALANCES
FOR THE YEAR ENDED DECEMBER 31, 2019

(Unit : Thousand Baht)

Consolidated Financial Statements								
		Other components of fund balances						
		Fund balances (See Note 24)	Change in value of available-for-sale investments managed by SET (net of tax)	Change in value of available-for-sale investments from Securities Investor Protection Fund (net of tax)	Share of other comprehensive profit (loss) of associates (net of tax)	Total other components of fund balances	Total fund balances	Non- controlling interests
	Note							Total fund balances
Opening balance as at January 1, 2018		26,724,008	639,642	11,223	(28)	650,837	27,374,845	2
Other comprehensive revenues and expenses, net of tax	24	485	(659,735)	(5,142)	(103)	(664,980)	(664,495)	(1)
Revenues over expenses	24	1,954,913	-	-	-	-	1,954,913	-
Closing balance as at December 31, 2018		<u>28,679,406</u>	<u>(20,093)</u>	<u>6,081</u>	<u>(131)</u>	<u>(14,143)</u>	<u>28,665,263</u>	<u>1</u>
Opening balance as at January 1, 2019		28,679,406	(20,093)	6,081	(131)	(14,143)	28,665,263	1
Other comprehensive revenues and expenses, net of tax	24	10,226	335,082	6,218	158	341,458	351,684	-
Revenues under expenses	24	(2,598,999)	-	-	-	-	(2,598,999)	-
Closing balance as at December 31, 2019		<u>26,090,633</u>	<u>314,989</u>	<u>12,299</u>	<u>27</u>	<u>327,315</u>	<u>26,417,948</u>	<u>1</u>

Notes to the financial statements form an integral part of these financial statements

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENT OF CHANGES IN FUND BALANCES (CONTINUED)
FOR THE YEAR ENDED DECEMBER 31, 2019

(Unit : Thousand Baht)

		Separate Financial Statements			
		Other components of fund balances			
		Change in value of available-for-sale investments		Change in value of available-for-sale investments from Securities	Total other components of fund balances
Note	Fund balances (See Note 24)	managed by SET (net of tax)	Investor Protection Fund (net of tax)		Total fund balances
Opening balance as at January 1, 2018	25,008,151	648,581	11,223	659,804	25,667,955
Other comprehensive revenues and expenses, net of tax	24	-	(660,763)	(5,142)	(665,905)
Revenues over expenses	24	1,313,281	-	-	1,313,281
Closing balance as at December 31, 2018		<u>26,321,432</u>	<u>(12,182)</u>	<u>6,081</u>	<u>(6,101)</u>
Opening balance as at January 1, 2019	26,321,432	(12,182)	6,081	(6,101)	26,315,331
Other comprehensive revenues and expenses, net of tax	24	10,226	335,080	6,218	341,298
Revenues under expenses	24	(3,018,225)	-	-	(3,018,225)
Closing balance as at December 31, 2019		<u>23,313,433</u>	<u>322,898</u>	<u>12,299</u>	<u>335,197</u>

Notes to the financial statements form an integral part of these financial statements

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2019

(Unit : Thousand Baht)

		Consolidated		Separate	
	Notes	Financial Statements		Financial Statements	
		2019	2018	2019	2018
Cash flows from operating activities					
Revenues over (under) expenses before income tax expense		(2,384,728)	2,433,575	(3,064,912)	1,549,567
Adjustments for					
Depreciation and amortisation	15 and 16	524,849	482,615	523,700	482,052
Investment income, net		(843,366)	(593,398)	(1,516,714)	(861,978)
Income derived from Securities Investor					
Protection Fund, net	25	(13,930)	(9,937)	(13,930)	(9,937)
Income derived from Derivatives					
Investor Protection Fund, net	25	(848)	(686)	-	-
Reversal of allowance for impairment of investments		(3,395)	-	(3,395)	-
Doubtful debts expenses		1,763	-	3,544	-
Employee benefits obligation	23	192,132	51,008	192,132	51,008
Loss from write-off of assets		52	507	52	507
Share of profit of investments in associates and joint venture entity - net of tax	13	(45,383)	(8,630)	-	-
		<u>(2,572,854)</u>	<u>2,355,054</u>	<u>(3,879,523)</u>	<u>1,211,219</u>
Changes in operating assets and liabilities					
(Increase) decrease in operating assets					
Assets for margin deposits and benefits		2,125,742	(2,112,519)	-	-
Trade and other receivables		102,061	195,996	127,681	256,360
Other current assets		13,827	(19,118)	9,197	(11,474)
Assets for clearing system protection and benefits		(222,749)	(80,152)	(3,760)	(1,646)
Securities Investor Protection Fund		(33,457)	(11,750)	(33,457)	(11,750)
Derivatives Investor Protection Fund		(6,321)	(13,007)	-	-
Refundable deposits		3,000	(500)	3,000	(500)
Increase (decrease) in operating liabilities					
Margin deposits and benefits payables		(2,125,742)	2,112,519	-	-
Trade and other payables		180,274	218,991	184,538	182,819
Fees received in advance		18,144	21,388	19,597	25,029
Other current liabilities		35,889	18,966	(13,219)	19,773
Assets for clearing system protection and benefits payable		219,476	78,506	-	-
Contributions and benefits to Securities Investor					
Protection Fund		13,407	9,472	13,407	9,472
Contributions and benefits to Derivative Investor					
Protection Fund		5,239	11,978	-	-
Employee benefits paid	23	(4,076)	(18,666)	(4,076)	(18,568)
Transfer of employees from a subsidiary		-	-	-	1,354
Other non-current liabilities		2,099	(1,942)	2,099	(1,045)
Cash flows generated from (used in) operations		<u>(2,246,041)</u>	<u>2,765,216</u>	<u>(3,574,516)</u>	<u>1,661,043</u>
<u>Less</u> Income tax paid		<u>(434,413)</u>	<u>(553,532)</u>	<u>(171,030)</u>	<u>(353,187)</u>
Net cash provided by (used in) operating activities		<u>(2,680,454)</u>	<u>2,211,684</u>	<u>(3,745,546)</u>	<u>1,307,856</u>

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS (CONTINUED)
FOR THE YEAR ENDED DECEMBER 31, 2019

(Unit : Thousand Baht)

		Consolidated		Separate	
		Financial Statements		Financial Statements	
	Notes	2019	2018	2019	2018
Cash flows from investing activities					
Investment income received		695,567	375,973	661,827	386,611
Dividend received		143,356	211,998	814,866	532,529
Purchase of short-term investments	9	(2,472,237)	(3,018,708)	(271,875)	(3,018,708)
Proceeds from disposals of short-term investments	9	4,904,849	2,044,831	4,904,849	2,044,831
Proceeds from disposals of investment in joint venture entity		13,000	-	13,000	-
Purchase of general investments	14	(24,500)	-	(24,500)	-
Proceeds from short-term loans to joint venture entity	7	7,500	-	7,500	-
Short-term loans to joint venture entity	7	-	(7,500)	-	(7,500)
Purchase of long-term investments	14	(1,999,380)	(3,703,981)	(1,999,380)	(3,703,981)
Proceeds from disposals of long-term investments	14	3,398,504	2,303,330	3,398,504	2,303,330
Proceeds from long-term loans to a subsidiary	7	-	-	-	5,957
Payment for long-term loans to a subsidiary	7	-	-	(200,000)	(200,000)
Reserve fund for clearing and settlement		(261,862)	(204,256)	-	-
Purchase of property, plant and equipment		(148,220)	(298,163)	(148,220)	(297,941)
Proceeds from disposals of property, plant and equipment		1,643	-	1,643	-
Purchase of intangible assets		(381,177)	(85,017)	(381,177)	(82,121)
Proceeds from share of profit of investments					
in joint venture entity	13	-	2,047	-	-
Proceeds from share of profit of investments in associates	13	15,743	12,595	-	-
Benefits received from Securities Investor Protection Fund		13,832	12,924	13,832	12,924
Benefits received from Derivatives					
Investor Protection Fund		1,082	1,029	-	-
Net cash provided by (used in) investing activities		3,907,700	(2,352,898)	6,790,869	(2,024,069)
Cash flows from financing activities					
Cash inflow on short-term borrowings from subsidiaries	7	-	-	458,713	1,226,000
Repayment of short-term borrowings from subsidiaries	7	-	-	(2,323,500)	(364,000)
Interest paid		-	-	(36,569)	(51,360)
Net cash provided by (used in) financing activities		-	-	(1,901,356)	810,640
Net increase (decrease) in cash and cash equivalents		1,227,246	(141,214)	1,143,967	94,427
Opening balances		1,187,681	1,328,895	948,769	854,342
Closing balances		2,414,927	1,187,681	2,092,736	948,769
Supplemental disclosures of cash flows information					
Cash and cash equivalents are as follows:					
Cash and cash equivalents	8	2,329,358	1,118,595	2,092,736	948,769
Cash at a banks for financial benefits payable		85,569	69,086	-	-
		2,414,927	1,187,681	2,092,736	948,769
Significant non-cash transactions					
Unrealized gain (loss) on available-for-sale securities		418,150	(826,060)	417,992	(825,957)
Unrealized gain (loss) on available-for-sale securities					
from Securities Investor Protection Fund	25.2	6,218	(10,646)	6,218	(10,646)
Other payables from purchase of assets		18,735	26,269	18,735	26,269

Notes to the financial statements form an integral part of these financial statements

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
NOTES TO THE CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2019

Notes	Contents	Page
1.	General information	1
2.	Accounting policies	3
3.	Critical accounting estimates, assumptions and judgments	16
4.	Financial risk management	17
5.	Capital risk management	19
6.	Segment information	19
7.	Transactions with related parties	22
8.	Cash and cash equivalents	26
9.	Short-term investments, net	27
10.	Trade and other receivables	28
11.	Other current assets	29
12.	Investments in subsidiaries	30
13.	Investments in associates and joint venture entity, net	31
14.	Long-term investments, net	35
15.	Property, plant and equipment, net	37
16.	Intangible assets, net	39
17.	Assets for margin deposits and benefits	41
18.	Assets for clearing system protection and benefits	42
19.	Reserve fund for clearing and settlement	45
20.	Deferred income taxes	46
21.	Trade and other payables	49
22.	Other current liabilities	49
23.	Employee benefits obligation	50
24.	Fund balances	53
25.	Financial position and results of fund operations	59
26.	Operating revenues	65
27.	Investment income, net	66
28.	Other income	66
29.	Employee benefit expenses	67
30.	SEC fees	67
31.	Other expenses	68
32.	Transfer money to the Capital Market Development Fund	68
33.	Income tax expense	68

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
NOTES TO THE CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2019

Notes	Contents	Page
34.	Commitments with non-related parties	69
35.	Fair value	70
36.	Contingent assets and contingent liabilities	73
37.	Financial instruments - forward foreign exchange contracts	74
38.	Reclassifications	75
39.	Approval of the financial statements	75

THE STOCK EXCHANGE OF THAILAND AND ITS SUBSIDIARIES
NOTES TO THE CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2019

1. GENERAL INFORMATION

The Stock Exchange of Thailand (SET) is a juristic entity incorporated in Thailand under the Securities Exchange of Thailand Act B.E. 2517 (1974). The principal business activities of SET are serving as the market or the centre for trading of securities and providing related services without the objective of distribution of profit to members. SET commenced its trading of securities on April 30, 1975 and operates under the framework of the Securities Exchange of Thailand Act B.E. 2535 (1992). Its registered office is located at 93 Floor 17 Ratchadapisek Road, Kwaeng Din Daeng, Khet Din Daeng, Bangkok 10400, Thailand.

For reporting purposes, SET and its subsidiaries are referred to as the Group.

The principal activities of SET and its subsidiaries are summarised as follows:

- 1) Securities markets comprise the operation of securities listing, trading system, clearing and settlement, depository, including market surveillance and supervision of listed companies and member companies.
- 2) Derivatives markets comprise the operation of trading and clearing of futures contracts and financial securities, providing other services related to futures trading transactions.
- 3) Technology services comprise the operation of internet trading platform for securities and derivatives, information services and other member services.
- 4) Registrar services and fund services comprise the operation of securities registrar and fund services.

Details of SET's subsidiaries, associates and joint venture entity as at December 31, 2019 and 2018 are as follows:

Name of entity	Type of business	Country of incorporation	Ownership interest %	
			2019	2018
Direct subsidiaries				
Thailand Securities Depository Co., Ltd.	Securities depository and registrar services	Thailand	100.00	100.00
Thai Trust Fund Management Co., Ltd.	Mutual fund management	Thailand	100.00	100.00
Thai NVDR Co., Ltd.	Investment management in Non-Voting Depository Receipts	Thailand	100.00	100.00
SETTRADE.COM Co., Ltd.	Computer system services	Thailand	100.00	100.00
Thailand Futures Exchange Public Company Limited	Derivatives exchange	Thailand	100.00	100.00
Thailand Clearing House Co., Ltd.	Clearing house and related back-office services for securities and derivatives contracts	Thailand	100.00	100.00
Finnet Innovation Network Co., Ltd.	Rendering payment service for the capital market	Thailand	100.00	100.00
Live Fin Corp Co., Ltd.	Provider of electronic network system for investment	Thailand	100.00	100.00
Joint venture entity				
Family Know-how Co., Ltd. ⁽¹⁾ (the dissolution was registered on December 26, 2018)	Media business specialising in financial and investment information	Thailand	50.00	50.00
Associates				
Clearing Fund ⁽²⁾	Fund	Thailand	8.59	9.42
TSFC Securities Public Company Limited ⁽³⁾	Securities financing services and securities borrowing and lending	Thailand	40.65	40.65

Details of SET's associates and joint venture entity as at December 31, 2019 and 2018 are as follows:

(1) Family Know-how Co., Ltd.

Family Know-how Co., Ltd. is a media company that broadcasts information about economics and investment for the benefits of investor. SET has performed joint arrangement with a company which have rights to the net assets of the arrangement. Therefore, the investment in Family Know-how is classified as investment in joint venture entity.

Family Know-how Co., Ltd. is a private limited company and its stock is not traded in the market price.

A Company has registered the dissolution with the Ministry of Commerce on December 26, 2018, and is currently in the process of liquidation.

(2) Clearing Fund

The Clearing Fund operates under the Regulations of the Clearing Fund (No.1) B.E. 2541 (1998), which require that a one-time payment of Baht 100 million be made as an initial contribution by SET. The ownership interest percentage will be reduced based on further contributions made by other members of the Clearing Fund in the future. SET has no control over the Clearing Fund's operations, but has influences in policy and operation. Therefore, the investment in the Clearing Fund is classified as investment in an associate.

(3) TSFC Securities Public Company Limited (TSFC)

TSFC Securities Public Company Limited has been established to provide liquidity for securities companies and to support to the further development of securities market. SET has appointed 5 representatives to be member of the 11-member Board of Directors of TSFC. The Board of Directors will participate in the decision-making on monetary policies and operations of the company. Therefore, the investment in TSFC is classified as investment in an associate.

TSFC Securities Public Company Limited is a public company and its stock is not traded in the market price.

2. ACCOUNTING POLICIES

2.1 Basis of preparation

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Act B.E. 2543 (2000), being those Thai Financial Reporting Standards issued under the Accounting Profession Act B.E. 2547 (2004).

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting policy for investments below.

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated and separate financial statements are disclosed in Note 3.

An English version of the consolidated and separate financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

2.2 Revised financial reporting standards, and related interpretations

2.2.1 Thai Financial Reporting Standards affecting the presentation and disclosure in the current period financial statements

During the period, the Group has adopted the revised and new financial reporting standards and guidelines on accounting issued by the Federation of Accounting Professions which become effective for fiscal years beginning on or after January 1, 2019. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards, with most of the changes directed towards revision of wording and terminology, and provision of interpretations and accounting guidance to users of standards. The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements. However, the new financial reporting standards which was changed the core principle is Thai Financial Reporting Standard No. 15 "Revenue from Contracts with Customers" ("TFRS 15"). The Group's accounting policies for revenues are disclosed in Note 2.18 to the financial statements. The application of TFRS 15 has no significant impact on the financial position and/or financial performance of the Group.

2.2.2 Thai Financial Reporting Standards announced in the Royal Gazette but not yet effective

The Federation of Accounting Professions has issued the Notification regarding Thai Accounting Standards, Thai Financial Reporting Standards and Thai Financial Reporting Standard Interpretation which have been announced in the Royal Gazette and will be effective for the financial statements for the period beginning on or after January 1, 2020 onwards, as follows:

Group of Financial Instruments Standards

Thai Accounting Standards ("TAS")

TAS 32 Financial Instruments: Presentation

Thai Financial Reporting Standards ("TFRS")

TFRS 7 Financial Instruments: Disclosures

TFRS 9 Financial Instruments

Thai Financial Reporting Standard Interpretations ("TFRIC")

TFRIC 16 Hedges of a Net Investment in a Foreign Operation

TFRIC 19 Extinguishing Financial Liabilities with Equity Instruments

These group of Standards make stipulations relating to the classification of financial instruments and their measurement at fair value or amortized cost; taking into account the type of instrument, the characteristics of the contractual cash flows and the Company's business model, the calculation of impairment using the expected credit loss method, and the concept of hedge accounting. These include stipulations regarding the presentation and disclosure of financial instruments. These Standards will supersede the Standards and Interpretations relating to the financial instruments upon its effective date.

Thai Financial Reporting Standards No. 16 “Leases” (“TFRS 16”)

This TFRS provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessees and lessors.

This TFRS will supersede the following lease Standards and Interpretations upon its effective date, which are Thai Accounting Standard No.17 “Leases”, Thai Accounting Standard Interpretation No.15 “Operating Lease - Incentives”, Thai Accounting Standard Interpretation No.27 “Evaluating the Substance of Transactions involving the Legal Form of a Lease” and Thai Financial Reporting Standard Interpretation No.4 “Determining whether an Arrangement contains a Lease”.

For lessee accounting, there are significant changes to lease accounting in this TFRS by removing the distinction between operating and finance leases under TAS 17 and requiring a lessee to recognize a right-of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets. However, the lessor accounting treatment continues to require a lessor to classify a lease either as an operating lease or a finance lease, using the same concept as TAS 17.

Other financial reporting standards

Thai Accounting Standards (“TAS”)

TAS 12	Income Taxes
TAS 19	Employee Benefits
TAS 23	Borrowing Costs
TAS 28	Investments in Associates and Joint Ventures

Thai Financial Reporting Standards (“TFRS”)

TFRS 3	Business Combinations
TFRS 11	Joint Arrangements

The Group’s management has assessed the impact of this TFRS and believed that it will not have any material impact on the financial statements of the Group in the period of initial application.

2.3 Group Accounting - Investments in subsidiaries, associates and joint ventures entity

1) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, 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. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances and unrealized gains or loss on transactions between the Group are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

In the separate financial statements, investments in subsidiaries are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

2) Transactions and non-controlling interests

The Group treats transactions with non-controlling interests as transactions with the Fund. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in the Fund. Gains or losses on disposals to non-controlling interests are also recorded in the Fund.

3) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognized in revenues and expenses. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive revenues and expenses in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities.

4) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognized at cost, and the carrying amount is increased or decreased to recognize the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investment in associates includes goodwill identified on acquisition.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognized in other comprehensive revenues and expenses is reclassified to revenues and expenses where appropriate.

The Group's share of its associates' post-acquisition profits or losses is recognized in the revenues and expenses, and its share of post-acquisition movements in other comprehensive revenues and expenses is recognized in other comprehensive revenues and expenses. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount adjacent to share of profit/(loss) of associates in the statement of comprehensive revenues and expenses.

Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group. Dilution gains and losses arising in investments in associates are recognized in the revenues and expenses.

In the separate financial statements, investments in associates are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

5) Joint venture entity

Under the equity method of accounting, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive revenues and expenses. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, from part of the Group's net investment in the joint ventures), the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealized gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

2.4 Foreign currencies

a) Functional and presentation currency

Items included in the financial statements of each of the Group's 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 Thai Baht, which is the Group's functional and the Group's presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the revenues or expenses.

When a gain or loss on a non-monetary item is recognized in other comprehensive revenues and expenses, any exchange component of that gain or loss is recognized in other comprehensive revenues and expenses. Conversely, when a gain or loss on a non-monetary item is recognized in revenues or expenses, any exchange component of that gain or loss is recognized in revenues or expenses.

2.5 Underlying assets

Underlying assets are the financial assets carried by Thai NVDR Co., Ltd. (the subsidiary). The financial liabilities are the Non-Voting Depository Receipts (NVDRs). The subsidiary will offset the financial assets and financial liabilities, and show the net amount in the financial statements. According to the regulations and conditions in the prospectus, the subsidiary are responsible for issuing and selling NVDRs and making investments in listed companies in the Stock Exchange of Thailand at the same amount and in the same period (back to back). In addition to the entitlement of financial benefits of those underlying securities as the registered holder, the subsidiaries have an obligation to repay those financial benefits to the investors in the NVDRs as mentioned in the prospectus. Those benefits are not recognized as revenues or expenses of the subsidiary.

2.6 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, call deposits (excluding deposits held to maturities), other short-term highly liquid investments held for working capital and short-term commitment payment purposes with maturities from acquisition date of three months or less.

2.7 Investments

Investments other than investments in subsidiaries, associates and joint ventures are classified into the following four categories: 1) trading investments; 2) held-to-maturity investments; 3) available-for-sale investments; and 4) general investments. The classification is dependent on the purpose for which the investments were acquired. Management determines the appropriate classification of its investments at the time of the purchase and re-evaluates such designation on a regular basis.

- 1) Trading investments are acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading investments and included in current assets.
- 2) Held-to-maturity investments are investments with fixed maturity that the management has the intent and ability to hold to maturity are classified as held-to-maturity and are included in non-current assets, except for maturities within 12 months from the statement of financial position date which are classified as current assets.
- 3) Available-for-sale investments are investments intended to be held for an indefinite period of time, which may be sold in response to liquidity needs or changes in interest rates, are classified as available-for-sale; and are included in non-current assets unless management has expressed the intention of holding the investment for less than 12 months from the statement of financial position date or unless they will need to be sold to raise operating capital, in which case they are included in current assets.
- 4) General investments are investments in non-marketable equity.

All categories of investments are initially recognized at cost, which is equal to the fair value of consideration paid plus transaction cost.

Trading investments and available-for-sale investments are subsequently measured at fair value. The fair value of investments is based on quoted bid price at the close of business on the statement of financial position date by reference to the Stock Exchange of Thailand and the Thai Bond Dealing Centre. The unrealized gains and losses of trading investments are recognized in revenues and expenses. The unrealized gains and losses of available-for-sale in investments are recognized in other comprehensive revenues and expenses.

Held-to-maturity investments are carried at amortised cost using the effective yield method less impairment loss.

General investments are carried at cost less impairment loss.

A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, impairment loss is charged to revenues and expenses.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is charged or credited to the revenues and expenses. When disposing part of the holding of a particular investment in debt or equity securities, the carrying amount of the disposed part is determined by the weighted average carrying amount of the total holding of the investment.

2.8 Trade and other receivables

Trade and other receivables are carried at original invoice amount less allowance for doubtful accounts (if any).

The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments, assessment of the future cash flows, known and identified instances of default and consideration of market trends. Bad debts are written off when incurred and recognized as part of other expenses in the statement of comprehensive revenues and expenses.

2.9 Property, plant and equipment

Land is stated at cost less impairment losses. Property and equipment are stated at cost less accumulated depreciation and impairment losses (if any).

Depreciation is charged to expenses in the statement of comprehensive revenues and expenses on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, except for land which is considered to have an unlimited useful life. The estimated useful lives are as follows:

Buildings	10 - 50 years
Building improvements	5 - 30 years
Furniture and fixtures	5 - 20 years
Office equipment	5 - 20 years
Vehicles	5 years

Management determines the estimated useful lives and residual values for the Group's property and equipment. Management will appropriately revise the residual values and useful lives of assets when the residual values and useful lives differ from previous estimations, or it will write-off technically obsolete assets or assets which have been sold or abandoned.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

Repair and maintenance expenses are charged to the statement of comprehensive revenues and expenses during the financial period in which they are incurred. The cost of major renovation is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group. Major renovations are depreciated over the remaining useful lives of the related assets.

Gains and losses on disposal are determined by comparing the proceeds with the carrying amount and are included in the statement of comprehensive revenues and expenses.

2.10 Borrowings

Borrowings are recognized initially at fair value, net of transaction cost incurred. Borrowings are subsequently stated at amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognized in revenues or expenses over the period of the borrowings using the effective yield method.

2.11 Intangible assets

Intangible assets, computer software, patent and right in operation, that are acquired by the Group, which have finite useful lives, are recognized at cost less accumulated amortization and impairment losses. Intangible assets are amortized in the statement of comprehensive revenues and expenses on a straight-line basis over their estimated useful lives from the date that they are available for use. The estimated useful lives are 2 - 10 years.

Costs associated with developing or maintaining computer software are recognized as expenses as incurred in the statement of comprehensive revenues and expenses. Costs that are directly associated with identifiable and unique software products controlled by the Group and have probable economic benefits exceeding the cost beyond one year are recognized as intangible assets. Direct costs include the purchase price and an appropriate portion of relevant overheads to allow such asset to be ready for its intended use. Expenditure which is incurred to enhance or extend the performance of computer software beyond its original specifications is recognized as an intangible asset.

Management determines the estimated useful lives of intangible assets. Management will revise the amortisation charge where useful lives differ from the previous estimations or it will write-off technically obsolete assets or assets which have been sold or abandoned.

2.12 Impairment

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

2.13 Interest-bearing liabilities

Interest-bearing liabilities are recognized initially at fair value less attributable transaction charges. Subsequent to initial recognition, interest-bearing liabilities are stated at amortized cost with any difference between cost and redemption value being recognized in the statement of comprehensive revenues and expenses over the period of the borrowings on an effective interest basis.

2.14 Trade and other payables

Trade and other payables are stated at cost.

2.15 Employee benefits obligation

1) Short-term benefits

The Group recognizes salaries, wages, bonuses, contributions to the social security fund and cumulative annual leave as expenses when incurred.

2) Contributions to provident fund

The Group operates a provident fund, being a defined contribution plan. The assets of which are held in a separate trustee-administered fund. The provident fund is funded by payments from employees and by the Group. The Group's contributions to provident fund are charged to expenses in the statement of comprehensive revenues and expenses in the period to which the contributions relate.

3) Retirement benefits and other benefits

Employee benefits that will be paid upon retirement usually depends on one or more factors such as age of employees, years of service and compensation. In addition, the Group provides other long-term employee benefit plans, namely long service awards.

The liability recognized in the statement of financial position in respect of defined benefit retirement plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yield of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related retirement liability. The Group reviews the assumptions used annually.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the Fund in other comprehensive revenues and expenses in the period in which they arise.

Past service cost are recognized immediately in revenues and expenses.

Past service cost related to the plan amendment is recognized as an expense in the statement of revenues and expenses when the plan amendment is effective.

4) Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

2.16 Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognized for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognized as interest expense.

2.17 Lease - where a Group is the lessee

Leases of assets under which all the risks and benefits of ownership are effectively retained by the lessor are classified as operating leases.

Payments made under operating leases are recognized in the statement of comprehensive revenues and expenses on a straight-line basis over the term of the lease. Lease incentives granted are recognized in the statement of comprehensive revenues and expenses as an integral part of the total rental income. Contingent rentals are charged to the statement of comprehensive revenues and expenses for the accounting period in which they are incurred.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognized as an expense in the period in which termination takes place.

2.18 Revenue

For the year ended December 31, 2019, the Group's change the basis according to the adoption of TFRS No. 15 "Revenue from Contracts with Customers". Therefore, the accounting policy for revenue recognition for the year ended December 31, 2019 and 2018 were contrast as below.

For the year ended December 31, 2019

Trading fees, initial securities registrar fees, initial listing fees, clearing and settlement fees, member services fees, initial of information service fees, depository fees, initial customization and IT support fees, initial membership fees and initial fund service fees is recognized revenue when the entity has fulfilled the obligations to be completed.

Annual stock registrar fees, annual listing fees, member service fees by overtime, information service fees by overtime, customization and IT support fees by overtime, annual membership fees and fund service fees by overtime is recognized revenue according to the obligations that must be completed throughout the period.

Interest income is recognized on a time proportion basis, taking into account the principal outstanding and the effective rate over the period to maturity, when it is determined that such income will accrue to the Group.

Dividend income is recognized in the statement of comprehensive revenues and expenses when the Group's right to receive payment is established.

Other income is recognized when the right to receive cash is established.

For the year ended December 31, 2018

Service income is recognized upon performance of services.

Membership fees comprise initial and annual fees. The initial fees are recognized as revenue in the commencing day on which the service is rendered. Annual fees are recognized on a time proportion basis.

2.19 Expense

Expense is recognized in the statement of comprehensive revenues and expenses on an accrual basis.

2.20 Directors' remuneration

Directors' remuneration comprises the benefits paid to the Board of Governors of SET and the Board of Directors of subsidiaries including benefits received by the members of sub-committees (excluding salaries, bonus and related benefits payable to management).

2.21 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognized in revenue or expense, except to the extent that it relates to items recognized in other comprehensive revenues and expenses or directly in fund balance. In this case the tax is also recognized in other comprehensive revenues and expenses or directly in fund balance, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognized, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2.22 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the Group's senior management.

3. CRITICAL ACCOUNTING ESTIMATES, ASSUMPTIONS AND JUDGMENTS

Use of management's judgements and key sources of estimation uncertainty

3.1 Management's judgements in applying accounting policies

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires the Group's management to exercise various judgements in applying accounting policies that can significantly affect the recognition and disclosures in the financial statements. Significant judgements in applying accounting policies are as follows:

Allowance for doubtful accounts

Detail of the allowance for doubtful is set out in Note 2.8.

Impairment

Detail of the impairment of asset is set out in Note 2.12.

Employee benefits obligation

Details of the employee benefits obligation are set out in Notes 2.15 and 23.

Provisions

Detail of the provisions is set out in Note 2.16.

Deferred tax

Details of the deferred tax are set out in Notes 2.21 and 20.

3.2 Key sources of estimation uncertainty

The Company has estimates with the assumptions concerning the future. Although these estimates are based on management's reasonable consideration of current events, actual results may differ from these estimates. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

Fair value measurements and valuation processes

Fair value measurements are for information disclosure purposes

The Group regularly review significant unobservable inputs and valuation adjustments. If third party information is used to measure fair values, then the Group assess the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of TFRS 13, including the level in the fair value hierarchy.

When measuring the fair value of an asset or a liability, the Group use market observable data as the first priority. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques for fair value measurement as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs are inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

4. FINANCIAL RISK MANAGEMENT

4.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: currency risk, fair value interest rate risk and cash flow interest rate risk, credit risk, liquidity risk and risk from investments and deposits. The Group's financial risk management programme focuses on investment management under investment policies and strategic asset allocation which is approved by SET's Board of Governors and subsidiaries' Board of Director. The investment committees are strictly established to oversee the investment in compliance with the policies and strategic asset allocation defined. The investment policy aims on maintaining stability of the principal, liquidity and return on the appropriate level of risk.

1) Foreign exchange risk

The Group has no significant exposure to foreign currency risk relates due to its accounts receivable and accounts payable are mainly made in Thai Baht, except for investments in some foreign mutual funds which is in foreign currency. The Group has appropriately applied forward exchange contracts to hedge foreign exchange risk of such investments.

2) Interest rate risk

Interest rate risk arises from fluctuations in market interest rates which may affect the Group's operating results and cash flow. The Group does not have interest rate derivative in order to manage fluctuation of the interest rate.

3) Credit risk

The Group has no significant concentrations of credit risk. The Group has appropriate policies in place to ensure that the Group provides services to customers who have appropriate credit history.

4) Liquidity risk

The Group has no significant exposure to liquidity risk as the Group has sufficient cash to support its operations. The Group aims on maintaining flexibility of funding by using internal capital of the Group.

5) Risk from investments and deposits

The Group is exposed to market risks as the investor of financial instruments, and credit risk from the issuer of financial instruments. The Group, therefore, has a policy of diversifying its investments and deposits to high credit financial institutions according to the investment policy prescribed by the resolution of the investment committee.

The investment policies framework regarding types and proportion of investments are as follows:

Investments in debt securities

Type of investment	Proportion of investment
Government securities, debentures or bonds of state enterprises or entities incorporated by specific laws and guaranteed by the Ministry of Finance	Unlimited
Fixed deposits or NCDs at commercial banks and promissory notes of finance companies or financial institutions incorporated by specific laws	Not to exceed 15% of total debt investment per institution
Debentures or warrants of debentures and bills of exchange	Not to exceed 5% of total debt investment per issuer
Investment units or warrants of investment units in mutual funds invested in debt securities	Not to exceed 10% of total debt investment per mutual fund

Investments in domestic equity securities

Type of investment	Proportion of investment
Investment units or warrants of investment units in mutual funds invested in equity securities	Not to exceed 10% of total equity investment per each Fund, and not to exceed 10% of fund size

Investments in property funds

Type of investment	Proportion of investment
Property funds	Not to exceed 10% of fund size per each Fund, except for Fund of Property Funds, not to exceed 20% of fund size

Investments in foreign investment funds

Type of investment	Proportion of investment
Foreign investment funds	<ul style="list-style-type: none"> - Foreign investment funds in Thailand; not to exceed 30% of fund size - Direct investment in Mutual Fund in Foreign and Exchange Traded Fund "ETF": not to exceed 10% of all foreign equity value per each fund (2018: Direct investment in Mutual Fund and ETF: not to exceed 10% of foreign equity value per each fund)

Investments in Absolute Return Strategy

Type of investment	Proportion of investment
Absolute Return Strategy funds	<ul style="list-style-type: none"> - Not to exceed 25% of the initial investment amount in Absolute Return per each fund

Investments in gold funds

Type of investment	Proportion of investment
Gold funds	Not to exceed 10% of fund size per mutual fund
Investments in each asset management company should not exceed 40% of total investments.	

4.2 Accounting for derivative financial instruments and hedging activities

Foreign currency forward contracts protect the Group from movements in exchange rates. The Group enters into contract establishing the rate at which a foreign currency asset will be realized or a foreign currency liability will be settled in the future. The Group recognise foreign currency forward contracts transaction in the financial statements in fair value measurement. The unrealized gain (loss) from fair value measurement of foreign currency forward contracts will be included in unrealized gain (loss) on exchange rate in the statements of comprehensive revenues and expenses.

Disclosures about derivative financial instruments to which the Group is a party are provided in Note 37.

5. CAPITAL RISK MANAGEMENT

The Group's objectives when managing capital are to safeguard the Subsidiaries in the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to increase investor and stakeholder confidence.

In order to maintain or adjust the capital structure, the subsidiaries in the Group may adjust the amount of dividends paid to shareholders depending on their operating performance.

6. SEGMENT INFORMATION

Segment information is presented in respect of the Group's business segments. The primary format, business segments, is based on the Group's management and internal reporting structure.

The Group comprises the following 5 main business segments:

- 1) Securities Markets (including securities trading, clearing and settlement, listing, depository and membership fees)
- 2) Derivatives Markets (including trading and clearing of future contracts and membership fees)
- 3) Technology Services (including member services, information services and technology support)
- 4) Registrar Services (including securities registrar)

- 5) Capital Market Development and others, i.e., rental income and other miscellaneous income. Capital Market Development including capital market education improving financial and investment capabilities, promoting sustainable development of capital market industry and conducting of capital market research.

Financial information presented in the consolidated financial statements as at December 31, 2019 and 2018 and for the years ended December 31, 2019 and 2018 are as follows:

(Unit : Thousand Baht)

Consolidated Financial Statements							
	Capital Market						
	Securities Markets	Derivatives Markets	Technology Services	Registrar Services	Development and others	Elimination	Total
For the year ended December 31, 2019							
Revenues from operation	3,052,745	1,020,689	684,848	1,226,040	353,523	-	6,337,845
Revenue from inter-segment	707,417	501,619	79,415	566,721	75,765	(1,930,937)	-
Total revenue	3,760,162	1,522,308	764,263	1,792,761	429,288	(1,930,937)	6,337,845
Segment revenues over expenses	1,195,706	382,197	381,245	366,746	(204,869)	-	2,121,025
Investment income, net							947,954
Share of profit of investments in joint venture entity, net of tax							7,248
Share of profit of investments in associates, net of tax							38,135
Revenues over expenses in operations							3,114,362
Non-operating revenues (expenses)							
Income derived from Securities Investor Protection Fund, net							13,930
Income derived from Derivatives Investor Protection Fund, net							848
Transfer money to the Capital Market Development Fund							(5,700,000)
Reversal of contributions to the Stock Exchange of Thailand Foundation							186,132
Revenues under expenses before income tax expenses							(2,384,728)
Income tax expense							(214,271)
Revenues under expenses							(2,598,999)
As at December 31, 2019							
Segment assets	4,131,925	27,709,288	895,417	690,872	254,054	(5,944,386)	27,737,170
Other assets	-	-	-	-	20,675,624	(3,418,600)	17,257,024
Total assets	4,131,925	27,709,288	895,417	690,872	20,929,678	(9,362,986)	44,994,194
Segment liabilities	1,676,534	21,474,802	238,203	482,867	648,225	(5,944,386)	18,576,245
Other liabilities	-	-	-	-	1,918,713	(1,918,713)	-
Total liabilities	1,676,534	21,474,802	238,203	482,867	2,566,938	(7,863,099)	18,576,245

(Unit : Thousand Baht)

Consolidated Financial Statements							
	Capital Market						
	Securities Markets	Derivatives Markets	Technology Services	Registrar Services	Development and others	Elimination	Total
For the year ended December 31, 2018							
Revenues from operation	3,107,109	957,548	592,399	1,120,937	214,361	-	5,992,354
Revenue from inter-segment	810,061	426,274	92,044	500,202	27,006	(1,855,587)	-
Total revenue	3,917,170	1,383,822	684,443	1,621,139	241,367	(1,855,587)	5,992,354
Segment revenues over expenses	<u>1,240,378</u>	<u>578,592</u>	<u>196,337</u>	<u>341,708</u>	<u>(342,746)</u>	<u>-</u>	<u>2,014,269</u>
Investment income, net							586,185
Share of loss of investments in joint venture entity , net of tax							(30,933)
Share of profit of investments in associates , net of tax							39,563
Revenues over expenses in operations							2,609,084
Non-operating revenues (expenses)							
Income derived from Securities Investor Protection Fund, net							9,937
Income derived from Derivatives Investor Protection Fund, net							686
Contributions to the Stock Exchange of Thailand Foundation							(186,132)
Revenues over expenses before income tax expenses							2,433,575
Income tax expense							(478,662)
Revenues over expenses							<u>1,954,913</u>
As at December 31, 2018							
Segment assets	4,008,194	29,027,065	921,289	743,866	460,892	(5,656,956)	29,504,350
Other assets	-	-	-	-	24,579,501	(5,313,183)	19,266,318
Total assets	<u>4,008,194</u>	<u>29,027,065</u>	<u>921,289</u>	<u>743,866</u>	<u>25,040,393</u>	<u>(10,970,139)</u>	<u>48,770,668</u>
Segment liabilities	1,503,384	23,093,450	226,649	443,766	495,111	(5,656,956)	20,105,404
Other liabilities	-	-	-	-	3,783,500	(3,783,500)	-
Total liabilities	<u>1,503,384</u>	<u>23,093,450</u>	<u>226,649</u>	<u>443,766</u>	<u>4,278,611</u>	<u>(9,440,456)</u>	<u>20,105,404</u>

Reconciliation of reportable segment assets/liabilities were as follows:

	(Unit : Thousand Baht)	
	Consolidated	
	Financial Statements	
	2019	2018
Assets		
Assets for reportable segments	27,737,170	29,504,350
Unallocated amounts:		
- Cash and investments	15,185,428	17,234,806
- Short-term loans to a joint venture entity	-	7,500
- Investments in related parties	988,420	968,228
- Accrued interest receivables	31,298	21,177
- Land and work in process	1,051,878	1,034,607
Total assets	<u>44,994,194</u>	<u>48,770,668</u>
Liabilities		
Liabilities for reportable segments	18,576,245	20,105,404
Total liabilities	<u>18,576,245</u>	<u>20,105,404</u>

7. TRANSACTIONS WITH RELATED PARTIES

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the entity, including holding companies, subsidiaries and fellow subsidiaries are related parties of the entity. Associates and individuals owning, directly or indirectly, an interest in the voting power of the entity that gives them significant influence over the enterprise, key management personnel, including directors and officers of the company and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

Transactions with related parties are conducted at prices based on market prices or at contractually agreed prices where no market price exists.

The pricing policies for particular types of transactions are explained below:

Transaction	Pricing policy
Service income	Cost plus margin
Purchase of services	Cost plus margin
Interest income	With reference to the return of bank deposit and debt securities
Interest expense	The interest rate on the loan is based on the floating market interest rate which is referred to the higher interest rate for one-year government bond or one-year fixed deposit on average of 4 banks for corporate credit line of Baht 10 million

Related party transactions for the years ended December 31, 2019 and 2018 were as follows:

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Service income				
Subsidiaries	-	-	1,778,466	1,711,474
Joint venture entity	7	15,807	7	14,607
Associates	1,680	1,680	-	-
	<u>1,687</u>	<u>17,487</u>	<u>1,778,473</u>	<u>1,726,081</u>
Purchase of services				
Subsidiaries	-	-	13,407	1,993
Joint venture entity	-	94,320	-	93,120
	<u>-</u>	<u>94,320</u>	<u>13,407</u>	<u>95,113</u>
Interest income				
Subsidiaries	-	-	170,388	90,437
Joint venture entity	41	8	41	8
	<u>41</u>	<u>8</u>	<u>170,429</u>	<u>90,445</u>
Interest expense				
Subsidiaries	-	-	36,569	51,360
	<u>-</u>	<u>-</u>	<u>36,569</u>	<u>51,360</u>

Related party balances as at December 31, 2019 and 2018 were as follows:

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Accounts receivable				
Joint venture entity	2	598	2	598
	<u>2</u>	<u>598</u>	<u>2</u>	<u>598</u>
Accrued income				
Subsidiaries	-	-	163,490	172,801
Joint venture entity	-	443	-	443
Associates	140	140	-	-
	<u>140</u>	<u>583</u>	<u>163,490</u>	<u>173,244</u>
Accrued interest receivable				
Subsidiaries	-	-	164,825	86,323
Joint venture entity	-	8	-	8
	<u>-</u>	<u>8</u>	<u>164,825</u>	<u>86,331</u>
Other current assets				
Joint venture entity	-	441	-	441
	<u>-</u>	<u>441</u>	<u>-</u>	<u>441</u>
Accounts payable				
Subsidiaries	-	-	-	124
Joint venture entity	-	6,746	-	6,746
	<u>-</u>	<u>6,746</u>	<u>-</u>	<u>6,870</u>
Accrued expenses				
Subsidiaries	-	-	11,641	184
	<u>-</u>	<u>-</u>	<u>11,641</u>	<u>184</u>
Fees received in advance				
Subsidiaries	-	-	2,585	3,165
	<u>-</u>	<u>-</u>	<u>2,585</u>	<u>3,165</u>
Other current liabilities				
Joint venture entity	-	1,339	-	1,339
	<u>-</u>	<u>1,339</u>	<u>-</u>	<u>1,339</u>

Short-term loans to a joint venture entity

	Interest rate (% per annum)		(Unit : Thousand Baht) Consolidated and Separate Financial Statements	
	2019	2018	2019	2018
Short-term loans to a joint venture entity	-	5.75	<u>-</u>	<u>7,500</u>

SET lent to a joint venture entity to enhance the liquidity during the dissolution of the joint venture. The loan is in the form of non-convertible promissory notes, which the redemption is on demand.

Movements of short-term loans to a joint venture entity for the years ended December 31, 2019 and 2018 were as follows:

	(Unit : Thousand Baht) Consolidated and Separate Financial Statements	
	2019	2018
A joint venture entity		
Opening balance	7,500	-
Additions	-	7,500
Repayments	(7,500)	-
Closing balance	<u>-</u>	<u>7,500</u>

Long-term loans to a subsidiary

Long-term loans to a subsidiary as at December 31, 2019 and 2018

	(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018
Long-term loans to a subsidiary	<u>5,440,834</u>	<u>5,240,834</u>

SET lent to a subsidiary to use as a reserve fund to enhance the competitiveness and support the future business expansion. The rate of return on loan is referred to the net return of a private fund plus 0.30% - 0.50% per annum of principle balance. The rate of return will be reviewed on an annual basis (see Note 19).

Movements of long-term loans to a subsidiary for the years ended December 31, 2019 and 2018 were as follows:

	(Unit : Thousand Baht)	
	Separate	
	Financial Statements	
	2019	2018
A subsidiary		
Opening balance	5,240,834	5,046,791
Additions	200,000	200,000
Repayments	-	(5,957)
Closing balance	<u>5,440,834</u>	<u>5,240,834</u>

Short-term borrowings from subsidiaries

Short-term borrowings from subsidiaries as at December 31, 2019 and 2018

	(Unit : Thousand Baht)	
	Separate	
	Financial Statements	
	2019	2018
	Interest rate	Interest rate
	(% per annum)	(% per annum)
	2019	2018
Short-term borrowings from subsidiaries	0.80 - 1.81	1.33 - 1.80
	<u>1,918,713</u>	<u>3,783,500</u>

The Group has a policy of centralising the investments and managed by SET in order to maximize its efficiency and overall returns. The parent will borrow from its subsidiaries in the form of one-year promissory notes. The interest rate on the loan is based on the floating market interest rate which is referred to the higher interest rate for one-year government bond or one-year fixed deposit on average of 4 banks for corporate credit line of up to Baht 10 million (interest rate may be revised as appropriate).

Movements of short-term borrowings from subsidiaries for the years ended December 31, 2019 and 2018 were as follows:

	(Unit : Thousand Baht)	
	Separate	
	Financial Statements	
	2019	2018
Subsidiaries		
Opening balance	3,783,500	2,921,500
Additions	458,713	1,226,000
Repayments	(2,323,500)	(364,000)
Closing balance	<u>1,918,713</u>	<u>3,783,500</u>

Sponsorship for joint venture entity

Under the shareholder agreement between SET and a Company, SET will be a principal sponsor of a joint venture's program that dissolution was registered on December 26, 2018. Therefore no financial support has been provided to a joint venture entity in 2019 (2018: Baht 90 million).

Contributions to the Stock Exchange of Thailand Foundation (Foundation)

SET realizes the importance of corporate social responsibility (CSR) alongside the core business. To grow the business sustainably, the corporation must be CSR-minded and must put into practice basis, SET has established the Foundation to support outstanding CSR projects that greatly benefit the society and the country as a whole.

The Foundation was established on August 9, 2006. SET's Board of Governors are also the committee members of the foundation, by position. The Foundation supports two key CSR areas; 1) Increasing the potential in human 2) Increasing the potential of organizations and communities.

SET allocated its annual revenues over expenses to support the implementation of the Foundation. Since 2006, SET appropriated one-third of revenues over expenses. On August 9, 2016, an adjustment was made to allocate 13% of revenues over expenses before income tax.

On July 24, 2019, SET's Board of Governors has resolved to cancel the allocation of funds to the Stock Exchange of Thailand Foundation which will be effective for revenue over expense before income tax expense of the fiscal year 2018 onwards. However, if the Foundation request for contributions, SET may consider allocating funds to the Foundation from time to time as appropriate.

Therefore, SET reversed an accrued contribution to the Foundation in 2018 of Baht 186.13 million for the year ended December 31, 2019 (2018: Contributions to the Foundation Baht 186.13 million).

Directors' remuneration

The directors' remuneration represents director fees and compensation fees for the Group's board of directors and other sub-committees for the years ended December 31, 2019 and 2018.

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	Financial Statements
	2019	2018	2019	2018
Directors' remuneration	27,714	27,252	24,200	23,692
	<u>27,714</u>	<u>27,252</u>	<u>24,200</u>	<u>23,692</u>

8. CASH AND CASH EQUIVALENTS

Cash and cash equivalents as at December 31, 2019 and 2018

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	Financial Statements
	2019	2018	2019	2018
Cash on hand	322	330	319	327
Savings and current accounts	2,329,036	1,118,265	2,092,417	948,442
	<u>2,329,358</u>	<u>1,118,595</u>	<u>2,092,736</u>	<u>948,769</u>

For the year ended December 31, 2019, savings accounts carried the interest at rates ranging from 0.10% - 1.30% per annum (2018: from 0.10% - 1.10% per annum).

9. SHORT-TERM INVESTMENTS, NET

Short-term investments, net as at December 31, 2019 and 2018

	Consolidated		Unit: Thousand Baht	
	Financial Statements		Separate	
	2019	2018	2019	2018
Investments managed by SET				
Trading securities	Fair value	Fair value	Fair value	Fair value
Government bond	1,404,201	-	505,921	-
	<u>1,404,201</u>	<u>-</u>	<u>505,921</u>	<u>-</u>
Available-for-sale securities	Fair value	Fair value	Fair value	Fair value
Investments in money market funds	1,275,060	3,190,697	1,275,060	3,190,697
	<u>1,275,060</u>	<u>3,190,697</u>	<u>1,275,060</u>	<u>3,190,697</u>
Held-to-maturity investments	Amortized Cost, net	Amortized Cost, net	Amortized Cost, net	Amortized Cost, net
Fixed deposit maturities within 1 year	700,000	887,540	700,000	887,540
Debenture maturities within 1 year	-	10,000	-	10,000
	<u>700,000</u>	<u>897,540</u>	<u>700,000</u>	<u>897,540</u>
Total investments managed by SET	<u>3,379,261</u>	<u>4,088,237</u>	<u>2,480,981</u>	<u>4,088,237</u>
Investments managed by private funds				
Trading securities	Fair value	Fair value	Fair value	Fair value
Share capital	702	702	702	702
Government bond	1,354,362	2,477,345	54,241	2,477,345
Debenture	637,539	730,861	637,539	730,861
	<u>1,992,603</u>	<u>3,208,908</u>	<u>692,482</u>	<u>3,208,908</u>
Held-to-maturity investments	Fair value	Fair value	Fair value	Fair value
Savings account	11,693	1,731	9,732	1,731
Fixed deposit maturities within 1 year	-	300,000	-	300,000
Negotiable certificate of deposit (NCD)	-	240,000	-	240,000
	<u>11,693</u>	<u>541,731</u>	<u>9,732</u>	<u>541,731</u>
Total Investments managed by private funds	<u>2,004,296</u>	<u>3,750,639</u>	<u>702,214</u>	<u>3,750,639</u>
Total short-term investments, net	<u>5,383,557</u>	<u>7,838,876</u>	<u>3,183,195</u>	<u>7,838,876</u>

Movements of short-term investments for the years ended December 31, 2019 and 2018 were as follows:

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Opening balance	7,838,876	6,649,894	7,838,876	6,649,894
Purchases	2,472,237	3,018,708	271,875	3,018,708
Disposals	(4,904,849)	(2,044,831)	(4,904,849)	(2,044,831)
Current portion of long-term investments	-	897,540	-	897,540
Classification of investments (see Note14)	-	(696,445)	-	(696,445)
Unrealized gain (loss) on available-for-sale securities	(22,707)	14,010	(22,707)	14,010
Closing balance	<u>5,383,557</u>	<u>7,838,876</u>	<u>3,183,195</u>	<u>7,838,876</u>

10. TRADE AND OTHER RECEIVABLES

Trade and other receivables as at December 31, 2019 and 2018

	Note	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
		2019	2018	2019	2018
Trade receivable					
Related parties	7	2	598	2	598
Other parties		84,787	66,756	50,502	30,224
		84,789	67,354	50,504	30,822
<u>Less</u> Allowance for doubtful accounts		(16,891)	(15,128)	(8,568)	(5,024)
		67,898	52,226	41,936	25,798
Other receivable					
Accrued income					
Related parties	7	140	583	163,490	173,244
Other parties		299,732	274,472	101,207	89,867
Cash at banks for dividend accounts of investors		89,032	84,042	-	-
Other receivables from sale of investments		-	150,000	-	150,000
Accrued interest receivable					
Related parties		-	8	164,825	86,331
Other parties		31,297	21,169	23,563	19,790
Prepaid expense		27,213	26,104	27,213	26,104
Others		3,441	3,311	2,948	2,465
		450,855	559,689	483,246	547,801
		518,753	611,915	525,182	573,599

Aging analysis for trade receivable are as follows:

	Note	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
		2019	2018	2019	2018
Related parties	7				
Within credit terms		2	174	2	174
Overdue:					
Less than 3 months		-	424	-	424
		<u>2</u>	<u>598</u>	<u>2</u>	<u>598</u>
Other parties					
Within credit terms		54,114	36,475	29,201	11,154
Overdue:					
Less than 3 months		13,782	12,614	12,733	11,822
3 - 6 months		906	2,073	906	1,923
6 - 12 months		1,853	153	1,853	149
Over 12 months		14,132	15,441	5,809	5,176
		<u>84,787</u>	<u>66,756</u>	<u>50,502</u>	<u>30,224</u>
<u>Less</u> Allowance for doubtful accounts		<u>(16,891)</u>	<u>(15,128)</u>	<u>(8,568)</u>	<u>(5,024)</u>
		<u>67,896</u>	<u>51,628</u>	<u>41,934</u>	<u>25,200</u>
		<u>67,898</u>	<u>52,226</u>	<u>41,936</u>	<u>25,798</u>

The normal credit terms granted by the Group range from 15 days to 30 days.

11. OTHER CURRENT ASSETS

Other current assets as at December 31, 2019 and 2018

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Withholding tax receivable	160,479	23,592	131,523	-
Loans to employees	30,242	27,114	30,242	27,114
Accounts receivable from net fair values of forward exchange contracts	10,673	22,709	10,673	22,709
Inventory - publication	4,666	5,107	4,666	5,107
Pending input tax	4,612	4,619	4,573	4,405
Value added tax receivable	3,662	7,997	-	-
Others	3,171	3,188	3,172	3,188
	<u>217,505</u>	<u>94,326</u>	<u>184,849</u>	<u>62,523</u>

12. INVESTMENTS IN SUBSIDIARIES

Investments in subsidiaries as at December 31, 2019 and 2018, and dividend income for the years then ended were as follows:

	(Unit : Thousand Baht)							
	Ownership interest (%)		Paid-up capital		Separate Financial Statements Cost method		Dividend income	
	2019	2018	2019	2018	2019	2018	2019	2018
Subsidiaries								
Thailand Securities Depository Co., Ltd.	100.00	100.00	200,000	200,000	200,000	200,000	252,294	223,556
Thai Trust Fund Management Co., Ltd.	100.00	100.00	100,000	100,000	100,000	100,000	185	332
Thai NVDR Co., Ltd.	100.00	100.00	10,000	10,000	10,000	10,000	-	494
SETTRADE.COM Co., Ltd.	100.00	100.00	80,000	80,000	74,591	74,591	204,783	-
Thailand Futures Exchange Public Company Limited	100.00	100.00	500,000	500,000	500,000	500,000	121,645	51,015
Thailand Clearing House Co., Ltd.	100.00	100.00	600,000	600,000	602,700	602,700	76,872	30,504
Finnet Innovation Network Co., Ltd.	100.00	100.00	200,000	200,000	200,000	200,000	-	-
Live Fin Corp Co., Ltd.	100.00	100.00	10,000	10,000	10,000	10,000	-	-
			<u>1,700,000</u>	<u>1,700,000</u>	<u>1,697,291</u>	<u>1,697,291</u>	<u>655,779</u>	<u>305,901</u>

The business place of all subsidiaries is in Thailand and the nature of business of each subsidiary has already disclosed in Note 1.

13. INVESTMENTS IN ASSOCIATES AND JOINT VENTURE ENTITY, NET

The amounts recognized in the statement of financial position as at December 31, 2019 and 2018 are as follows:

	Consolidated Financial Statements Equity method		(Unit : Thousand Baht) Separate Financial Statements Cost method	
	2019	2018	2019	2018
Associates	966,875	940,930	779,015	775,620
Joint venture entity	21,545	27,298	12,000	25,000
As at December 31,	<u>988,420</u>	<u>968,228</u>	<u>791,015</u>	<u>800,620</u>

The amounts recognized in the statement of comprehensive revenues and expenses are share of profit (loss) of investments in associates and joint venture entity, net of tax are as follows:

	Consolidated Financial Statements Equity method		(Unit : Thousand Baht) Separate Financial Statements Cost method	
	2019	2018	2019	2018
Associates	38,135	39,563	-	-
Joint venture entity	7,248	(30,933)	-	-
For the years ended December 31,	<u>45,383</u>	<u>8,630</u>	<u>-</u>	<u>-</u>

a) Investment in associates

Set out below are the associates of the Group as at December 31, 2019 and 2018, which are not material to the Group. The associates as listed below have share capital consisting solely of ordinary shares, which are held directly by the Group.

	(Unit : Thousand Baht)									
	Ownership interest (%)		Paid-up capital		Consolidated Financial Statements				Dividend income	
	2019	2018	2019	2018	Cost method		Equity method		2019	2018
Associates										
Clearing Fund ("CLF")	8.59	9.42	2,396,979	2,140,622	100,000	100,000	205,897	201,559	-	-
TSFC Securities Public Company Limited ("TSFC")	40.65	40.65	1,549,126	1,549,126	679,015	675,620	760,978	739,371	-	-
					<u>779,015</u>	<u>775,620</u>	<u>966,875</u>	<u>940,930</u>	<u>-</u>	<u>-</u>

	(Unit : Thousand Baht)									
	Ownership interest (%)		Paid-up capital		Cost method		Separate Financial Statements		At cost, net	
	2019	2018	2019	2018	2019	2018	Impairment		2019	2018
Associates										
Clearing Fund ("CLF")	8.59	9.42	2,396,979	2,140,622	100,000	100,000	-	-	100,000	100,000
TSFC Securities Public Company Limited ("TSFC")	40.65	40.65	1,549,126	1,549,126	679,015	679,015	-	(3,395)	679,015	675,620
					<u>779,015</u>	<u>779,015</u>	<u>-</u>	<u>(3,395)</u>	<u>779,015</u>	<u>775,620</u>
									<u>15,743</u>	<u>12,595</u>

The business place of all associates is in Thailand and the nature of business of each associate has already disclosed in Note 1.

The Group also has interests in a number of individually associates that are accounted for using the equity method in the consolidated financial statements.

	(Unit : Thousand Baht)					
	CLF	2019 TSFC	Total	CLF	2018 TSFC	Total
Aggregate carrying amount of individually immaterial associates	205,897	760,978	966,875	201,559	739,371	940,930
Aggregate amounts of the reporting entity's share of:						
Revenues over expenses from continuing activities, net of tax	4,337	33,798	38,135	2,030	37,533	39,563
Other comprehensive revenues and expenses, net of tax	-	158	158	-	(103)	(103)
Total comprehensive revenues and expenses, net of tax	4,337	33,956	38,293	2,030	37,430	39,460

The Group has no contingent liabilities relating to associates.

b) Investment in joint venture entity

Set out below is a joint venture entity of the Group as at December 31, 2019 and 2018, which are not material to the Group. A joint venture listed below has share capital consisting solely of preferred shares, which is held directly by the Group.

(Unit : Thousand Baht)							
Joint venture entity	Consolidated Financial Statements						
	Ownership interest (%)		Paid-up capital		Equity method		Dividend income
	2019	2018	2019	2018	2019	2018	2019
							2018
Family Know-how Co., Ltd. ⁽¹⁾	50.00	50.00	50,000	50,000	21,545	27,298	-
							-

(Unit : Thousand Baht)								
Joint venture entity	Ownership interest (%)		Paid-up capital		Separate Financial Statements Cost method		Dividend income	
	2019	2018	2019	2018	2019	2018	2019	2018
Family Know-how Co., Ltd. ⁽¹⁾	50.00	50.00	50,000	50,000	12,000	25,000	-	2,047

The business place of joint venture entity is in Thailand and the nature of business of each entity has already disclosed in Note 1.

⁽¹⁾ At the Extraordinary Shareholder's meeting no. 1/2018 held on December 14, 2018, the shareholders resolved to dissolve the company. The dissolution was registered with the Ministry of Commerce on December 26, 2018 which is currently in the process of liquidation.

The Group also has interests in a joint venture entity that is accounted for using the equity method.

	(Unit : Thousand Baht)	
	Consolidated	
	Financial Statements	
	2019	2018
Aggregate carrying amount of joint venture entity	21,545	27,298
Aggregate amounts of the reporting entity's share of:		
Revenues over expenses from continuing activities,		
net of tax	7,248	(30,933)
Other comprehensive revenues and expenses,		
net of tax	-	(758)
Total comprehensive revenue and expenses,		
net of tax	7,248	(31,691)

The Group has no contingent liabilities related to joint venture entity.

14. LONG-TERM INVESTMENTS, NET

Long-term investments, net as at December 31, 2019 and 2018

	(Unit: Thousand Baht)	
	Consolidated and separate	
	Financial statements	
	2019	2018
Available-for-sale securities	Fair value	Fair value
Investments in general mutual funds	3,001,150	3,629,189
Investments in property funds	1,231,033	1,455,010
Investments in foreign investment funds	2,694,353	2,975,539
	<u>6,926,536</u>	<u>8,059,738</u>
Held-to-maturity investments	Amortized Cost, net	Amortized Cost, net
Cash at banks under a Memorandum		
of Understanding (M.O.U.)	501,153	523,742
Government bond maturities after 1 year	239,408	242,004
Debenture maturities after 1 year	200,000	-
	<u>940,561</u>	<u>765,746</u>
General investments	Cost	Cost
Ordinary shares	36,861	12,361
	<u>36,861</u>	<u>12,361</u>
Total long term investments - net	7,903,958	8,837,845

Movements of long-term investments for the years ended December 31, 2019 and 2018 were as follows:

	(Unit : Thousand Baht)	
	Consolidated and Separate Financial Statements	
	2019	2018
Opening balance	8,837,845	8,478,268
Purchases	2,023,880	3,703,981
Disposals	(3,398,504)	(2,303,330)
Classification of investments (see Note 9)	-	696,445
Unrealized gain/(loss) on available-for-sale securities	440,737	(839,979)
	7,903,958	9,735,385
<u>Less</u> Current portion within 1 year (see Note 9)	-	(897,540)
Closing balance	7,903,958	8,837,845

As at December 31, 2019 and 2018, held-to-maturity investments which were classified by maturity were as follows:

	(Unit : Thousand Baht)			
	Consolidated and Separate Financial Statements			
	Within 1 year (See Note 9)	1 to 5 years	Over 5 years	Total
As at December 31, 2019				
Deposits at banks	-	-	501,153	501,153
Government bonds	-	239,408	-	239,408
Debentures	-	200,000	-	200,000
	-	439,408	501,153	940,561
As at December 31, 2018				
Deposits at banks	887,540	-	523,742	1,411,282
Government bonds	-	242,004	-	242,004
Debentures	10,000	-	-	10,000
	897,540	242,004	523,742	1,663,286

As at December 31, 2019 and 2018, the fair value of held-to-maturity investments were as follows:

	(Unit : Thousand Baht)			
	Consolidated and Separate Financial Statements			
	Amortized cost, net		Fair value	
	2019	2018	2019	2018
Deposits at banks	501,153	1,411,282	422,062	1,308,358
Government bonds	239,408	242,004	245,774	241,379
Debentures	200,000	10,000	206,414	10,131
	940,561	1,663,286	874,250	1,559,868
<u>Less</u> Current portion within 1 year (see Note 9)	-	(897,540)	-	(897,671)
	940,561	765,746	874,250	662,197

15. PROPERTY, PLANT AND EQUIPMENT, NET

(Unit : Thousand Baht)

	Consolidated Financial Statements					
	Land and land improvements	Buildings and building improvements	Furniture, fixtures and office equipment	Motor vehicles	Work in process	Total
As at January 1, 2018						
Cost	1,014,097	3,990,700	1,321,750	388	256,150	6,583,085
<u>Less</u> Accumulated depreciation	-	(676,540)	(768,962)	(188)	-	(1,445,690)
Net book amount	<u>1,014,097</u>	<u>3,314,160</u>	<u>552,788</u>	<u>200</u>	<u>256,150</u>	<u>5,137,395</u>
For the year ended						
December 31, 2018						
Opening net book amount	1,014,097	3,314,160	552,788	200	256,150	5,137,395
Additions	-	7,747	30,217	-	152,363	190,327
Disposals/write-off	-	(288)	(439)	-	-	(727)
Depreciation charge	-	(205,587)	(138,912)	(60)	-	(344,559)
Transfer	-	254,167	107,189	-	(361,356)	-
Adjustments	-	-	-	-	(3,354)	(3,354)
Closing net book amount	<u>1,014,097</u>	<u>3,370,199</u>	<u>550,843</u>	<u>140</u>	<u>43,803</u>	<u>4,979,082</u>
As at December 31, 2018						
Cost	1,014,097	4,252,326	1,458,070	388	43,803	6,768,684
<u>Less</u> Accumulated depreciation	-	(882,127)	(907,227)	(248)	-	(1,789,602)
Net book amount	<u>1,014,097</u>	<u>3,370,199</u>	<u>550,843</u>	<u>140</u>	<u>43,803</u>	<u>4,979,082</u>
For the year ended						
December 31, 2019						
Opening net book amount	1,014,097	3,370,199	550,843	140	43,803	4,979,082
Additions	-	10,985	43,158	1,450	76,578	132,171
Disposals/write-off	-	(79)	(166)	(1,450)	-	(1,695)
Depreciation charge	-	(197,654)	(174,418)	(60)	-	(372,132)
Transfer	-	22,469	57,716	-	(80,185)	-
Adjustments	-	(221,285)	224,047	-	(2,415)	347
Closing net book amount	<u>1,014,097</u>	<u>2,984,635</u>	<u>701,180</u>	<u>80</u>	<u>37,781</u>	<u>4,737,773</u>
As at December 31, 2019						
Cost	1,014,097	4,064,289	1,424,648	388	37,781	6,541,203
<u>Less</u> Accumulated depreciation	-	(1,079,654)	(723,468)	(308)	-	(1,803,430)
Net book amount	<u>1,014,097</u>	<u>2,984,635</u>	<u>701,180</u>	<u>80</u>	<u>37,781</u>	<u>4,737,773</u>

(Unit : Thousand Baht)

	Land and land improvements	Buildings and building improvements	Separate Financial Statements Furniture, fixtures and office equipment	Motor vehicles	Work in process	Total
As at January 1, 2018						
Cost	1,014,097	3,990,700	1,278,358	388	256,150	6,539,693
<u>Less</u> Accumulated depreciation	-	(676,540)	(726,460)	(188)	-	(1,403,188)
Net book amount	<u>1,014,097</u>	<u>3,314,160</u>	<u>551,898</u>	<u>200</u>	<u>256,150</u>	<u>5,136,505</u>
For the year ended December 31, 2018						
Opening net book amount	1,014,097	3,314,160	551,898	200	256,150	5,136,505
Additions	-	7,747	29,995	-	152,363	190,105
Disposals/write-off	-	(288)	(439)	-	-	(727)
Depreciation charge	-	(205,587)	(138,685)	(60)	-	(344,332)
Transfer	-	254,167	107,189	-	(361,356)	-
Adjustments	-	-	-	-	(3,354)	(3,354)
Closing net book amount	<u>1,014,097</u>	<u>3,370,199</u>	<u>549,958</u>	<u>140</u>	<u>43,803</u>	<u>4,978,197</u>
As at December 31, 2018						
Cost	1,014,097	4,252,326	1,414,454	388	43,803	6,725,068
<u>Less</u> Accumulated depreciation	-	(882,127)	(864,496)	(248)	-	(1,746,871)
Net book amount	<u>1,014,097</u>	<u>3,370,199</u>	<u>549,958</u>	<u>140</u>	<u>43,803</u>	<u>4,978,197</u>
For the year ended December 31, 2019						
Opening net book amount	1,014,097	3,370,199	549,958	140	43,803	4,978,197
Additions	-	10,985	43,158	1,450	76,578	132,171
Disposals/write-off	-	(79)	(166)	(1,450)	-	(1,695)
Depreciation charge	-	(197,654)	(174,150)	(60)	-	(371,864)
Transfer	-	22,469	57,716	-	(80,185)	-
Adjustments	-	(221,285)	224,047	-	(2,415)	347
Closing net book amount	<u>1,014,097</u>	<u>2,984,635</u>	<u>700,563</u>	<u>80</u>	<u>37,781</u>	<u>4,737,156</u>
As at December 31, 2019						
Cost	1,014,097	4,064,291	1,420,732	388	37,781	6,537,289
<u>Less</u> Accumulated depreciation	-	(1,079,656)	(720,169)	(308)	-	(1,800,133)
Net book amount	<u>1,014,097</u>	<u>2,984,635</u>	<u>700,563</u>	<u>80</u>	<u>37,781</u>	<u>4,737,156</u>

16. INTANGIBLE ASSETS, NET

	(Unit : Thousand Baht)			
	Consolidated Financial Statements			
	Computer software	Patent	Work in process	Total
As at January 1, 2018				
Cost	1,519,025	2,867	34,007	1,555,899
<u>Less</u> Accumulated amortisation	(1,127,753)	(1,288)	-	(1,129,041)
Net book amount	<u>391,272</u>	<u>1,579</u>	<u>34,007</u>	<u>426,858</u>
For the year ended December 31, 2018				
Opening net book amount	391,272	1,579	34,007	426,858
Additions	21,286	-	62,095	83,381
Amortisation charge	(137,669)	(387)	-	(138,056)
Transfer	51,922	-	(51,922)	-
Adjustments	7,894	-	(4,320)	3,574
Closing net book amount	<u>334,705</u>	<u>1,192</u>	<u>39,860</u>	<u>375,757</u>
As at December 31, 2018				
Cost	1,600,127	2,867	39,860	1,642,854
<u>Less</u> Accumulated amortisation	(1,265,422)	(1,675)	-	(1,267,097)
Net book amount	<u>334,705</u>	<u>1,192</u>	<u>39,860</u>	<u>375,757</u>
For the year ended December 31, 2019				
Opening net book amount	334,705	1,192	39,860	375,757
Additions	272,972	1,050	114,398	388,420
Amortisation charge	(152,330)	(387)	-	(152,717)
Transfer	84,353	-	(84,353)	-
Adjustments	929	-	(4)	925
Closing net book amount	<u>540,629</u>	<u>1,855</u>	<u>69,901</u>	<u>612,385</u>
As at December 31, 2019				
Cost	1,958,376	3,917	69,901	2,032,194
<u>Less</u> Accumulated amortisation	(1,417,747)	(2,062)	-	(1,419,809)
Net book amount	<u>540,629</u>	<u>1,855</u>	<u>69,901</u>	<u>612,385</u>

	(Unit : Thousand Baht)			
	Separate Financial Statements			
	Computer software	Patent	Work in process	Total
As at January 1, 2018				
Cost	1,440,305	2,006	34,007	1,476,318
<u>Less</u> Accumulated amortisation	<u>(1,049,588)</u>	<u>(790)</u>	<u>-</u>	<u>(1,050,378)</u>
Net book amount	<u>390,717</u>	<u>1,216</u>	<u>34,007</u>	<u>425,940</u>
For the year ended December 31, 2018				
Opening net book amount	390,717	1,216	34,007	425,940
Additions	18,390	-	62,095	80,485
Amortisation charge	(137,456)	(264)	-	(137,720)
Transfer	51,922	-	(51,922)	-
Adjustments	<u>7,894</u>	<u>-</u>	<u>(4,320)</u>	<u>3,574</u>
Closing net book amount	<u>331,467</u>	<u>952</u>	<u>39,860</u>	<u>372,279</u>
As at December 31, 2018				
Cost	1,518,511	2,006	39,860	1,560,377
<u>Less</u> Accumulated amortisation	<u>(1,187,044)</u>	<u>(1,054)</u>	<u>-</u>	<u>(1,188,098)</u>
Net book amount	<u>331,467</u>	<u>952</u>	<u>39,860</u>	<u>372,279</u>
For the year ended December 31, 2019				
Opening net book amount	331,467	952	39,860	372,279
Additions	272,972	1,050	114,398	388,420
Amortisation charge	(151,572)	(264)	-	(151,836)
Transfer	84,353	-	(84,353)	-
Adjustments	<u>929</u>	<u>-</u>	<u>(4)</u>	<u>925</u>
Closing net book amount	<u>538,149</u>	<u>1,738</u>	<u>69,901</u>	<u>609,788</u>
As at December 31, 2019				
Cost	1,876,760	3,056	69,901	1,949,717
<u>Less</u> Accumulated amortisation	<u>(1,338,611)</u>	<u>(1,318)</u>	<u>-</u>	<u>(1,339,929)</u>
Net book amount	<u>538,149</u>	<u>1,738</u>	<u>69,901</u>	<u>609,788</u>

17. ASSETS FOR MARGIN DEPOSITS AND BENEFITS

Thailand Clearing House Co., Ltd. (TCH) is the clearing house for derivatives market. Members of TCH who have outstanding positions are obliged to place the required margin deposits as a guarantee according to the rate or amount called by TCH. TCH may invest the margin proceeds according to specified terms and conditions. The benefits, after deducting management fees, shall be distributed to members at the announced rates and procedures.

As at December 31, 2019 and 2018, the details of investments for which margin deposits were placed by members consist of:

	(Unit : Thousand Baht)	
	Consolidated	
	Financial Statements	
	2019	2018
Savings and fixed deposit accounts	10,360,966	12,670,196
Savings account in foreign currency	514,544	378,758
Held-to-maturity investments	1,605,133	1,604,529
Securities collateral	840,265	796,926
Accrued benefits	63,754	59,995
	<u>13,384,662</u>	<u>15,510,404</u>

As at December 31, 2019, savings account in foreign currency of USD 17.16 million (2018: USD 11.73 million) was translated into Thai Baht using the average transfer buying rate announced by the Bank of Thailand at the end of the accounting period.

The Group presented margin deposits placed by members separately in the account “Assets for margin deposits and benefits” in current assets in the statement of financial position and presented liabilities in the same amount in the account “Margin deposits and benefits payable” in current liabilities in the statement of financial position.

18. ASSETS FOR CLEARING SYSTEM PROTECTION AND BENEFITS

The assets for clearing system protection are established to secure the clearing system of Thailand Clearing House Co., Ltd. (TCH) against any damage caused by defaults by members or other incidents.

Assets for clearing system protection comprise of 2 categories as the following:

18.1 Securities Deposit

Members of TCH are required to place a Securities Deposit according to the announcement made by TCH (the current Securities Deposit for members, who are allowed to clear all types of derivatives, is not less than Baht 5 million and for only one type of derivatives is not less than Baht 4 million).

18.2 Clearing fund contributions comprising contributions from:

- 1) SET amounting to Baht 100 million
- 2) Members of TCH:
 - Initial contributions according to the announced rates (currently the initial contribution members, who are allowed to clear all types of derivatives, are not less than Baht 6 million and for only one type of derivatives is not less than Baht 1 million).
 - Monthly contributions at a value of not less than Baht 1,000.

TCH manages the assets for clearing system protection and there are benefits incurred thereon, if such benefits are derived from the assets for clearing system protection of members, TCH shall return them to members after deduction of a management fees in accordance with the procedures and within the period prescribed by TCH.

In the event that members defaults in clearing on damage is caused by act of members in connection with clearing. TCH shall have the power to use assets for the Clearing System Protection in the following order:

- 1) Security Deposit of the Member who is in default or causes damage to the Clearing System of TCH, as the case maybe;
- 2) Contribution to the Clearing Fund by the Member who is in default or causes damage to the Clearing of TCH;
- 3) Contributions to the Clearing Fund by the SET in accordance with the amount prescribed by TCH as the first part;
- 4) Assets contributed to the Clearing Fund in the part of other Clearing Fund Members who are not in default or who do not cause the damage to the Clearing System of TCH, as the case maybe;
- 5) The remaining amount of the contributions to the Clearing Fund by the SET after deducting the first part of the contributions to the Clearing Fund by the SET;
- 6) Additional contribution according to the proportion made to the Clearing Fund by respective members
- 7) SET Reserve Fund

The use of the assets under 4) and 6) shall be in proportion with the assets contributed by the clearing Fund Members to the Clearing Fund.

The use of contributions to the Clearing Fund under 3) in accordance with the proportion prescribed by TCH, TCH may notify the change of the proportion in the use of such contributions as appropriate.

A Member who is in default or causes damage to the Clearing of TCH has the duty to return the assets for the Clearing System Protection or other assets which TCH has used according to the Regulation.

In the case that the Clearing Fund has been used, TCH may charge interest for the use of such fund at the maximum rate permitted by the law on interests on loans of financial institutions, as from the date of the use of such fund until the date of the return thereof unless other interest rate is prescribed by TCH.

When the defaulting Member or the Member who causes damage to the Clearing of TCH, has reimbursed the assets for the Clearing System Protection which are equal to the used amount of the assets together with the interest incurred thereon to TCH, the assets shall be allocated as per the order below:

- 1) SET Reserve Fund
- 2) Additional contribution according to the proportion made to the Clearing Fund by respective Members
- 3) The remaining amount of the contributions to the Clearing Fund by the SET after deducting the first part of the contributions to the Clearing Fund by the SET;
- 4) Assets contributed to the Clearing Fund in the part of other Clearing Fund Members who are not in default or who do not cause the damage to the Clearing System of TCH, as the case maybe;
- 5) Contributions to the Clearing Fund by the SET in accordance with the amount prescribed by TCH as the first part;
- 6) Contribution to the Clearing Fund by the Member who is in default or causes damage to the Clearing of TCH
- 7) Security Deposit of the Member who is in default or causes damage to the Clearing System of TCH

The allocation for the return of the assets under 2) and 4) shall be in proportion with that such assets are used pursuant.

When TCH has a resolution to terminate the membership of any members, TCH shall return the assets which such members has provided for the Clearing of TCH, including the remaining benefits therefore after deduction of debts as well as damages and penalty that the member owes to TCH, within the period prescribed by TCH.

The Group has shown the assets to which members have joined as security assets in accordance with the rules specified as a separate item in the account. “Assets for margin deposits and benefits” under non-current assets and have shown the same amount of liabilities in the account “Margin deposits and benefits payable” under non-current liabilities in the statement of financial position.

As at December 31, 2019 and 2018, assets for clearing system protection and benefits consist of:

	Consolidated Financial Statements				(Unit : Thousand Baht)	
	Securities Deposit and benefits		Clearing fund and benefits		Total	
	2019	2018	2019	2018	2019	2018
Investments managed by TCH	698,988	673,494	-	-	698,988	673,494
Investments managed by private fund						
Savings accounts	69	486	52	2,535	121	3,021
Trading Securities	203,120	200,975	1,295,715	1,092,175	1,498,835	1,293,150
	902,177	874,955	1,295,767	1,094,710	2,197,944	1,969,665
Accrued interest receivable	354	352	1,955	1,773	2,309	2,125
Other assets	46	59	4,999	10,700	5,045	10,759
	902,577	875,366	1,302,721	1,107,183	2,205,298	1,982,549

(Unit : Thousand Baht)		
Separate		
Financial Statements		
	2019	2018
Clearing fund and benefits		
Contributions	100,000	100,000
Accumulated benefits	47,916	44,156
	147,916	144,156

Investments managed by TCH

For the year ended December 31, 2019, savings accounts carried interest rates at rates ranging from 0.375% - 1.00% per annum (2018: from 0.375% - 1.00% per annum).

Investments managed by private fund

Investments in private fund are managed by 1 asset management company (2018: 1 asset management company).

The investments policy of private fund is reference to the TCH’s regulations in relation to deposits with financial institution and company’s investment policies. For the year ended December 31, 2019, the investment in private fund have return rates ranging from 2.45% - 2.46% per annum (2018: from 1.42% - 1.43% per annum).

As at December 31, 2019 and 2018, assets for clearing system protection and benefits payable consist of:

	(Unit : Thousand Baht)	
	Consolidated	
	Financial Statements	
	2019	2018
Securities Deposit and benefits		
Contributions	897,000	871,528
Benefits (semi-annually distribute to members)	5,997	3,838
	<u>902,997</u>	<u>875,366</u>
Clearing fund and benefits		
Contributions	1,011,551	847,572
Accumulated benefits	143,321	115,455
	<u>1,154,872</u>	<u>963,027</u>
	<u>2,057,869</u>	<u>1,838,393</u>

19. RESERVE FUND FOR CLEARING AND SETTLEMENT

Reserve Fund for clearing and settlement from SET established as a source of funds for clearing house to compensate for any damage that may result from default or damages that may be caused by the actions of members in the business relating to the settlement and delivery of securities of the clearing house.

On January 14, 2015 and April 27, 2016, SET's Board of Governors approved an appropriation of reserve fund for clearing and settlement in the approximately Baht 5,690 million by 2020 for compliance with the standard of clearing house set by the Overseas Securities Regulator and for enhance competitiveness and support future business expansion. As at December 31, 2019, the reserve fund for clearing and settlement was Baht 5,590.44 million (2018: Baht 5,328.58 million).

As at December 31, 2019 and 2018, reserve fund for clearing and settlement consist of:

	(Unit : Thousand Baht)	
	Consolidated	
	Financial Statements	
	2019	2018
Investments managed by private fund		
Savings accounts	2,202	10,633
Trading Securities	5,577,063	5,293,794
	<u>5,579,265</u>	<u>5,304,427</u>
Accrued interest income	10,364	10,401
Other assets	809	13,748
	<u>5,590,438</u>	<u>5,328,576</u>

Investments in private fund are managed by 2 asset management companies (2018: 2 asset management companies)

The investment policy of private fund is reference to the TCH's regulations in relation to deposits with financial institution and company's investment policies. For the year ended December 31, 2019, the investments in private fund have return rates ranging between 2.46% - 2.54% per annum (2018: between 1.39% - 1.40% per annum).

20. DEFERRED INCOME TAXES

Statement of financial position shows the balance as follows:

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
As at December 31,				
Deferred tax assets	91,768	139,821	91,743	137,655
Deferred tax liabilities	(12,676)	-	-	-
Deferred tax, net	<u>79,092</u>	<u>139,821</u>	<u>91,743</u>	<u>137,655</u>

The gross movement of the deferred income tax account for the years ended December 31, 2019 and 2018 is as follows:

Deferred tax assets:

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Opening balance	149,684	89,789	147,515	87,433
Tax charged/(credited) to revenues and expenses	39,473	46,508	39,982	46,695
Tax charged/(credited) to components of other comprehensive revenues and expenses	(12,692)	13,387	(12,692)	13,387
Closing balance	<u>176,465</u>	<u>149,684</u>	<u>174,805</u>	<u>147,515</u>

Deferred tax liabilities:

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Opening balance	9,863	172,568	9,860	171,240
Tax charged/(credited) to revenues and expenses	17,291	(5,395)	2,983	(4,070)
Tax charged/(credited) to components of other comprehensive revenues and expenses	70,219	(151,806)	70,219	(151,806)
Adjustments in SIPF's fund balances	-	(5,504)	-	(5,504)
Closing balance	<u>97,373</u>	<u>9,863</u>	<u>83,062</u>	<u>9,860</u>
Deferred tax, net	<u>79,092</u>	<u>139,821</u>	<u>91,743</u>	<u>137,655</u>

The movement in deferred tax assets and deferred tax liabilities during the years is as follows:

(Unit : Thousand Baht)

	Consolidated Financial Statements					
	Allowance for doubtful accounts	Unrealized gain on revaluation of investments	Difference on useful life of assets	Employee benefits obligation from accumulated annual leave	Employee benefits obligation	Total
Deferred tax assets						
As at January 1, 2018	3,026	-	-	5,227	81,536	89,789
Tax charged/(credited) to revenues and expenses	-	789	39,316	(66)	6,469	46,508
Tax charged/(credited) to components of other comprehensive revenues and expenses	-	13,387	-	-	-	13,387
As at December 31, 2018	3,026	14,176	39,316	5,161	88,005	149,684
Tax charged/(credited) to revenues and expenses	348	(789)	4,879	164	34,871	39,473
Tax charged/(credited) to components of other comprehensive revenues and expenses	-	(13,387)	-	-	695	(12,692)
As at December 31, 2019	3,374	-	44,195	5,325	123,571	176,465

(Unit : Thousand Baht)

	Consolidated Financial Statements			
	Unrealized gain on revaluation of available-for-sale securities	Unrealized gain on revaluation of trading securities	Adjustments in SIPF's fund balances	Total
Deferred tax liabilities				
As at January 1, 2018	164,918	7,650	-	172,568
Tax charged/(credited) to revenues and expenses	-	(5,395)	-	(5,395)
Tax charged/(credited) to components of other comprehensive revenues and expenses	(151,806)	-	(5,504)	(157,310)
As at December 31, 2018	13,112	2,255	(5,504)	9,863
Tax charged/(credited) to revenues and expenses	-	17,291	-	17,291
Tax charged/(credited) to components of other comprehensive revenues and expenses	70,219	-	-	70,219
As at December 31, 2019	83,331	19,546	(5,504)	97,373

(Unit : Thousand Baht)

	Separate Financial Statements					
		Unrealized		Employee		
	Allowance for	gain on	Difference	benefits		
	doubtful	revaluation	on useful life	obligation	Employee	Total
	accounts	of investments	of assets	from	benefits	
				accumulated	obligation	
				annual leave		
Deferred tax assets						
As at January 1, 2018	1,005	-	-	5,183	81,245	87,433
Tax charged/(credited) to revenues and expenses	-	641	39,316	(21)	6,759	46,695
Tax charged/(credited) to components of other comprehensive revenues and expenses	-	13,387	-	-	-	13,387
As at December 31, 2018	1,005	14,028	39,316	5,162	88,004	147,515
Tax charged/(credited) to revenues and expenses	709	(641)	4,879	164	34,871	39,982
Tax charged/(credited) to components of other comprehensive revenues and expenses	-	(13,387)	-	-	695	(12,692)
As at December 31, 2019	1,714	-	44,195	5,326	123,570	174,805

(Unit : Thousand Baht)

	Separate Financial Statements			
	Unrealized	Unrealized	Adjustments	Total
	gain on	gain on	in SIPF's fund	
	revaluation of	revaluation of	balances	
	available-for-sale securities	trading securities		
Deferred tax liabilities				
As at January 1, 2018	164,918	6,322	-	171,240
Tax charged/(credited) to revenues and expenses	-	(4,070)	-	(4,070)
Tax charged/(credited) to components of other comprehensive revenues and expenses	(151,806)	-	(5,504)	(157,310)
As at December 31, 2018	13,112	2,252	(5,504)	9,860
Tax charged/(credited) to revenues and expenses	-	2,983	-	2,983
Tax charged/(credited) to components of other comprehensive revenues and expenses	70,219	-	-	70,219
As at December 31, 2019	83,331	5,235	(5,504)	83,062

21. TRADE AND OTHER PAYABLES

Trade and other payables as at December 31, 2019 and 2018

	Note	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
		2019	2018	2019	2018
Trade payable					
Subsidiaries	7	-	-	-	124
Joint venture entity	7	-	6,746	-	6,746
Other parties		91,662	62,809	89,536	59,470
		<u>91,662</u>	<u>69,555</u>	<u>89,536</u>	<u>66,340</u>
Other payable					
Accrued expense					
Subsidiaries	7	-	-	11,641	184
Other parties		1,085,998	1,070,267	1,061,803	1,033,558
Dividend payable from					
registrar services to investors		89,032	84,042	-	-
Financial benefits payable		85,569	69,086	-	-
Other payable from purchase					
of investments		121,325	-	121,325	-
Others		16,881	24,777	12,453	19,672
		<u>1,398,805</u>	<u>1,248,172</u>	<u>1,207,222</u>	<u>1,053,414</u>
		<u>1,490,467</u>	<u>1,317,727</u>	<u>1,296,758</u>	<u>1,119,754</u>

22. OTHER CURRENT LIABILITIES

Other current liabilities as at December 31, 2019 and 2018

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Withholding tax payable	79,403	34,417	9,581	10,624
Other retention payables	27,407	36,854	27,404	36,850
Employee benefits obligation from				
accumulated annual leave	26,631	25,810	26,631	25,810
Value added tax payable	19,927	21,652	16,862	21,652
Ngoen-Thong-khong-Mee-Kha Fund	11,576	11,576	11,576	11,576
Current portion of employee benefits				
obligation (see Note 23)	4,456	3,699	4,456	3,699
Others	3,597	2,342	1,913	673
	<u>172,997</u>	<u>136,350</u>	<u>98,423</u>	<u>110,884</u>

23. EMPLOYEE BENEFITS OBLIGATION

	Consolidated Financial Statements As at December 31		(Unit : Thousand Baht) Separate Financial Statements As at December 31	
	2019	2018	2019	2018
Statement of financial position				
Provision to be settled within 1 year				
Retirement benefits (see Note 22)	4,456	3,699	4,456	3,699
	<u>4,456</u>	<u>3,699</u>	<u>4,456</u>	<u>3,699</u>
Provision to be settled after 1 year				
Retirement benefits	571,483	407,020	571,483	407,020
Other benefits	41,910	29,301	41,910	29,301
	<u>613,393</u>	<u>436,321</u>	<u>613,393</u>	<u>436,321</u>
	<u>617,849</u>	<u>440,020</u>	<u>617,849</u>	<u>440,020</u>
	Consolidated Financial Statements For the year ended December 31,		Separate Financial Statements For the year ended December 31,	
	2019	2018	2019	2018
Expenses charge included in the statement of revenues and expenses				
Retirement benefits	175,446	48,390	175,446	48,390
Other benefits	16,686	2,618	16,686	2,618
	<u>192,132</u>	<u>51,008</u>	<u>192,132</u>	<u>51,008</u>

The amounts recognized in the statement of financial position are determined as follows:

	Consolidated Financial Statements As at December 31		(Unit : Thousand Baht) Separate Financial Statements As at December 31	
	2019	2018	2019	2018
Present value of obligations				
Retirement benefits	575,939	410,719	575,939	410,719
Other benefits	41,910	29,301	41,910	29,301
Liabilities in the statement of financial position	<u>617,849</u>	<u>440,020</u>	<u>617,849</u>	<u>440,020</u>

The movement in the defined benefit obligation during the years is as follows:

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
As at January 1,	440,020	407,678	440,020	406,226
Current service costs	36,115	40,029	36,115	40,029
Interest costs	12,712	10,979	12,712	10,979
Past service costs	143,305	-	143,305	-
Remeasurements:				
Loss from change in demographic assumptions	42,550	-	42,550	-
Gain from change in financial assumptions	(9,274)	-	(9,274)	-
Gain from experience	(43,503)	-	(43,503)	-
	<u>621,925</u>	<u>458,686</u>	<u>621,925</u>	<u>457,234</u>
<u>Less</u> Benefits paid	(4,076)	(18,666)	(4,076)	(18,568)
<u>Add</u> Transfer of employees from a subsidiary	-	-	-	1,354
As at December 31,	<u>617,849</u>	<u>440,020</u>	<u>617,849</u>	<u>440,020</u>
<u>Less</u> Current portion within 1 year (see Note 22)	(4,456)	(3,699)	(4,456)	(3,699)
Total non-current portion	<u>613,393</u>	<u>436,321</u>	<u>613,393</u>	<u>436,321</u>

For the years ended December 31, 2019 and 2018, the amounts recognized in the statement of comprehensive revenues and expenses are as follows:

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Current service costs	36,115	40,029	36,115	40,029
Interest costs	12,712	10,979	12,712	10,979
Past service costs	143,305	-	143,305	-
	<u>192,132</u>	<u>51,008</u>	<u>192,132</u>	<u>51,008</u>

The Labor Protection Act (No. 7) B.E. 2562 has been announced in the Royal Gazette on April 5, 2019, which will be effective after 30 days from the date announced in Royal Gazette. This Labor Protection Act stipulates additional legal severance pay rates for employees who have worked for an uninterrupted period of twenty years or more. Such employees are entitled to receive compensation of not less than 400 days at the employees' latest wage rate. This change is considered an amendment to post-employment benefits plan. The Group reflects the effect of such change by recognizing past service cost as an expense in the statement of comprehensive revenues and expenses of the period in which the law is effective.

The principal actuarial assumptions used were as follows:

	2019	2018
Discount rate as of December 31,	1.78% - 3.82%	2.75%
Salary incremental rate	7%	6.50%
Average turnover rate	0.00 % - 12.00%	0.00 % - 13.00%
Pre-retirement mortality rate	Adjust 3% of TMO2017	75% of TMO2017
Retirement age	60 years old	60 years old

	Change in assumption		Impact on defined benefit obligation			
	2019	2018	Increase in assumption		Decrease in assumption	
	2019	2018	2019	2018	2019	2018
Discount rate	0.5%	1%	Decrease by 6%	Decrease by 12%	Increase by 7%	Increase by 12%
Salary growth rate	1%	1%	Increase by 13%	Increase by 14%	Decrease by 11%	Decrease by 12%
Turnover growth rate	20%	20%	Decrease by 4%	Decrease by 6%	Increase by 4%	Increase by 6%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognized within the statement of financial position.

The weighted average duration of the defined benefit obligation is 19 years (2018 : 20 years).

Expected maturity analysis of undiscounted retirement and other benefits:

	(Unit : Thousand Baht)			
	Consolidated and Separate Financial Statements			
	Within a year	1-5 years	Over 5 years	Total
As at December 31, 2019				
Retirement benefits	5,092	62,741	254,584	322,417
Other benefits	4,518	13,790	14,699	33,007
Total	9,610	76,531	269,283	355,424

	(Unit : Thousand Baht)			
	Consolidated and Separate Financial Statements			
	Within a year	1-5 years	Over 5 years	Total
As at December 31, 2018				
Retirement benefits	82	34,167	508,512	542,761
Other benefits	3,628	7,660	20,038	31,326
Total	3,710	41,827	528,550	574,087

24. FUND BALANCES

The statement of change in the fund for the years ended December 31, 2019 and 2018 presented as part of the consolidated and separate financial statements as follows:

(Unit : Thousand Baht)								
Consolidated Financial Statements								
	Notes	Fund balances						Total
		Securities Clearing Reserve Fund	Derivatives Clearing Reserve Fund	Indemnity Fund	Staff Welfare Fund	Securities Investor Protection Fund	Derivatives Investor Protection Fund	General Fund
Opening balance as at January 1, 2018		4,740,000	300,000	100,000	110,670	459,608	54,662	20,959,068
Appropriation of general fund	24.1	200,000	-	-	-	-	-	(200,000)
Appropriation of Securities Clearing Reserve Fund	24.1 and 24.2	(700,000)	700,000	-	-	-	-	-
Other comprehensive revenues and expenses, net of tax	25.2	-	-	-	-	-	-	485
Revenues over expenses	25.2	-	-	-	1,404	9,937	686	1,942,886
Closing balance as at December 31, 2018		<u>4,240,000</u>	<u>1,000,000</u>	<u>100,000</u>	<u>112,074</u>	<u>469,545</u>	<u>55,348</u>	<u>22,702,439</u>
Opening balance as at January 1, 2019		4,240,000	1,000,000	100,000	112,074	469,545	55,348	22,702,439
Appropriation of general fund	24.1	200,000	-	-	-	-	-	(200,000)
Other comprehensive revenues and expenses, net of tax	25.2	-	-	-	-	-	-	10,226
Revenues over (under) expenses	25.2	-	-	-	1,923	13,930	848	(2,615,700)
Closing balance as at December 31, 2019		<u>4,440,000</u>	<u>1,000,000</u>	<u>100,000</u>	<u>113,997</u>	<u>483,475</u>	<u>56,196</u>	<u>19,896,965</u>

(Unit : Thousand Baht)

		Separate Financial Statements						
		Fund balances						
	Notes	Securities Clearing Reserve Fund	Derivatives Clearing Reserve Fund	Indemnity Fund	Staff Welfare Fund	Securities Investor Protection Fund	General Fund	Total
Opening balance as at January 1, 2018		4,740,000	300,000	100,000	110,670	459,608	19,297,873	25,008,151
Appropriation of general fund		24.1 200,000	-	-	-	-	(200,000)	-
Appropriation of Securities Clearing Reserve Fund		24.1 and 24.2 (700,000)	700,000	-	-	-	-	-
Revenues over expenses		25.2 -	-	-	1,404	9,937	1,301,940	1,313,281
Closing balance as at December 31, 2018		4,240,000	1,000,000	100,000	112,074	469,545	20,399,813	26,321,432
Opening balance as at January 1, 2019		4,240,000	1,000,000	100,000	112,074	469,545	20,399,813	26,321,432
Appropriation of general fund		24.1 200,000	-	-	-	-	(200,000)	-
Other comprehensive revenues and expenses, net of tax		25.2 -	-	-	-	-	10,226	10,226
Revenues over (under) expenses		25.2 -	-	-	1,923	13,930	(3,034,078)	(3,018,225)
Closing balance as at December 31, 2019		4,440,000	1,000,000	100,000	113,997	483,475	17,175,961	23,313,433

Details of fund balances are as follows:

24.1 Securities Clearing Reserve Fund

In 1997 and 2013, the Board of Governors of SET approved an appropriation of general funds of Baht 2,000 million and Baht 500 million, respectively, totalling Baht 2,500 million to the Securities Clearing Reserve Fund, which is operated by a subsidiary of SET, in order to resolve liquidity risk in the event of default on clearing and settlement from securities trading on SET.

In 2015, the Board of Governors of SET approved an appropriation of general funds to the Securities Clearing Reserve Fund from 2015 - 2019, totalling Baht 2,640 million, starting from 2015 of Baht 1,840 million and in the following years of Baht 200 million per year.

In 2018, the Board of Governors of SET approved an appropriation of the Securities Clearing Reserve Fund to Derivatives Clearing Reserve Fund of Baht 700 million, in order for the clearing house to have sufficient funds in both markets.

24.2 Derivatives Clearing Reserve Fund

In 2004, the Board of Governors of SET approved an appropriation of general funds of Baht 300 million to the Derivatives Clearing Reserve Fund in order to assure contingent losses from the clearing system of futures contracts at Thailand Clearing House Co., Ltd.

In 2018, Derivatives Clearing Reserve Fund has been allocated from Securities Clearing Reserve Fund of Baht 700 million according to the resolution of the Board of Governors of SET, in order for the clearing house to have sufficient funds in both markets.

24.3 Indemnity Fund

In 1993 and 2002, the Board of Governors of SET approved appropriations of general funds totalling Baht 100 million to the Indemnity Fund in order to assist and assure the Board of Governors of SET and those appointed assignees on matters requiring consideration and decisions which may affect or cause damages to other parties.

24.4 Staff Welfare Fund

In 1997 and 2004, the Board of Governors of SET approved appropriations of general funds was Baht 75 million to the Staff Welfare Fund. All benefits earned from this fund are retained in the fund.

24.5 Securities Investor Protection Fund

In 2004, the Board of Governors of SET approved an appropriation of Baht 300 million from broker seat admission fees as an initial fund for the establishment of the Securities Investor Protection Fund (SIPF).

The SIPF was formally established under SIPF regulations on October 1, 2004. The objective of the fund is to protect and build investor confidence in trading listed securities on SET through the members of the SIPF. As at December 31, 2019, there were 34 SIPF members from securities companies (2018: 34 SIPF members).

The assets of SIPF consist of:

- 1) the initial fund from SET of Baht 300 million;
- 2) the cumulative membership entrance fees and monthly fees collected from the members;
- 3) the future benefits generated from investments in the SIPF.

SIPF will protect the investors' assets which are in the custody of the securities brokers who are members of the SIPF. In the event that the members of the SIPF fail to return the assets to investors, each investor shall be compensated by the SIPF for the related damages at the actual cost, but not exceeding Baht 1 million per SIPF member, in the following cases:

- 1) if any SIPF member is in receivership under the Bankruptcy Act or
- 2) if there are disputes concerning the purchase or sale of securities listed on SET between investors and any SIPF member, and the arbitrator's award is that the SIPF member shall return the assets to investors, but the SIPF member violates the award.

The protection will not include any losses from securities trading regardless of who makes the investment decision.

If the number of assets of the SIPF is not sufficient for compensation to investors as mentioned above, the investors will receive from the SIPF for assets in accordance with the proportion of damage sustained by each investor (pro rata based).

When the Board of Governors of SET resolves to approve granting protection to any investor. SET will use the SIPF to provide protection to such investor, which shall be in the following sequence:

- 1) the SIPF with respect to the part paid by that SIPF's member who caused damage to the investors;
- 2) the SIPF with respect to the yields or benefits;
- 3) the SIPF with respect to the part paid by other member; and
- 4) the SIPF with respect to the part paid by SET

Upon SET's use of SIPF to provide protection to investors in accordance with the rules prescribed, SET shall exercise the right to demand the return of the assets which have been paid to the investors and damages from the SIPF's member in accordance with the right transferred by the investors.

SET shall allocate the assets or money to SIPF which are returned from members who caused damage to the investors in the following sequence:

- 1) the SIPF with respect to the part belonging to SET;
- 2) the SIPF with respect to the part belonging to other members;
- 3) the SIPF with respect to the yield or benefits;
- 4) the SIPF with respect to the part belonging to SIPF's members who caused damage to the investors

24.6 Derivatives Investor Protection Fund

In 2012 the board of directors of Thailand Futures Exchange Public Company Limited (TFEX), a subsidiary, has a resolution to establish the Derivatives Investor Protection Fund (DIPF) and approved an appropriation of Baht 50 million as an initial fund.

The DIPF was established on November 15, 2012. The objective of the DIPF is to provide protection for derivatives contracts investors in accordance with the rules prescribed by TFEX. Investors need to be protected must become customers of DIPF members and is a Thai natural person, a juristic person incorporated in Thailand who is not an institutional investor under the Derivatives Act B.E. 2546 (2003). As at December 31, 2019, there were 37 DIPF members from security companies (2018: 37 DIPF members).

Assets of the DIPF consist of TFEX initial capital, admission fees and contributions collected from members of the DIPF, and yields or benefits obtained from the proceeds and assets of the DIPF after the deduction of expenses for the operation of the DIPF. At the time of its establishment, the DIPF will have assets worth no less than Baht 100 million, which consists of initial capital of Baht 50 million from TFEX and admission fees and contributions from DIPF members in the rest to make the total of Baht 100 million. TFEX may collect additional sums of money as it deems necessary and appropriate.

DIPF will protect the investors' assets which are in the custody of the securities brokers who are members of the DIPF. In the event that the members of the DIPF fail to return the assets to investors, each investor shall be compensated by the DIPF for the related damages at the actual cost, but not exceeding Baht 1 million per DIPF member, in the following cases:

- 1) if any DIPF member is in receivership under the Bankruptcy Act or
- 2) if there are disputes concerning the purchase or sale of securities listed on SET between investors and any DIPF member, and the arbitrator's award is that the DIPF member shall return the assets to investors, but the DIPF member violates the award.

The protection will not include any losses from derivatives trading regardless of who makes the investment decision.

If the number of assets of the DIPF is not sufficient for compensation to investors as mentioned above, the investors will receive from the DIPF for assets in accordance with the proportion of damage sustained by each investor (pro rata based).

When the Board resolves to approve granting protection to any investor. TFEX will use the DIPF to provide protection to such investor, which shall be in the following sequence:

- 1) the DIPF with respect to the part paid by that DIPF's member who caused damage to the investors;
- 2) the DIPF with respect to the yields or benefits;
- 3) the DIPF with respect to the part paid by other member; and
- 4) the DIPF with respect to the part paid by TFEX

Upon TFEX's use of DIPF to provide protection to investors in accordance with the rules prescribed, DIPF's member who caused damage to investors has the duty to return assets to TFEX. TFEX shall exercise the right to demand the return of the assets which have been paid to the investors and damages from the DIPF's member in accordance with the right transferred by the investors.

TFEX shall allocate the funds which are returned in whole or in part to the DIPF in the following sequence:

- 1) the DIPF with respect to the part belonging to TFEX;
- 2) the DIPF with respect to the part belonging to other members;
- 3) the DIPF with respect to the yield or benefits;
- 4) the DIPF with respect to the part belonging to DIPF's members who caused damage to the investors

25. FINANCIAL POSITION AND RESULTS OF FUND OPERATIONS

25.1 Financial position of fund

The SIPF's financial statements included as part of the consolidated and separate's financial statements are as follows:

	(Unit : Thousand Baht)	
	Consolidated and Separate	
	Financial Statements	
	As at December 31,	
	2019	2018
Assets		
Current assets		
Cash deposits and short-term investments	297,100	325,128
Accrued interest receivable	3,836	3,530
Other current asset	300	389
Total current assets	<u>301,236</u>	<u>329,047</u>
Non-current assets		
Long-term investments	<u>530,792</u>	<u>469,426</u>
Total non-current assets	<u>530,792</u>	<u>469,426</u>
Total assets	<u>832,028</u>	<u>798,473</u>
Liabilities and fund balances		
Liabilities of members portion		
Contributions from members	227,873	226,628
Benefits on contributions from members	<u>108,381</u>	<u>96,219</u>
Total liabilities of members portion	<u>336,254</u>	<u>322,847</u>
Fund balances		
Initial fund	300,000	300,000
Benefits on contributions from SET	<u>183,475</u>	<u>169,545</u>
	<u>483,475</u>	<u>469,545</u>
Other components	<u>12,299</u>	<u>6,081</u>
Total fund balances	<u>495,774</u>	<u>475,626</u>
Total liabilities and fund balances	<u>832,028</u>	<u>798,473</u>

The DIPF's financial statement included as part of the consolidated financial statements are as follows:

	(Unit : Thousand Baht)	
	Consolidated	
	Financial Statements	
	As at December 31,	
	2019	2018
Assets		
Current assets		
Cash deposits and short-term investments	68,479	54,587
Contributions from members	15	851
Accrued interest receivable	543	485
Total current assets	<u>69,037</u>	<u>55,923</u>
Non-current assets		
Long-term investments	<u>41,200</u>	<u>48,227</u>
Total non-current assets	<u>41,200</u>	<u>48,227</u>
Total assets	<u><u>110,237</u></u>	<u><u>104,150</u></u>
Liabilities and fund balances		
Current liabilities		
Income tax payable	396	293
Other current liabilities	<u>1</u>	<u>-</u>
Total current liabilities	<u>397</u>	<u>293</u>
Non-current liabilities		
Contributions from members	50,976	46,634
Benefits on contributions from members	<u>2,668</u>	<u>1,875</u>
Total non-current liabilities	<u>53,644</u>	<u>48,509</u>
Total liabilities	<u>54,041</u>	<u>48,802</u>
Fund balances		
Initial fund	50,000	50,000
Benefits on contributions from TFEX	<u>6,196</u>	<u>5,348</u>
Total fund balances	<u>56,196</u>	<u>55,348</u>
Total liabilities and fund balances	<u><u>110,237</u></u>	<u><u>104,150</u></u>

25.2 Results of fund operations

Details of the results of fund operations which are included as part of the consolidated and the entity's statement of comprehensive revenues and expenses are as follows:

(Unit : Thousand Baht)					
Consolidated Financial Statements					
	Staff Welfare Fund	Securities Investor Protection Fund (SET's portion)	Derivatives Investor Protection Fund (TFEX's portion)	General Fund	Total
For the year ended December 31, 2019					
Revenues					
Operating revenues	-	-	-	5,883,591	5,883,591
Investment income, net	1,923	14,016	1,110	946,031	963,080
Other income	-	-	-	499,636	499,636
Total revenues	<u>1,923</u>	<u>14,016</u>	<u>1,110</u>	<u>7,329,258</u>	<u>7,346,307</u>
Expenses					
Operating expenses	-	86	46	4,216,819	4,216,951
Reversal of contributions to the Stock Exchange of Thailand Foundation	-	-	-	(186,132)	(186,132)
Transfer money to the Capital Market Development Fund	-	-	-	5,700,000	5,700,000
Income tax expense	-	-	216	214,271	214,487
Total expenses	<u>-</u>	<u>86</u>	<u>262</u>	<u>9,944,958</u>	<u>9,945,306</u>
Revenues over (under) expenses	<u>1,923</u>	<u>13,930</u>	<u>848</u>	<u>(2,615,700)</u>	<u>(2,598,999)</u>
Other comprehensive revenues and expenses					
Items that will be reclassified subsequently to revenues and expenses					
Share of profit of investments in associates	-	-	-	158	158
Change in value of available-for-sale investments managed by SET	-	-	-	417,992	417,992
Change in value of available-for-sale investments from Securities Investor Protection Fund	-	6,218	-	-	6,218
Income tax relating to items that will be reclassified subsequently to revenues and expenses	-	-	-	(82,910)	(82,910)
Total items that will be reclassified subsequently to revenues and expenses	<u>-</u>	<u>6,218</u>	<u>-</u>	<u>335,240</u>	<u>341,458</u>
Items that will not be reclassified subsequently to revenues and expenses					
Remeasurements of post-employment benefits obligations	-	-	-	10,226	10,226
Total items that will not be reclassified to revenues and expenses	<u>-</u>	<u>-</u>	<u>-</u>	<u>10,226</u>	<u>10,226</u>
Total comprehensive revenues and expenses	<u>1,923</u>	<u>20,148</u>	<u>848</u>	<u>(2,270,234)</u>	<u>(2,247,315)</u>
Total comprehensive revenues and expenses for the years attributable to:					
Owners of the parents	1,923	20,148	848	(2,270,234)	(2,247,315)
Non - controlling interests	-	-	-	-	-
	<u>1,923</u>	<u>20,148</u>	<u>848</u>	<u>(2,270,234)</u>	<u>(2,247,315)</u>

(Unit : Thousand Baht)

	Consolidated Financial Statements				
	Staff Welfare Fund	Securities Investor Protection Fund (SET's portion)	Derivatives Investor Protection Fund (TFEX's portion)	General Fund	Total
For the year ended December 31, 2018					
Revenues					
Operating revenues	-	-	-	5,722,355	5,722,355
Investment income, net	1,404	12,487	952	584,781	599,624
Other income	-	-	-	278,629	278,629
Total revenues	1,404	12,487	952	6,585,765	6,600,608
Expenses					
Operating expenses	-	117	89	3,978,085	3,978,291
Contributions to the Stock Exchange of Thailand Foundation	-	-	-	186,132	186,132
Income tax expense	-	2,433	177	478,662	481,272
Total expenses	-	2,550	266	4,642,879	4,645,695
Revenues over expenses	1,404	9,937	686	1,942,886	1,954,913
Other comprehensive revenues and expenses					
Items that will be reclassified					
subsequently to revenues and expenses					
Share of profit of investments in associates	-	-	-	(103)	(103)
Change in value of available-for-sale investments managed by SET	-	-	-	(825,957)	(825,957)
Change in value of available-for-sale investments from Securities Investor Protection Fund	-	(10,646)	-	-	(10,646)
Income tax relating to items that will be reclassified subsequently to revenues and expenses	-	5,504	-	166,221	171,725
Total items that will be reclassified subsequently to revenues and expenses	-	(5,142)	-	(659,839)	(664,981)
Items that will not be reclassified subsequently					
to revenues and expenses					
Remeasurements of post-employment benefits obligations	-	-	-	606	606
Income tax relating to items that will not be reclassified subsequently to revenues and expenses	-	-	-	(121)	(121)
Total items that will not be reclassified to revenues and expenses	-	-	-	485	485
Total comprehensive revenues and expenses	1,404	4,795	686	1,283,532	1,290,417
Total comprehensive revenues and expenses					
for the years attributable to:					
Owners of the parents	1,404	4,795	686	1,283,533	1,290,418
Non - controlling interests	-	-	-	(1)	(1)
	1,404	4,795	686	1,283,532	1,290,417

	(Unit : Thousand Baht)			
	Separate Financial Statements			
	Securities Investor			
	Staff Welfare Fund	Protection Fund (SET's portion)	General Fund	Total
For the year ended December 31, 2019				
Revenues				
Operating revenues	-	-	2,652,268	2,652,268
Investment income, net	1,923	14,016	1,547,098	1,563,037
Other income	-	-	2,060,116	2,060,116
Total revenues	<u>1,923</u>	<u>14,016</u>	<u>6,259,482</u>	<u>6,275,421</u>
Expenses				
Operating expenses	-	86	3,826,379	3,826,465
Reversal of contributions to the Stock Exchange of Thailand Foundation	-	-	(186,132)	(186,132)
Transfer money to the Capital Market Development Fund	-	-	5,700,000	5,700,000
Income tax expense	-	-	(46,687)	(46,687)
Total expenses	<u>-</u>	<u>86</u>	<u>9,293,560</u>	<u>9,293,646</u>
Revenues over(under) expenses	<u>1,923</u>	<u>13,930</u>	<u>(3,034,078)</u>	<u>(3,018,225)</u>
Other comprehensive revenues and expenses				
Items that will be reclassified subsequently to revenues and expenses				
Change in value of available-for-sale investments managed by SET	-	-	417,992	417,992
Change in value of available-for-sale investments from Securities Investor Protection Fund	-	6,218	-	6,218
Income tax relating to items that will be reclassified subsequently to revenues and expenses	-	-	(82,912)	(82,912)
Total items that will be reclassified subsequently to revenues and expenses	<u>-</u>	<u>6,218</u>	<u>335,080</u>	<u>341,298</u>
Items that will not be reclassified subsequently to revenues and expenses				
Remeasurements of post-employment benefits obligations	-	-	10,226	10,226
Total items that will not be reclassified to revenues and expenses	<u>-</u>	<u>-</u>	<u>10,226</u>	<u>10,226</u>
Total comprehensive revenues and expenses	<u>1,923</u>	<u>20,148</u>	<u>(2,688,772)</u>	<u>(2,666,701)</u>
Total comprehensive revenues and expenses for the years attributable to:				
Owners of the parents	1,923	20,148	(2,688,772)	(2,666,701)
Non - controlling interests	-	-	-	-
	<u>1,923</u>	<u>20,148</u>	<u>(2,688,772)</u>	<u>(2,666,701)</u>

	(Unit : Thousand Baht)			
	Separate Financial Statements			
	Securities Investor			
	Staff Welfare Fund	Protection Fund (SET's portion)	General Fund	Total
For the year ended December 31, 2018				
Revenues				
Operating revenues	-	-	2,601,316	2,601,316
Investment income, net	1,404	12,487	860,726	874,617
Other income	-	-	1,901,827	1,901,827
Total revenues	1,404	12,487	5,363,869	5,377,760
Expenses				
Operating expenses	-	117	3,639,511	3,639,628
Contributions to the Stock Exchange of Thailand Foundation	-	-	186,132	186,132
Income tax expense	-	2,433	236,286	238,719
Total expenses	-	2,550	4,061,929	4,064,479
Revenues over expenses	1,404	9,937	1,301,940	1,313,281
Other comprehensive revenues and expenses				
Items that will be reclassified subsequently to revenues and expenses				
Change in value of available-for-sale investments managed by SET	-	-	(825,957)	(825,957)
Change in value of available-for-sale investments from Securities Investor Protection Fund	-	(10,646)	-	(10,646)
Income tax relating to items that will be reclassified subsequently to revenues and expenses	-	5,504	165,194	170,698
Total items that will be reclassified subsequently to revenues and expenses	-	(5,142)	(660,763)	(665,905)
Items that will not be reclassified subsequently to revenues and expenses				
Remeasurements of post-employment benefits obligations	-	-	-	-
Income tax relating to items that will not be reclassified subsequently to revenues and expenses	-	-	-	-
Total items that will not be reclassified to revenues and expenses	-	-	-	-
Total comprehensive revenues and expenses	1,404	4,795	641,177	647,376
Total comprehensive revenues and expenses for the years attributable to:				
Owners of the parents	1,404	4,795	641,177	647,376
Non - controlling interests	-	-	-	-
	1,404	4,795	641,177	647,376

26. OPERATING REVENUES

Operating revenues for the years ended 31 December 2019 and 2018 consist of:

	Consolidated Financial Statements		Separate Financial Statements	
	2019	2018	2019	2018
(Unit : Thousand Baht)				
Timing of revenue recognition				
At a point in time				
Trading fees	1,839,019	1,922,481	1,297,886	1,413,007
Securities registrar fees	532,377	470,865	-	-
Listing fees	244,945	193,944	244,945	193,944
Clearing & settlement fees	600,935	603,948	-	-
Member services fees	379,978	408,635	-	-
Information service fees	993	2,167	476	1,956
Depository fees	346,545	341,204	-	-
Customization and IT support fees	1,375	556	1,375	556
Membership fees	200	16,260	-	12,858
Fund services fees	2,800	2,600	-	-
	<u>3,949,167</u>	<u>3,962,660</u>	<u>1,544,682</u>	<u>1,622,321</u>
Overtime				
Securities registrar fees	693,662	650,072	-	-
Listing fees	477,924	449,001	477,924	449,001
Member services fee	40,347	42,324	-	-
Information service fees	365,713	343,489	331,525	308,145
Customisation and IT support fees	275,572	199,100	274,737	198,449
Membership fees	63,830	63,680	23,400	23,400
Fund services fee	17,376	12,029	-	-
	<u>1,934,424</u>	<u>1,759,695</u>	<u>1,107,586</u>	<u>978,995</u>
Total operating revenues	<u>5,883,591</u>	<u>5,722,355</u>	<u>2,652,268</u>	<u>2,601,316</u>

27. INVESTMENT INCOME, NET

Investment income, net for the years ended December 31, 2019 and 2018

	Notes	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
		2019	2018	2019	2018
Interest income		436,238	417,033	278,766	208,939
<u>Less</u> Interest expense					
Short-term borrowings					
from subsidiaries	7	-	-	(36,569)	(51,360)
Assets for clearing					
system protection -					
members' portion		(219,577)	(211,527)	-	-
Interest income, net		216,661	205,506	242,197	157,579
Dividend income from					
Mutual funds		140,331	208,304	140,331	208,304
Subsidiaries	12	-	-	655,779	305,901
Associates	13	-	-	15,743	12,595
Joint venture entity	13	-	-	-	2,047
Private fund		31	25	17	14
Other entities		3,536	2,668	3,536	2,668
Realized gain from investments		420,168	206,316	396,471	202,290
Unrealized gain (loss) from					
trading securities		90,398	(30,918)	18,118	(23,552)
Gain (loss) on exchange rate					
from foreign investments		73,434	(5,527)	73,434	(5,527)
Reversal of impairment loss		3,395	-	3,395	-
Others		-	(189)	-	(189)
		<u>947,954</u>	<u>586,185</u>	<u>1,549,021</u>	<u>862,130</u>

28. OTHER INCOME

Other income for the years ended December 31, 2019 and 2018

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Compensation income (see Note 36.1)	145,088	-	145,088	-
Fines	80,151	58,647	12,418	52,743
Educational activities income	64,442	72,604	64,442	72,604
Revenues from fees and management funds	36,657	41,821	840	770
Revenues from securities borrowing				
and lending	34,461	14,103	-	-
Revenues from marketing event	22,978	24,266	22,634	24,266
Rental & utilities revenues	15,295	16,403	15,295	16,403
Revenues from transfer of rights from				
securities companies	11,200	-	10,000	-
Service income from related parties				
(see Note 7)	1,687	17,487	1,778,473	1,726,081
Other income	42,294	24,668	10,926	8,960
	<u>454,253</u>	<u>269,999</u>	<u>2,060,116</u>	<u>1,901,827</u>

29. EMPLOYEE BENEFIT EXPENSES

Employee benefit expenses for the years ended December 31, 2019 and 2018

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Management				
Salaries and other benefits	232,216	211,189	232,216	211,189
Contributions to provident fund	11,053	9,744	11,053	9,744
	<u>243,269</u>	<u>220,933</u>	<u>243,269</u>	<u>220,933</u>
Other employees				
Salaries and other benefits	1,622,193	1,397,436	1,620,982	1,397,256
Contributions to provident fund	74,009	69,383	74,009	69,366
	<u>1,696,202</u>	<u>1,466,819</u>	<u>1,694,991</u>	<u>1,466,622</u>
	<u>1,939,471</u>	<u>1,687,752</u>	<u>1,938,260</u>	<u>1,687,555</u>

The defined contribution plans comprise provident funds established by the Group for its employees. Contributions are made monthly by the employees at rates ranging from 3.00% to 15.00% of their basic salaries and by the Group at the rate of 10.00% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by a licensed Fund Manager.

30. SEC FEES

The Securities and Exchange Act B.E. 2535 (1992) requires SET to pay to the SEC at a rate as determined by the Board of the SEC.

In 2016, the Board of the SEC has approved to charge SET for the year 2017 - 2019 (for the period of 3 years) as follows:

1. Charge at the rate of 0.002% of trading value of the year.
2. Charge on total equity of listing companies who have never issued securities for sale under the approval of the SEC, at the same rate that the SEC charge from listed companies who issued securities and submit report to the SEC according to clause 56 of the SEC Act.

In 2017, Board of Governors of SET was resolved to cancel the additional fees as prescribed by the Office of the Securities and Exchange Commission in order to comply with the Securities and Exchange Act (No. 5) B.E. 2559 (2016), effective from December 12, 2016.

However, if there is an event changes or problems of implementation during the period, terms and conditions may be revised.

The Board of the SEC also required Thailand Future Exchange Public Company Limited (subsidiary) to pay the fee of derivatives trading exchange. The rate for year 2017 - 2019 is Baht 2 million per annum.

31. OTHER EXPENSES

Other expenses for the years ended December 31, 2019 and 2018

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Fees and compensation expenses	128,067	99,166	108,152	84,100
Capital market development expenses	36,492	23,969	36,493	23,941
Travelling and vehicle expenses	35,985	36,524	34,318	35,331
Donation and CSR expenses	11,206	748	11,006	748
Institution membership fees	4,897	5,160	3,661	3,898
Entertainment expenses	3,170	2,850	3,130	2,799
Meeting expenses	2,821	2,755	2,634	2,586
Other expenses	15,977	11,100	15,476	10,843
	<u>238,615</u>	<u>182,272</u>	<u>214,870</u>	<u>164,246</u>

32. TRANSFER MONEY TO THE CAPITAL MARKET DEVELOPMENT FUND

The Securities and Exchange Act (No. 6) B.E. 2562, announced on April 16, 2019, requires that The Stock Exchange of Thailand (SET) proceed as follows:

1. Transfer the money or any other assets in the amount of Baht 5,700 million to the Capital Market Development Fund (CMDf). SET's Board of the Governors and CMDf's Committee shall jointly determine the amount or value, type and nature of the money or assets to be transferred.
2. Provide the money to CMDf within 150 days from the end of the calendar year at the rate not less than 90% of the revenue after deduction of expense, tax and reserve expenses. In this regard, the consolidated financial statements of SET shall be used to calculate the remittance amount.

SET transferred money in the amount of Baht 5,700 million to the CMDf on July 4, 2019 and recognized in expense for the year 2019.

33. INCOME TAX EXPENSE

Income tax expense for the years ended December 31, 2019 and 2018

	Consolidated		(Unit : Thousand Baht)	
	Financial Statements		Separate	
	2019	2018	2019	2018
Current income tax				
Previous income tax	-	-	(9,688)	-
Current income tax	236,452	530,565	-	287,051
Total current income tax	<u>236,452</u>	<u>530,565</u>	<u>(9,688)</u>	<u>287,051</u>
Deferred income tax				
Origination and reversal of temporary differences	(22,181)	(51,903)	(36,999)	(50,765)
Total deferred income tax	<u>(22,181)</u>	<u>(51,903)</u>	<u>(36,999)</u>	<u>(50,765)</u>
Total income tax expense (revenue)	<u>214,271</u>	<u>478,662</u>	<u>(46,687)</u>	<u>236,286</u>

The tax on the Group's revenues over expenses before income tax differs from the theoretical amount that would arise using the Thailand basic tax rate as follows:

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Revenues over (under) expenses before income tax expense	(2,384,728)	2,433,575	(3,064,912)	1,549,567
Tax calculated at a tax rate of 20%	(476,945)	486,715	(612,982)	309,913
Income tax from the previous year	(9,688)	(1,542)	(9,688)	(1,720)
Cumulative loss carried forward from the previous year	(953)	-	-	-
Assessed income under Revenue Code	1,552	1,941	723	-
Income not subject to tax	(197,659)	(77,905)	(182,843)	(77,318)
Expenses additional deductible for tax purposes	(2,795)	(2,656)	(2,795)	(2,656)
Expenses not deductible for tax purposes	775,701	44,672	760,898	42,874
Eliminated transaction between related party, net of income tax	125,228	62,382	-	-
Revenues over expenses - Securities/Derivatives Investor Protection Fund, net of income tax	(170)	(3,364)	-	(3,226)
Tax credit recognized during the year	-	(31,581)	-	(31,581)
Income tax	<u>214,271</u>	<u>478,662</u>	<u>(46,687)</u>	<u>236,286</u>
The weight average applicable tax rate (%)	8.99	19.67	-	15.25

34. COMMITMENTS WITH NON-RELATED PARTIES

	Consolidated Financial Statements As at December 31,		(Unit : Thousand Baht) Separate Financial Statements As at December 31,	
	2019	2018	2019	2018
Capital commitments				
Computer	14,460	-	14,460	-
Software	12,760	4,736	12,760	4,736
Buildings and other constructions	-	1,081	-	1,081
	<u>27,220</u>	<u>5,817</u>	<u>27,220</u>	<u>5,817</u>
Non-cancellable operating lease commitments				
Within one year	20,887	17,502	20,887	17,502
After one year but within five years	30,906	35,757	30,906	35,757
	<u>51,793</u>	<u>53,259</u>	<u>51,793</u>	<u>53,259</u>
System and building maintenance commitments				
Within one year	97,917	139,603	97,917	139,603
After one year but within five years	40,463	56,373	40,463	56,373
	<u>138,380</u>	<u>195,976</u>	<u>138,380</u>	<u>195,976</u>

35. FAIR VALUE

35.1 Fair value estimation

The fair value of the financial instruments are defined into the following three different levels by valuation method as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3: Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The following table presents the Group's financial assets and liabilities that are measured at fair value as at December 31, 2019 and 2018.

(Unit : Thousand Baht)				
Consolidated Financial Statements				
2019				
	Level 1	Level 2	Level 3	Total
Trading securities	-	10,472,702	-	10,472,702
Available-for-sales	1,543,835	6,949,265	-	8,493,100
Total	<u>1,543,835</u>	<u>17,421,967</u>	<u>-</u>	<u>18,965,802</u>

(Unit : Thousand Baht)				
Consolidated Financial Statements				
2018				
	Level 1	Level 2	Level 3	Total
Trading securities	-	10,035,852	-	10,035,852
Available-for-sales	666,596	10,798,050	-	11,464,646
Total	<u>666,596</u>	<u>20,833,902</u>	<u>-</u>	<u>21,500,498</u>

(Unit : Thousand Baht)				
Separate Financial Statements				
2019				
	Level 1	Level 2	Level 3	Total
Trading securities	-	1,198,404	-	1,198,404
Available-for-sales	1,543,835	6,949,265	-	8,493,100
Total	<u>1,543,835</u>	<u>8,147,669</u>	<u>-</u>	<u>9,691,504</u>

(Unit : Thousand Baht)				
Separate Financial Statements				
2018				
	Level 1	Level 2	Level 3	Total
Trading securities	-	3,448,908	-	3,448,908
Available-for-sales	666,596	10,798,050	-	11,464,646
Total	<u>666,596</u>	<u>14,246,958</u>	<u>-</u>	<u>14,913,554</u>

The following table presents the Group's financial assets and liabilities that are not measured at fair value at December 31, 2019 and 2018.

(Unit : Thousand Baht)				
Consolidated Financial Statements				
2019				
	Level 1	Level 2	Level 3	Total
Held-to-maturity investments	-	8,772,169	-	8,772,169
General investments	-	-	36,861	36,861
Total	<u>-</u>	<u>8,772,169</u>	<u>36,861</u>	<u>8,809,030</u>

(Unit : Thousand Baht)				
Consolidated Financial Statements				
2018				
	Level 1	Level 2	Level 3	Total
Held-to-maturity investments	-	9,318,107	-	9,318,107
General investments	-	-	12,361	12,361
Total	<u>-</u>	<u>9,318,107</u>	<u>12,361</u>	<u>9,330,468</u>

(Unit : Thousand Baht)				
Separate Financial Statements				
2019				
	Level 1	Level 2	Level 3	Total
Held-to-maturity investments	-	1,411,316	-	1,411,316
General investments	-	-	36,861	36,861
Total	<u>-</u>	<u>1,411,316</u>	<u>36,861</u>	<u>1,448,177</u>

(Unit : Thousand Baht)				
Separate Financial Statements				
2018				
	Level 1	Level 2	Level 3	Total
Held-to-maturity investments	-	1,229,584	-	1,229,584
General investments	-	-	12,361	12,361
Total	<u>-</u>	<u>1,229,584</u>	<u>12,361</u>	<u>1,241,945</u>

There was no transfers between Levels 1 and 2 during the year.

Other financial instruments not carried at fair value are typically short-term in nature and reprice to current market rate frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. These financial instruments include cash and cash equivalents, cash at banks for financial benefits payable, assets for margin deposits and benefits, accounts receivable, accrued interest receivable, deposits and other benefits in assets for clearing system protection, deposits and other benefits in Securities Investor Protection Fund, deposits and other benefits in Derivatives Investor Protection Fund, accounts payable and short-term borrowings from subsidiaries.

The management believes that the fair value of the Group's financial assets and liabilities does not materially differ from their carrying value.

Valuation techniques used to derive Level 1 fair values

Available-for-sale securities which are listed in the Stock Exchange of Thailand or foreign stock exchanges as shown in long-term investments and Securities Investor Protection Fund. The fair value of investments is measured by using last bid price at the close of business on the statement of financial position date by reference to the other Stock Exchange in which such securities are listed.

Valuation techniques used to derive Level 2 fair values

Other available-for-sale securities presented as short-term investments, long-term investments and Securities Investor Protection Fund. The fair value of investments is measured by using last bid price at the close of business on the statement of financial position date by reference to the Association of Investment Management Companies.

Held-to-maturity investments and trading securities include fixed deposit accounts, bonds and debentures. The fair value of fixed deposit accounts, is measured by using discounted cash flows based on each contract with an average yield of 4 commercial banks. The fair value of bonds and debentures are measured by using the price published in the Thai Bond Market Association at the end of the date in the statement of financial position.

Valuation techniques used to derive Level 3 fair values

As the Group has a general investments in limited companies which the Group's shareholding was insignificant, the Group has no controlling and decision making power in the invested companies resulting in difficulty in obtaining the information to support the fair value valuation in practice. These investments are not in the stock exchange and do not have any market prices which can be used as fair value. The Group also do not have any plan for selling these investments, so the Group did not assess the fair value for the general investments. Therefore, the Group cannot disclose the fair value of the general investments in the notes to the financial statements and have stated these investments at cost less allowance for impairment (if any).

36. CONTINGENT ASSETS AND CONTINGENT LIABILITIES

36.1 Contingent assets

The Group

In 2012, the Group sued the group of insurance companies for the fire damages of the Stock Exchange of Thailand building (previous office building) in 2010, seeking compensation for the damages under the insurance contract and coverage amounting to Baht 123 million plus interest rate at 7.50% per annum. On April 30, 2019, the Supreme Court issued a judgment ordering the group of insurance companies to make proportionate payment to the Group with interest rate at 7.50% per annum. Subsequently, on August 20, 2019, the Group received the full compensation (see Note 28).

36.2 Contingent liabilities

36.2.1 SET

As at December 31, 2019, SET has letters of guarantee issued by banks totalling Baht 5.13 million (2018: Baht 5.13 million) in respect of electricity usage in the ordinary course of business from which management anticipates that no material liabilities will arise.

SET has issued a letter of comfort to a bank in respect of an overdraft credit line of Baht 2,400 million (2018: Baht 2,400 million) granted to Thailand Clearing House Co., Ltd. (TCH), a subsidiary, for clearing and settlement of equity instruments and derivatives. Under the terms of the letter of comfort, SET is required to maintain its shareholding at 99.99% of the registered share capital in TCH to the end of the credit period. In addition, SET is required to support TCH's operations to ensure its ability to repay the debt to the bank. As at December 31, 2019, TCH had not drawn down the overdraft credit line.

On December 26, 2017, SET was claimed to recourse for damages arising from not supervising member company to carry out the force selling of the plaintiff's securities in accordance with the specified regulation. The plaintiff was seeking such alleged damages totalling Baht 12.65 million. On November 20, 2019, the Appeal Court dismissed the case, and the plaintiff does not appear to appeal to the Supreme Court within the specific time. Therefore, the case has been finalized.

36.2.1 Subsidiary

36.2.2.1 On January 22, 2019, a subsidiary was claimed to recourse for the damages incurred related to the case of the wrongful acts recalling the asset and compensation from the forgery of the share certificates. The subsidiary has been claimed for the amount of Baht 76.23 million.

On December 4, 2019, the Civil Court ordered the subsidiary to pay the amount of Baht 62.55 million with interest rate at 7.5% per annum, and to pay Baht 400,000 legal fee and litigation cost. The subsidiary is in the process of considering an appeal to the Appeal Court. The outcome of the case has not presently been finalized. As a result, the subsidiary did not record any transaction in relation to the above case in the 2019 financial statements.

The Group has purchased insurance policy covering professional liability (Financial Institutional Professional Indemnity Insurance) which has fully covered the liability for this case.

36.2.2.2 On December 11, 2019, a subsidiary was indicted to carry out the registration to change the name of shareholders or to pay the price of shares in the amount of Baht 495 million. As at December 31, 2019, the subsidiary was in the process of making the statement to submit to the court. Therefore, the subsidiary did not record such damages in the 2019 financial statements.

37. FINANCIAL INSTRUMENTS - FORWARD FOREIGN EXCHANGE CONTRACTS

SET has financial instruments, which their latest settlement date of forward foreign exchange contracts will be on March 30, 2020. The amount of the outstanding contracts as at December 31, 2019 and 2018 to be paid are:

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
US Dollar currency	2,197,292	1,501,243	2,197,292	1,501,243

The net fair values of forward foreign exchange contracts as at December 31, were:

	Consolidated Financial Statements		(Unit : Thousand Baht) Separate Financial Statements	
	2019	2018	2019	2018
Forward foreign exchange contracts				
- with positive fair values	93,623	3,739	93,623	3,739

The fair value of forward foreign exchange contracts is in Level 2. They are measured based on forward foreign exchange rate comparing with Thai Baht announced by the Bank of Thailand which input that are observable.

38. RECLASSIFICATIONS

Certain reclassifications have been made in the financial statements for the year ended December 31, 2018, to conform to the classifications used in the financial statements for the year ended December 31, 2019 as follows:

(Unit : Thousand Baht)				
Items	Previous classification Presentation	Current classification Presentation	Consolidated Financial Statements	Separate Financial Statements
Assets				
Accrued interest receivable	Accrued interest receivable	Trade and other receivable	21,177	106,121
Other receivables from sale of investments	Other current assets	Trade and other receivable	150,000	150,000
Cash at banks for dividend accounts of investors	Other current assets	Trade and other receivable	84,042	-
Prepaid expenses	Other current assets	Trade and other receivable	26,104	26,104
Others	Other current assets	Trade and other receivable	3,311	2,465
Liabilities				
Dividend payable from registrar services to investors	Other current liabilities	Trade and other payable	84,042	-
Financial benefits payable	Other current liabilities	Trade and other payable	69,086	-
Others	Other current liabilities	Trade and other payable	24,777	19,672

39. APPROVAL OF THE FINANCIAL STATEMENTS

These financial statements have been approved for issuance by the Stock Exchange's Board of Governors on February 19, 2020.