

Management discussion and analysis (MD&A)

Overview

The operating results of the SET group for the year ended December 31, 2021 were as follows:

(Unit: THB million)	For the year ended December 31			
	2021	2020	Increase / (Decrease)	
			Amount	%
Operating revenue	7,735	6,548	1,187	18
Other income	180	163	17	10
Investment income (loss), net	369	(364)	733	201
Total revenues	8,284	6,347	1,937	31
Operating expenses	(5,036)	(4,289)	747	17
Non-operating revenue	46	36	10	28
Revenues over expenses before contribution to the Capital Market Development Fund (CMDf) and income tax	3,294	2,094	1,200	57
Income tax expense	(1,114)	(378)	736	195
Revenues over expenses before contribution to CMDf	2,180	1,716	464	27
Contribution to CMDf	(583)	(362)	221	61
Revenues over expenses, net	1,597	1,354	243	18

In 2021, the SET group had total revenues of THB 8,284 million, a 31% increase from the previous year due to an increase in operating revenue, after the discount net on various fees as part of the relief measures for the stakeholders during the COVID-19 pandemic. Operating revenue increased by THB 1,187 million, significantly driven by the rise in average daily trading volume of equity. Investment income increased by THB 733 million, focusing on investing in Thai equity securities and debt instruments. Back in 2020, the capital market and financial market were volatile due to the impact of the COVID-19 pandemic, causing a net loss from investment. Total operating expenses amounted to THB 5,036 million, a 17% increase, mainly resulting from the fee contributed to the SEC in accordance with an increase in equity trading volume. The registrar service expenses were up in accordance with the increasing volume of corporate actions transactions. In addition, the donations and CSR expense also increased mostly to support various COVID-19 epidemic prevention and control projects. Consequently, the SET group had total revenue over expenses before remittance to the CMDf fund and before taxes of THB 3,294 million for the year 2021.

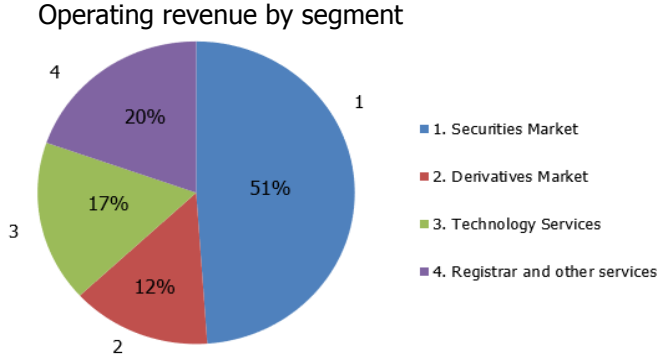
SET provided the annual contribution to CMDP totaling THB 583 million, accounting for 90% of the revenue after deduction of expenses, taxes and reserves, based on the 2021 consolidated financial statements. As a result, the SET group had net revenue over expenses of THB 1,597 million in 2021.

1. Analysis of operating results

1.1 Operating revenue

Operating revenue by segment

Operating revenue classified by key business segments consists of Securities Market, Derivatives Market, Technology Services, and Registrar, and other services.



For the year ended December 31, 2021 (Unit: THB million)

Securities Market	
- Trading	2,262
- Clearing and settlement	557
- Listing fee	696
- Depository	379
- Membership	32
Total	3,926
Derivatives Market	
- Trading	647
- Clearing	278
- Membership	32
Total	957

For the year ended December 31, 2021 (Unit: THB million)

Technology Services

- Member services	507
- Information services	424
- IT support	411

Total **1,342**

Registrar and other Services

- Securities registrar services	1,458
- Fund services	32
- Payment services	13
- Digital Gateway services	7

Total **1,510**

Total operating revenue **7,735**

1.1.1 Securities Market

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Revenue - Securities Market	3,926	3,127	799	26
Trading fees	2,262	1,667	595	36
Clearing and settlement fees	557	450	107	24
Listing fees	696	682	14	2
Depository fees	379	296	83	28
Membership fees	32	32	-	-
Key market index indicators				
SET Index at the end of the year (points)	1,657	1,449	208	14
Average daily trading value - Equity (THB million)	93,846	68,607	25,239	37
Average market capitalization (THB trillion)	18.49	14.72	3.77	26
Number of listed securities (securities)	3,007	2,853	154	5

Operating revenue from securities market, net of discounts and promotional activities on various types of fees as relief measures for stakeholders during the COVID-19 pandemic, increased by THB 799 million or 26%. The increase was mainly from trading fee and clearing and settlement fee in correlation with the rise in average daily trading value. In addition, the depository fees also increased in accordance with the increase in average market capitalization.

1.1.2 Derivatives Market

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Revenue - Derivatives Market	957	999	(42)	(4)
Trading fees	647	677	(30)	(4)
Clearing fees	278	290	(12)	(4)
Membership fees	32	32	-	-
Key market index indicators				
Average daily trading volume - Derivatives (contracts)	560,652	494,624	66,028	13

Average daily trading volume: derivatives rose by 13%, particularly the rise of Single Stock Futures and Gold Online Futures, while the SET 50 Index futures declined from the previous year. As a result, operating revenue from derivatives market, net of a reduction in trading fees to mitigate the impact of COVID-19 pandemic to stakeholders decreased by THB 42 million or 4%.

1.1.3 Technology Services

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Revenue - Technology services	1,342	1,160	182	16
Member service fees	507	437	70	16
Information service fees	424	378	46	12
Customization and IT support fees	411	345	66	19

Operating revenue from technology services increased by THB 182 million or 16%, driven mainly by the rise in technology support fees in line with the higher number of users.

1.1.4 Registrar and other Services

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Revenue - Registrar and other services	1,510	1,262	248	20
Securities registrar fees	1,458	1,229	229	19
Fund services	32	24	8	33
Payment service fees	13	9	4	44
Digital Gateway service fees	7	-	7	n/a

Operating revenue from registrar and other services, net of discounts on annual registrar fees as part of the COVID-19 relief to stakeholders, rose by THB 248 million or 20%, mainly due to the increase in corporate actions services in accordance with the number of securities and securities holders.

1.2 Other income

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Total other income	180	163	17	10
Revenue from fees of funds management	51	48	3	6
Revenue from education activities	17	23	(6)	(26)
Revenue from rental and utilities	11	12	(1)	(8)
Revenue from fines	8	12	(4)	(33)
Revenue from securities borrowing and lending	4	4	-	-
Revenue from funding for small entrepreneurs	4	3	1	33
Others	85	61	24	39

Other income increased by THB 17 million or 10%, mainly from the income funding for small entrepreneurs' projects from CMDF, which increased in line with the activities carried out on the knowledge development of small entrepreneurs in 2021.

1.3 Investment income (loss)

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Investment income (loss)	369	(364)	733	201
Interest income	147	152	(5)	(3)
Dividend income	68	66	2	3
Realized gain (loss) from sale of investments	43	(320)	363	113
Unrealized gain (loss) from investments	128	(165)	293	178
Gain (loss) on exchange rate and others	(12)	(93)	81	87
Allowance for expected credit loss	(5)	(4)	(1)	(25)

In 2021, the SET group gained net investment income of THB 369 million, increased by THB 733 million or 201% due mainly to gain on sales of investment amount and unrealized gains from mark-to-market of investments, focusing on investing in Thai equity securities and certain debt instruments with the downtrend of government bond yields in the market. In 2020 there was volatility in the global capital and financial markets due to the impact of the COVID-19 pandemic at the beginning, resulting in the loss from sale of investments and unrealized loss on mark-to-market of equity funds and real estate funds.

1.4 Operating expenses

(Unit: THB million)	2021	2020	Increase / (Decrease)	
			Amount	%
Operating expenses	5,036	4,289	747	17
Employee benefit expenses	2,146	1,947	199	10
The SEC fees	910	669	241	36
Direct service expenses	523	379	144	38
Depreciation and amortization	520	529	(9)	(2)
Technology expenses	271	226	45	20
Building and office expenses	184	180	4	2
Marketing expenses	134	125	9	7
Donations and CSR expenses	112	11	101	918
Fees and compensation expenses	103	116	(13)	(11)
Educational activities expenses	38	29	9	31
Others	95	78	17	22

Operating expenses in 2021 amounted to THB 5,036 million, a 17% increase. This mainly from the increase in the fees contributed to the SEC, in line with the rise in equity trading volume. The increase in direct service expenses was in accordance with the growth in corporate action transactions. In addition, the expense for donations and CSR expenses increased in order to support various COVID-19 pandemic prevention and control projects, such as the COVID-19 Vaccine Development Project, Baiya vaccine project, and a project to build a field hospital dormitory for COVID-19 patients, etc.

2. Analysis of financial position

(Unit: THB million)	Dec 31, 2021	Dec 31, 2020	Increase / (Decrease)	
			Amount	%
Total assets	56,881	54,427	2,454	5
Total liabilities	27,512	26,720	792	3
Funds balances	29,369	27,707	1,662	6

Significant movements in assets, liabilities and funds of the SET group as at December 31, 2021 in comparison with the balance as at December 31, 2020, were as follows:

2.1 Analysis of assets

As at December 31, 2021, total assets of the SET group amounted to THB 56,881 million, an increase of THB 2,454 million or 5% in comparison with the balance as at December 31, 2020. Significant details are as follows:

2.1.1 Cash and cash equivalents, cash at banks for financial benefits payable, and financial assets were THB 20,966 million or 37% of total assets, an increase of THB 3,642 million or 21%, categorized as follows:

(Unit: THB million)	Dec 31,	Dec 31,	Increase /(Decrease)	
	2021	2020	Amount	%
Cash and cash equivalents	9,017	8,012	1,005	13
Cash at banks for financial benefits payable	84	76	8	10
Financial assets	11,865	9,236	2,629	28
- Investment in debt instruments measured at FVTPL	10,602	7,088	3,514	50
- Investment measured at amortized cost	1,209	2,094	(885)	(42)
- Investment in equity instruments measured at FVTOCI	54	54	-	-
Total	20,966	17,324	3,642	21

The SET group has a policy to invest in various types of investments such as cash deposit at banks, debt instruments (e.g. government bonds, corporate debentures, etc.), mutual funds and other domestic and foreign financial instruments, enabling total cash and financial assets incremental to yearly operating results. The investment portfolio of each type of financial asset has been adjusted to suit with the investment trend and conditions as well as overall market volatility.

2.1.2 Assets for margin deposits and benefits, and assets for clearing system protection and benefits recorded at THB 21,825 million or 38% of total assets, a decrease of THB 718 million or 3%. This resulted from the withdrawal of collaterals of Thailand Clearing House Co., Ltd. (TCH)'s members, who are obliged to place the assets as collateral for derivatives trading at the specified rate.

2.1.3 Reserve fund for TCH security on clearing and settlement amounted to THB 5,702 million or 10% of total assets, a THB 102 million or 2% drop, mainly from paying back the return on investment.

2.2 Analysis of liabilities

As at December 31, 2021, total liabilities of the SET group amounted to THB 27,512 million, a THB 792 million or 3% increase, comparing with the balance as at December 31, 2020. Significant details are as follows:

2.2.1 Margin deposits and assets for clearing system protection and benefits payable amounted to THB 21,6823 million or 79% of total liabilities, a decrease of THB 713 million or 3%. The decrease resulted from the lower risk and lower trading volume of derivatives at the end of the year, therefore, the withdrawal of collaterals of Thailand Clearing House Co., Ltd. (TCH)'s members was incurred.

2.2.2 Trade and other payables amounted to THB 2,999 million or 11% of total liabilities, an increase of THB 502 million or 20% mainly from the 2021 annual remittance amount to CMDP, and the subscription money for new shares in excess of the rights to be returned to the shareholders.

2.3 Analysis of funds

As at December 31, 2021 the total funds of the SET group amounted to THB 29,369 million, an increase of THB 1,662 million or 6%, in comparison with the balance as at December 31, 2020. The SET group's revenue over expenses for 2021 reached THB 1,597 million with gain from the actuarial adjustment of THB 65 million.

3. Analysis of liquidity

Cash flows of the SET group for the year ended December 31, 2021 and 2020 can be summarized as follows:

(Unit: THB million)	2021	2020	Increase /(Decrease)	
			Amount	%
Cash flows from (used in) operating activities	3,297	2,312	985	43
Cash flows from (used in) investing activities	(2,320)	3,397	(5,717)	(168)
Cash flows used in financing activities	(16)	(14)	2	14
Cash and cash equivalents at the end of year	9,101	8,088	1,013	13

Cash and cash equivalents as at December 31, 2021 amounted to THB 9,101 million, an increase of THB 1,013 million or 13% from the year 2020. The details of the inflows and outflows are as follows:

- Net cash from operating activities totaled THB 3,297 million.

- Net cash used in investing activities totaled THB 2,320 million, mainly from the purchase of financial assets of net THB 2,092 million and investment in new assets amounted to THB 428 million.

4. Reserves and contribution to the Capital Market Development Fund (“CMDF”)

The Securities and Exchange Act (No. 6), enacted on April 16, 2019, requires the Stock Exchange of Thailand (SET) to contribute to CMDF no less than 90% of the revenue after deduction of expenses, tax and reserves. In this regard, the consolidated financial statements of SET shall be used to calculate the contribution amount. The provision of reserves shall be in accordance with the type and amount specified by the SET’s Board of Governors. Details are as follows:

4.1 Reserves

The type, allocation principles, and reserve amount are presented as follows:

Type of reserve	Principles for reserve allocation to ensure adequacy of funding sources	Reserve amount (THB million)	
		2021	2020
1. Reserves set aside according to law or criteria in business operation as specified, including reserve amount to accommodate special situations	1.1 Legal reserve	17	24
	1.2 Reserves according to business operation such as European Market Infrastructure Regulation (EMIR), Principles for financial Market Infrastructures (PFMI) to meet an increase (decrease) of business operation each year	26	(37)
	1.3 Reserves allocated for specific funds such as approval of additional capital in specific funds during the year, benefit sharing of SIPF, DIPP, CLF or other similar funds	13	261
	1.4 Reserves allocated to accommodate operations risks including emergency measures	467	424
2. Reserves set aside to accommodate the fluctuation of investments	According to unrealized gain (loss) during the year	395	(180)
3. Reserves set aside for investment in businesses or fixed assets	According to the investment amount in businesses and fixed assets approved by the Board of Governors	614	822
Total reserves		1,532	1,314

4.2 Contribution to CMDF

The annual contribution has been calculated as follows:

(Unit: THB million)	2021	2020
Revenue over expenses before contribution to CMDF (according to the statement of comprehensive revenue and expenses)	3,294	2,094
<u>Less</u> Income tax expense	(1,114)	(378)
Revenue after deduction of expenses and tax before reserves	2,180	1,716
<u>Less</u> Reserves	(1,532)	(1,314)
Revenue after deduction of expenses, tax and reserves	648	402
Annual contribution amount at the rate of 90%	<u>583</u>	<u>362</u>

Accumulated contribution expenses to CMDF as of December 31, 2021 can be presented as follows.

	(THB million)
Money transferred to CMDF in 2019	5,700
Annual contribution amount for 2020	362
Annual contribution amount for 2021	583
Total accumulated contribution expenses	<u><u>6,645</u></u>