

BUY (Unchanged)

Change in Numbers

TP: Bt 20.00

Upside : 25.0%

(From: Bt 15.50)

27 SEPTEMBER 2022

Small Cap Research

SISB Pcl (SISB TB)**In all the right places**

We reaffirm our BUY call on SISB as the company's business strategies look to be in all the right places, including its target groups, price points, locations, and curriculums, which are driving a 41% earnings CAGR in 2022-24F. We raise our earnings estimates further by 17-26% in 2022-24F and lift our TP to Bt20.

**SAKSID PHADTHANARAK**

662 – 779 9112

saksid.pha@thanachartsec.co.th

The right business strategies, in our opinion

SISB has been highly successful in penetrating the Thai international school market. From its first school opening with 35 students in 2001, it is now the second-largest international school in Thailand with 3,015 students at four campuses. We attribute its success to the right business strategies of **1)** targeting mid-to-high income new-generation families whose demand for international schools for their kids is growing; **2)** affordable price points; **3)** outer Bangkok locations where new-generation families live but are still short of international schools; and **4)** its Singaporean-British curriculums with a perceived strength in math and sciences, taught in English, Chinese and Thai.

Fast growing

By adopting the above strategies, SISB has continued to gain market share from private schools. According to the Office of the Private Education Commission, while student growth in private schools was negative at -0.6% on average in 2015-19, students in international schools, which accounted for 4% of total students in private schools, grew by 6% p.a. and SISB's students rose by 9% p.a. between 2015-21. This implies SISB's market share at around 3% in the international school industry. According to SISB's expansion plans (Exhibit 8), we estimate its student number to grow by 25/19/10% y-y in 2022-24F to drive its earnings growth by 59/40/25% y-y.

Raising our earnings

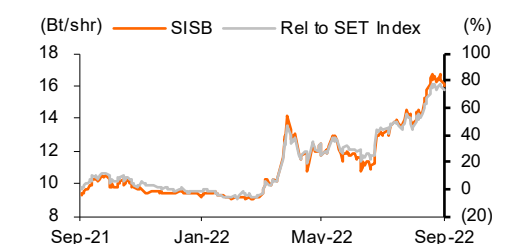
Due to stronger-than-expected student growth, we lift our earnings further by 17-26% in 2022-24F. Despite the COVID-19 situation lingering in 1H22, SISB's students grew to 2,731 at the end of June 2022 vs. a stagnant level of 2,434 at the end of 2021. We now forecast the number of students to hit 3,041 by year-end. With the planned opening of the Nonthaburi and Rayong campuses next year, we expect its student numbers to rise to 3,618/3,966 by end 2023-24F. We also expect SISB to benefit from inflows of Chinese students now that China's education reforms have led to a reduction in English teaching and a crackdown on private tutoring schools. Foreign students made up 15% of its total students in 2Q22.

Deserves a premium valuation, in our view

With a 41% three-year earnings CAGR in 2022-24F, 16-22% ROE, 40% EBITDA margin, and a net-cash position, we see SISB's valuations at 32/26x PE multiples in 2023-24F (vs. its four-year average of 36x in 2019-22) as acceptable, being supported by a strong long-term earnings growth outlook. After our earnings upgrade, we lift our DCF-based 12-month TP, using a 2023F base year, to Bt20/share (from Bt15.5).

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	1,055	1,256	1,604	1,928
Net profit	209	332	465	581
Consensus NP	—	315	404	517
Diff frm cons (%)	—	5.4	14.9	12.4
Norm profit	209	332	465	581
Prev. Norm profit	—	285	370	483
Chg frm prev (%)	—	16.6	25.8	20.4
Norm EPS (Bt)	0.2	0.4	0.5	0.6
Norm EPS grw (%)	19.2	59.2	39.9	25.1
Norm PE (x)	72.0	45.3	32.4	25.9
EV/EBITDA (x)	38.8	29.1	22.3	18.1
P/BV (x)	7.5	6.8	6.0	5.3
Div yield (%)	0.6	1.0	1.4	1.7
ROE (%)	10.7	15.7	19.6	21.7
Net D/E (%)	(34.1)	(24.3)	(22.9)	(35.8)

PRICE PERFORMANCE**COMPANY INFORMATION**

Price as of 27-Sep-22 (Bt)	16.00
Market cap (US\$ m)	396.0
Listed shares (m shares)	940.0
Free float (%)	21.6
Avg daily turnover (US\$ m)	2.0
12M price H/L (Bt)	16.70/9.00
Sector	Professional services
Major shareholder	Mr. Yew Hook Koh 32.8%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P9

Earnings catalysts

We lift our earnings by 17-26% in 2022-24F and TP to Bt20 given...

SISB Pcl's (SISB) stronger-than-expected student growth despite the lingering COVID situation in 1H22 leads us to raise our assumptions as shown in Exhibit 1. Our earnings estimates are then boosted by 17-26% in 2022-24F, resulting in our DCF-based 12-month TP (2023F base year) increasing to Bt20/share from Bt15.5 previously. We now project SISB to enjoy a three-year earnings CAGR of 41% in 2022-24F.

Ex 1: Key Assumption Changes

	2020	2021	2022F	2023F	2024F
Students (students)					
New	2,638	2,434	3,041	3,618	3,966
Old			2,814	3,382	3,691
Change (%)			8.1	7.0	7.5
Tuition fee & service income (Bt/student)					
New	425,118	445,423	494,969	519,718	545,703
Old			494,731	506,130	531,437
Change (pp)			0.0	2.7	2.7
Gross margin (%)					
New	42.7	47.1	49.4	50.4	50.9
Old			49.3	48.8	50.8
Change (pp)			0.1	1.6	0.1
Normalized earnings (Bt m)					
New	175	209	332	465	581
Old			285	370	483
Change (%)			16.6	25.8	20.4

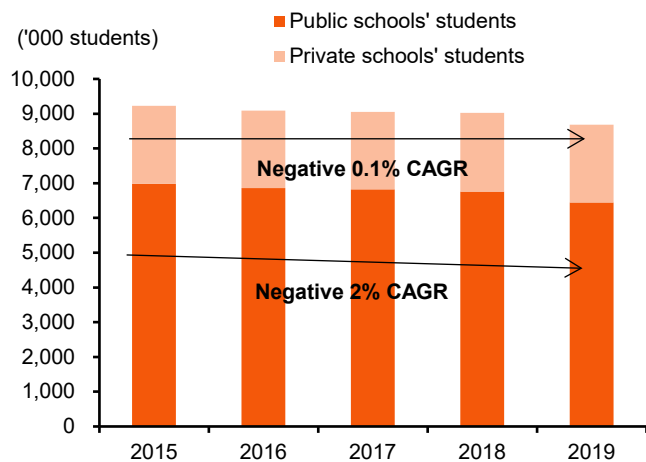
Sources: Company data, Thanachart estimates

We thus see earnings catalysts for SISB from:

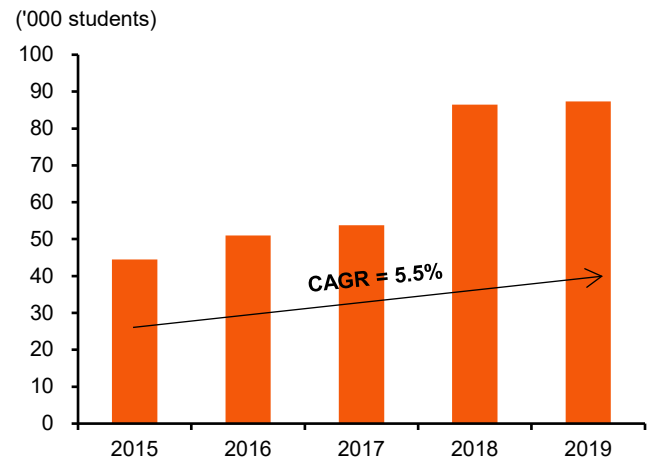
...stronger-than-expected student numbers...

Firstly, strong student growth: SISB had 2,611 students at the end of 2019 before the COVID-19 crisis caused the number to fall to 2,434 at the end of 2021. After the easing of the COVID-19 situation, the figure recovered to 2,731 students at end 2Q22 and management expects about 3,000 by end 2022. We now forecast a growth of 25/19/10% y-y in 2022-24F to 3,041/3,618/3,966 students at end 2022-24F, driven by;

- 1) Market share gains because of the trend among parents of sending children to international schools. Among the international schools, SISB is also well perceived with its Singaporean and British curriculums which are strong in math and sciences and taught in English, Chinese, and Thai.

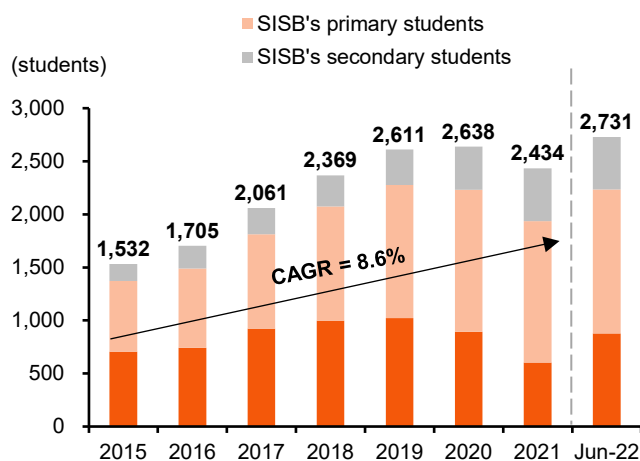
Ex 2: Thailand's Public And Private School Students

Source: The Office of the Private Education Commission (Opec)

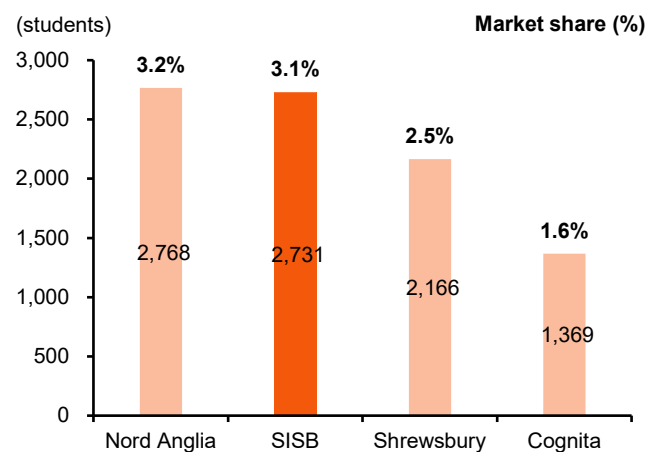
Ex 3: Inter. Students Make Up 4% Of Private Students

Sources: The Office of the Private Education Commission (Opec)

Note: * We take out the exceptionally high international student growth in 2018 to standardize average growth in 2015-19 as Opec asked more international schools to disclose their student numbers in 2018.

Ex 4: SISB's Students

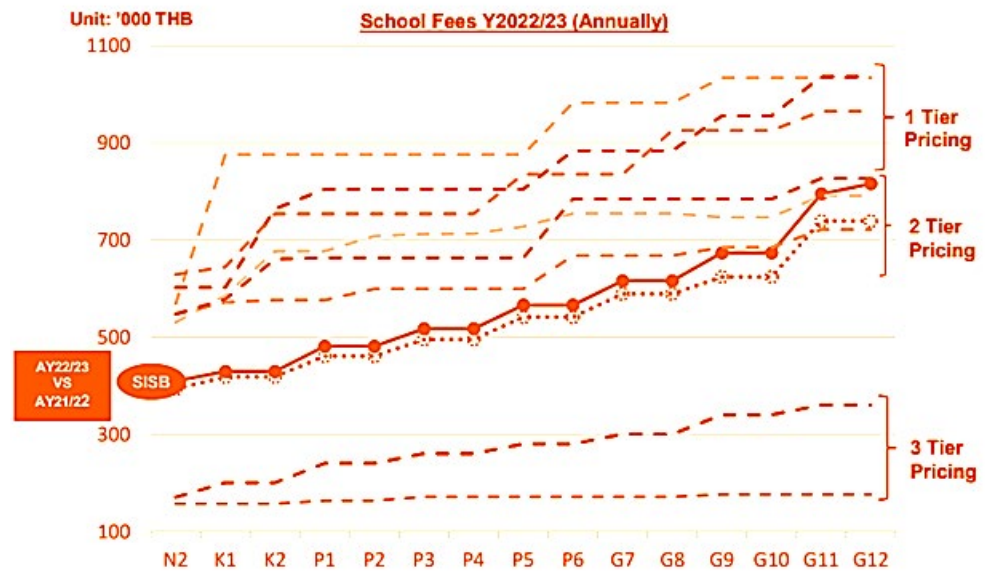
Source: Company data

Ex 5: It Is Now The Second-Largest International School

Source: Company data

- 2) Its affordable prices as SISB offers mid-end tuition fees compared to its competitors. Its tuition fees are about 25-30% lower than the high-end schools'.

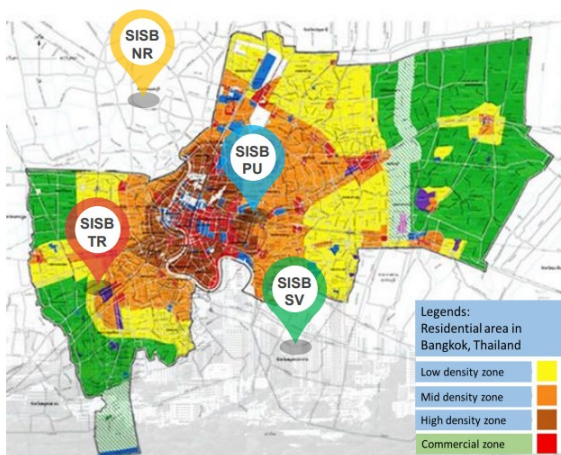
Ex 6: SISB's Affordable And Competitive Pricing



Source: Company data

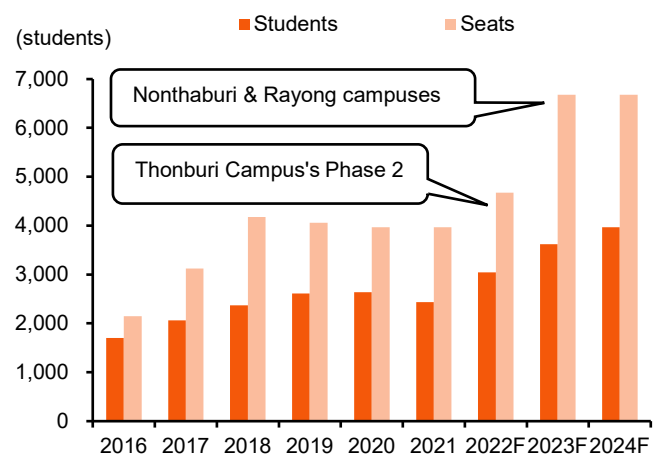
- 3) its growth strategy of opening new campuses in outer Bangkok areas where competition is low but the population density is high. The opening of the Thonburi Campus's phase 2 in August 2021 boosted SISB's total seat capacity by 18% this year while the planned opening of the Nonthaburi and Rayong campuses in August 2023 would further increase its total seat capacity by 43% next year.

Ex 7: SISB's Campuses In Greater Bangkok



Source: Company data

Ex 8: SISB's Students Vs. Seat Capacity

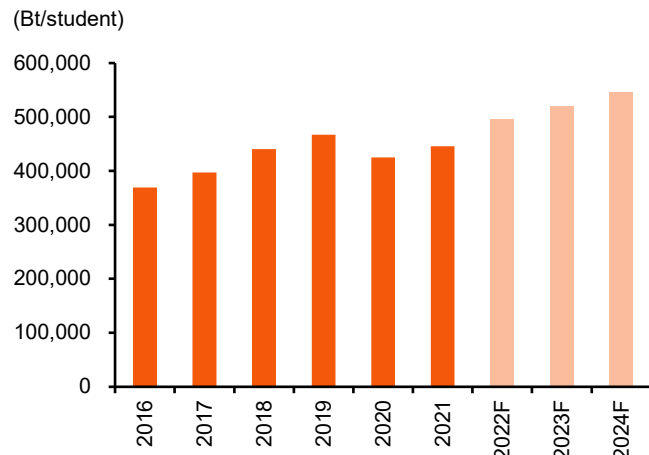


Source: Company data

...its tuition fee hikes...

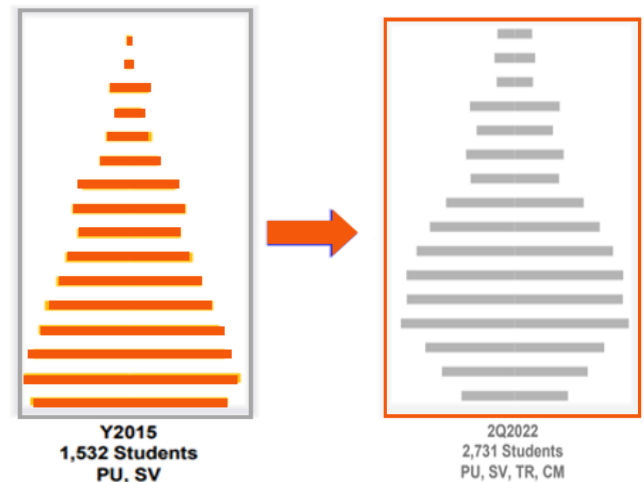
Secondly, tuition fee hikes: International schools in Thailand normally increase their tuition fees by 5-10% each new academic year starting in August-September. Excluding the COVID-19 years in 2020-21 when SISB offered tuition fee discounts, its tuition fee and service income per student rose by around 8% a year on average between 2015-19. The increase was driven by both yearly tuition fee hikes and a higher proportion of high-tuition-fee students. We assume increases in its tuition fee and service income per student of 11/5/5% y-y in 2022-24F.

Ex 9: SISB's Tuition Fee & Service Income Per Student



Sources: Company data, Thanachart estimates

Ex 10: Higher Proportion Of High-tuition-fee Students

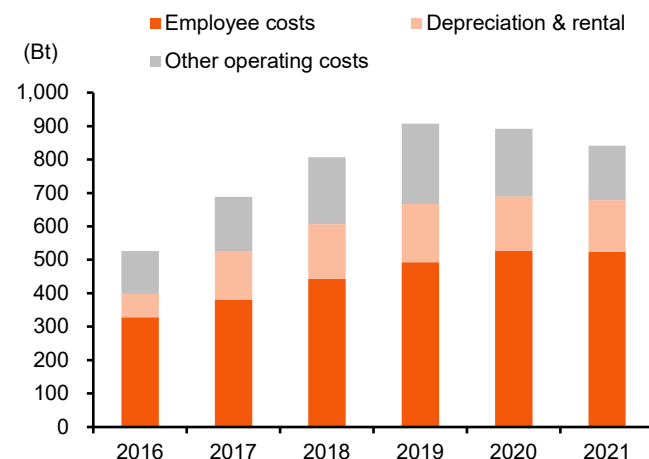


Source: Company data

...and its operating leverage benefits

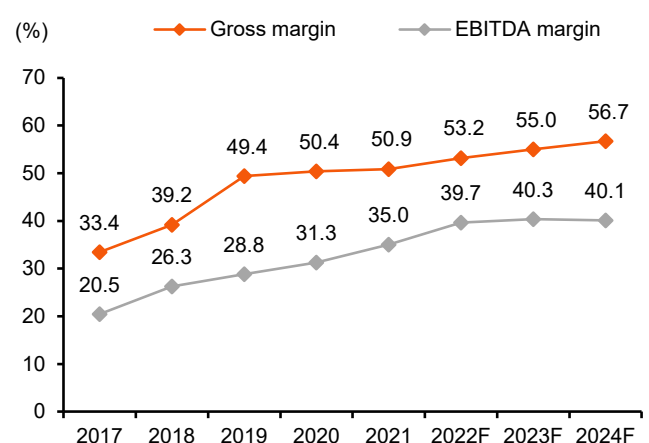
Thirdly, operating leverage benefits: Some 55-60% of SISB's operating and SG&A expenses are from employee costs while the rest is from depreciation, rental and other expenses. These expenses increase following growth in the number of students and school expansions but to a lesser degree than tuition fees and service income. These expenses per student increased by around 6% a year on average between 2015-19.

Ex 11: SISB's Costs Per Student



Source: Company data

Ex 12: SISB's Gross Margin & Operating Margin



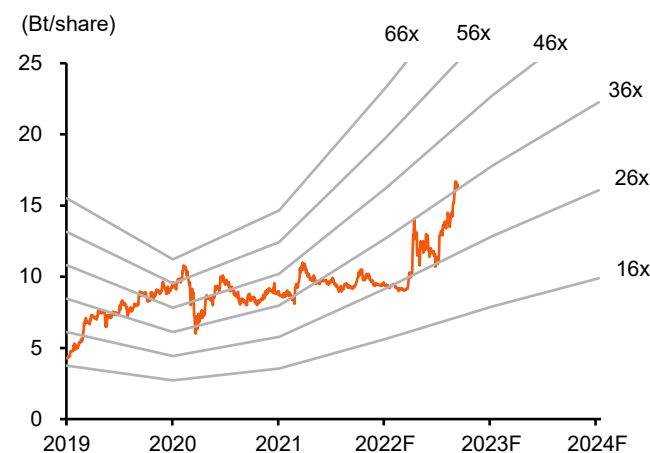
Sources: Company data, Thanachart estimates

Deserves a premium valuation, in our view

Given its strong earnings growth, we still see its valuation as attractive

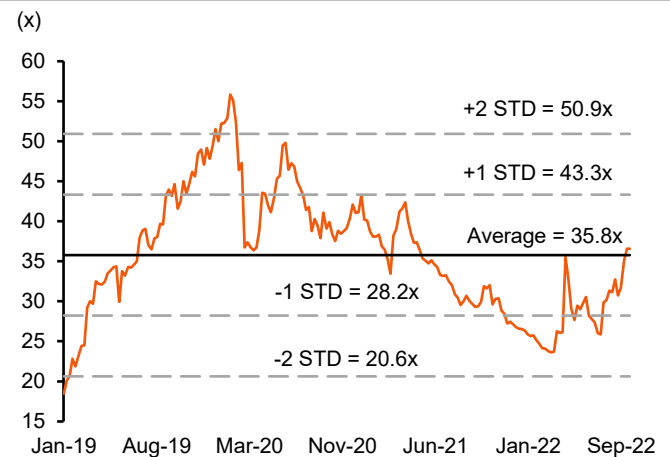
Given its solid fundamentals, we believe SISB deserves a premium valuation. Besides a 41% three-year earnings CAGR in 2022-24F, we estimate it to generate EBITDA of Bt498/647/774m in 2022-24F (vs. Bt370m in 2021 and Bt328m in 2020) with an EBITDA margin of 40% (vs. 35% in 2021 and 31% in 2020). We also expect its ROE at 16/20/22% in 2022-24F (vs. 11% in 2021 and 10% in 2020). Despite assuming Bt950m in capex for the new Nonthaburi and Rayong campuses, SISB's financial status still looks solid with a net-cash position. We therefore see its valuations at 32/26x PE multiples in 2023-24F as acceptable, compared to its four-year average of 36x.

Ex 13: SISB's PE Band



Sources: Bloomberg, Thanachart estimates

Ex 14: SISB's PE Standard Deviation



Sources: Bloomberg, Thanachart estimates

Ex 15: 12-month DCF-based TP Calculation Using A Base Year Of 2023F

(Bt m)	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	Terminal Value
EBITDA	647	774	925	1,082	1,257	1,434	1,612	1,776	1,951	2,137	2,324	—
Free cash flow	143	619	763	919	1,092	1,265	1,192	1,606	1,778	1,961	2,146	29,190
PV of free cash flow	143	526	589	651	709	754	652	806	785	791	791	10,751
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	0.8											
WACC (%)	8.5											
Terminal growth (%)	2.0											
Enterprise value - add investments	17,948											
Net debt (2022F)	(540)											
Minority interest	0											
Equity value	18,488											
# of shares (m)	940											
Target price/share (Bt)	20											

Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 16: Valuation Comparison With Regional Peers

Name	BBG code	Country	—EPS growth—		— PE —		— P/BV —		EV/EBITDA		— Div yield —	
			22F (%)	23F (%)	22F (x)	23F (x)	22F (x)	23F (x)	22F (x)	23F (x)	22F (%)	23F (%)
NIIT Ltd	NIIT IN	India	(19.8)	22.0	23.2	19.1	3.2	2.5	10.2	9.1	1.8	3.8
China New Higher Edu.	2001 HK	Hong Kong	22.0	16.1	4.3	3.7	0.8	0.7	4.5	4.0	11.7	12.8
Minsheng Education	1569 HK	Hong Kong	18.2	8.8	2.6	2.4	0.4	0.3	1.5	1.4	12.3	13.0
Edvantage Group	382 HK	Hong Kong	27.4	17.0	3.8	3.2	0.7	0.6	4.3	3.7	7.5	8.9
SISB Pcl	SISB TB	Thailand	59.2	39.9	45.3	32.4	6.8	6.0	29.1	22.3	1.0	1.4
Average			21.4	20.8	15.8	12.2	2.4	2.0	9.9	8.1	6.9	8.0

Sources: Company data, Thanachart estimates

Note: * Thanachart estimates, using normalized EPS

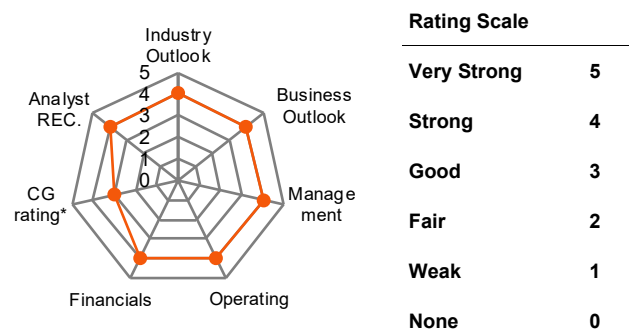
Based on 27-Sep-2022 closing prices

COMPANY DESCRIPTION

SISB Public Company Limited (SISB) provides educational services in Thailand. The school offers various subjects such as languages, sciences, social studies, and maths, as well as music, dance, art, and sports. With four campuses in Bangkok, Samutprakarn and Chiangmai and more than 2,600 students, it is one of the biggest school groups in Thailand.

Source: Thanachart

COMPANY RATING



Source: Thanachart; * CG Rating No rating.

THANACHART'S SWOT ANALYSIS

S — Strength

- Solid brand perception and awareness.
- Economies of scale allow it to offer mid-range tuition fees and broaden targeted households.
- Robust financial status.

O — Opportunity

- Growing demand for international schools in Thailand.
- Opportunities to expand in AEC markets.
- Business diversification.

W — Weakness

- Three out of four campuses are located on leased land, so there is a risk pertaining to lease contract extensions.
- Teachers are the key to its success, so a shortage of teachers presents a risk.

T — Threat

- Intense competition.
- Ageing society trend.
- Laws and regulations for operating schools.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	16.38	20.00	22%
Net profit 22F (Bt m)	315	332	5%
Net profit 23F (Bt m)	404	465	15%
Consensus REC	BUY: 4	HOLD: 0	SELL: 0

HOW ARE WE DIFFERENT FROM THE STREET?

- Our earnings estimates for 2022-23F are 5-15% higher than the Bloomberg consensus numbers, which we attribute to us assuming more aggressive student growth over the period.
- Our DCF-based TP is also 22% higher than the Street's, likely due to us having a higher earnings growth projection over the long term.

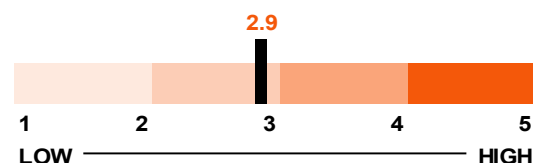
Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- A weak economic situation in Thailand is the key downside risk to our student and tuition fee growth assumptions.
- A continuation of the COVID-19 crisis would also represent a secondary downside risk to our student and tuition-fee-growth assumptions.
- If the company can't increase its tuition fees to offset rising teacher costs, this would negatively impact our gross-margin assumptions and therefore our net-profit forecasts.
- To comply with the government's strict regulations, the company may incur extra costs, which would negatively impact our gross-margin assumptions and our net-profit forecasts. This is a secondary downside risk to our call.

Source: Thanachart

SISB runs four school campuses, of which three are in Bangkok and one (50% owned) is in Chiang Mai province. It is currently the second-largest international school operator in Thailand with around 3,000 students. Our ESG score for SISB is moderate at 2.9 reflecting the nature of its business that doesn't produce much greenhouse gas but still lacks clear targets and plans for ESG issues.

Thanachart ESG Rating


	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	Arabesque S-Ray (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
SISB	-	-	-	-	-	-	-	-	3.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "term of use" in the following back page.

Factors
Our Comments
ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- Running a school business doesn't produce much greenhouse gas (GHG). In 2021, SISB had direct GHG emissions of 226 tonnes of CO2 equivalent and indirect emissions of 1,573 tonnes, as measured by EY Office Limited.
- SISB has an environmentally friendly approach to reduce pollution and preserve energy in improving its buildings and creating learning environment by designing its buildings to allow good ventilation and using LED light bulbs to save on energy costs.
- SISB arranges green spaces around its buildings and encourages students to be aware of the environment and take part in preserving and improving it.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- SISB says it has policies to treat all employees with fairness and ensure a safe working environment.
- SISB provides training to develop its employees' professional skills. In addition to life insurance, it also offers health and accident insurance for employees.
- SISB has continuously supported the development of communities and society by organizing social and public benefit projects such as teaching English and donating computers, IT equipment, COVID-19 testing kits, etc.

**GOVERNANCE &
SUSTAINABILITY**

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- We believe SISB has a good board of directors (BOD) structure. It is an eight-member BOD which we consider an appropriate size for the size and scope of its business. The chairman is an independent director. Of the eight members, four are independent directors. There are three female board members.
- There are two directors who hold over 25% stakes in SISB. However, SISB has appointed an Audit Committee to audit, review and scrutinize transactions to ensure transparency and no conflicts of interests.
- SISB has engaged P&L Internal Audit Company Limited, an outsourced service provider, to audit its internal control system while EY Company Limited, the auditor of the group, did not have any observations related to the company's internal control system.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	1,048	1,055	1,256	1,604	1,928
Cost of sales	601	558	636	795	947
Gross profit	447	496	620	809	981
% gross margin	42.7%	47.1%	49.4%	50.4%	50.9%
Selling & administration expenses	276	279	283	345	405
Operating profit	172	218	338	464	576
% operating margin	16.4%	20.7%	26.9%	28.9%	29.9%
Depreciation & amortization	156	152	161	183	197
EBITDA	328	370	498	647	774
% EBITDA margin	31.3%	35.0%	39.7%	40.3%	40.1%
Non-operating income	28	20	20	25	30
Non-operating expenses	(0)	(5)	0	0	0
Interest expense	(26)	(26)	(24)	(21)	(21)
Pre-tax profit	174	208	334	467	585
Income tax	(1)	0	3	5	6
After-tax profit	175	208	330	463	579
% net margin	16.7%	19.7%	26.3%	28.8%	30.0%
Shares in affiliates' Earnings	1	1	2	2	2
Minority interests	0	0	0	0	0
Extraordinary items	(15)	0	0	0	0
NET PROFIT	160	209	332	465	581
Normalized profit	175	209	332	465	581
EPS (Bt)	0.2	0.2	0.4	0.5	0.6
Normalized EPS (Bt)	0.2	0.2	0.4	0.5	0.6

After the easing of the COVID-19 restrictions, we expect SISB's earnings to grow strongly from 2022F

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	1,098	863	701	756	1,215
Cash & cash equivalent	1,008	764	610	640	1,075
Account receivables	77	78	69	88	106
Inventories	7	8	8	10	12
Others	6	12	15	19	23
Investments & loans	54	55	55	55	55
Net fixed assets	1,556	1,999	2,289	2,605	2,558
Other assets	458	417	423	428	433
Total assets	3,166	3,334	3,468	3,845	4,261
LIABILITIES:					
Current liabilities:	626	635	626	657	676
Account payables	77	84	87	109	130
Bank overdraft & ST loans	0	0	0	0	0
Current LT debt	17	18	17	15	13
Others current liabilities	532	533	522	532	533
Total LT debt	60	58	53	49	40
Others LT liabilities	604	626	564	629	689
Total liabilities	1,289	1,319	1,243	1,335	1,405
Minority interest	0	0	0	0	0
Preferreds shares	0	0	0	0	0
Paid-up capital	470	470	470	470	470
Share premium	1,128	1,128	1,128	1,128	1,128
Warrants	0	0	0	0	0
Surplus	0	0	0	0	0
Retained earnings	279	416	627	912	1,258
Shareholders' equity	1,877	2,014	2,225	2,510	2,856
Liabilities & equity	3,166	3,334	3,468	3,845	4,261

SISB's balance sheet looks solid and it is in a net-cash position

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	174	208	334	467	585
Tax paid	(0)	(0)	(3)	(5)	(6)
Depreciation & amortization	156	152	161	183	197
Chg In working capital	16	5	12	1	1
Chg In other CA & CL / minorities	53	21	(11)	9	(1)
Cash flow from operations	399	386	492	655	777
Capex	(293)	(595)	(450)	(500)	(150)
Right of use	(348)	(6)	(5)	(5)	(5)
ST loans & investments	0	0	0	0	0
LT loans & investments	(1)	(1)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	255	43	(63)	64	60
Cash flow from investments	(386)	(558)	(518)	(441)	(95)
Debt financing	1	(0)	(6)	(6)	(12)
Capital increase	0	0	0	0	0
Dividends paid	(94)	(71)	(122)	(179)	(235)
Warrants & other surplus	(8)	0	0	0	0
Cash flow from financing	(101)	(72)	(128)	(185)	(247)
Free cash flow	106	(209)	42	155	627

We factor in Bt950m of capex in 2022-23F...

...mainly for investments in the new Thonburi and Nonthaburi campuses

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	85.9	72.0	45.3	32.4	25.9
Normalized PE - at target price (x)	107.3	90.1	56.6	40.5	32.3
PE (x)	94.0	72.0	45.3	32.4	25.9
PE - at target price (x)	117.5	90.1	56.6	40.5	32.3
EV/EBITDA (x)	43.0	38.8	29.1	22.3	18.1
EV/EBITDA - at target price (x)	54.5	49.0	36.6	28.2	23.0
P/BV (x)	8.0	7.5	6.8	6.0	5.3
P/BV - at target price (x)	10.0	9.3	8.4	7.5	6.6
P/CFO (x)	37.7	39.0	30.6	22.9	19.4
Price/sales (x)	14.3	14.3	12.0	9.4	7.8
Dividend yield (%)	0.5	0.6	1.0	1.4	1.7
FCF Yield (%)	0.7	(1.4)	0.3	1.0	4.2
(Bt)					
Normalized EPS	0.2	0.2	0.4	0.5	0.6
EPS	0.2	0.2	0.4	0.5	0.6
DPS	0.1	0.1	0.2	0.2	0.3
BV/share	2.0	2.1	2.4	2.7	3.0
CFO/share	0.4	0.4	0.5	0.7	0.8
FCF/share	0.1	(0.2)	0.0	0.2	0.7

Sources: Company data, Thanachart estimates

Given its solid fundamentals, SISB deserves a premium valuation in our view

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(4.3)	0.6	19.1	27.7	20.2
Net profit (%)	(27.6)	30.5	59.2	39.9	25.1
EPS (%)	(27.6)	30.5	59.2	39.9	25.1
Normalized profit (%)	(20.7)	19.2	59.2	39.9	25.1
Normalized EPS (%)	(20.7)	19.2	59.2	39.9	25.1
Dividend payout ratio (%)	44.7	45.0	45.0	45.0	45.0
Operating performance					
Gross margin (%)	42.7	47.1	49.4	50.4	50.9
Operating margin (%)	16.4	20.7	26.9	28.9	29.9
EBITDA margin (%)	31.3	35.0	39.7	40.3	40.1
Net margin (%)	16.7	19.7	26.3	28.8	30.0
D/E (incl. minor) (x)	0.0	0.0	0.0	0.0	0.0
Net D/E (incl. minor) (x)	(0.5)	(0.3)	(0.2)	(0.2)	(0.4)
Interest coverage - EBIT (x)	6.6	8.5	14.0	21.7	27.2
Interest coverage - EBITDA (x)	12.6	14.5	20.7	30.2	36.5
ROA - using norm profit (%)	6.0	6.4	9.8	12.7	14.3
ROE - using norm profit (%)	9.5	10.7	15.7	19.6	21.7
DuPont					
ROE - using after tax profit (%)	9.4	10.7	15.6	19.5	21.6
- asset turnover (x)	0.4	0.3	0.4	0.4	0.5
- operating margin (%)	19.1	22.2	28.5	30.5	31.4
- leverage (x)	1.6	1.7	1.6	1.5	1.5
- interest burden (%)	87.0	89.1	93.3	95.6	96.5
- tax burden (%)	100.4	99.9	99.0	99.0	99.0
WACC (%)	8.5	8.5	8.5	8.5	8.5
ROIC (%)	21.6	23.0	25.2	27.2	29.5
NOPAT (Bt m)	172	218	334	459	571
invested capital (Bt m)	946	1,327	1,685	1,935	1,834

Sources: Company data, Thanachart estimates

ESG Information - Third Party Terms

www.Settrade.com

SETTRADE: You acknowledge that the use of data, information or service displayed and/or contained in this website may require third party's data, content or software which is subject to the terms of third party provider. By accessing and/or using of such certain data, you acknowledge and agree to comply with and be bound by the applicable third party terms specified below.

ESG Scores by Third Party data from www.SETTRADE.com

1. MSCI (CCC- AAA)
2. Arabesque S-Ray (0-100)
3. Refinitiv (0-100)
4. S&P Global (0-100)
5. Moody's ESG Solutions (0-100)

SET THSI Index (SETTHSI)

Nowadays, long-term investment tends to be more focused on sustainable companies. The financial statement performance and the consideration in environmental, social and governance (ESG) perspective are keys aspects for analysis.

SET has created a Thailand Sustainability Investment (THSI) list since 2015 for using as an alternative investment in the high performance ESG stocks for investors while, supporting the sustainable Thai companies. SET defines the sustainable companies as the companies that embrace risk management, supply chain management and innovations together with responsibility for environmental, social and governance aspects

As a result, SET has created the SETTHSI for the purpose of indicating the price of these sustainable companies that pass the market capital size and liquidity criteria.

Arabesque S-Ray®

The S-Ray data here is published with a 3 month delay. For the latest data, please contact sray@arabesque.com

Arabesque S-Ray® is a service (the "Service") provided by Arabesque S-Ray GmbH ("Arabesque S-Ray") and its branch and subsidiary companies. Arabesque S-Ray is a limited liability company (Gesellschaft mit beschränkter Haftung) incorporated in Frankfurt am Main and organized under the laws of Germany with registered number HRB 113087 in the commercial register of the local court with its seat and business address at Zeppelinallee 15, 60325 Frankfurt am Main, Germany. The Service is unconnected to any of the asset management activities conducted within the wider group of Arabesque companies, and is not investment advice or a solicitation or an offer to buy any security or instrument or to participate in investment services. RELIANCE - Arabesque S-Ray makes no representation or warranty, express or implied, as to the accuracy or completeness of the information contained herein, and accepts no liability for any loss, of whatever kind, howsoever arising, in relation thereto, and nothing contained herein should be relied upon. ENQUIRIES - Any enquiries in respect of this document should be addressed to Arabesque S-Ray.

Arabesque S-Ray® - The ESG Score, ranging from 0 to 100, identifies sustainable companies that are better positioned to outperform over the long run, based on the principles of financial materiality. That is, when computing the ESG Score of a company, the algorithm will only use information that significantly helps explain future risk-adjusted performance. Materiality is applied by overweighting features with higher materiality and rebalancing these weights on a rolling quarterly basis to stay up-to-date

MSCI ESG Research LLC

"Certain information @2021 MSCI ESG Research LLC. Reproduced by permission"

"Although [User ENTITY NAME's] information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Further, non of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages."

Score range	Description
CCC - B	LAGGARD: A company lagging its industry based on its high exposure and failure to manage significant ESG risks
BB - BBB - A	AVERAGE : A company with a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers
AA - AAA	LEADER: A company leading its industry in managing the most significant ESG risks and opportunities

The Dow Jones Sustainability Indices (DJSI)

The Dow Jones Sustainability Indices (DJSI) are a family of best-in-class benchmarks for investors who have recognized that sustainable business practices are critical to generating long-term shareholder value and who wish to reflect their sustainability convictions in their investment portfolios. The family was launched in 1999 as the first global sustainability benchmark and tracks the stock performance of the world's leading companies in terms of economic, environmental and social criteria. Created jointly by S&P Dow Jones Indices and SAM, the DJSI combine the experience of an established index provider with the expertise of a specialist in Sustainable Investing to select the most sustainable companies from across 61 industries. The indices serve as benchmarks for investors who integrate sustainability considerations into their portfolios, and provide an effective engagement platform for investors who wish to encourage companies to improve their corporate sustainability practices.

S&P Global Market Intelligence

Copyright © 2021, S&P Global Market Intelligence (and its affiliates as applicable). Reproduction of any information, opinions, views, data or material, including ratings ("Content") in any form is prohibited except with the prior written permission of the relevant party. Such party, its affiliates and suppliers ("Content Providers") do not guarantee the accuracy, adequacy, completeness, timeliness or availability of any Content and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such Content. In no event shall Content Providers be liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with any use of the Content. A reference to a particular investment or security, a rating or any observation concerning an investment that is part of the Content is not a recommendation to buy, sell or hold such investment or security, does not address the suitability of an investment or security and should not be relied on as investment advice. Credit ratings are statements of opinions and are not statements of fact.

ESG risk combines the concepts of management and exposure to arrive at an absolute assessment of ESG risk. We identify five categories of ESG risk severity that could impact a company's enterprise value

Moody's ESG Solutions

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

Additional terms for Hong Kong only: Any Second Party Opinion or other opinion that falls within the definition of "advising on securities" under the Hong Kong Securities and Futures Ordinance ("SFO") is issued by Vigeo Eiris Hong Kong Limited, a company licensed by the Hong Kong Securities and Futures Commission to carry out the regulated activity of advising on securities in Hong Kong. This Second Party Opinion or other opinion that falls within the definition of "advising on securities" under the SFO is intended for distribution only to "professional investors" as defined in the SFO and the Hong Kong Securities and Futures (Professional Investors) Rules. This Second Party Opinion or other opinion must not be distributed to or used by persons who are not professional investors.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

Refinitiv ESG

These Terms of Use govern your access or use of the ESG information and materials on the Refinitiv website and any AI powered voice assistance software ("Refinitiv ESG Information"). 2020© Refinitiv. All rights reserved. Refinitiv ESG Information is proprietary to Refinitiv Limited and/or its affiliates ("Refinitiv").

The Refinitiv ESG Information is for general informational and non-commercial purposes only. Reproduction, redistribution or any other form of copying or transmission of the Refinitiv ESG Information is prohibited without Refinitiv's prior written consent.

All warranties, conditions and other terms implied by statute or common law including, without limitation, warranties or other terms as to suitability, merchantability, satisfactory quality and fitness for a particular purpose, are excluded to the maximum extent permitted by applicable laws. The Refinitiv ESG Information is provided "as is" and Refinitiv makes no express or implied warranties, representations or guarantees concerning the accuracy, completeness or currency of the information in this service or the underlying Third Party Sources (as defined below). You assume sole responsibility and entire risk as to the suitability and results obtained from your use of the Refinitiv ESG Information.

The Refinitiv ESG Information does not amount to financial, legal or other professional advice, nor does it constitute: (a) an offer to purchase shares in the funds referred to; or (b) a recommendation relating to the sale and purchase of instruments; or (c) a recommendation to take any particular legal, compliance and/or risk management decision. Investors should remember that past performance is not a guarantee of future results.

The Refinitiv ESG Information will not be used to construct or calculate and index or a benchmark, used to create any derivative works or used for commercial purposes. Refinitiv's disclaimer in respect of Benchmark Regulations applies to the Refinitiv ESG Information.

No responsibility or liability is accepted by Refinitiv its affiliates, officers, employees or agents (whether for negligence or otherwise) in respect of the Refinitiv ESG Information, or for any inaccuracies, omissions, mistakes, delays or errors in the computation and compilation of the Refinitiv ESG Information (and Refinitiv shall not be obliged to advise any person of any error therein). For the avoidance of doubt, in no event will Refinitiv have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of the Refinitiv ESG Information.

You agree to indemnify, defend and hold harmless Refinitiv from and against any claims, losses, damages, liabilities, costs and expenses, including, without limitation, reasonable legal and experts' fees and costs, as incurred, arising in any manner out of your use of, or inability to use, any Information contained on the Refinitiv web site or obtained via any AI powered voice assistance software.

You represent to us that you are lawfully able to enter into these Terms of Use. If you are accepting these Terms of Use for and on behalf of an entity such as the company you work for, you represent to us that you have legal authority to bind that entity.

By accepting these Terms of Use you are also expressly agreeing to the following Refinitiv's website Terms of Use.

Refinitiv ESG scores are derived from third party publicly available sources ("Third Party Sources") and are formulated on the basis of Refinitiv own transparent and objectively applied methodology. Refinitiv's ESG Information methodology can be accessed [here](#).

Score range	Description	
0 to 25	First Quartile	Scores within this range indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly.
> 25 to 50	Second Quartile	Scores within this range indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly.
> 50 to 75	Third Quartile	Scores within this range indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly.
> 75 to 100	Fourth Quartile	Score within this range indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly.

CG Report : by Thai Institute of Directors Association (Thai IOD), Established in December 1999, the Thai IOD is a membership organization that strives to promote professionalism in directorship. The Thai IOD offers directors certification and professional development courses, provides a variety of seminars, forums and networking events, and conducts research on board governance issues and practices. Membership comprises board members from companies ranging from large publicly listed companies to small private firms.



General Disclaimers And Disclosures:

This report is prepared and issued by Thanachart Securities Public Company Limited (TNS) as a resource only for clients of TNS, Thanachart Capital Public Company Limited (TCAP) and its group companies. Copyright © Thanachart Securities Public Company Limited. All rights reserved. The report may not be reproduced in whole or in part or delivered to other persons without our written consent.

This report is prepared by analysts who are employed by the research department of TNS. While the information is from sources believed to be reliable, neither the information nor the forecasts shall be taken as a representation or warranty for which TNS or TCAP or its group companies or any of their employees incur any responsibility. This report is provided to you for informational purposes only and it is not, and is not to be construed as, an offer or an invitation to make an offer to sell or buy any securities. Neither TNS, TCAP nor its group companies accept any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

The information and opinions contained herein have been compiled or arrived at from sources believed reliable. However, TNS, TCAP and its group companies make no representation or warranty, express or implied, as to their accuracy or completeness. Expressions of opinion herein are subject to change without notice. The use of any information, forecasts and opinions contained in this report shall be at the sole discretion and risk of the user.

TNS, TCAP and its group companies perform and seek to perform business with companies covered in this report. TNS, TCAP, its group companies, their employees and directors may have positions and financial interest in securities mentioned in this report. TNS, TCAP or its group companies may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any entity mentioned in this report. Therefore, investors should be aware of conflict of interest that may affect the objectivity of this report.

Note: Thanachart Securities Public Company Limited act as a Market Maker and Derivative Warrants Issuer. At present, TNS has issued 93 Derivative Warrants which are ADVANC16C2301A, ADVANC16C2210A, ADVANC16C2211A, AMATA16C2212A, AMAT16C2209A, AOT16C2212A, AOT16C2209A, BANPU16C2212A, BANPU16C2210A, BBL16C2212A, BCH16C2211A, BH16C2212B, BH16C2212A, BGRIM16C2301A, BGRIM16C2212A, BGRI16C2209A, BLA16C2212A, BLA16C2209A, BTS16C2301A, CBG16C2301B, CBG16C2301A, CBG16C2210A, CENTEL16C2209A, COM716C2209A, COM716C2211A, COM716C2211B, COM716C2211C, CPALL16C2211A, CPN16C2301A, DTAC16C2212A, DOHOME16C2301A, EA16C2209A, EA16C2211A, ESSO16C2209A, ESSO16C2209B, FORTH16C2211A, GPSC16C2301A, GPSC16C2209A, GULF16C2301A, GULF16C2210A, GUNKUL16C2301A, GUNKUL16C2209A, HANA16C2301A, HANA16C2209A, HANA16C2211A, IVL16C2301A, IVL16C2212A, IVL16C2209A, IVL16C2211A, JMART16C2210A, JMART16C2211A, JMT16C2210A, JMT16C2211A, KBANK16C2301A, KBAN16C2209A, KBANK16C2211A, KCE16C2301A, KCE16C2209A, KCE16C2211A, KTC16C2211A, KTC16C2209A, MINT16C2301A, MINT16C2211A, MTC16C2301A, MTC16C2212A, MTC16C2209A, PSL16C2212A, PTG16C2211A, PTG16C2209A, PTTEP16C2212A, PTTE16C2209A, RBF16C2209A, SAWAD16C2211A, S5016C2209A, S5016P2209A, SAWA16C2209A, SCB16C2211A, SCGP16C2212A, SET5016P2212A, SET5016C2209B, SET5016C2212A, SET5016P2209B, SINGER16C2212A, SPRC16C2212A, SPRC16C2209A, STEC16C2209A, TIDLOR16C2212A, TOP16C2211A, TRUE16C2212A, TTA16C2211A, TU16C2210A, VGI16C2301A, WHA16C2209A (underlying securities are (ADVANC, AMATA, AOT, BANPU, BBL, BCH, BGRIM, BH, BLA, BTS, CBG, CENTEL, COM7, CPALL, CPN, DOHOME, DTAC, EA, ESSO, FORTH, GPSC, GULF, GUNKUL, HANA, IVL, JMART, JMT, KBANK, KCE, KTC, MINT, MTC, PSL, PTG, PTTEP, RBF, SAWAD, SCB, SET50, SCGP, SINGER, SPRC, STEC, TIDLOR, TOP, TRUE, TTA, TU, VGI, WHA). before making investment decisions.

Note: Our major shareholder TCAP (Thanachart Capital Pcl) which holding 50.96% of Thanachart Securities and also TCAP holding 100% of Thanachart SPV1 Co. Ltd. TCAP and Thanachart SPV1 Co. Ltd has stake in THANI for 60% and being the major shareholder of THANI.

Note: Thanachart Capital Public Company Limited (TCAP), TMBThanachart Bank Public Company Limited (TTB), are related companies to Thanachart Securities Public Company Limited (TNS). Thanachart Securities Pcl is a subsidiary of Thanachart Capital Pcl (TCAP) which holds 23% of the shareholding in TMBThanachart Bank Pcl.

Thanachart Capital Public Company Limited (TCAP), Ratchthani Leasing Public Company Limited (THANI), MBK PUBLIC COMPANY LIMITED (MBK) and PATUM RICE MILL AND GRANARY PUBLIC COMPANY LIMITED (PRG) are related companies to Thanachart Securities Public Company Limited (TNS) . Since TNS covers those securities in research report, consequently TNS incurs conflicts of interest.

Disclosure of Interest of Thanachart Securities

Investment Banking Relationship

Within the preceding 12 months, Thanachart Securities has lead-managed public offerings and/or secondary offerings (excluding straight bonds) of the securities of the following companies: The One Enterprise Pcl. (ONEE TB)

Recommendation Structure:

Recommendations are based on absolute upside or downside, which is the difference between the target price and the current market price. If the upside is 10% or more, the recommendation is BUY. If the downside is 10% or more, the recommendation is SELL. For stocks where the upside or downside is less than 10%, the recommendation is HOLD. Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on the market price and the formal recommendation.

For sectors, an "Overweight" sector weighting is used when we have BUYs on majority of the stocks under our coverage by market cap. "Underweight" is used when we have SELLs on majority of the stocks we cover by market cap. "Neutral" is used when there are relatively equal weightings of BUYs and SELLs.

Thanachart Securities Pcl.

Research Team

18 Floor, MBK Tower

444 Phayathai Road, Pathumwan Road, Bangkok 10330

Tel: 662 - 779-9119

Email: thanachart.res@thanachartsec.co.th

Pimpaka Nichgaroon, CFA

Head of Research

Tel: 662-779-9199

pimpaka.nic@thanachartsec.co.th

Pattarawan Wangmingmat

Senior Technical Analyst

Tel: 662-779-9105

pattarawan.wan@thanachartsec.co.th

Phannarai Tiypittayarut

Property, Retail

Tel: 662-779-9109

phannarai.von@thanachartsec.co.th

Sarachada Sornsong

Bank, Finance

Tel: 662-779-9106

sarachada.sor@thanachartsec.co.th

Witchanan Tambamroong

Technical Analyst

Tel: 662-779-9123

witchanan.tam@thanachartsec.co.th

Adisak Phupiphathirungul, CFA

Retail Market Strategy

Tel: 662-779-9120

adisak.phu@thanachartsec.co.th

Nuttapop Prasitsuksant

Telecom, Utilities

Tel: 662-483-8296

nuttapop.pra@thanachartsec.co.th

Rata Limsuthiwanpoom

Auto, Industrial Estate, Media, Prop. Fund

Tel: 662-483-8297

rata.lim@thanachartsec.co.th

Siriporn Arunothai

Small Cap, Healthcare, Hotel

Tel: 662-779-9113

siriporn.aru@thanachartsec.co.th

Sittichet Rungrassameephat

Analyst, Quantitative

Tel: 662-483-8303

sittichet.run@thanachartsec.co.th

Chak Reungsinpinya

Strategy, Insurance, Paper

Tel: 662-779-9104

chak.reu@thanachartsec.co.th

Pattadol Bunnak

Electronics, Food & Beverage, Shipping

Tel: 662-483-8298

pattadol.bun@thanachartsec.co.th

Saksid Phadthananarak

Construction, Transportation

Tel: 662-779-9112

saksid.pha@thanachartsec.co.th

Yupapan Polpornprasert

Energy, Petrochemical

Tel: 662-779-9110

yupapan.pol@thanachartsec.co.th

Thaloengsak Kucharoenpaisan

Analyst, Retail Market

Tel: 662-483-8304

thaloengsak.kuc@thanachartsec.co.th