

BUY (Unchanged)

Change in Numbers

TP: Bt 50.00

(From: Bt 42.00)

26 JANUARY 2023**Upside : 19.0%**

Siam Makro Pcl (MAKRO TB)

Big kid on the block

We expect MAKRO to be back on investors' radar as a big-cap growth stock with a 38% three-year EPS CAGR after two years of EPS declines. Concerns about a low free float have eased as the level has increased to 15%. Reaffirm BUY with a new Bt50 TP.

**PHANNARAI TIYAPITTAYARUT**

662-779-9109

phannarai.von@thanachartsec.co.th

BUY with a higher Bt50 TP

After the first full-year of consolidating Lotus's retail grocery chain with all of the backbone investments completed, we incorporate MAKRO's long-term growth strategy to become a leading B2B/B2C grocery retailer in Asia, boosting our earnings by 11% p.a. from 2025F and DCF-based 12-month TP, using a 2023F base year, by 19% to Bt50 (from Bt42). Our earnings cuts of 3-10% in 2022-24F mainly reflect higher-than-expected financial costs along with rising electricity costs. Ranking No.9 on the SET y market capitalization with its free float having risen to 15% and a strong growth outlook over a three-year horizon with an estimated 38% EPS CAGR in 2023-25F, we reaffirm BUY.

Backbone investments completed

After its store rebranding completion from Tesco to Lotus's, major IT capex, and the launch of its omnichannel platform, i.e., Lotus's smart app and Makro PRO, MAKRO finished its backbone investments which should start to relieve cost concerns. As for the large amount of debt from Lotus's acquisition, we expect interest costs to have peaked last year and to start to fall more clearly from mid-2023F onward along with its debt-restructuring plan. MAKRO plans to convert its US dollar debt (39% of its Bt117bn interest-bearing debt in 2022F), which is exposed to a rising LIBOR rate by 1H23F to fixed-rate domestic debt. As such, we expect interest expense to fall from 2H23F.

A 38% three-year EPS CAGR in 2023-25F

We expect strong growth to start this year after two years of EPS declines. Our 38% three-year EPS CAGR is based on Lotus's turning around from a Bt655m profit in 2022F to Bt2.8/6.2/9.4bn in 2023-25F from growing sales and rental income from more branch openings (new models) and hypermarket transformations to smart community centers (via a store refresh program, with extensions targeting 100 existing malls and 80-100k sqm of new leasable area in five years) and deleveraging. We also project a 15% three-year profit CAGR for its resilient wholesale business.

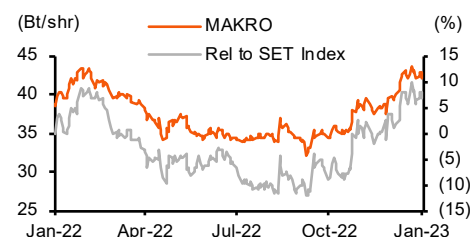
Free float increases to 15%

The divestment of a 1.51% stake by one of its major shareholders, CP Holding (CPH), in November last year pushed MAKRO's free float up to 15.04%. With a 15% free float, MAKRO is eligible for inclusion in the MSCI Index. As the current share price is close to the Bt43.5 PO price in 4Q21, we see a high possibility of further share sales by its major shareholders, CP All Pcl (CPALL TB, BUY, Bt69.25) (59.9%), Charoen Pokphand Holding Co. Ltd. (CPH, not listed) (16.2%), and Charoen Pokphand Foods Pcl (CPF TB, BUY Bt23.60) (8.9%), which will likely drive the free float up to 20% to meet the SET50/100 requirement.

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	265,545	462,926	518,746	576,289
Net profit	13,687	7,669	10,706	15,420
Consensus NP	—	7,747	11,672	14,136
Diff frm cons (%)	—	(1.0)	(8.3)	9.1
Norm profit	6,972	7,669	10,706	15,420
Prev. Norm profit	—	8,101	11,895	15,843
Chg frm prev (%)	—	(5.3)	(10.0)	(2.7)
Norm EPS (Bt)	1.1	0.7	1.0	1.5
Norm EPS grw (%)	(8.1)	(35.8)	39.6	44.0
Norm PE (x)	37.2	57.9	41.5	28.8
EV/EBITDA (x)	21.3	18.2	16.0	13.4
P/BV (x)	1.5	1.5	1.5	1.5
Div yield (%)	1.7	1.3	1.8	2.6
ROE (%)	4.5	2.6	3.6	5.1
Net D/E (%)	23.5	30.9	33.0	31.5

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 26-Jan-23 (Bt)	42.00
Market Cap (US\$ m)	13,564.1
Listed Shares (m shares)	10,580.3
Free Float (%)	15.0
Avg Daily Turnover (US\$ m)	13.9
12M Price H/L (Bt)	43.50/32.00
Sector	Commerce
Major Shareholder	CP All 59.92%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P12



Raising our TP

We lift our TP to Bt50/share

After the first full year of consolidating Lotus's retail grocery chain with all of the backbone investments now completed, we incorporate Siam Makro Pci's (MAKRO) long-term growth strategy to become a leading B2B/B2C grocery retailer in Asia, boosting our earnings estimates by 11% p.a. from 2025F and raising our DCF-based 12-month TP, using a 2023F base year, by 19% to Bt50/share (from Bt42).

Our key upgrades are more aggressive branch opening assumptions starting this year for both its wholesale and retail businesses, including its overseas stores, and higher long-term same-store sales (SSS) growth and gross margin assumptions from new store models, product mix adjustments toward fresh food, increasing its private-label product mix, and boosting its omnichannel sales. Besides new leasable space from new malls, we factor in Lotus's mall extension program that would increase space by 80,000-100,000 sqm at its 100 existing malls in five years. Our earnings cuts of 3-10% in 2022-24F mainly reflect higher-than-expected financial costs since 2H22F (a sharp rise in the LIBOR rate, debenture issuance fees, one-time amortization from debt repayment) and rising electricity costs. Ranking No.9 on the SET by market capitalization with its free float increasing to 15% along with a strong growth outlook over a three-year horizon with an estimated 38% EPS CAGR in 2023-25F, we reaffirm our BUY call on shares of MAKRO.

Ex 1: Our Key Assumptions

	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F
Lotus's profit (Bt m)												
New	655	2,754	6,210	9,362	12,686	15,850	18,634	21,393	24,349	27,555	30,999	34,700
Old	1,278	4,075	6,954	9,549	12,195	14,295	16,559	18,710	21,020	23,498	26,158	29,011
Change (%)	(49)	(32)	(11)	(2)	4	11	13	14	16	17	19	20
Wholesale's profit (Bt m)												
New	7,014	7,952	9,210	10,742	12,796	14,404	15,859	17,531	19,406	21,411	23,562	25,702
Old	6,824	7,820	8,889	10,194	11,893	13,405	14,776	16,072	17,457	18,910	20,422	20,423
Change (%)	3	2	4	5	8	7	7	9	11	13	15	26
Wholesale business												
SSS growth (%)												
New	6.6	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Old	4.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Gross margin on sales (%)												
New	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6
Old	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5
Store expansion -Thailand												
Classic + Eco Plus	2	4	2	2	2	2	2	2	2	2	2	2
Foodservice	7	8	8	8	8	8	8	8	8	8	8	8
Food shop	(1)	0	0	0	0	0	0	0	0	0	0	0
Frozen shop	0	0	0	0	0	0	0	0	0	0	0	0
Fresh@Makro	2	0	10	10	10	10	10	10	10	10	10	10
Store number (YE) -Thailand												
Classic + Eco Plus	96	100	102	104	106	108	110	112	114	116	118	120
Food service	42	50	58	66	74	82	90	98	106	114	122	130
Food shop	4	4	4	4	4	4	4	4	4	4	4	4
Frozen shop	7	7	7	7	7	7	7	7	7	7	7	7
Fresh@Makro	3	3	13	23	33	43	53	63	73	83	93	103

Source: Thanachart estimates

Ex 1: Our Key Assumptions (Con't)

	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F
Overseas store expansion	3	6	10	11	11	5	0	0	0	0	0	0
Cambodia	1	1	2	2	1	0	0	0	0	0	0	0
India	1	2	3	3	3	0	0	0	0	0	0	0
China	1	2	3	4	4	5	0	0	0	0	0	0
Myanmar	0	1	2	2	3	0	0	0	0	0	0	0
Overseas stores (YE)	10	16	26	37	48	53	53	53	53	53	53	53
Cambodia	3	4	6	8	9	9	9	9	9	9	9	9
India	4	6	9	12	15	15	15	15	15	15	15	15
China	2	4	7	11	15	20	20	20	20	20	20	20
Myanmar	1	2	4	6	9	9	9	9	9	9	9	9
Normalized profit (Bt m)												
New	7,669	10,706	15,420	20,104	25,483	30,255	34,493	38,924	43,755	48,965	54,562	60,402
Old	8,101	11,895	15,843	19,743	24,088	27,701	31,335	34,783	38,476	42,409	46,580	51,040
Change (%)	(5)	(10)	(3)	2	6	9	10	12	14	15	17	18

Source: Thanachart estimates

Ex 2: Lotus's Key Assumptions

	FY19 (end-Feb)	FY20 (end-Feb)	2021 (end-Dec)	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Sales of goods (Bt m)												
- Thailand	171,326	162,962	159,272	169,190	187,347	207,070	225,929	244,145	261,970	280,727	300,463	321,230
- Malaysia	33,901	34,498	34,457	35,609	42,131	47,474	52,723	57,922	62,947	68,127	73,469	78,983
Rental revenues (Bt m)												
- Thailand	12,739	9,670	9,348	11,055	12,577	14,023	15,436	16,956	18,608	19,586	20,606	21,669
- Malaysia	2,066	1,518	1,555	1,822	2,041	2,167	2,277	2,366	2,458	2,550	2,645	2,741
IBD (YE) (Bt m)	120,823	120,823	128,261	117,747	117,747	112,747	107,747	102,747	92,747	82,747	72,747	60,747
Lotus's Thailand												
SSSG (%)												
- Hypermarkets	na	na	na	(0)	3	3	3	3	3	3	3	3
- Supermarkets	na	na	na	4	3	3	3	3	3	3	3	3
- Mini-supermarkets	na	na	na	16	10	10	7	5	3	3	3	3
Store expansion	na	106	524	(40)	160	163	163	163	193	193	193	193
- Hypermarkets	na	4	3	1	5	5	5	5	5	5	5	5
- Supermarkets	na	18	3	3	5	8	8	8	8	8	8	8
- Mini-supermarkets	na	84	518	(44)	150	150	150	150	180	180	180	180
Store number (YE)	1,988	2,094	2,618	2,578	2,738	2,901	3,064	3,227	3,420	3,613	3,806	3,999
- Hypermarkets	215	219	222	223	228	233	238	243	248	253	258	263
- Supermarkets	178	196	199	202	207	215	223	231	239	247	255	263
- Mini-supermarkets	1,595	1,679	2,197	2,153	2,303	2,453	2,603	2,753	2,933	3,113	3,293	3,473
Net leasable area (sqm)	na	na	717,224	740,877	777,377	816,877	856,377	895,877	936,377	956,877	977,377	997,877
Occupancy rate (%)	90	90	90	92	95	96	96	96	96	96	96	96
Average rental rate growth (%)	na	na	na	12	5	5	5	5	5	3	3	3

Sources: Company data, Thanachart estimates

Ex 2: Lotus's Key Assumptions (Con't)

	FY19 (end-Feb)	FY20 (end-Feb)	2021 (end-Dec)	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Lotus's Malaysia												
<u>SSSG (%)</u>												
- Hypermarkets	na	na	na	(3)	0	1	1	1	1	1	1	1
- Supermarkets	na	na	na	(3)	0	1	1	1	1	1	1	1
<u>Store expansion</u>												
- Hypermarkets	na	(7)	0	3	14	10	10	10	10	10	10	10
- Supermarkets	na	0	0	0	0	0	0	0	0	0	0	0
- Express stores	na	2	0	3	14	10	10	10	10	10	10	10
- Express stores	na	(9)	0	0	0	0	0	0	0	0	0	0
<u>Store number (YE)</u>												
- Hypermarkets	69	62	62	65	79	89	99	109	119	129	139	149
- Supermarkets	46	46	46	46	46	46	46	46	46	46	46	46
- Express stores	14	16	16	19	33	43	53	63	73	83	93	103
- Express stores	9	0	0	0	0	0	0	0	0	0	0	0
Net leasable area (sqm)	na	na	300,562	309,966	323,966	333,966	343,966	353,966	363,966	373,966	383,966	393,966
Occupancy rate (%)	92	92	92	95	97	97	97	97	97	97	97	97
Average rental rate growth (%)	na	na	na	10	5	3	2	1	1	1	1	1

Sources: Company data, Thanachart estimates

Backbone investments completed***Easing concerns over
business transition capex
and high interest costs***

Cost concerns over business transition capex have eased as last year MAKRO completed its store rebranding from Tesco to Lotus's, its major IT investment, and the launch of its omnichannel platform, i.e., Lotus's smart app (March 2022) and Makro PRO (January 2023). As for the large amount of debt incurred by the acquisition of Lotus's, we believe interest costs peaked last year and should start to fall more clearly from mid-2023F onward along with its debt-restructuring plan. MAKRO used the PO proceeds to repay some Bt17bn-18bn of Lotus's debt in April last year, and later in October Lotus's issued Bt23.4bn of debentures to replace floating-rate domestic and foreign debt. We estimate outstanding interest-bearing debt of B117bn as of 2022F, and MAKRO's plan is to convert the remaining US\$1,250m of debt (39% of the total), which is exposed to the rising LIBOR rate, to fixed-rate domestic debt by 1H23. As such, we expect interest expense to fall from 2H23F. Lotus's has submitted filings for further bond issuances in April this year.

Ex 3: Debt Structure

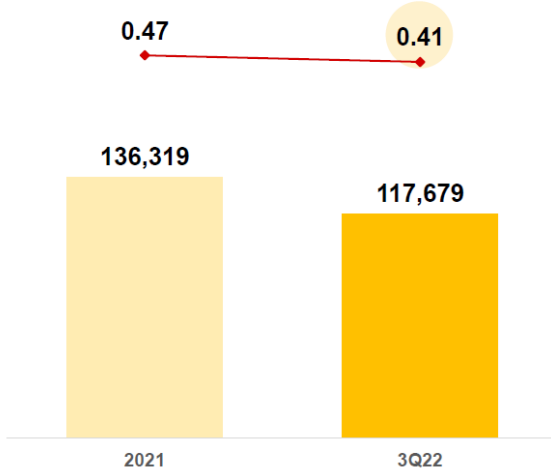
Interest-bearing Debts and IBD/Equity Ratio

Unit: in million Baht / times

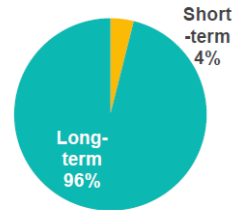


90,219 million
3Q22 Net Debt ¹⁾

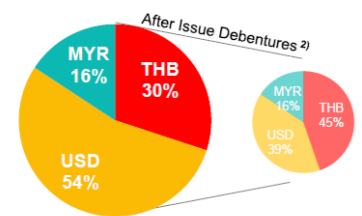
Net IBD/Equity = 0.31



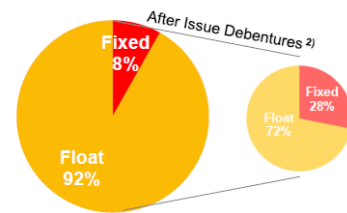
Debt Life Breakdown



Currency Breakdown



Interest Rate Breakdown



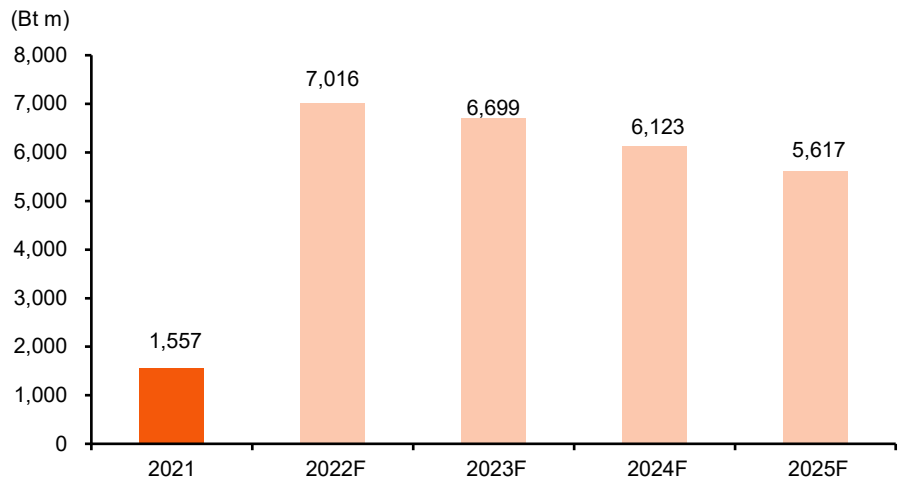
Source: Company data

Note: Loan covenant for IBD to equity not in excess of 2.0x

1) Net debt calculated by IBD excluding cash and cash equivalent & short-term investments

2) On 21 October 2022, MAKRO partially repaid long-term borrowings amounting to US\$449m (equivalent to Bt17,220m) and Bt6,869m, assuming other borrowings were maintained as of 30 September 2022

Ex 4: MAKRO's Falling Interest Expenses



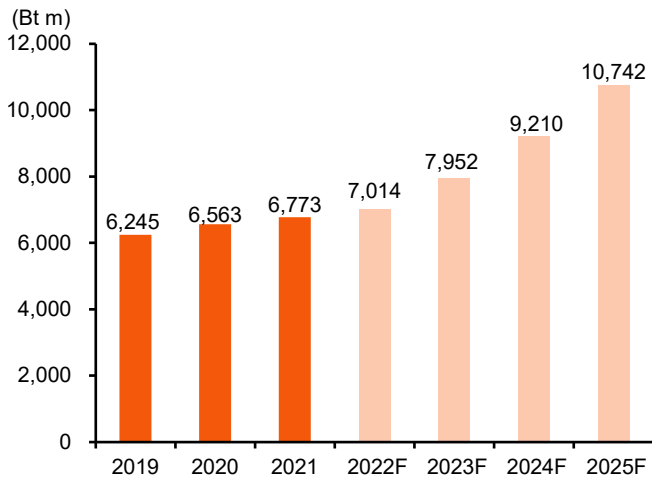
Sources: Company data, Thanachart estimates

A 38% three-year EPS CAGR

Growth driven by Lotus's with profit contribution rising to 47% in 2025F

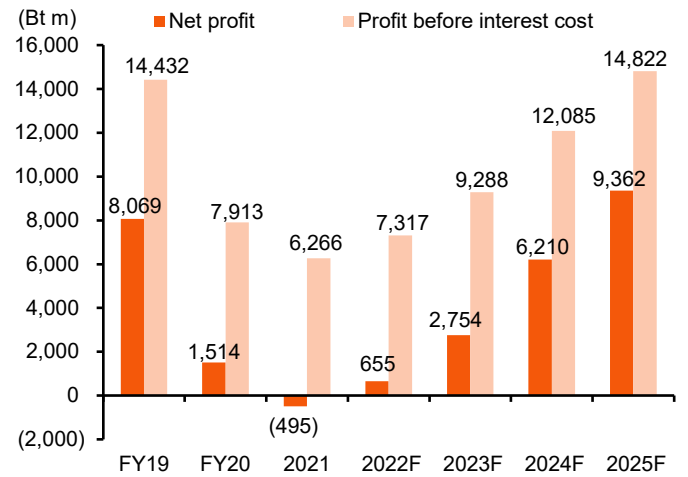
We expect a strong growth to start this year after two years of EPS declines. Our 38% three-year EPS CAGR is boosted by Lotus's turnaround from profit of Bt655m in 2022F to Bt2.8/6.2/9.4bn in 2023-25F, or 143% growth p.a. in these three coming years. We also project a 15% three-year profit CAGR for its resilient wholesale business.

Ex 5: Wholesale's Normalized Profit



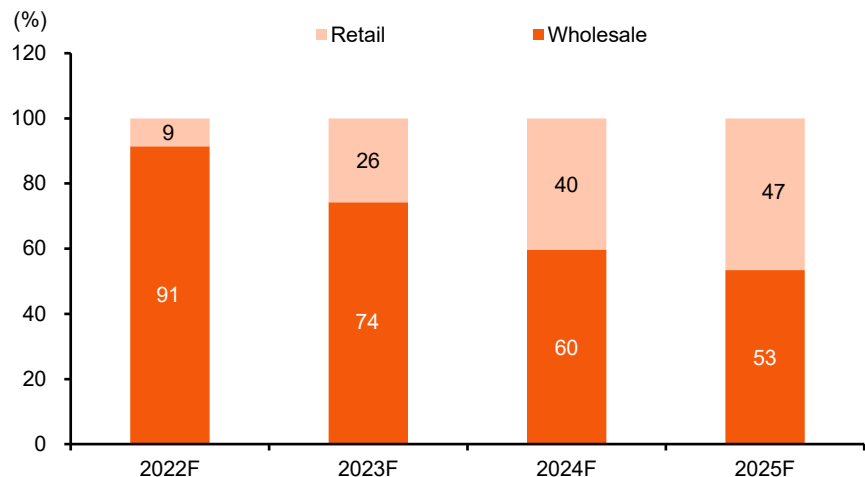
Sources: Company data, Thanachart estimates

Ex 6: Lotus's Profit



Sources: Company data, Thanachart estimates

Ex 7: Profit Breakdown



Source: Thanachart estimates

We identify the growth factors as follows:

New stores, SSS, rental income and deleveraging are key growth drivers

First, store expansion. MAKRO has announced a plan to ramp up branch openings this year, i.e., 12 branches in Thailand and six branches overseas for wholesale, and 210 stores (five hypermarkets, five supermarkets, 200 mini supermarkets) for Lotus's Thailand, and 14 supermarkets for Lotus's Malaysia. We have seen Lotus's introduce new store formats. In 4Q22, it launched the first standalone Lotus's community mall, Lotus's North Ratchapruek, with 4,500-sqm of hypermarket sales area (30% food sales space, above the 25% fresh food mix for other stores) and 10,953 sqm of net leasable area rented out to more than 50% of restaurant tenants. The mall has become a food destination attracting more traffic to shop at the hypermarket. Recently, in January, it opened Lotus's Prive, its first premium

hypermarket, with 2,400 sqm of sales space (more product assortments for premium fresh foods and imported goods) in a brand-new shopping mall ICS (2nd phase of Iconsiam) in Bangkok. These new store formats/brands should enable more expansion going forward and strengthen its leading position in the two-player hypermarket segment in Thailand.

Second, same-store sales growth. We project long-term SSS growth of 5% p.a. for wholesale and 3% for Lotus's Thailand. Drivers are from a fresh food focus (fresh food sales mix rising from 38% to in 2019 to 42% in 9M22 for wholesale and from 20% to 25% for Lotus's), growing online sales with a target to reach 15-20% in five years (online sales grew strongly with the sales mix increasing from 11% in 2021 to 12.5% in 9M22 for wholesale and from 2.7% to 4.3% for Lotus's), growing the portion of private-label goods to over 20% (targeting a 1% increase this year from the 15% sales mix last year for wholesale and a 3% increase this year from the 12% last year for Lotus's). The wholesale Buddy Mart project (converting traditional mom-and-pop shops into Buddy Mart outlets) should also help boost the sales of its mom-and-pop customers.

Third, rental income growth. Rental income is mostly from Lotus's malls in Thailand and Malaysia and we estimate an 11% three-year rental income CAGR from Bt13.2bn in 2022F to Bt18.1bn in 2025F. Growth would be via an improving occupancy rate (92% in Thailand and 95% in Malaysia as of 2022), rental rate adjustments (along with economic growth and tenant mix adjustments) and new space. In addition to the space from new branches, Lotus's has a mall extension project at 100 existing malls over five years with a plan to add 80,000-100,000 sqm of new leasable area.

Fourth, deleveraging benefits.

Ex 8: Wholesale Business Plan In 2023



Sources: Company data, Thanachart estimates

Ex 9: Wholesale Business Plan In 2023: Thailand

<p>Strengthen Hypermarket</p>	<p>Accelerate Convenience Format</p>	<p>Enhance Fresh Food</p>	<p>Smart App</p>	<p>Synergy</p>	<p>Cost Optimization</p>
<p>Transform Hypermarket to Smart community center</p>	<p>Fine tune the offers in Go fresh proposition</p>	<p>Build fresh food to become the key competitive advantage</p>	<p>Accelerate the online food/nonfood</p>	<p>Drive the synergy with Makro and group</p>	<p>Deliver the cost optimization and initiatives</p>
<p>Develop upmarket proposition</p>	<p>+5 Super +200 Mini Super</p>	<p>Imported /exclusive range</p>	<p>On demand and scheduled</p>	<p>Own Brand development</p>	<p>Energy reduction</p>
<p>+5 Hyper +19 Malls</p>		<p>Quality/ food safety</p>	<p>CRM/ personalized offers</p>	<p>Supply chain</p>	<p>Productivity</p>
<p>Extension in 2023, up to 100 malls in 3-5 years</p>				<p>Property</p>	<p>IT cost</p>
<p>+100 Stores upgraded offers</p>					

Sources: Company data, Thanachart estimates

Ex 10: Wholesale Business Plan In 2023: Malaysia

Mall OCC Improvement:

97%
Y2023 Target

95%
Current

- Improve tenant mix
- Introduce an integrated food concept combining food tenants and food courts into 1 single experience
- Utilize our buildings

Mall Strategy

Multiformat Expansion

- New store expansion of up to 14 stores
- Moving into small store formats
- B2B expansion

2022: 65 stores → 2023: 79 stores (+14)

Tentative sites

- Central
- South
- East Coast

Lotus's

Operation Efficiency

Quality & Range

- Using technology in stores to reduce cost
- DC upgrading to increase capacity and reduce cost

Quality Journey

- Improving quality perception for Fresh
- Introducing more upmarket/ mass premium products
- Upgrading Lotus Brand Products

Sources: Company data, Thanachart estimates

Ex 11: 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	29,296	35,629	41,296	49,199	56,038	60,704	66,792	73,253	78,610	85,958	93,838	
Free cash flow	1,723	13,619	18,093	24,654	33,000	36,848	44,157	49,622	53,920	60,095	66,703	1,005,294
PV of free cash flow	1,718	11,716	14,436	18,245	22,158	22,842	25,277	26,230	26,320	27,082	26,451	398,646
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	0.9											
WACC (%)	7.8											
Terminal growth (%)	2.0											
Enterprise value - add investments	621,122											
Net debt (end-2022F)	91,651											
Minority interest	485											
Equity value	528,986											
# of shares (m)	10,580											
Equity value/share (Bt)	50.00											

Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 12: Valuation Comparison With Regional Peers

Name	BBG code	Country	EPS growth		PE		P/BV		EV/EBITDA		Div. yield	
			22F	23F	22F	23F	22F	23F	22F	23F	22F	23F
Marks & Spencer	MKS LN	Britain	na	(25.8)	6.1	8.2	1.0	0.9	4.6	5.2	0.6	3.5
J Sainsbury PLC	SBRY LN	Britain	109.1	(5.2)	9.5	10.0	0.7	0.6	4.8	5.0	5.6	6.0
Tesco	TSCO LN	Britain	110.8	(2.3)	10.4	10.6	1.3	1.1	6.3	6.7	4.8	4.8
Carrefour SA	CA FP	France	6.2	12.7	11.5	10.2	1.2	1.1	6.7	6.2	3.3	3.8
Casino Guichard	CO FP	France	(58.2)	63.6	19.8	12.1	0.5	0.5	7.1	6.5	0.0	0.0
L'Oreal SA	OR FP	France	25.7	6.3	34.9	32.8	7.9	7.1	23.0	21.6	1.5	1.6
Alimentation Couche	ATD/B CN	Canada	7.9	14.4	na	na	na	na	10.2	9.7	na	na
Aeon	8267 JP	Japan	148.7	135.5	na	80.5	2.4	2.3	9.7	8.9	1.4	1.4
Kao Corporation	4452 JP	Japan	(16.8)	13.2	24.5	21.6	2.5	2.4	12.0	10.7	2.9	2.9
Lion Corporation	4912 JP	Japan	(6.2)	(7.7)	19.8	21.5	1.5	1.4	8.0	7.9	1.8	1.9
Shiseido Co. Ltd	4911 JP	Japan	(8.7)	79.7	80.9	45.0	4.8	4.5	25.6	18.6	1.5	1.0
Lawson	2651 JP	Japan	105.8	22.6	27.7	22.6	1.9	1.8	3.8	3.6	2.9	2.9
Seven & I Holdings	3382 JP	Japan	36.3	26.9	25.0	19.7	1.9	1.7	11.1	8.7	1.7	1.8
Lotte Corp	004990 KS	South Korea	21.6	11.4	9.0	8.1	0.5	0.4	9.6	9.2	4.6	4.9
Shinsegae	004170 KS	South Korea	21.7	9.4	6.4	5.8	0.6	0.5	5.8	5.6	1.3	1.5
Amore Pacific Group	002790 KS	South Korea	(52.6)	50.9	31.5	20.8	1.1	1.0	6.7	6.9	0.9	1.3
Best Buy Co Inc	BBY US	USA	(34.1)	2.2	12.8	12.5	6.5	7.2	6.7	6.6	4.1	4.2
Wal-Mart Stores	WMT US	USA	(5.1)	8.1	23.4	21.6	4.9	4.5	12.4	11.6	1.6	1.6
Home Depot Inc	HD US	USA	7.3	1.3	19.0	18.8	na	na	13.6	13.6	2.4	2.6
Levi Strauss & Co.	LEVI US	USA	0.8	(5.7)	11.4	12.1	3.5	2.9	8.1	8.1	2.5	2.8
Yonghui Superstores	601933 CH	China	90.2	na	na	47.7	3.1	3.1	22.4	15.8	0.6	1.2
Sa International	178 HK	Hong Kong	21.8	74.7	na	na	5.9	6.6	na	na	0.0	0.5
Dairy Farm Intl Hldgs	DFI SP	Hong Kong	(75.5)	na	na	22.1	3.8	3.4	12.2	10.2	1.3	3.5
President Chain Store	2912 TT	Taiwan	10.3	17.6	28.6	24.3	7.9	7.4	11.1	10.9	3.2	3.5
7-Eleven Malaysia	SEM MK	Malaysia	188.9	3.8	25.6	24.7	18.2	14.3	7.8	8.5	2.4	2.4
Berli Jucker *	BJC TB	Thailand	49.1	6.9	30.3	28.3	1.3	1.3	14.4	13.8	2.5	2.6
COM7 *	COM7 TB	Thailand	21.0	19.3	23.2	19.4	9.9	8.2	15.7	13.3	2.0	4.2
CP All *	CPALL TB	Thailand	59.0	60.3	50.8	31.7	5.6	5.1	13.8	11.7	1.0	1.6
Central Pattana *	CPN TB	Thailand	152.2	30.4	36.7	28.2	3.9	3.6	21.0	17.3	1.3	1.6
Central Retail Corp. *	CRC TB	Thailand	10,199.2	48.5	42.9	28.9	4.3	4.0	11.6	10.1	0.9	1.4
Siam Global House *	GLOBAL TB	Thailand	13.4	12.9	25.5	22.6	4.4	3.9	20.2	18.1	1.6	1.8
Home Product*	HMPRO TB	Thailand	14.0	17.7	30.9	26.3	8.1	7.5	17.4	15.2	2.6	3.0
Siam Makro *	MAKRO TB	Thailand	(35.8)	39.6	57.9	41.5	1.5	1.5	18.2	16.0	1.3	1.8
Mc Group *	MC TB**	Thailand	27.6	22.6	15.2	12.4	2.5	2.5	6.7	6.4	6.3	8.0
Average			29.9	23.9	25.9	23.5	3.9	3.6	11.8	10.6	2.2	2.6

Sources: Bloomberg, Thanachart estimates

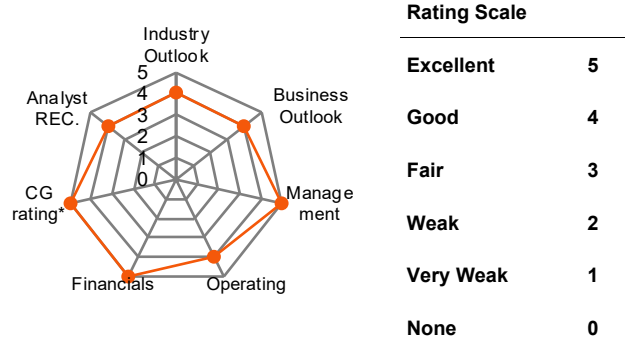
Note: * Thanachart estimates using normalized EPS growth, ** MC's fiscal year ends in June. The figures shown in the table are for FY23F and FY24F
Based on 26 January 2023 closing price

COMPANY DESCRIPTION

Siam Makro Pcl (MAKRO) operates the Makro discount store chain, selling food and consumer products to its registered customers comprising wholesalers, retailers, small businesses, caterers and private individuals. It was operating 152 MAKRO stores as of 4Q22 (including small food-service stores, food shops, frozen shops, Fresh@Makro) in Thailand, two wholesale stores in Cambodia, four eco-plus branches in India, two branches in China and one branch in Myanmar. In 4Q21, Lotus's in Thailand and Malaysia became a wholly owned subsidiary of MAKRO.

Source: Thanachart

COMPANY RATING



Source: Thanachart; *CG Rating

Rating Scale

Excellent	5
Good	4
Fair	3
Weak	2
Very Weak	1
None	0

THANACHART'S SWOT ANALYSIS

S — Strength

- The sole cash-and-carry wholesale operator in Thailand selling food and non-food products to registered customers.
- Strong product niche with premium food and frozen foods targeting professional customers.
- A significantly higher grocery market share after Lotus's acquisition.

O — Opportunity

- Room to open more medium- or small-sized HORECA stores offering fresh and frozen foods to hotels, restaurants and catering customers.
- Further product assortment changes geared toward higher-margin items, i.e., fresh food, private labels.

W — Weakness

- Low concentration of retail customers and end-users.
- Very efficient inventory management is required given thin net margin.

T — Threat

- Risks and challenges in overseas market penetration.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	42.88	50.00	17%
Net profit 22F (Bt m)	7,747	7,669	-1%
Net profit 23F (Bt m)	11,672	10,706	-8%
Consensus REC	BUY: 12	HOLD: 5	SELL: 2

HOW ARE WE DIFFERENT FROM THE STREET?

- Our net profits for 2022-23F are 1-8% below the Bloomberg consensus estimates, which we attribute to us factoring in higher SG&A during the business transition and our higher interest cost assumptions.
- Our TP is 17% above the consensus, which we attribute to us having higher long-term profit forecasts.

Sources: Bloomberg consensus, Thanachart estimates

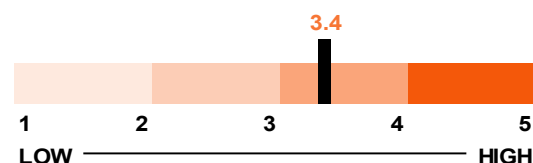
RISKS TO OUR INVESTMENT CASE

- The key downside risk to our earnings forecasts would be a weaker domestic economy and tourism recovery that could dampen overall consumption.
- Another downside risk would be lower-than-expected synergies from the acquisition of Lotus's.

Source: Thanachart

MAKRO operates 152 large and small cash & carry stores in Thailand and 10 branches in Cambodia, India, China and Myanmar. It also owns 2,578 Lotus’s hypermarkets and supermarkets in Thailand and 65 in Malaysia. We assign a decent ESG score of 3.4 to MAKRO since even though it doesn’t release much greenhouse gas, it still sets targets and is committed to its plans to improve 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)
MAKRO	-	-	-	-	52.69	77.15	52.84	-	5.0

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

- MAKRO released scope 1 and 2 greenhouse gas (GHG) emissions of 0.25mt of CO2 equivalent in 2021. Its GHG emission intensity fell by 30% over 2018-21.
- MAKRO targets carbon neutrality from its operations by 2030.
- MAKRO targets to reduce water intensity per revenue by 20% in 2030 from 2020’s level by preventing water leakages, utilizing water-saving equipment, and recycling water.
- MAKRO is committed to achieving sending zero food waste to landfills by 2030.
- MAKRO is committed to using packaging that can be reduced, reused, recycled, and upcycled.

SOCIAL

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

- MAKRO respects human rights and labor practices in all countries where it operates and it adheres to the Universal Declaration of Human Rights (UDHR), the Ten Principles of the United Nations Global Compact (UN Global Compact), the UN Guiding Principles on Business and Human Rights (UNGPs), and the Declaration on Fundamental Principles and Rights at Work of the International Labor Organization (ILO).
- In 2021, 3.5% of its total 16,920 employees were >50 years old while it had 26 disabled staff. Average employee training increased from 8.96 hours/person/year in 2018 to 14.75 hours in 2021. The fatality rate of employees as a result of work-related injuries was 0% in 2018-21 with 100% of staff covered by an occupational health and safety management system.
- MAKRO strives to ensure food safety throughout the supply chain and has appointed a committee on food quality and safety.

GOVERNANCE & SUSTAINABILITY

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

- There are 15 members of its board of directors (BOD), of whom five are independent directors, and three are female. However, the chairman of the BOD is also the chairman of the executive board.
- MAKRO says it is committed to conducting its businesses with honesty, transparency, and fairness to all stakeholders, and that it is in the company’s best interests to maintain stable and sustainable growth with good returns for shareholders over the long run.
- Customer satisfaction is the priority, according to MAKRO, and it expects the level to be above the industry standard. For business sustainability and customer satisfaction, MAKRO says it is determined to identify new products, expand product varieties, and focus on product quality and safety. Safety standards of its food products are of the utmost importance, the company says.

Source: Thanachart, Company data

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	218,259	265,545	462,926	518,746	576,289
Cost of sales	192,072	229,451	387,132	432,890	480,025
Gross profit	26,186	36,094	75,793	85,856	96,264
% gross margin	12.0%	13.6%	16.4%	16.6%	16.7%
Selling & administration expenses	17,731	26,490	62,719	70,323	76,351
Operating profit	8,957	10,494	15,521	18,227	22,859
% operating margin	4.1%	4.0%	3.4%	3.5%	4.0%
Depreciation & amortization	3,215	4,842	13,932	15,694	17,434
EBITDA	12,171	15,336	29,453	33,921	40,293
% EBITDA margin	5.6%	5.8%	6.4%	6.5%	7.0%
Non-operating income	502	890	2,446	2,693	2,946
Non-operating expenses	0	0	0	0	0
Interest expense	(619)	(1,557)	(7,016)	(6,699)	(6,123)
Pre-tax profit	8,337	8,937	8,504	11,528	16,736
Income tax	1,813	2,128	1,749	2,306	3,347
After-tax profit	6,524	6,810	6,755	9,222	13,389
% net margin	3.0%	2.6%	1.5%	1.8%	2.3%
Shares in affiliates' Earnings	0	149	897	1,442	1,989
Minority interests	39	14	16	42	42
Extraordinary items	0	6,714	0	0	0
NET PROFIT	6,563	13,687	7,669	10,706	15,420
Normalized profit	6,563	6,972	7,669	10,706	15,420
EPS (Bt)	1.2	2.2	0.7	1.0	1.5
Normalized EPS (Bt)	1.2	1.1	0.7	1.0	1.5

*We project a 38% EPS
CAGR in 2023-25F*

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	28,251	110,000	70,561	72,668	77,992
Cash & cash equivalent	10,518	68,530	25,975	23,975	23,975
Account receivables	945	2,301	2,029	2,274	2,526
Inventories	14,478	31,967	35,001	37,952	42,084
Others	2,310	7,203	7,556	8,467	9,407
Investments & loans	85,552	14,310	14,310	14,310	14,310
Net fixed assets	30,564	118,444	127,947	142,692	148,318
Other assets	15,219	326,737	330,308	328,896	327,588
Total assets	159,587	569,490	543,126	558,565	568,208
LIABILITIES:					
Current liabilities:	40,475	118,211	112,335	120,426	126,977
Account payables	25,804	54,845	53,032	59,300	65,757
Bank overdraft & ST loans	1,050	29,198	23,525	24,580	24,055
Current LT debt	5,001	2,001	4,705	4,916	4,811
Others current liabilities	8,619	32,167	31,073	31,630	32,355
Total LT debt	2,002	105,120	89,395	93,403	91,408
Others LT liabilities	8,847	57,661	45,055	44,622	44,128
Total liabilities	51,324	280,992	246,785	258,451	262,513
Minority interest	86,024	501	485	443	402
Preferreds shares	0	0	0	0	0
Paid-up capital	2,400	5,290	5,290	5,290	5,290
Share premium	3,290	263,882	263,882	263,882	263,882
Warrants	0	0	0	0	0
Surplus	(202)	(6,874)	0	0	0
Retained earnings	16,751	25,700	26,684	30,499	36,122
Shareholders' equity	22,239	287,997	295,855	299,671	305,294
Liabilities & equity	159,587	569,490	543,126	558,565	568,208

*Capital increase to
acquire Lotus's in 4Q21*

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	8,337	8,937	8,504	11,528	16,736
Tax paid	(1,730)	(1,929)	(910)	(2,070)	(3,102)
Depreciation & amortization	3,215	4,842	13,932	15,694	17,434
Chg In working capital	1,741	10,195	(4,576)	3,072	2,072
Chg In other CA & CL / minorities	87,366	(68,234)	(1,389)	853	1,530
Cash flow from operations	98,929	(46,188)	15,561	29,077	34,670
Capex	(1,254)	(91,201)	(20,110)	(27,000)	(19,510)
Right of use	(11,150)	(28,147)	(1,407)	(1,407)	(1,407)
ST loans & investments	0	0	0	0	0
LT loans & investments	(85,552)	71,243	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	2,045	(228,033)	(18,094)	(1,053)	(1,330)
Cash flow from investments	(95,912)	(276,138)	(39,612)	(29,460)	(22,247)
Debt financing	7,225	128,266	(18,694)	5,274	(2,626)
Capital increase	0	263,482	0	0	0
Dividends paid	(4,608)	(4,800)	(6,685)	(6,891)	(9,797)
Warrants & other surplus	41	(6,610)	6,874	0	0
Cash flow from financing	2,658	380,338	(18,504)	(1,617)	(12,423)
Free cash flow	97,675	(137,389)	(4,549)	2,077	15,160

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	34.2	37.2	57.9	41.5	28.8
Normalized PE - at target price (x)	40.7	44.3	69.0	49.4	34.3
PE (x)	34.2	19.0	57.9	41.5	28.8
PE - at target price (x)	40.7	22.6	69.0	49.4	34.3
EV/EBITDA (x)	18.2	21.3	18.2	16.0	13.4
EV/EBITDA - at target price (x)	21.7	24.6	21.1	18.5	15.5
P/BV (x)	10.1	1.5	1.5	1.5	1.5
P/BV - at target price (x)	12.0	1.8	1.8	1.8	1.7
P/CFO (x)	2.3	(5.6)	28.6	15.3	12.8
Price/sales (x)	2.0	1.7	1.0	0.9	0.8
Dividend yield (%)	2.1	1.7	1.3	1.8	2.6
FCF Yield (%)	43.6	(53.0)	(1.0)	0.5	3.4
(Bt)					
Normalized EPS	1.2	1.1	0.7	1.0	1.5
EPS	1.2	2.2	0.7	1.0	1.5
DPS	0.9	0.7	0.5	0.8	1.1
BV/share	4.2	27.2	28.0	28.3	28.9
CFO/share	18.5	(7.5)	1.5	2.7	3.3
FCF/share	18.3	(22.2)	(0.4)	0.2	1.4

Sources: Company data, Thanachart estimates

EPS turnaround for many years justifies high 2023F PE, in our view

FINANCIAL RATIOS

	FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate						
<i>Strong profit growth from 2023F</i>	Sales (%)	4.0	21.7	74.3	12.1	11.1
	Net profit (%)	5.1	108.6	(44.0)	39.6	44.0
	EPS (%)	5.1	80.3	(67.3)	39.6	44.0
	Normalized profit (%)	5.1	6.2	10.0	39.6	44.0
	Normalized EPS (%)	5.1	(8.1)	(35.8)	39.6	44.0
	Dividend payout ratio (%)	73.1	55.7	75.0	75.0	75.0
Operating performance						
<i>More debt room given loan covenant at 2x D/E</i>	Gross margin (%)	12.0	13.6	16.4	16.6	16.7
	Operating margin (%)	4.1	4.0	3.4	3.5	4.0
	EBITDA margin (%)	5.6	5.8	6.4	6.5	7.0
	Net margin (%)	3.0	2.6	1.5	1.8	2.3
	D/E (incl. minor) (x)	0.1	0.5	0.4	0.4	0.4
	Net D/E (incl. minor) (x)	(0.0)	0.2	0.3	0.3	0.3
	Interest coverage - EBIT (x)	14.5	6.7	2.2	2.7	3.7
	Interest coverage - EBITDA (x)	19.6	9.9	4.2	5.1	6.6
	ROA - using norm profit (%)	5.9	1.9	1.4	1.9	2.7
	ROE - using norm profit (%)	30.9	4.5	2.6	3.6	5.1
DuPont						
ROE - using after tax profit (%)	30.7	4.4	2.3	3.1	4.4	
- asset turnover (x)	2.0	0.7	0.8	0.9	1.0	
- operating margin (%)	4.1	4.0	3.4	3.5	4.0	
- leverage (x)	5.2	2.4	1.9	1.8	1.9	
- interest burden (%)	93.1	85.2	54.8	63.2	73.2	
- tax burden (%)	78.3	76.2	79.4	80.0	80.0	
WACC (%)	7.8	7.8	7.8	7.8	7.8	
ROIC (%)	43.2	40.4	3.5	3.8	4.6	
NOPAT (Bt m)	7,009	7,996	12,328	14,582	18,287	
invested capital (Bt m)	19,774	355,787	387,506	398,595	401,592	

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 an 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.

90-100	▲▲▲▲▲	Excellent
80-89	▲▲▲▲	Very Good
70-79	▲▲▲	Good
60-69	▲▲	Satisfactory
50-59	▲	Pass
Below		N/A

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 63 Derivative Warrants which are ADVANC16C2301A, ADVANC16C2302A, AOT16C2305A, AOT16C2302A, BANPU16C2303A, BANPU16C2302A, BBL16C2305A, BCP16C2305A, BEC16C2305A, BGRIM16C2301A, BGRIM16C2302A, BH16C2304A, BH16C2303A, BLA16C2302A, BTS16C2301A, CBG16C2301A, CBG16C2301B, CBG16C2302A, COM716C2302A, CPN16C2303A, CPN16C2301A, CRC16C2303A, DELTA16C2305A, DOHOME16C2301A, DOHOME16C2303A, EA16C2305A, EA16C2303A, ESSO16C2303A, ESSO16C2302A, GPSC16C2301A, GPSC16C2302A, GULF16C2301A, GULF16C2302A, GULF16C2302B, GUNKUL16C2301A, GUNKUL16C2302A, HANA16C2301A, HANA16C2303A, IVL16C2301A, JMART16C2303A, JMT16C2302A, KBANK16C2304A, KBANK16C2301A, KBANK16C2302A, KCE16C2305A, KCE16C2303A, KCE16C2301A, KCE16C2301B, KCE16C2302A, KTB16C2303A, MINT16C2301A, MINT16C2302A, MTC16C2301A, PTTEP16C2303A, RCL16C2303A, SAWAD16C2305A, SAWAD16C2302A, SCB16C2301A, SCGP16C2303A, SET5016P2303B, SET5016P2303A, SET5016C2303A, VGI16C2301A (underlying securities are (ADVANC, AOT, BANPU, BBL, BCP, BEC, BGRIM, BH, BLA, BTS, CBG, COM7, CPN, CRC, DELTA, DOHOME, EA, ESSO, GPSC, GULF, GUNKUL, HANA, IVL, JMART, JMT, KBANK, KCE, KTB, MINT, MTC, PTTEP, RCL, SAWAD, SCB, SCGP, SET50, VGI)). . before making investment decisions.

Note: Our major shareholder TCAP (Thanachart Capital Pcl) which holding 89.96% 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 24.33% 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 Tiyapittayarut

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