

HOLD (From: SELL)

Change in Recommendation

TP: Bt 8.80

Downside : 3.3%

(From: Bt 7.20)

1 DECEMBER 2021

Small Cap Research

Star Petroleum Refining (SPRC TB)

A refining proxy of choice

We upgrade SPRC to HOLD from Sell and raise our TP to Bt8.8 from Bt7.2 after boosting our GRM assumptions. We view SPRC as the best proxy for the refining space, though we caution that a GRM recovery may be slow and potentially volatile. In addition, valuation at 44/22x 2022-23F PE makes us believe that such a recovery is also priced in.

**CHAK REUNGSINPINYA**

662-779-9104

chak.reu@thanachartsec.co.th

Recovery likely priced in

We view SPRC as the best proxy for the refining space. The company derives essentially all of its revenue and profit from its refinery and there is no chemical or oil retail operation. Still, we believe a potential GRM recovery is more or less priced in with the stock trading at 44/22x 2022-23F PE. Potential upside risks could come from a faster-than-expected oil demand recovery and continued restraint in exports from China. The biggest potential downside risk to a GRM recovery would come from the impact of the Omicron COVID-19 variant outbreak.

Slow GRM recovery, higher crude premium

We upgrade our Singapore GRM assumptions to USD2.5/4.0/4.5 per bbl in 2021-23F, up from USD2/3/4 per bbl previously. We also raise our longer-term assumption to USD5/bbl from USD4.5/bbl. We believe a GRM recovery will be slow and potentially volatile and positive demand drivers (such as gas-to-oil switching) are balanced by potentially lower demand from the transportation sector due to the new COVID variant. We also note that the rise in the benchmark GRM may not translate fully to the bottom line as crude premiums have been rising. This pushes up the actual cost of crude oil procurement vs. the Dubai benchmark.

Demand outlook still murky

The demand outlook for oil products is made all the more murky by the Omicron variant. It may be weeks, and potentially months, for the countries affected to come up with new measures to contain the outbreak. Still, we see a limited likelihood that a broad-based lockdown will be implemented. On that basis, we believe demand for gasoline and diesel will still hold up. We see downside risk for jet fuel demand although we have always been cautious on that front and believe a full recovery may not happen until 2023F or later.

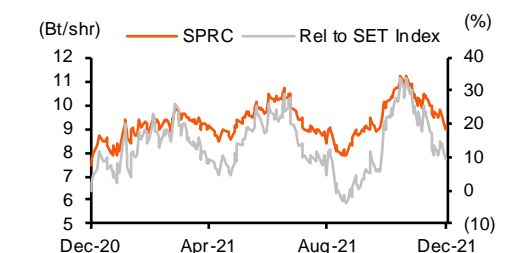
Help from limited China exports

In the near term, we believe limited Chinese exports of oil products will be the biggest support to Asian crack spreads. The China government has restricted the export quota for oil products, and the implied potential exports for November and December are likely to be just 1.5m tonnes per month compared to 2.4m tonnes in October and the 3.6m tonnes/month average in 10M21. The energy crunch coupled with air quality control will likely keep China's refineries operating at low utilization rates through the rest of winter. We do not expect any material uptick in exports until 2Q22F when demand could also pick up.

COMPANY VALUATION

Y/E Dec (Bt m)	2020A	2021F	2022F	2023F
Sales	130,163	176,207	182,790	194,267
Net profit	(6,005)	(992)	896	1,772
Consensus NP	—	4,008	4,004	4,575
Diff frm cons (%)	—	na	(77.6)	(61.3)
Norm profit	(6,468)	(992)	896	1,772
Prev. Norm profit	—	(269)	334	1,277
Chg frm prev (%)	—	na	168.2	38.8
Norm EPS (Bt)	(1.5)	(0.2)	0.2	0.4
Norm EPS grw (%)	na	na	na	97.8
Norm PE (x)	na	na	44.1	22.3
EV/EBITDA (x)	na	31.5	12.2	9.2
P/BV (x)	1.5	1.5	1.5	1.4
Div yield (%)	0.0	0.0	0.8	1.7
ROE (%)	na	na	3.4	6.5
Net D/E (%)	32.6	51.5	38.9	28.5

PRICE PERFORMANCE



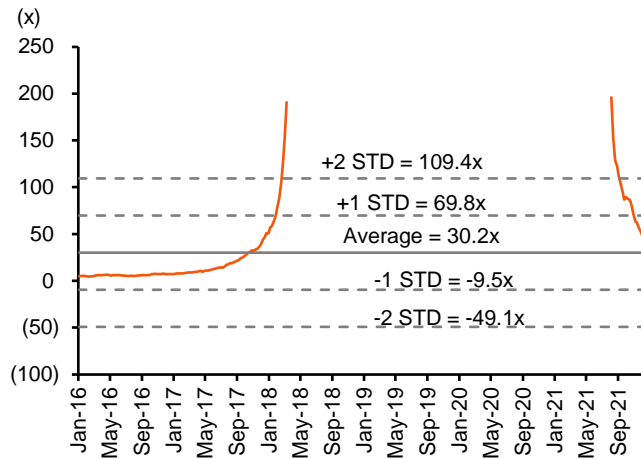
COMPANY INFORMATION

Price as of 1-Dec-21 (Bt)	9.10
Market Cap (US\$ m)	1,169.9
Listed Shares (m shares)	4,335.9
Free Float (%)	39.4
Avg Daily Turnover (US\$ m)	7.2
12M Price H/L (Bt)	11.20/7.50
Sector	Energy
Major Shareholder	Chevron Asia Holdings 60.56%

Sources: Bloomberg, Company data, Thanachart estimates

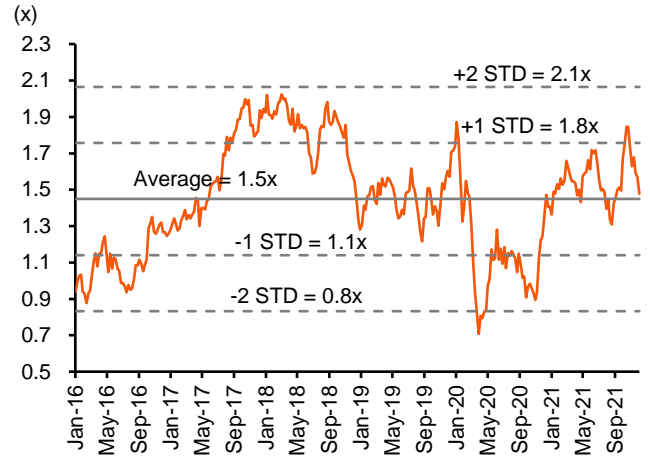
Star Petroleum Refining Pcl (SPRC) is our refiner of choice as it offers pureplay exposure to the space. Still, we are not bullish on the gross refining margin (GRM) and believe any recovery will be slow and potentially volatile. More importantly, we believe a recovery is fully priced in with the stock trading at 44x 2022F PE and 22x 2023F PE.

Ex 1: PE



Sources: Bloomberg, Thanachart estimates

Ex 2: P/BV



Sources: Bloomberg, Thanachart estimates

We expect a GRM recovery to be slow

In this report, we upgrade our Singapore GRM assumptions to USD2.5/4.0/4.5 per bbl in 2021-23F, up from USD2/3/4 per bbl previously. We also raise our longer-term assumption to USD5/bbl from USD4.5/bbl. We believe a GRM recovery will be slow and potentially volatile and positive demand drivers (such as gas-to-oil switching) are balanced out by potentially lower demand from the transportation sector due to the new COVID-19 variant. Offsetting higher GRM assumptions are lower utilization rates over 2021-22F. We now assume crude intake of less than 140kbd in both of these years, implying 77-80% utilization rates. Our assumptions for 2023-24F remain unchanged at about 150kbd (85% utilization rate).

Ex 3: Key Assumption Changes – Higher GRM Partially Offset By Lower Utilization Rate

Assumption	Unit	2021F	2022F	2023F	2024F
New					
GRM	(USD/bbl)	2.5	4.0	4.5	5.0
Crude intake	Kbd	136.5	140.0	148.8	148.8
Old					
GRM	(USD/bbl)	2.0	3.0	4.0	4.5
Crude intake	Kbd	148.8	148.8	148.8	148.8
Change					
GRM	(USD/bbl)	0.5	1.0	0.5	0.5
Crude intake	(%)	(8.2)	(5.9)	0.0	0.0

Sources: Company data, Thanachart estimates

Given the above, we have raised our earnings for 2022-24F by 23-168% (from very low levels). Note that we have increased our losses for 2021F as we factor in a lower utilization rate and a higher crude premium (see more discussion on the following page). We have also boosted our DCF-based 12-month TP (2022F base year) to Bt8.8 from Bt7.2.

Ex 4: EPS Revisions

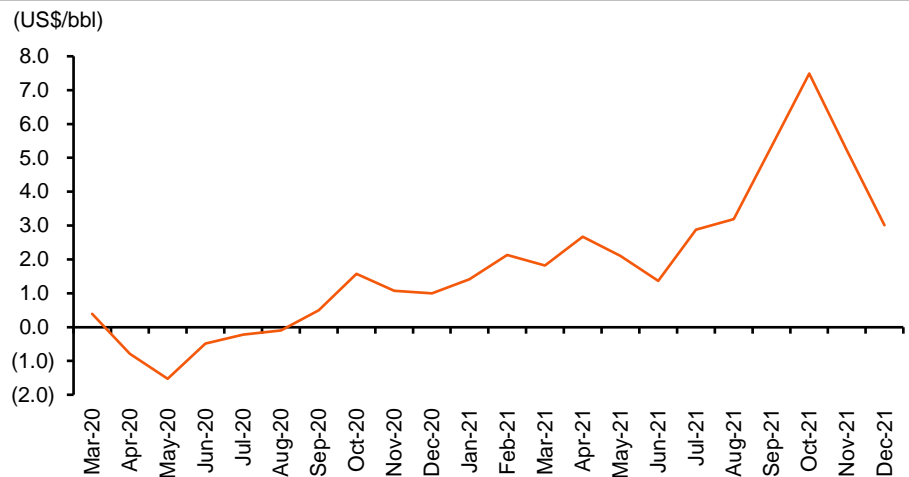
(Bt/shr)	2019	2020	2021F	2022F	2023F	2024F
New/Actual	(0.93)	(1.49)	(0.23)	0.21	0.41	0.55
Old			(0.06)	0.08	0.29	0.45
Change (%)			na	168.2	38.8	23.2

Sources: Company data, Thanachart estimates

GRM has pulled back from its October high as refiners ramp up utilization rates

In the short run, we believe the Singapore GRM will remain in the USD2-4/bbl range as regional refineries ramp up their utilization rates to take advantage of higher crack spreads. In our view, this explains the collapse in GRM in late November from a high of over USD7/bbl in October.

Ex 5: Singapore GRM – October Surge Not Sustainable

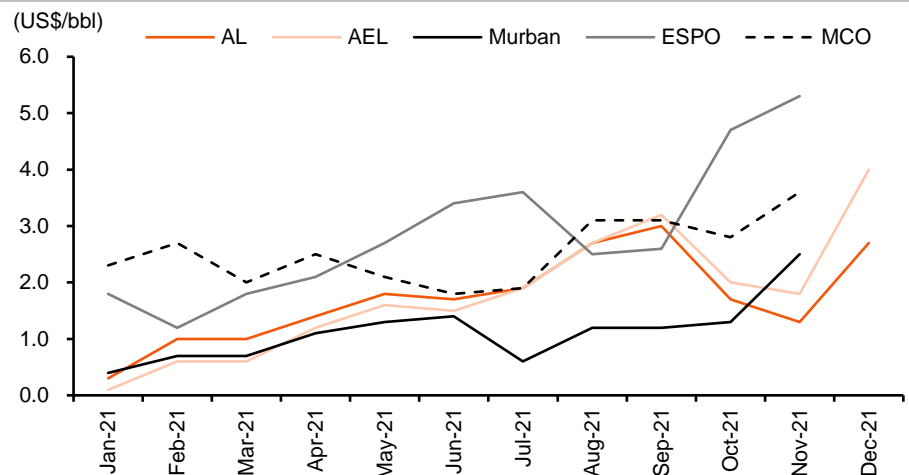


Sources: Thaioil, Thanachart estimates

Rising crude premiums over Dubai benchmark are a key headwind

Another factor that may cap refiners' profitability is the rising crude premium. Key crude grades processed by SPRC, such as Arab Light and Murban, have seen their premiums over Dubai increase in the past few months. This is due to the limited actual production increases among OPEC+ members as well as higher crack spreads which enable these producers to charge a higher premium for their crudes.

Ex 6: Crude Premiums On The Rise

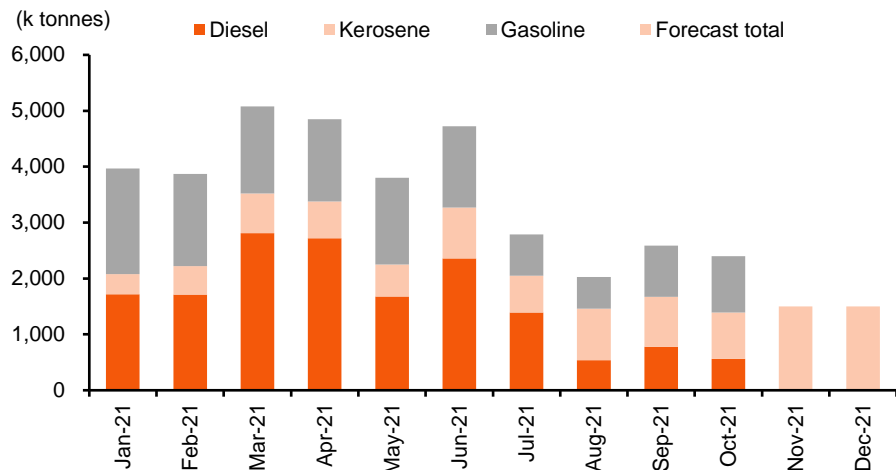


Sources: Bloomberg, Thanachart estimates

We expect Chinese exports of oil products to remain subdued for the rest of 2021F and into 1Q22F

One positive factor that could help cushion regional GRM is lower Chinese exports. In the first 10 months of this year, exports of gasoline, jet fuel and diesel averaged about 3.6m tonnes per month. However, with the limited export quota remaining, we believe exports of these products could decline to just 1.5m tonnes per month in November and December. Exports are likely to remain low in 1Q22F as well. This is due to an energy shortage and air quality control measures which could limit refinery run rates in China. The government may also want to reserve fuels to ensure sufficient domestic supplies for the winter.

Ex 7: Chinese Exports Of Oil Products Could Slow In November/December



Sources: GACC, Thanachart estimates

Ex 8: 12-month DCF-based TP Calculation, Using A Base Year Of 2022F

(Bt m)	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	Terminal Value
EBITDA + dividend	4,058	5,119	5,843	6,045	5,929	5,812	5,692	5,570	5,446	5,320	5,192	
Free cash flow	2,795	3,174	4,887	3,612	4,460	4,361	4,260	4,158	4,053	3,947	3,839	36,043
PV of free cash flow	2,665	2,752	3,853	2,590	2,867	2,542	2,251	1,991	1,760	1,714	1,466	13,768
Risk-free rate (%)	5.0%											
Market risk premium (%)	8.0%											
Beta	1.25											
WACC (%)	10.0%											
Terminal growth (%)	0.0%											
Enterprise value - add	51,133											
Investments												
Net debt (2021F)	13,172											
Minority interest	-											
Equity value	37,961											
# of shares (m)	4,336											
Equity value/sh (Bt)	8.80											

Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 9: Comparison With Regional Peers

Company	Code	Country	EPS Growth		PE		P/BV		EV/EBITDA		Div. Yield		ROE	
			21F (%)	22F (%)	21F (x)	22F (x)	21F (x)	22F (x)	21F (x)	22F (x)	21F (%)	22F (%)	21F (%)	22F (%)
Refining & Marketing														
Caltex Australia	CTX AU	Australia	69.3	32.0	na	na	na	na	na	na	na	na	11.6	14.6
BPCL	BPCL IN	India	121.2	(1.5)	7.9	8.0	1.7	1.4	7.2	7.3	5.7	5.5	24.7	18.5
HPCL	HPCL IN	India	160.5	(9.4)	5.6	6.2	1.3	1.1	5.7	6.9	6.2	6.7	24.1	17.8
IOCL	IOCL IN	India	129.5	22.8	7.3	5.9	1.0	0.9	6.6	5.5	6.9	8.5	14.6	15.0
Reliance Industries	RIL IN	India	(0.6)	24.7	35.6	28.5	2.7	2.1	22.2	16.5	0.3	0.3	8.6	7.7
SK Energy	096770 KS	S.Korea	na	77.8	25.2	14.2	1.1	1.0	7.9	7.3	0.9	1.5	4.6	8.3
S-OIL	010950 KS	S.Korea	na	(7.7)	6.2	6.7	1.4	1.2	4.9	5.4	4.7	4.3	24.3	19.5
Petron	PCOR PM	Philippines	na	200.0	18.3	6.1	0.5	0.5	10.7	7.4	na	na	1.9	5.5
Formosa Petrochemical	6505 TT	Taiwan	na	(11.1)	17.9	20.1	2.7	2.6	11.1	12.5	4.1	3.2	15.5	12.7
Bangchak *	BCP TB	Thailand	na	na	na	22.8	0.7	0.7	8.5	6.6	0.0	2.4	na	na
ESSO (Thailand) *	ESSO TB	Thailand	na	na	na	133.8	1.9	1.9	35.8	20.2	0.0	0.4	na	na
IRPC Pcl *	IRPC TB	Thailand	na	9.6	13.6	12.4	1.0	1.0	8.7	8.0	4.4	4.8	na	na
PTG Pcl *	PTG TB	Thailand	(3.6)	11.8	13.6	12.2	2.8	2.5	6.8	6.4	3.7	4.1	21.5	21.4
PTT Global Chemicals *	PTTGC TB	Thailand	219.4	(1.2)	10.6	10.7	0.9	0.8	6.5	6.3	5.7	5.6	8.5	8.0
Star Petroleum Refining *	SPRC TB	Thailand	na	na	na	44.1	1.5	1.5	31.5	12.2	0.0	0.8	na	na
SUSCO Pcl	SUSCO TB	Thailand	3.0	23.4	15.4	12.4	0.9	0.9	6.5	5.3	3.3	4.0	5.9	7.1
Thai Oil *	TOP TB	Thailand	na	(11.7)	18.1	20.5	0.8	0.8	14.8	16.3	2.5	2.2	4.5	3.9
Average			87.4	25.7	15.0	22.8	1.4	1.3	12.2	9.4	3.2	3.6	13.1	12.3
Integrated oils														
PetroChina	857 HK	China	na	(9.0)	6.7	7.4	0.5	0.5	3.4	3.1	7.2	6.9	7.3	6.8
Sinopec	386 HK	China	116.4	(8.4)	5.6	6.1	0.5	0.5	3.4	3.5	10.6	9.8	10.1	8.9
Total	FP	France	na	5.5	na	na	na	na	na	na	na	na	15.1	14.8
Eni	ENI IM	Italy	na	22.8	10.2	8.3	1.1	1.0	3.7	3.2	7.1	7.4	10.7	12.4
RD/Shell A	RDSA NA	Netherlands	na	32.9	7.6	5.7	0.9	0.8	4.3	3.8	4.6	5.2	11.2	13.3
Repsol	REP SM	Spain	na	17.3	6.8	5.8	0.7	0.7	3.8	3.5	6.1	6.2	11.1	12.0
Chevron Texaco	CVX US	USA	na	13.6	13.4	11.8	1.6	1.5	5.9	5.5	4.7	4.9	11.8	12.9
Exxon Mobil	XOM US	USA	na	17.4	11.8	10.1	1.5	1.4	5.9	5.3	5.8	6.0	13.2	14.7
Conoco Philips	COP US	USA	na	31.8	11.9	9.0	2.0	1.8	5.1	4.3	2.5	2.6	20.7	22.7
PTT Pcl *	PTT TB	Thailand	182.0	5.2	9.8	9.3	1.1	1.0	4.4	4.0	5.1	5.4	11.7	11.6
Average			149.2	12.9	9.3	8.2	1.1	1.0	4.4	4.0	6.0	6.0	12.3	13.0
Exploration and Production														
Santos	STO AU	Australia	190.1	38.6	14.4	10.4	1.7	1.5	4.5	3.7	1.9	2.3	11.8	14.8
Woodside	WPL AU	Australia	149.9	46.5	16.4	11.2	1.6	1.5	5.2	4.2	4.4	5.8	9.6	14.5
Suncor Energy	SU US	Canada	na	54.2	8.6	5.6	1.0	0.9	5.0	4.2	4.3	6.8	11.4	16.4
ONGC	ONGC IN	India	(46.2)	170.9	14.4	5.3	0.8	0.7	5.9	4.1	2.2	6.8	6.1	14.9
RIL	RIL IN	India	(0.6)	24.7	35.6	28.5	2.7	2.1	22.2	16.5	0.3	0.3	8.6	7.7
Cairn India	CAIR IN	India	na	na	na	na	na	na	na	na	na	na	na	na
Apache	APA US	USA	na	23.9	6.4	5.2	na	na	4.0	3.8	0.7	2.2	(119.1)	(236.5)
Devon Energy	DVN US	USA	na	60.5	12.5	7.8	3.0	2.1	6.0	4.5	2.3	3.6	38.1	34.7
PTTEP *	PTTEP TB	Thailand	68.1	15.8	13.0	11.2	1.3	1.2	4.1	3.7	4.6	5.3	9.9	11.0
Average			72.3	54.4	15.2	10.7	1.7	1.4	7.1	5.6	2.6	4.1	(3.0)	(15.3)

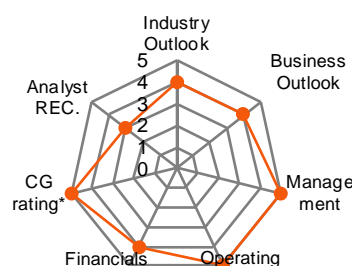
Sources: Bloomberg, * Thanachart estimates
Based on 1 December 2021 closing prices

COMPANY DESCRIPTION

Star Petroleum Refining Pcl's (SPRC) refinery produces petroleum products, which include LPG, premium and regular grades of unleaded gasoline, high-speed diesel, jet fuel and fuel oil, as well as petrochemical feedstocks used in the petrochemical industry, which include PGP, LPG, chemical-grade naphtha, mixed C4 and reformat.

Source: Thanachart

COMPANY RATING



Rating Scale

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

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Strong operator with a very high utilization rate and high plant reliability.
- Procurement, distribution and technical support from parent Chevron.

O — Opportunity

- Opportunities to upgrade and/or expand its refinery to meet higher local demand.

W — Weakness

- Lack of company-owned retail channel limits upside from domestic product placement and higher marketing margin.

T — Threat

- Threat of substitutes such as electric vehicles may lower demand for oil products.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	11.34	8.80	-22%
Net profit 21F (Bt m)	4,008	(992)	na
Net profit 22F (Bt m)	4,004	896	-78%
Consensus REC	BUY: 13	HOLD: 3	SELL: 2

HOW ARE WE DIFFERENT FROM THE STREET?

- We are significantly below the Bloomberg consensus with our 2022F earnings, likely as we assume a slower GRM recovery
- Our DCF-based TP is consequently lower than the consensus number.

Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- A sharply higher Singapore GRM may affect SPRC's operating results and represents the key upside risk to our call.
- Sharply lower oil prices would decrease SPRC's cash costs and positively affect its profits, posing a secondary upside risk to our call.
- Other upside risks include a faster-than-expected GRM recovery and better cost control.
- Slow demand recovery and increased exports from China are the key downside risks to our call.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	168,840	130,163	176,207	182,790	194,267
Cost of sales	172,051	137,169	176,421	180,618	191,044
Gross profit	(3,211)	(7,006)	(214)	2,172	3,223
% gross margin	-1.9%	-5.4%	-0.1%	1.2%	1.7%
Selling & administration expenses	1,690	911	919	929	938
Operating profit	(4,901)	(7,916)	(1,133)	1,243	2,285
% operating margin	-2.9%	-6.1%	-0.6%	0.7%	1.2%
Depreciation & amortization	2,565	2,832	2,803	2,837	2,871
EBITDA	(2,336)	(5,084)	1,670	4,081	5,157
% EBITDA margin	-1.4%	-3.9%	0.9%	2.2%	2.7%
Non-operating income	36	71	150	159	166
Non-operating expenses	(7)	(1)	0	0	0
Interest expense	(46)	(177)	(257)	(283)	(236)
Pre-tax profit	(4,919)	(8,024)	(1,240)	1,120	2,215
Income tax	(885)	(1,555)	(248)	224	443
After-tax profit	(4,034)	(6,468)	(992)	896	1,772
% net margin	-2.4%	-5.0%	-0.6%	0.5%	0.9%
Shares in affiliates' Earnings	0	0	0	0	0
Minority interests	0	0	0	0	0
Extraordinary items	1,225	464	0	0	0
NET PROFIT	(2,809)	(6,005)	(992)	896	1,772
Normalized profit	(4,034)	(6,468)	(992)	896	1,772
EPS (Bt)	(0.6)	(1.4)	(0.2)	0.2	0.4
Normalized EPS (Bt)	(0.9)	(1.5)	(0.2)	0.2	0.4

We expect earnings recovery from 2022F onward

BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
ASSETS:					
Current assets:	25,524	19,323	25,775	26,499	27,974
Cash & cash equivalent	20	1,635	2,000	2,000	2,000
Account receivables	7,192	8,515	11,527	11,957	12,708
Inventories	17,856	9,052	12,084	12,371	13,085
Others	456	121	164	171	181
Investments & loans	0	0	0	0	0
Net fixed assets	26,686	24,156	21,890	19,604	17,300
Other assets	2,084	3,062	3,355	3,747	4,209
Total assets	54,294	46,541	51,019	49,850	49,483
LIABILITIES:					
Current liabilities:	21,334	10,740	11,097	11,283	11,427
Account payables	13,567	7,821	7,734	7,918	8,375
Bank overdraft & ST loans	6,819	0	0	0	0
Current LT debt	0	1,380	1,821	1,475	1,190
Others current liabilities	949	1,539	1,543	1,890	1,862
Total LT debt	0	8,857	13,352	10,820	8,728
Others LT liabilities	484	517	986	1,284	1,587
Total liabilities	21,818	20,114	25,435	23,387	21,742
Minority interest	0	0	0	0	0
Preferred shares	0	0	0	0	0
Paid-up capital	30,004	30,004	30,004	30,004	30,004
Share premium	978	978	978	978	978
Warrants	0	0	0	0	0
Surplus	(7,674)	(7,447)	(7,447)	(7,447)	(7,447)
Retained earnings	9,168	2,892	2,049	2,928	4,206
Shareholders' equity	32,476	26,427	25,584	26,463	27,741
Liabilities & equity	54,294	46,541	51,019	49,850	49,483

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	(4,919)	(8,024)	(1,240)	1,120	2,215
Tax paid	753	1,555	248	(224)	(443)
Depreciation & amortization	2,565	2,832	2,803	2,837	2,871
Chg In working capital	1,754	1,736	(6,131)	(534)	(1,008)
Chg In other CA & CL / minorities	(2,994)	572	(40)	341	(38)
Cash flow from operations	(2,840)	(1,329)	(4,359)	3,539	3,597
Capex	(506)	(253)	(480)	(480)	(480)
Right of use	0	0	(300)	(300)	(300)
ST loans & investments	0	0	0	0	0
LT loans & investments	0	0	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(1,508)	(498)	420	134	54
Cash flow from investments	(2,014)	(750)	(360)	(646)	(726)
Debt financing	8,044	3,738	4,935	(2,877)	(2,378)
Capital increase	0	0	0	0	0
Dividends paid	(521)	(271)	149	(17)	(494)
Warrants & other surplus	(2,723)	227	0	0	0
Cash flow from financing	4,801	3,694	5,084	(2,894)	(2,871)
Free cash flow	(3,346)	(1,582)	(4,839)	3,059	3,117

We expect a FCF improvement next year

VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	na	na	na	44.1	22.3
Normalized PE - at target price (x)	na	na	na	42.6	21.5
PE (x)	na	na	na	44.1	22.3
PE - at target price (x)	na	na	na	42.6	21.5
EV/EBITDA (x)	na	na	31.5	12.2	9.2
EV/EBITDA - at target price (x)	na	na	30.7	11.9	8.9
P/BV (x)	1.2	1.5	1.5	1.5	1.4
P/BV - at target price (x)	1.2	1.4	1.5	1.4	1.4
P/CFO (x)	(13.9)	(29.7)	(9.1)	11.1	11.0
Price/sales (x)	0.2	0.3	0.2	0.2	0.2
Dividend yield (%)	2.0	0.0	0.0	0.8	1.7
FCF Yield (%)	(8.5)	(4.0)	(12.3)	7.8	7.9
(Bt)					
Normalized EPS	(0.9)	(1.5)	(0.2)	0.2	0.4
EPS	(0.6)	(1.4)	(0.2)	0.2	0.4
DPS	0.2	0.0	0.0	0.1	0.2
BV/share	7.5	6.1	5.9	6.1	6.4
CFO/share	(0.7)	(0.3)	(1.0)	0.8	0.8
FCF/share	(0.8)	(0.4)	(1.1)	0.7	0.7

We believe a GRM recovery looks priced in

Sources: Company data, Thanachart estimates

FINANCIAL RATIOS

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Growth Rate					
Sales (%)	(19.3)	(22.9)	35.4	3.7	6.3
Net profit (%)	na	na	na	na	97.8
EPS (%)	na	na	na	na	97.8
Normalized profit (%)	na	na	na	na	97.8
Normalized EPS (%)	na	na	na	na	97.8
Dividend payout ratio (%)	(28.2)	0.0	30.0	37.0	37.0
Operating performance					
Gross margin (%)	(1.9)	(5.4)	(0.1)	1.2	1.7
Operating margin (%)	(2.9)	(6.1)	(0.6)	0.7	1.2
EBITDA margin (%)	(1.4)	(3.9)	0.9	2.2	2.7
Net margin (%)	(2.4)	(5.0)	(0.6)	0.5	0.9
D/E (incl. minor) (x)	0.2	0.4	0.6	0.5	0.4
Net D/E (incl. minor) (x)	0.2	0.3	0.5	0.4	0.3
Interest coverage - EBIT (x)	na	na	na	4.4	9.7
Interest coverage - EBITDA (x)	na	na	6.5	14.4	21.8
ROA - using norm profit (%)	na	na	na	1.8	3.6
ROE - using norm profit (%)	na	na	na	3.4	6.5
DuPont					
ROE - using after tax profit (%)	na	na	na	3.4	6.5
- asset turnover (x)	3.1	2.6	3.6	3.6	3.9
- operating margin (%)	na	na	na	0.8	1.3
- leverage (x)	1.5	1.7	1.9	1.9	1.8
- interest burden (%)	100.9	102.3	126.2	79.8	90.4
- tax burden (%)	na	na	na	80.0	80.0
WACC (%)	10.0	10.0	10.0	10.0	10.0
ROIC (%)	(12.7)	(20.2)	(2.6)	2.6	5.0
NOPAT (Bt m)	(4,901)	(7,916)	(906)	995	1,828
invested capital (Bt m)	39,275	35,029	38,757	36,759	35,660

ROE to remain in single-digit territory despite an improving outlook

Sources: Company data, Thanachart estimates

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 136 Derivative Warrants which are ACE16C2111A, ACE16C2201A, ACE16C2202A, ADVA16C2201A, ADVA16C2202A, AEON16C2201A, AEON16C2201B, AMAT16C2112A, AOT16C2112A, AOT16C2202A, BAM16C2112A, BANP16C2112A, BANP16C2201A, BANP16C2202A, BBL16C2201A, BBL16C2203A, BCH16C2111A, BCH16C2111B, BCH16C2201A, BCH16C2203A, BCPG16C2111A, BEC16C2202A, BGRI16C2112A, CBG16C2201A, CBG16C2202A, CHG16C2111A, CHG16C2112A, CHG16C2202A, COM716C2112A, COM716C2203A, CPAL16C2111A, CPAL16C2112A, CPAL16C2203A, CPF16C2112A, CPN16C2202A, DELT16C2112A, DELT16C2202A, DELT16C2203A, DOHO16C2111A, DOHO16C2112A, DOHO16C2202A, DTAC16C2112A, EA16C2201A, ESSO16C2202A, GLOB16C2201A, GLOB16C2203A, GPSC16C2201A, GPSC16C2201B, GPSC16C2203A, GULF16C2112A, GULF16C2202A, GUNK16C2112A, GUNK16C2201A, GUNK16C2203A, HANA16C2112A, HANA16C2202A, HMPR16C2202A, INTU16C2201A, INTU16C2202A, IRPC16C2112A, IVL16C2111A, IVL16C2202A, JAS16C2202A, JMAR16C2111A, JMAR16C2201A, JMAR16C2202A, JMT16C2201A, JMT16C2203A, KBAN16C2111A, KBAN16C2111B, KBAN16C2201A, KBAN16C2202A, KCE16C2201A, KTC16C2112A, KTC16C2202A, LH16C2202A, MAJO16C2201A, MEGA16C2112A, MINT16C2112A, MINT16C2203A, MTC16C2112A, MTC16C2202A, OR16C2112A, OR16C2202A, OR16C2203A, PTG16C2201A, PTG16C2202A, PTG16C2203A, PTL16C2201A, PTL16C2202A, PTL16C2202B, PTT16C2112A, PTT16C2201A, PTT16C2203A, PTTE16C2112A, PTTE16C2203A, PTTG16C2111A, RBF16C2112A, RBF16C2202A, RS16C2112A, RS16C2201A, S5016C2112A, S5016C2112B, S5016C2112C, S5016C2112D, S5016C2203A, S5016P2112A, S5016P2112B, S5016P2112C, S5016P2112D, S5016P2203A, SAWA16C2112A, SAWA16C2202A, SCB16C2111A, SCB16C2112A, SCB16C2201A, SCB16C2202A, SCC16C2112A, SCGP16C2201A, SCGP16C2202A, SPAL16C2202A, SPRC16C2201A, STA16C2112A, STA16C2201A, STEC16C2201A, STGT16C2111A, STGT16C2202A, SYNE16C2202A, TASC16C2201A, TOP16C2112A, TOP16C2202A, TRUE16C2202A, TRUE16C2203A, TU16C2111A, TU16C2202A, WHA16C2202A (underlying securities are ACE, ADVANC, AEONTS, AMATA, AOT, BAM, BANPU, BBL, BCH, BCPG, BEC, BGRIM, CBG, CHG, COM7, CPALL, CPF, CPN, DELTA, DOHOME, DTAC, EA, ESSO, GLOBAL, GPSC, GULF, GUNKUL, HANA, HMPRO, INTUCH, IRPC, IVL, JAS, JMART, JMT, KBANK, KCE, KTC, LH, MAJOR, MEGA, MINT, MTC, OR, PTG, PTL, PTT, PTTEP, PTTGC, RBF, RS, SAWAD, SCB, SCC, SCGP, SPALI, SPRC, SET50, STA, STEC, STGT, SYNTEC, TASCO, TOP, TRUE, TU, WHA). Since TNS covers those underlying securities in research report, consequently TNS incurs conflicts of interest. Moreover, Investors are advised to carefully review the details and information in the prospectus before making investment decisions.

Note: Thanachart Securities has an indirect financial interest in Ratchthani Leasing Pcl (THANI). Thanachart Securities Pcl is a subsidiary of Thanachart Capital Pcl (TCAP) which holds more than 56% of the shareholding in Ratchthani Leasing Pcl (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 20.1% of the shareholding in TMBThanachart Bank Pcl.

Thanachart Capital Public Company Limited (TCAP), Ratchthani Leasing Public Company Limited (THANI), TMB Public Company Limited, 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: Saksiam Leasing Pcl. (SAK TB), SCG Packaging Pcl (SCGP 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

19 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, Insurance

Tel: 662-779-9106

sarachada.sor@thanachartsec.co.th

Sittichet Rungrassameephat

Analyst, Quantitative

Tel: 662-483-8303

sittichet.run@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

Thaloengsak Kucharoenpaisan

Analyst, Retail Market

Tel: 662-483-8304

thaloengsak.kuc@thanachartsec.co.th

Chak Reungsinpinya

Energy, Petrochemical, 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

Witchanan Tambamroong

Technical Analyst

Tel: 662-779-9123

witchanan.tam@thanachartsec.co.th