BUY (Unchanged)

Change in Numbers

TP: Bt 14.50 (From: Bt 15.50)

Upside : 23.9%

30 NOVEMBER 2022

Small Cap Research

Star Petroleum Refining (SPRC TB)

Riding the GRM trend

We maintain our BUY call on SPRC but trim our TP to Bt14.5 from Bt15.5 on the back of our lower refining margin assumptions. We view the stock as attractively valued trading on an 8.5x 2023F PE multiple amid an elevated refinery margin outlook.

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Thanachart Securities

Maintaining BUY

This report is a part of *Energy sector – Tight refinery market,* dated 30 November 2022. We maintain our BUY call on SPRC. We still expect SPRC to benefit from strong middle-distillate margins albeit to a lesser extent relative to its peers. We see the company as a well-run refinery with a strong balance sheet. We believe its high FCF yields of 17-19% can support dividend yields of 5.9/4.5% over 2023-24F. The stock looks attractive to us at 8.5x 2023F PE and 1.2x P/BV, near its historical averages while we estimate high ROE levels of 14.5/12.5% over 2024-23F.

Factoring in lower GRM

We factor in a lower market gross refining margin (GRM) for SPRC as we have done for other refiners. We assume a USD7.9/7.6/6.9/bbl Singapore GRM in 2023-25F. As for its product mix, SPRC could be at a slight disadvantage to other local refiners given its relatively high gasoline yield and the spread softness for that product. We cut our normalized profit estimates for SPRC by 20/13/17% over 2022-24F and therefore our DCF-based 12-month TP, using a 2023F base year, falls to Bt14.5/share from Bt15.5 previously.

Elevated GRM despite lagging peers

SPRC's GRM has consistently outperformed peers' since 2015 as the gasoline spread has been higher than the diesel spread. Looking ahead, we expect SRPC's GRM to underperform peers' again over 2022-24F. This is given our expectation that middle distillates will be the key support factor for strong refinery margins. Relative to peers, SPRC has more exposure to gasoline and less exposure to middle-distillate products. Its gasoline yield was at 25% in 3Q22 vs. peers' 20% while its middle-distillate yield was at 44% vs. peers' 49%. Another factor behind the underperformance was that the company was also seeing higher-than-normal freight costs as its SPM license is currently suspended. Despite the underperformance, we still expect SPRC to enjoy elevated GRM. We estimate SRPC's GRM to be at USD9/7.0/6.7 per bbl over 2022-24F, still much higher than its five-year average of USD3.9/bbl.

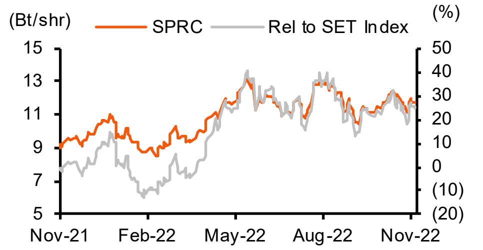
Gasoline margin bottoming out

SPRC's gasoline margin looks to be bottoming out and it is now at USD15/bbl vs. the bottom of USD3.8/bbl in October despite low seasonal demand. We believe this has been due to below-average US gasoline inventories and lower oil prices that should help stimulate demand. This bodes well for SPRC given its higher gasoline yield. We expect its gasoline margin to be at its historical average level of USD12/bbl between 2023-24F, dropping from USD19/bbl in 2022F given lower demand growth.

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	172,484	273,611	246,337	232,246
Net profit	4,746	8,663	5,947	4,515
Consensus NP	—	12,259	6,552	6,419
Diff frm cons (%)	—	*(29.3)*	*(9.2)*	*(29.7)*
Norm profit	(1,542)	9,070	5,947	5,341
Prev. Norm profit	—	11,348	6,870	6,444
Chg frm prev (%)	—	*(20.1)*	*(13.4)*	*(17.1)*
Norm EPS (Bt)	(0.4)	2.1	1.4	1.2
Norm EPS grw (%)	na	na	(34.4)	(10.2)
Norm PE (x)	na	5.6	8.5	9.5
EV/EBITDA (x)	19.6	3.7	4.5	4.4
P/BV (x)	1.5	1.3	1.2	1.2
Div yield (%)	1.5	10.3	5.9	4.5
ROE (%)	na	24.4	14.5	12.5
Net D/E (%)	14.9	5.5	(8.8)	(20.2)

PRICE PERFORMANCE



COMPANY INFORMATION

Price *as of* 29-Nov-22 (Bt)	11.70
Market Cap (US$ m)	1,433.8
Listed Shares (m shares)	4,335.9
Free Float (%)	39.4
Avg Daily Turnover (US$ m)	9.2
12M Price H/L (Bt)	13.30/8.50
Sector	Energy
Major Shareholder	Chevron Asia Holdings 60.56%

Sources: Bloomberg, Company data, Thanachart estimates

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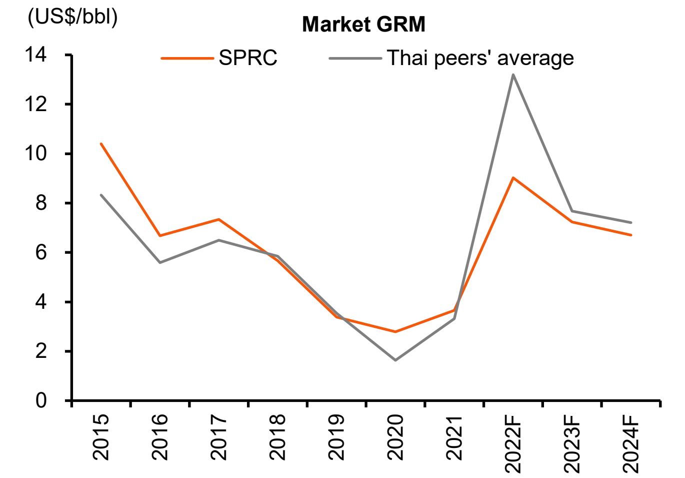
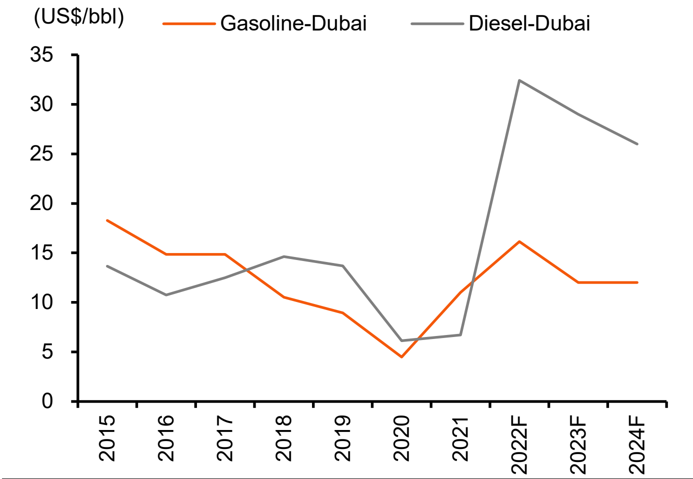
Ex 1: SPRC's GRM Vs. Thai Peers' Average



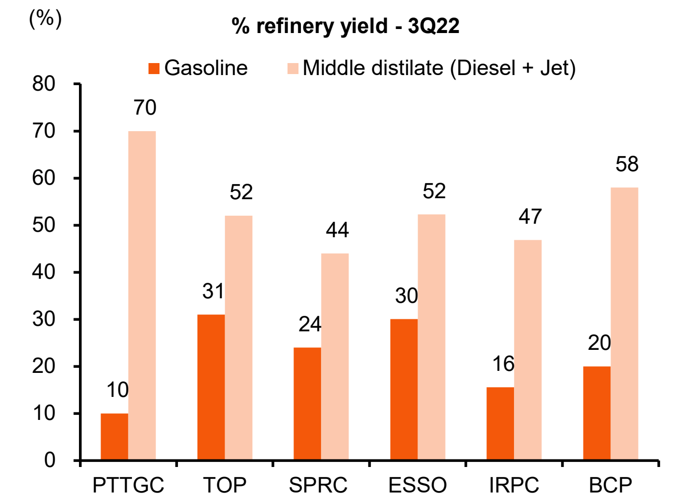
Sources: Company data, Thanachart estimates

Ex 2: Gasoline Margin To Be At A Discount To Diesel



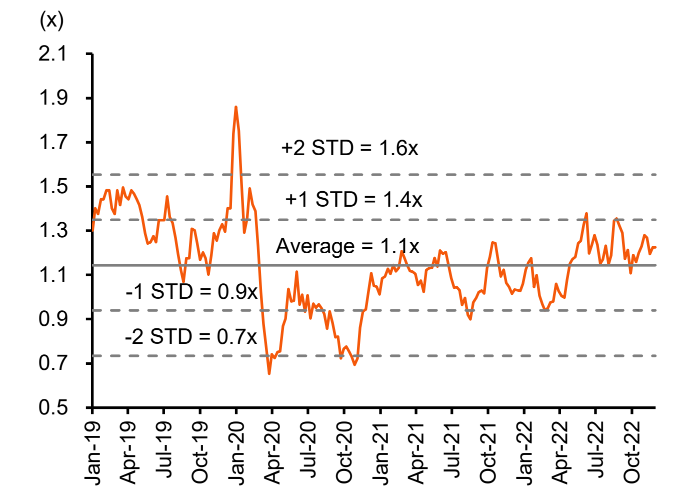
Sources: Bloomberg, Thanachart estimates

Ex 3: Thai Refinery Yield



Source: Company data

Ex 4: SPRC's P/BV Range



Sources: Bloomberg, Thanachart estimates

Ex 5: Earnings Revisions

	2019	2020	2021	2022F	2023F	2024F
Normalized profit (Bt m)						
New	(4,034)	(6,325)	(1,542)	9,070	5,947	5,341
Old				11,348	6,870	6,444
Change (%)				*(20.1)*	*(13.4)*	*(17.1)*
Net profit (Bt m)						
New	(1,694)	(12,280)	4,746	8,663	5,947	4,515
Old				13,807	5,073	5,583
Change (%)				*(37.3)*	*17.2*	*(19.1)*
Market GRM (US$/bbl)						
New	3.4	2.8	3.7	9.0	7.2	6.7
Old				9.9	7.5	7.4
Change (%)				*(9.0)*	*(3.7)*	*(8.8)*
Utilization (%)						
New	81.5	86.7	77.2	90.0	92.0	94.0
Old				92.0	98.0	98.0
Change (ppt)				*(2.0)*	*(6.0)*	*(4.0)*

Sources: Company data, Thanachart estimates

Ex 6: 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 + dividend		10,477	9,433	7,763	6,913	7,430	7,436	7,439	7,442	5,381	7,454	7,460	
Free cash flow		10,247	8,474	5,420	1,902	5,892	5,896	5,903	5,911	7,671	2,525	5,940	66,899
PV of free cash flow		9,402	7,131	4,129	1,323	3,745	3,421	3,129	2,862	3,261	976	2,088	23,511

Risk-free rate (%)	2.5
Market risk premium (%)	8.0
Beta	1.0
WACC (%)	9.0
Terminal growth (%)	1.0
Enterprise value - add Investments	64,979
Net debt (2022F)	2,198
Minority interest	0
Equity value	62,780
# of shares (m)	4,336
Equity value/sh (Bt)	**14.5**

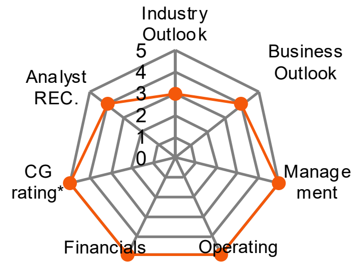
Sources: Thanachart estimates

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 reformate. The company has refining capacity of 175K b/d.

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.

W — Weakness

- Volatile earnings due to its pure refinery exposure.
- Lack of company-owned retail channel limits upside from domestic product placement and higher marketing margin.
- Limited growth potential to expand its refinery business given that Thailand is a net export country for refined oil products.

O — Opportunity

- Opportunities to upgrade and/or expand its refinery to meet higher local demand.
- Expansion into new businesses or securing its own retail channel.

T — Threat

- High oil prices could slow local demand and force it to sell in the lower-margin export market.
- Threat of substitutes such as electric vehicles may lower demand for oil products.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	12.83	14.50	13%
Net profit 22F (Bt m)	12,259	8,663	-29%
Net profit 23F (Bt m)	6,552	5,947	-9%
Consensus REC	**BUY: 9**	**HOLD: 6**	**SELL: 3**

HOW ARE WE DIFFERENT FROM THE STREET?

- We are significantly below the Bloomberg consensus for 2022F due to our lower GRM forecast and stock loss. Our 2023F is below consensus as we factor in a higher freight rate.
- Our DCF-based TP is higher than the consensus number due to our more positive view on refinery margins.

Sources: Bloomberg consensus, Thanachart estimates

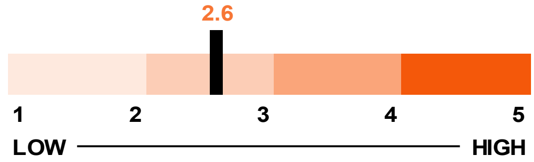
RISKS TO OUR INVESTMENT CASE

- Downside risks would be a sudden increase in oil exports from China or a collapse in demand that would lead to a refinery margin correction.
- A secondary downside risk would be sudden government intervention at the ex-refinery price to help reduce inflationary pressure.

Source: Thanachart

SRPC appears to have decent transparency and robust measures to protect minority interests to offset related-party transactions with its major shareholder, Chevron. Our ESG score for SPRC of 2.6 is due to its high energy intensity given the nature of its business and the lack of green investment project announcements.

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)
SPRC	-	-	-	-	56.47	54.92	26.94	-	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" toward the back of this report.

Factors	Our Comments
ENVIRONMENT – **Environmental Policies & Guidelines** – **Energy Management** – **Carbon Management** – **Water Management** – **Waste Management**	▪ In 2021, SPRC released 1.3mt of CO2 equivalent, which was steady from 2018. Emission intensity was at 194kg/BOE (barrels of crude oil equivalent). This was below Thai energy peers' average of 280kg/BOE. We believe this was due to its less diversified business as the company only has refinery operations. ▪ The company doesn't have clear emission reductions targets. However, SPRC does have targets for spill prevention, improving air quality, and waste/water management. In addition, SPRC plans to partner with Chevron, a leading global refiner, to study and establish continuous improvements that need to be made to bring down energy usage and greenhouse gas emissions ▪ SPRC lags global peers in terms of diversifying into the biofuel or renewable business that could help it to reduce carbon emissions. We believe the company is maintaining its goal is to use capex for efficiency improvements.
SOCIAL – **Human Rights** – **Staff Management** – **Health & Safety** – **Product Safety & Quality** – **Social Responsibility**	▪ The safety principles in the Environment, Health and Safety (EHS) Management System are used as a safety framework for all of SPRC's practices. The company experienced an oil spill incident in early 2022, but the company acted quickly and no serious injuries were reported. SPRC also showed a responsible attitude toward minimizing the environmental damage and the company paid compensation to affected people of US$42m this year. ▪ In 2021, SPRC did not receive any complaints through any of its whistleblowing channels. As of December 2021, SPRC had a hiring rate of 7%, with 499 full-time employees of whom 492 work on a permanent basis. Some 70% of employees have been with SPRC for over 10 years and the turnover rate is only 2%
GOVERNANCE & SUSTAINABILITY – **Board** – **Ethics & Transparency** – **Business Sustainability** – **Risk Management** – **Innovation**	▪ The major shareholder is Chevron South Asia Limited, with a 60.6% stake. However, the company is run independently and has flexibility in purchasing crude. ▪ The company has a good mix of board of director members with a policy guidelines and performance review on an annual basis. Four of SPRC's eight board members are independent non-executive directors (INEDs). Only one executive director serves on the board: CEO Robert Joseph Dobrik, a representative from Chevron. ▪ Operating performance margins are in line with the benchmarks and can be cross-checked easily. Audit fees are reported and IFRS accounting standards are used. While there is some risk from contingent liabilities, commodities prices, and forex rates, the balance sheet is generally strong.

Though we expect lower profit in 2023F, we see upside risk if the Ukraine war is prolonged

Balance sheet remains strong despite a difficult operating environment during the pandemic

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	130,163	172,484	273,611	246,337	232,246
Cost of sales	137,169	171,528	261,460	237,897	224,876
Gross profit	**(7,006)**	**956**	**12,151**	**8,440**	**7,370**
% gross margin	-5.4%	0.6%	4.4%	3.4%	3.2%
Selling & administration expenses	911	749	881	881	881
Operating profit	**(7,916)**	**207**	**11,270**	**7,559**	**6,489**
% operating margin	-6.1%	0.1%	4.1%	3.1%	2.8%
Depreciation & amortization	2,832	2,644	2,874	2,918	2,944
EBITDA	**(5,084)**	**2,851**	**14,144**	**10,477**	**9,433**
% EBITDA margin	-3.9%	1.7%	5.2%	4.3%	4.1%
Non-operating income	71	62	40	70	103
Non-operating expenses	143	(433)	0	0	0
Interest expense	(177)	(212)	(249)	(204)	(130)
Pre-tax profit	**(7,880)**	**(376)**	**11,061**	**7,425**	**6,462**
Income tax	(1,555)	1,166	1,990	1,478	1,121
After-tax profit	**(6,325)**	**(1,542)**	**9,070**	**5,947**	**5,341**
% net margin	-4.9%	-0.9%	3.3%	2.4%	2.3%
Shares in affiliates' Earnings	0	0	0	0	0
Minority interests	0	0	0	0	0
Extraordinary items	(5,955)	6,288	(407)	0	(826)
NET PROFIT	**(12,280)**	**4,746**	**8,663**	**5,947**	**4,515**
Normalized profit	**(6,325)**	**(1,542)**	**9,070**	**5,947**	**5,341**
EPS (Bt)	(2.8)	1.1	2.0	1.4	1.0
Normalized EPS (Bt)	(1.5)	(0.4)	2.1	1.4	1.2

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	19,323	32,731	43,304	43,691	44,254
Cash & cash equivalent	1,635	2,945	5,000	9,000	11,500
Account receivables	8,515	13,219	16,732	15,064	14,202
Inventories	9,052	16,486	21,444	19,511	18,443
Others	121	81	128	115	109
Investments & loans	0	0	0	0	0
Net fixed assets	24,156	24,219	23,045	20,827	18,583
Other assets	3,062	1,776	2,763	2,497	2,359
Total assets	**46,541**	**58,726**	**69,112**	**67,015**	**65,197**
LIABILITIES:					
Current liabilities:	10,740	20,031	21,652	19,330	18,002
Account payables	7,821	13,961	18,045	16,419	15,520
Bank overdraft & ST loans	0	0	0	0	0
Current LT debt	1,380	4,680	1,080	797	396
Others current liabilities	1,539	1,390	2,527	2,114	2,086
Total LT debt	**8,857**	**3,374**	**6,118**	**4,519**	**2,246**
Others LT liabilities	517	950	1,297	1,262	1,145
Total liabilities	**20,114**	**24,355**	**29,067**	**25,111**	**21,394**
Minority interest	0	0	0	0	0
Preferreds 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	(7,447)	(4,207)	(4,207)	(4,207)	(4,207)
Retained earnings	**2,892**	**7,596**	**13,270**	**15,129**	**17,029**
Shareholders' equity	26,427	34,371	40,045	41,904	43,804
Liabilities & equity	**46,541**	**58,726**	**69,112**	**67,015**	**65,197**

Sources: Company data, Thanachart estimates

With limited capex, high GRM, FCF is strong over the next three years

Valuation at 1.2x P/BV looks attractive to us vs. ROE of 14.5% in 2023F

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	(7,880)	(376)	11,061	7,425	6,462
Tax paid	1,555	(1,166)	(1,990)	(1,478)	(1,121)
Depreciation & amortization	2,832	2,644	2,874	2,918	2,944
Chg In working capital	1,736	(5,999)	(4,386)	1,974	1,031
Chg In other CA & CL / minorities	847	(171)	1,086	(402)	(23)
Cash flow from operations	**(910)**	**(5,068)**	**8,645**	**10,437**	**9,293**
Capex	(253)	(2,665)	(1,700)	(700)	(700)
Right of use	0	0	0	0	0
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	(7,191)	7,670	(1,045)	234	(804)
Cash flow from investments	**(7,444)**	**5,005**	**(2,745)**	**(466)**	**(1,504)**
Debt financing	3,738	(1,824)	(856)	(1,882)	(2,674)
Capital increase	0	0	0	0	0
Dividends paid	(271)	(774)	(2,989)	(4,088)	(2,616)
Warrants & other surplus	6,502	3,971	0	0	0
Cash flow from financing	**9,969**	**1,373**	**(3,844)**	**(5,970)**	**(5,289)**
Free cash flow	**(1,163)**	**(7,733)**	**6,945**	**9,737**	**8,593**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	na	na	5.6	8.5	9.5
Normalized PE - at target price (x)	na	na	6.9	10.6	11.8
PE (x)	na	10.7	5.9	8.5	11.2
PE - at target price (x)	na	13.2	7.3	10.6	13.9
EV/EBITDA (x)	na	19.6	3.7	4.5	4.4
EV/EBITDA - at target price (x)	na	23.8	4.6	5.6	5.7
P/BV (x)	1.9	1.5	1.3	1.2	1.2
P/BV - at target price (x)	2.4	1.8	1.6	1.5	1.4
P/CFO (x)	(55.7)	(10.0)	5.9	4.9	5.5
Price/sales (x)	0.4	0.3	0.2	0.2	0.2
Dividend yield (%)	0.0	1.5	10.3	5.9	4.5
FCF Yield (%)	(2.3)	(15.2)	13.7	19.2	16.9
(Bt)					
Normalized EPS	(1.5)	(0.4)	2.1	1.4	1.2
EPS	(2.8)	1.1	2.0	1.4	1.0
DPS	0.0	0.2	1.2	0.7	0.5
BV/share	6.1	7.9	9.2	9.7	10.1
CFO/share	(0.2)	(1.2)	2.0	2.4	2.1
FCF/share	(0.3)	(1.8)	1.6	2.2	2.0

Sources: Company data, Thanachart estimates

ROE looks set to remain at double-digit levels over the next three years.

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(22.9)	32.5	58.6	(10.0)	(5.7)
Net profit (%)	na	na	82.5	(31.4)	(24.1)
EPS (%)	na	na	82.5	(31.4)	(24.1)
Normalized profit (%)	na	na	na	(34.4)	(10.2)
Normalized EPS (%)	na	na	na	(34.4)	(10.2)
Dividend payout ratio (%)	0.0	16.3	60.1	50.0	50.0
Operating performance					
Gross margin (%)	(5.4)	0.6	4.4	3.4	3.2
Operating margin (%)	(6.1)	0.1	4.1	3.1	2.8
EBITDA margin (%)	(3.9)	1.7	5.2	4.3	4.1
Net margin (%)	(4.9)	(0.9)	3.3	2.4	2.3
D/E (incl. minor) (x)	0.4	0.2	0.2	0.1	0.1
Net D/E (incl. minor) (x)	0.3	0.1	0.1	(0.1)	(0.2)
Interest coverage - EBIT (x)	na	1.0	45.2	37.0	49.9
Interest coverage - EBITDA (x)	na	13.5	56.8	51.3	72.6
ROA - using norm profit (%)	na	na	14.2	8.7	8.1
ROE - using norm profit (%)	na	na	24.4	14.5	12.5
DuPont					
ROE - using after tax profit (%)	na	na	24.4	14.5	12.5
- asset turnover (x)	2.6	3.3	4.3	3.6	3.5
- operating margin (%)	na	na	4.1	3.1	2.8
- leverage (x)	1.7	1.7	1.7	1.7	1.5
- interest burden (%)	102.3	229.4	97.8	97.3	98.0
- tax burden (%)	na	na	82.0	80.1	82.7
WACC (%)	9.0	9.0	9.0	9.0	9.0
ROIC (%)	(20.2)	0.6	23.2	14.3	13.6
NOPAT (Bt m)	(7,916)	207	9,164	6,055	5,199
invested capital (Bt m)	35,029	39,480	42,243	38,220	34,946

Sources: Company data, Thanachart estimates

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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.

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Score range	Description
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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

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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.

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Moody's ESG Solutions

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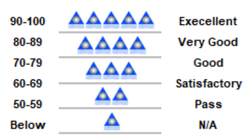

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