

BUY (From: HOLD)**TP: Bt 58.00** (From: Bt 56.00)**1 APRIL 2022**

Change in Recommendation

Upside : 14.3%

PTT Global Chemical Pcl (PTTGC TB)

Value emerges

We upgrade PTTGC to BUY from Hold as we believe its share price has already factored in the change in its fundamentals trading at only 0.7x P/BV. At the same time, we expect chemical spreads to have passed their bottoms and to turn to an upcycle next year.

**YUPAPAN POLPORNPRASERT**

662-779-9110

yupapan.pol@thanachartsec.co.th

Upgrading to BUY

We upgrade PTTGC to BUY (from Hold) as we believe the stock has already been de-rated enough from 1.3x P/BV in 2018 to 0.7x currently. The stock is trading on nearly -1STD of its five-year P/BV band (Exhibit 8). The de-rated valuation in our view is a reflection of the change in its feedstock mix toward more expensive naphtha and less cheaper ethane gas. At the same time, we expect an improving outlook for petrochemical spreads after new global supply peaks this year.

Spreads start to rebound

Polyolefins spreads, depressed by a new supply wave this year, have been squeezed further from a jump in oil prices that pushed up naphtha and ethane feedstock costs. However, spreads have started to improve as product prices have been adjusted up along with oil prices, which have also fallen from their peak. Looking ahead, we expect spreads to improve further after the Russian-Ukraine war ends and with falling global supply additions from 2022F onward. Our benchmark HDPE-naphtha spread assumptions are US\$450/500/550 per tonne in 2022-24F vs. US\$630 in 2021 and US\$377 in March 2022. Exhibits 3-4 show the global supply-demand outlook.

Cyclical improvement of feed mix

One of the key structural changes that has de-rated PTTGC's valuation in our view is the rising naphtha and LPG feedstock mix trend which we expect to increase from 43% in 2018 to 55% in 2025F. This year, however, will likely be cyclically the worst year of the mix in that structural trend at 65% naphtha & LPG vs. 35% gas costs. This is due to a temporary slump in gas output from the Erawan field, which Chevron is handing over to a new operator PTT Exploration & Production (PTTEP TB, HOLD, Bt148). We estimate output to fall to an average 250-300mmcf in 2022F from 867mmcf in 2021 before ramping up to 500mmcf in 2023F and to its full potential of 800mmcf in 2024F. We thus estimate PTTGC's naphtha & LPG mix to cyclically improve from 2022F's peak of 65% in 2022F to 60%/55% in 2023-24F.

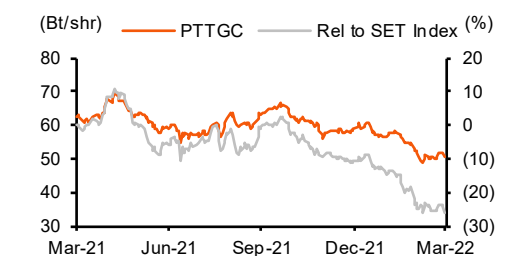
Earnings revisions

We raise our reported earnings estimate for 2022F by 14% on the higher-than-expected GRM spike and a Bt4bn inventory gain. However, we only fine tune up our earnings by 3-4% in 2023-24F. Our DCF-based 12-month TP, using a 2023F base year, is raised slightly to Bt58 (from Bt56). Exhibits 5-6 show our earnings revision assumptions.

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	465,128	627,450	533,400	520,860
Net profit	44,982	26,808	24,032	29,088
Consensus NP	—	26,137	28,159	29,142
Diff frm cons (%)	—	2.6	(14.7)	(0.2)
Norm profit	28,295	22,808	24,032	29,088
Prev. Norm profit	—	23,442	23,380	28,089
Chg frm prev (%)	—	(2.7)	2.8	3.6
Norm EPS (Bt)	6.3	5.1	5.3	6.5
Norm EPS grw (%)	270.7	(19.4)	5.4	21.0
Norm PE (x)	8.1	10.0	9.5	7.9
EV/EBITDA (x)	7.9	7.7	7.2	5.9
P/BV (x)	0.7	0.7	0.7	0.6
Div yield (%)	7.4	4.9	4.7	5.7
ROE (%)	9.4	7.0	7.1	8.3
Net D/E (%)	58.0	50.8	42.1	32.3

PRICE PERFORMANCE

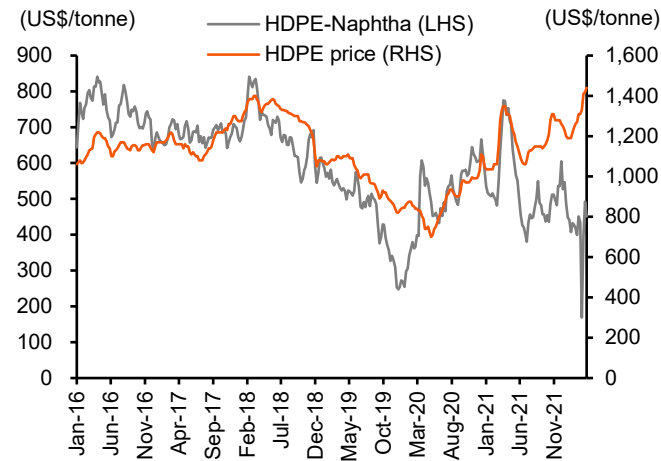


COMPANY INFORMATION

Price as of 31-Mar-22 (Bt)	50.75
Market Cap (US\$ m)	6,882.5
Listed Shares (m shares)	4,508.8
Free Float (%)	54.3
Avg Daily Turnover (US\$ m)	31.2
12M Price H/L (Bt)	69.50/48.75
Sector	PETRO
Major Shareholder	PTT Pcl 45.18%

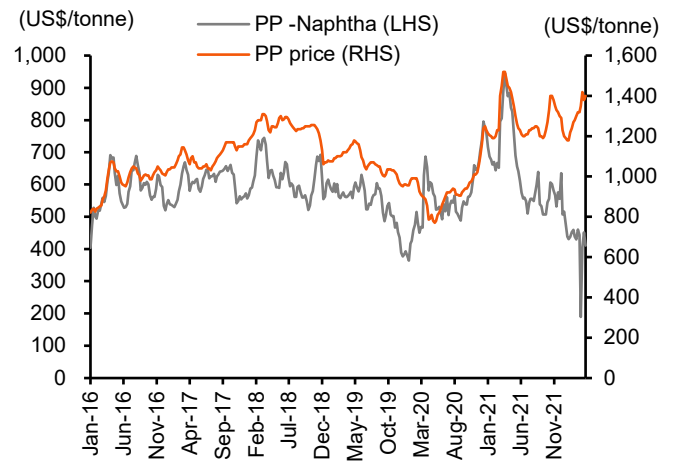
Sources: Bloomberg, Company data, Thanachart estimates

Ex 1: HDPE-Naphtha Spread Starts To Bounce



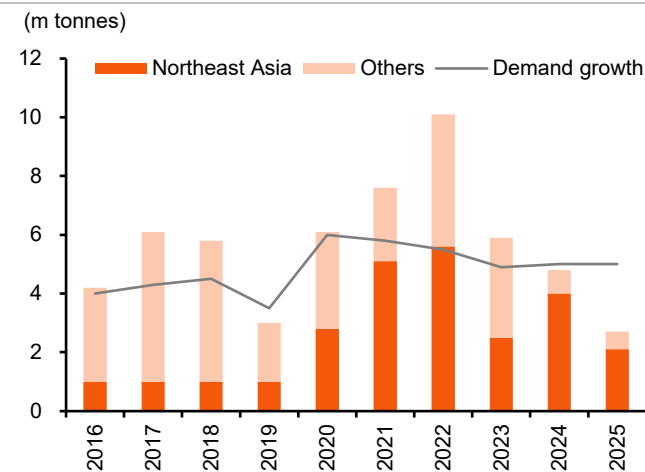
Source: Bloomberg

Ex 2: And Also PP-naphtha Spread



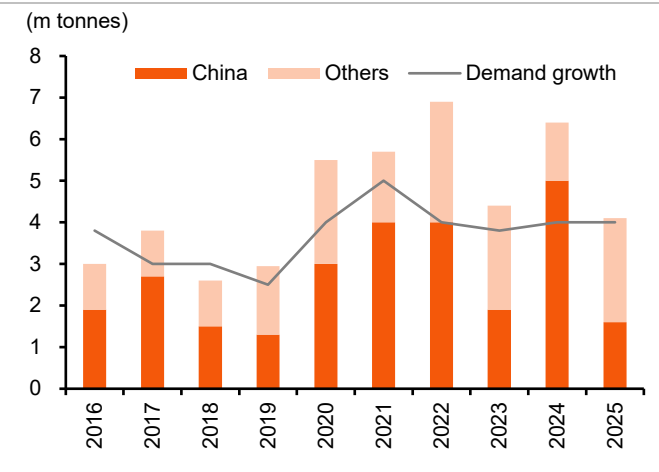
Source: Bloomberg

Ex 3: Global PE Supply Peaking Out



Source: PTTGC

Ex 4: As Is Global PP Supply



Source: IRPC

Ex 5: Spread Assumption Revisions

	2020	2021	1Q22	Mar-22	New			Old			Change (%)		
					2022F	2023F	2024F	2022F	2023F	2024F	2022F	2023F	2024F
(US\$/tonne)													
HDPE-naphtha	506	630	413	377	450	500	550	480	530	590	(6.3)	(5.7)	(6.8)
LLDPE-naphtha	479	630	437	389	505	550	600	500	550	600	1.1	0.0	0.0
LDPE-naphtha	626	1,020	731	707	750	800	830	750	800	830	0.0	0.0	0.0
PP-naphtha	616	680	419	364	420	550	600	550	600	620	(23.6)	(8.3)	(3.2)
(US\$/bbl)													
Gasoline-Dubai	4.4	11.0	16.9	22.0	16.5	13.0	12.0	13.5	12.0	12.0	21.9	8.3	0.0
Diesel-Dubai	6.2	6.7	17.6	33.8	19.1	14.0	14.0	13.0	13.0	13.0	47.3	7.7	7.7
Jet-Dubai	2.6	5.8	13.7	23.7	17.6	13.0	13.0	12.5	12.0	12.0	41.1	8.3	8.3
HSFO-Dubai	(3.0)	(4.9)	(8.9)	(10.3)	(7.7)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(4.3)	0.0	0.0
SG GRM	0.7	3.1	7.4	12.5	7.3	5.5	5.2	5.7	5.4	5.1	27.9	2.0	0.5

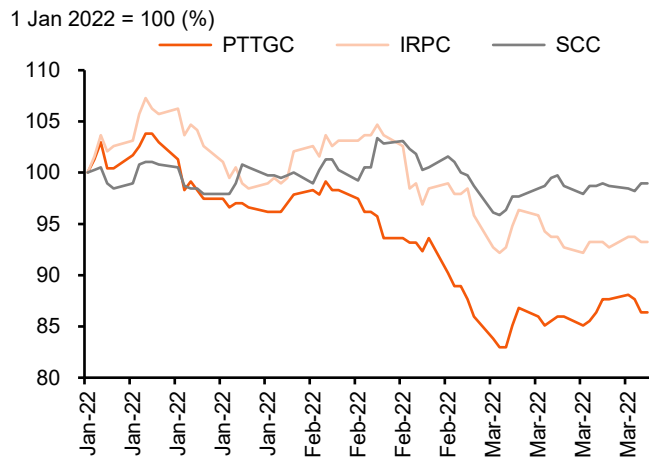
Sources: Bloomberg, Thanachart estimates

Ex 6: Earnings Revisions

(Bt m)	2021	2022F	2023F	2024F
Net Profit				
New	44,982	26,808	24,032	29,088
Old	44,982	23,442	23,380	28,089
Change (%)	0.0	14.4	2.8	3.6
Normalized profit				
New	28,295	22,808	24,032	29,088
Old	28,296	23,442	23,380	28,089
Change (%)	(0.0)	(2.7)	2.8	3.6

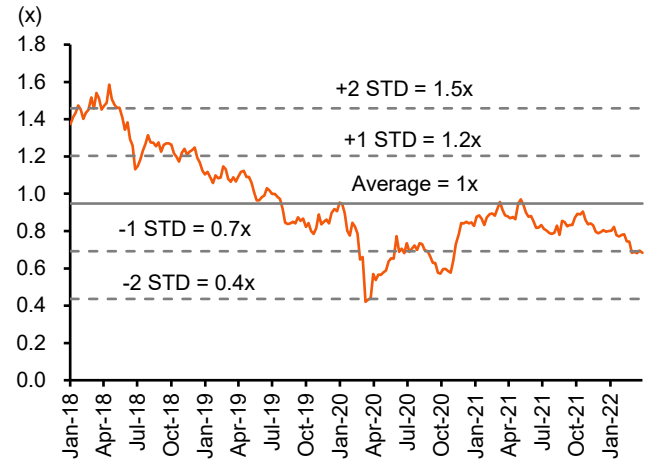
Sources: Company data, Thanachart estimates

Ex 7: PTTGC's Share Price Has Underperformed



Source: Bloomberg

Ex 8: At Nearly -1STD P/BV Ratio



Sources: Bloomberg, Thanachart estimates

Ex 9: 12-month DCF-based TP Calculation, Using A Base Year Of 2023F

(Bt m)	2023F	2024F	2025F	2026F	2018F	2028F	2029F	2030F	2031F	2032F	2033F	Terminal Value
EBITDA & equity income	52,284	59,046	59,168	59,911	58,978	58,989	59,105	59,243	59,645	59,429	57,703	
Free cash flow	44,076	45,014	45,434	48,536	47,544	46,807	46,982	47,171	47,558	47,482	46,274	582,713
PV of free cash flow	36,985	34,588	31,975	30,635	27,371	24,571	22,494	20,599	18,942	16,468	14,577	183,560
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.4											
WACC (%)	9.2											
Terminal growth (%)	2.0											
Enterprise value - add investments	462,762											
Net debt (end-2022F)	190,025											
Minority interest	10,127											
Equity value	262,611											
# of shares (m)	4,509											
Equity value/share (Bt)	58											

Source: Thanachart estimates

Valuation Comparison

Ex 10: Comparison With Regional Peers

Name	BBG code	Country	EPS growth		— PE —		— P/BV —		EV/EBITDA		– Div yield –	
			22F (%)	23F (%)	22F (x)	23F (x)	22F (x)	23F (x)	22F (x)	23F (x)	22F (%)	23F (%)
Sinopec Shanghai	338 HK	Hong Kong	(0.4)	(2.9)	6.7	6.9	0.6	0.5	5.0	5.0	7.4	8.8
Sinopec Yizheng	1033 HK	Hong Kong	(6.7)	17.9	22.9	19.4	1.5	1.4	10.1	9.7	0.0	0.0
AKR Corporindo	AKRA IJ	Indonesia	20.8	12.5	14.2	12.6	1.8	1.6	9.8	8.7	3.0	3.5
Reliance Industries Ltd	RIL IN	India	28.4	27.7	29.6	23.2	2.3	2.1	18.0	14.5	0.3	0.3
LG Chem	051910 KS	South Korea	(33.6)	29.1	15.6	12.1	1.5	1.4	6.9	5.7	2.1	2.0
SK Energy	096770 KS	South Korea	82.4	11.3	15.4	13.8	1.1	1.0	7.9	7.0	0.9	1.5
Petronas Chemicals Group	PCHEM MK	Malaysia	(3.1)	(7.3)	12.1	13.1	2.1	1.9	7.8	8.2	4.8	4.6
Formosa Chemical	1326 TT	Taiwan	(24.8)	(1.0)	15.1	15.3	1.2	1.2	12.3	12.2	6.5	5.0
Far Eastern New Century	1402 TT	Taiwan	3.9	9.9	13.4	12.2	0.7	0.7	11.6	11.0	5.5	5.6
IRPC Pcl *	IRPC TB *	Thailand	(70.7)	489.1	63.5	10.8	0.8	0.8	13.1	7.6	4.3	4.6
Indorama Ventures *	IVL TB *	Thailand	31.7	11.5	9.7	8.7	1.5	1.4	7.7	7.8	5.2	5.7
PTT Global Chemical *	PTTGC TB *	Thailand	(19.4)	5.4	10.0	9.5	0.7	0.7	7.7	7.2	4.9	4.7
Siam Cement *	SCC TB *	Thailand	(29.1)	46.0	13.8	9.4	1.2	1.1	12.8	8.8	3.6	5.3
TPI Polene	TPIPL TB	Thailand	(37.0)	0.0	9.6	9.6	0.6	0.6	9.5	9.7	na	4.9
Average			(4.1)	46.4	18.0	12.6	1.3	1.2	10.0	8.8	3.7	4.0

Sources: Bloomberg, * Thanachart estimates

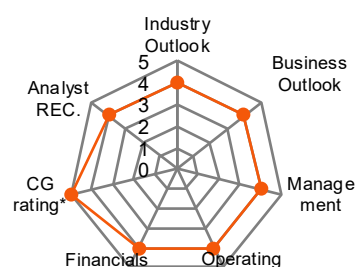
Based on 31 March 2022 closing prices

COMPANY DESCRIPTION

PTT Global Chemical (PTTGC) became a fully integrated petrochemical and refining company after the amalgamation of PTTCH (PTT Chemicals) and PTTAR (PTT Aromatics & Refining) in late 2011. The company produces olefins and derivatives, and its key products are ethylene, propylene, HDPE, LDPE, LLDPE and MEG. Together, the olefin value chain made up about half of 2022 EBITDA. PTTGC is one of the few gas-based crackers in Asia and it has a competitive cost structure compared with other naphtha-based crackers. The company also has fully integrated refinery and aromatics plants which produce mainly paraxylene and benzene. The company also recently moved into the specialty coating business with its investment in Allnex Holdings GmbH (Allnex).

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

- It is a low-cost producer that is leveraging on its gas-based and flexible cracker.
- Large economies of scale due to synergies from its fully integrated facilities.
- Being a PTT group company helps ensure feedstock and raises its franchise value.

O — Opportunity

- Significant growth potential in terms of chemical demand in the region.
- Value enhancement from synergies, debottlenecking of its units, and further downstream integration.
- M&A activity that could lead to higher return to investors.

W — Weakness

- Cyclical business with volatile earnings and cash flow.
- Potential impact of stock losses (due mainly to oil price movements) on earnings.
- Reliance on bulk chemicals and limited exposure to specialty chemicals.

T — Threat

- Depleting low-cost domestic gas supply would reduce its competitive edge of being a low-cost producer.
- Low oil prices erode its competitive advantage.
- Increasing competition from lower-cost producers in the Middle East and US-based crackers.
- Overpaying for acquisitions and limited synergies.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	65.85	58.00	-12%
Net profit 22F (Bt m)	26,137	26,808	3%
Net profit 23F (Bt m)	28,159	24,032	-15%
Consensus REC	BUY: 13	HOLD: 12	SELL: 1

RISKS TO OUR INVESTMENT CASE

- Lower-than-expected oil prices and/or chemical spreads would be the key downside risk to our call.
- Hiccups in the gas supply from its parent company PTT or any unplanned outages at the complex would be another downside risk.

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023F net profit is lower than consensus likely given our lower GRM assumption.
- Therefore, our target price is also lower than Bloomberg consensus.

Sources: Bloomberg consensus, Thanachart estimates

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	329,291	465,128	627,450	533,400	520,860
Cost of sales	308,527	416,647	574,664	485,304	467,166
Gross profit	20,764	48,481	52,786	48,097	53,694
% gross margin	6.3%	10.4%	8.4%	9.0%	10.3%
Selling & administration expenses	14,881	18,878	25,466	21,649	21,140
Operating profit	5,883	29,603	27,320	26,448	32,554
% operating margin	1.8%	6.4%	4.4%	5.0%	6.3%
Depreciation & amortization	20,292	23,092	25,001	25,836	26,492
EBITDA	26,174	52,695	52,321	52,284	59,046
% EBITDA margin	7.9%	11.3%	8.3%	9.8%	11.3%
Non-operating income	2,283	4,931	4,931	4,931	4,931
Non-operating expenses	0	0	0	0	0
Interest expense	(3,511)	(5,434)	(6,918)	(5,900)	(5,285)
Pre-tax profit	4,654	29,100	25,333	25,479	32,200
Income tax	(109)	7,229	7,333	6,370	8,050
After-tax profit	4,763	21,871	17,999	19,109	24,150
% net margin	1.4%	4.7%	2.9%	3.6%	4.6%
Shares in affiliates' Earnings	3,323	6,992	5,574	5,574	5,574
Minority interests	(452)	(568)	(766)	(651)	(636)
Extraordinary items	(7,434)	16,687	4,000	0	0
NET PROFIT	200	44,982	26,808	24,032	29,088
Normalized profit	7,634	28,295	22,808	24,032	29,088
EPS (Bt)	0.0	10.0	5.9	5.3	6.5
Normalized EPS (Bt)	1.7	6.3	5.1	5.3	6.5

Expect profit to improve in 2023F which chemical margins recovery

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	129,911	207,244	250,443	222,857	223,137
Cash & cash equivalent	60,658	74,994	70,000	70,000	75,000
Account receivables	29,277	50,540	68,178	57,959	56,596
Inventories	33,445	69,725	96,168	81,214	78,179
Others	6,531	11,985	16,097	13,684	13,362
Investments & loans	65,675	74,706	74,706	74,706	74,706
Net fixed assets	269,177	289,579	284,676	275,537	261,223
Other assets	24,620	182,585	182,585	182,585	182,585
Total assets	489,383	754,115	792,411	755,686	741,652
LIABILITIES:					
Current liabilities:	59,041	147,007	176,511	219,460	133,122
Account payables	20,114	69,951	96,480	81,477	78,432
Bank overdraft & ST loans	19	2,423	0	0	0
Current LT debt	22,017	37,835	40,000	100,000	20,000
Others current liabilities	16,892	36,797	40,031	37,983	34,689
Total LT debt	126,261	224,760	203,378	119,367	175,140
Others LT liabilities	15,086	54,746	71,435	62,132	60,892
Total liabilities	200,389	426,512	451,324	400,960	369,154
Minority interest	7,979	9,361	10,127	10,778	11,414
Preferreds shares	0	0	0	0	0
Paid-up capital	45,088	45,088	45,088	45,088	45,088
Share premium	36,937	36,937	36,937	36,937	36,937
Warrants	0	0	0	0	0
Surplus	(3,618)	5,235	5,235	5,235	5,235
Retained earnings	202,608	230,982	243,699	256,688	273,824
Shareholders' equity	281,015	318,242	330,959	343,948	361,084
Liabilities & equity	489,383	754,115	792,411	755,686	741,652

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	4,654	29,100	25,333	25,479	32,200
Tax paid	203	(5,976)	(7,604)	(6,216)	(8,245)
Depreciation & amortization	20,292	23,092	25,001	25,836	26,492
Chg In working capital	2,322	(7,707)	(17,552)	10,171	1,353
Chg In other CA & CL / minorities	4,056	21,870	4,914	5,785	2,797
Cash flow from operations	31,527	60,380	30,092	61,054	54,597
Capex	(24,905)	(43,495)	(20,097)	(16,698)	(12,177)
Right of use	(7,039)	(3,373)	0	0	0
ST loans & investments	2,144	485	53	0	0
LT loans & investments	226	(9,032)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(3,192)	(94,832)	20,690	(9,303)	(1,240)
Cash flow from investments	(32,766)	(150,247)	645	(26,001)	(13,417)
Debt financing	41,352	111,958	(21,641)	(24,010)	(24,228)
Capital increase	0	0	0	0	0
Dividends paid	(5,024)	(14,080)	(14,090)	(11,043)	(11,952)
Warrants & other surplus	9	6,324	0	0	0
Cash flow from financing	36,338	104,203	(35,731)	(35,054)	(36,180)
Free cash flow	6,622	16,885	9,995	44,356	42,420

With a lack of capacity expansion, we expect positive FCF over the next three years

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	30.0	8.1	10.0	9.5	7.9
Normalized PE - at target price (x)	34.3	9.2	11.5	10.9	9.0
PE (x)	1,146.4	5.1	8.5	9.5	7.9
PE - at target price (x)	1,310.2	5.8	9.8	10.9	9.0
EV/EBITDA (x)	12.1	7.9	7.7	7.2	5.9
EV/EBITDA - at target price (x)	13.3	8.6	8.3	7.9	6.5
P/BV (x)	0.8	0.7	0.7	0.7	0.6
P/BV - at target price (x)	0.9	0.8	0.8	0.8	0.7
P/CFO (x)	7.3	3.8	7.6	3.7	4.2
Price/sales (x)	0.7	0.5	0.4	0.4	0.4
Dividend yield (%)	2.0	7.4	4.9	4.7	5.7
FCF Yield (%)	2.9	7.4	4.4	19.4	18.5
(Bt)					
Normalized EPS	1.7	6.3	5.1	5.3	6.5
EPS	0.0	10.0	5.9	5.3	6.5
DPS	1.0	3.8	2.5	2.4	2.9
BV/share	62.3	70.6	73.4	76.3	80.1
CFO/share	7.0	13.4	6.7	13.5	12.1
FCF/share	1.5	3.7	2.2	9.8	9.4

Sources: Company data, Thanachart estimates

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(20.2)	41.3	34.9	(15.0)	(2.4)
Net profit (%)	(98.3)	22,436.0	(40.4)	(10.4)	21.0
EPS (%)	(98.3)	22,436.0	(40.4)	(10.4)	21.0
Normalized profit (%)	(6.5)	270.7	(19.4)	5.4	21.0
Normalized EPS (%)	(6.5)	270.7	(19.4)	5.4	21.0
Dividend payout ratio (%)	2,258.9	37.6	42.0	45.0	45.0
Operating performance					
Gross margin (%)	6.3	10.4	8.4	9.0	10.3
Operating margin (%)	1.8	6.4	4.4	5.0	6.3
EBITDA margin (%)	7.9	11.3	8.3	9.8	11.3
Net margin (%)	1.4	4.7	2.9	3.6	4.6
D/E (incl. minor) (x)	0.5	0.8	0.7	0.6	0.5
Net D/E (incl. minor) (x)	0.3	0.6	0.5	0.4	0.3
Interest coverage - EBIT (x)	1.7	5.4	3.9	4.5	6.2
Interest coverage - EBITDA (x)	7.5	9.7	7.6	8.9	11.2
ROA - using norm profit (%)	1.6	4.6	2.9	3.1	3.9
ROE - using norm profit (%)	2.7	9.4	7.0	7.1	8.3
DuPont					
ROE - using after tax profit (%)	1.7	7.3	5.5	5.7	6.9
- asset turnover (x)	0.7	0.7	0.8	0.7	0.7
- operating margin (%)	2.5	7.4	5.1	5.9	7.2
- leverage (x)	1.7	2.1	2.4	2.3	2.1
- interest burden (%)	57.0	84.3	78.5	81.2	85.9
- tax burden (%)	102.3	75.2	71.1	75.0	75.0
WACC (%)	9.2	9.2	9.2	9.2	9.2
ROIC (%)	1.6	6.0	3.8	3.9	4.9
NOPAT (Bt m)	6,021	22,249	19,411	19,836	24,416
invested capital (Bt m)	368,653	508,266	504,337	493,316	481,224

Sources: Company data, Thanachart estimates

Net D/E remains relatively low

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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

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 Limsuthiwanoom

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

Thematic Research, 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 Phadthanarak

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