

**BUY** (Unchanged)

Change in Numbers

**TP: Bt 5.10** (From Bt5.30)**Upside : 19.7%****23 NOVEMBER 2021**

# BTS Rail Mass Transit (BTSGIF TB)

## Looking undervalued

BTSGIF's current price implies ridership stays at 85% of the pre-COVID level until the end of its concession term in 2029. We believe this is unrealistic and reaffirm our BUY call on BTSGIF, which is also offering an attractive dividend IRR of 11%. Our TP with a FY23F base year is Bt5.1.

**SAKSID PHADTHANANARAK**

662 – 779 9112

saksid.pha@thanachartsec.co.th

### BUYing opportunity

BTSGIF's share price is down 24% from its peak this year on COVID waves hitting skytrain ridership. We take this opportunity to reaffirm our BUY call on the stock. *First*, we believe BTSGIF is unrealistically valued at the current market price which implies ridership staying at a flat 85% of the pre-COVID level until the end of its concession in 2029. *Second*, the stock also looks inexpensive to us offering an 11% p.a. dividend IRR when held to the concession's end. *Third*, for shorter-term investors, the stock offers potential upside to our DDM-derived (FY23F base year, March year end) 12-month TP of Bt5.1 (see our TP sensitivity analysis on page 2). *Lastly*, a near-term catalyst would be a swift recovery of ridership after the July-August 2021 lockdown.

### Earnings revisions

We lower our earnings for BTSGIF by 13% in FY22F (ending March 2022F) but raise them by 2-4% for FY23-24F. The upward revisions are due to 2-5% p.a. increases in our fare assumption following the cancelation of the monthly pass ticket which offers a lower average fare per trip. We do not expect the company to re-offer this pass. As for ridership, we cut our assumption by 16% to 89m trips in FY22F and maintain trips at 202-242m for FY23-24F vs. 237m trips in pre-COVID FY20. However, these positive factors are offset by the rollover of the base year in our model to FY23F (BTSGIF's value is amortized over the concession life and becomes zero at the concession's end in December 2029). Our 12-month TP falls to Bt5.1 from Bt5.3 previously.

### Ridership turnaround

After the easing of the lockdown from September 2021, BTSGIF's ridership has recovered from a low of 2.8m trips in August to 6.1m trips in October and we expect 8.5m trips in November. That is compared to the pre-COVID monthly level of 19.8m trips/month or 237m trips p.a. Our ridership estimates are 89/202/242m trips over FY22-24F with 1.5% p.a. growth after that. Our fare growth projection is 0.5% p.a. from FY23F onward.

### No progress on concession extension

BTS Group Holdings (BTS TB, Bt9.6, BUY) has been negotiating with the Bangkok Metropolitan Administration (BMA) to obtain a 30-year concession extension for its skytrain operation. Then, BTSGIF would buy more farebox revenue generated from BTS's skytrain network. However, the negotiations have yet to succeed and this plan continues to be delayed. In our view, a successful deal would be a positive for BTSGIF's share price as it would extend revenue generation with a possible leverage benefit via some debt financing rather than pure equity investment. We leave this as potential upside to our numbers.

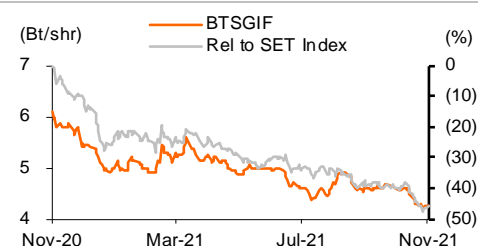
### COMPANY VALUATION

Y/E Mar (Bt m)	2021A	2022F	2023F	2024F
Sales	2,108	1,368	3,910	4,978
Net profit	(5,835)	435	1,592	1,472
Norm profit	2,037	1,335	3,830	4,879
Consensus NP	—	637	3,825	4,439
Diff frm cons (%)	—	109.6	0.1	9.9
Prev. Norm profit	—	1,540	3,677	4,778
Chg frm prev (%)	—	(13.3)	4.2	2.1
Norm EPS (Bt)	0.4	0.2	0.7	0.8
Norm EPS grw (%)	(56.9)	(34.5)	186.9	27.4
Norm PE (x)	12.1	18.5	6.4	5.1
EV/EBITDA (x)	12.0	18.4	6.4	5.0
P/NAV (x)	0.5	0.6	0.6	0.6
Cash div yield (%)*	7.2	5.4	15.5	19.8
Effective yield (%)**	0.0	0.0	0.0	0.0
ROE (%)	4.1	3.0	8.8	12.1
Net D/E (%)	(0.1)	(0.1)	(0.2)	(0.2)

Note: \* Dividend from operations and capital reduction

\*\* Dividend from operations

### PRICE PERFORMANCE



### COMPANY INFORMATION

Price as of 23-Nov-21 (Bt)	4.26
Market Cap (US\$ m)	745.3
Listed Shares (m shares)	5,788.0
Free Float (%)	64.5
Avg Daily Turnover (US\$ m)	0.5
12M Price H/L (Bt)	6.10/4.16
Sector	Transportation
Major Shareholder	BTS Group Holdings 33.33%

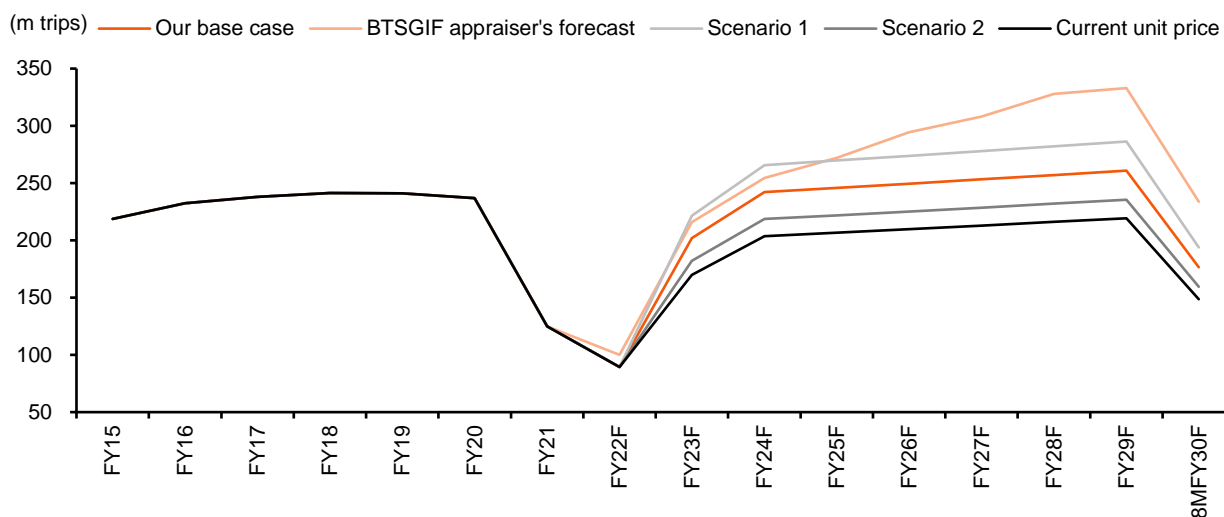
Sources: Bloomberg, Company data, Thanachart estimates

## Ex 1: Key Assumption Changes

	FY20	FY21	FY22F	FY23F	FY24F
<b>Ridership (m trips)</b>					
New	236.9	124.9	89.3	201.8	242.2
Old			106.2	201.8	242.2
Change (%)			(15.9)	—	—
<b>Average fare (Bt/trip)</b>					
New	28.8	29.7	31.2	31.4	31.5
Old			29.9	30.0	30.9
Change (pp)			4.5	4.7	1.9

Sources: Company data, Thanachart estimates

## Ex 2: Sensitivity Analysis On The Change In Ridership To...

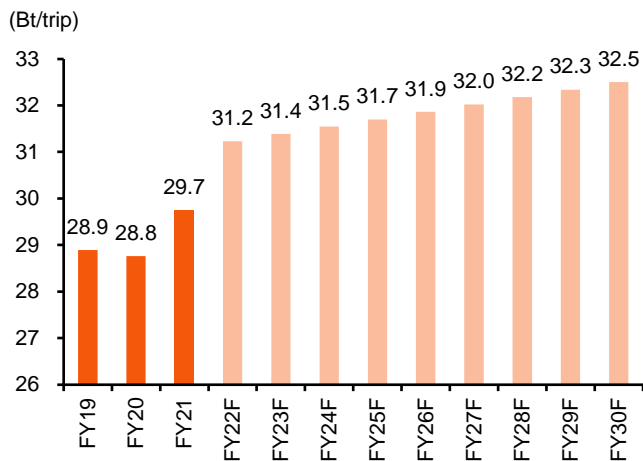


Sources: Company data, Thanachart estimates

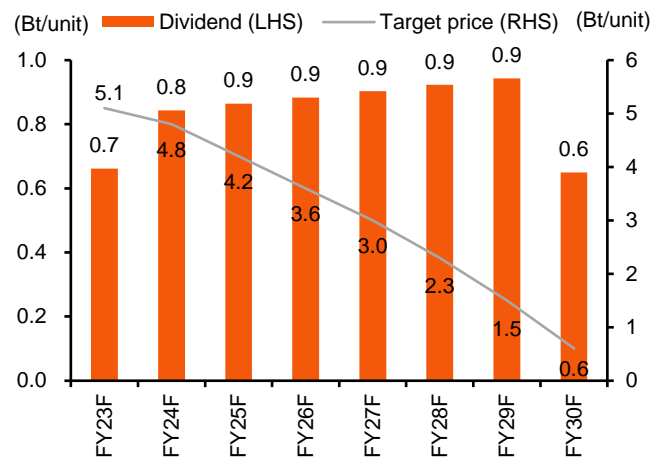
## Ex 3: ...BTSGIF's Fair Value (Sensitivity Analysis)

	Earnings growth (% y-y)			Total dividend	IRR	TP
	FY23F	FY24F	FY25F	FY23-30F (Bt)	(%)	(Bt)
Our base case	186.9	27.4	2.5	6.7	11.1	5.1
Scenario 1: +10% ridership	217.6	26.9	2.5	7.4	13.9	5.6
Scenario 2: -10% ridership	156.3	28.0	2.6	6.0	8.2	4.6
Ridership at current unit price	136.8	28.4	2.6	5.6	6.3	4.2

Source: Thanachart estimates

**Ex 4: Average Fare**

Sources: Company data; Thanachart estimates

**Ex 5: Our TP Vs. Dividend Per Unit**

Sources: Thanachart estimates

**Ex 6: 12-month DDM-based Valuation Using A Base Year Of FY23F**

(Bt m)	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F	FY29F	FY30F
Dividend of common shares	435	1,592	1,472	572	(210)	(878)	(1,446)	(1,924)	(4,148)
Dividend from capital reduction	900	2,238	3,407	4,429	5,323	6,104	6,787	7,383	7,905
Dividend payment	1,335	3,830	4,879	5,002	5,112	5,226	5,341	5,459	3,757
Cost of equity	6.1%	6.1%	6.1%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%
<b>PV of dividend</b>		<b>3,819</b>	<b>4,334</b>	<b>4,129</b>	<b>3,959</b>	<b>3,796</b>	<b>3,639</b>	<b>3,489</b>	<b>2,253</b>
<b>Total PV</b>		<b>29,419</b>							
<b>No. of units (m)</b>		<b>5,788</b>							
<b>Value / unit (Bt)</b>		<b>5.10</b>							

Sources: Company data, Thanachart estimates

## Valuation Comparison

### Ex 7: Valuation Comparison With Regional Peers

Name	BBG Code	Country	EPU growth		— PE —		— P/NAV —		EV/EBITDA		Div yield	
			21F (%)	22F (%)	21F (x)	22F (x)	21F (x)	22F (x)	21F (x)	22F (x)	21F (%)	22F (%)
Link REIT/The	823 HK	Hong Kong	na	99.4	22.8	21.7	0.9	0.9	21.7	20.5	4.5	4.6
Yuexiu Real Estate	405 HK	Hong Kong	na	11.8	16.5	15.6	0.7	0.7	19.1	17.7	8.4	8.5
Fortune Real Estate	778 HK	Hong Kong	na	12.5	18.2	17.9	0.6	0.6	20.5	20.4	5.8	5.9
Frasers Centrepoint Trust	FCT SP	Singapore	na	6.4	19.5	18.7	1.0	1.0	24.8	24.4	5.5	5.5
Mapletree Commercial	MCT SP	Singapore	na	13.8	25.0	21.7	1.3	1.2	28.0	25.6	4.3	4.6
Suntec Real Estate	SUN SP	Singapore	na	12.1	21.2	20.1	0.8	0.8	43.6	36.0	5.4	5.8
Starhill Global REIT	SGREIT SP	Singapore	na	10.3	15.7	15.0	0.8	0.8	18.2	17.9	6.4	6.7
Keppel REIT	KREIT SP	Singapore	na	1.7	24.6	23.1	0.9	0.9	65.3	51.1	5.0	5.1
Ascendas Real Estate	AREIT SP	Singapore	na	10.0	19.3	18.5	1.3	1.3	24.0	22.2	5.2	5.4
Mapletree Industrial Trust	MINT SP	Singapore	na	0.0	18.9	18.5	1.5	1.4	24.2	21.6	5.2	5.4
Mapletree Logistics Trust	MLT SP	Singapore	na	0.4	22.4	21.7	1.5	1.5	25.6	24.5	4.5	4.6
Ascott Residence Trust	ART SP	Singapore	na	50.0	30.6	21.4	0.9	0.8	40.5	29.2	3.8	5.6
CDL Hospitality Trusts	CDREIT SP	Singapore	na	47.1	48.1	25.0	0.9	1.0	42.7	29.2	3.7	4.8
Sunway Real Estate	SREIT MK	Malaysia	na	11.1	19.1	17.2	1.0	1.0	20.3	18.5	4.9	5.7
KLCCP Stapled Group	KLCCSS MK	Malaysia	38.1	13.1	20.4	18.0	0.9	0.9	27.6	23.8	4.6	5.2
IGB Real Estate	IGBREIT MK	Malaysia	na	33.3	28.9	20.9	1.5	1.4	27.0	20.8	3.7	4.8
Pavilion Real Estate	PREIT MK	Malaysia	(8.9)	16.3	35.8	19.8	1.0	1.0	28.2	20.0	2.9	5.1
BTS Rail Mass Transit **	BTSGIF TB	Thailand	(34.5)	186.9	18.5	6.4	0.6	0.6	18.4	6.4	5.4	15.5
Digital Telecom Int. *	DIF TB	Thailand	1.3	1.0	11.8	11.7	0.8	0.8	12.6	12.4	7.5	7.6
Jasmine Broadband Int. *	JASIF TB	Thailand	(0.3)	0.8	9.5	9.4	0.9	0.9	9.7	9.6	9.7	9.7
CPN Retail Growth *	CPNREIT TB	Thailand	(39.9)	112.4	30.2	14.2	1.7	1.6	32.1	17.2	2.7	6.3
Frasers Property Thailand **	FTREIT TB	Thailand	(3.3)	3.2	17.4	16.8	1.2	1.2	19.9	19.4	5.3	5.4
IMPACT Growth REIT **	IMPACT TB	Thailand	(1.2)	154.1	65.7	25.9	1.8	1.8	58.0	26.1	1.5	3.7
WHA Premium Growth *	WHART TB	Thailand	(1.3)	(1.6)	18.7	19.0	1.3	1.2	21.1	21.1	4.9	4.9
Lotus's Retail Growth **	LPF TB	Thailand	4.1	10.2	18.7	16.9	1.2	1.2	18.8	17.0	4.8	5.3
<b>Average</b>			<b>(4.6)</b>	<b>32.7</b>	<b>23.9</b>	<b>18.2</b>	<b>1.1</b>	<b>1.1</b>	<b>27.7</b>	<b>22.1</b>	<b>5.0</b>	<b>6.1</b>

Source: Bloomberg

Note: \* Thanachart estimates, using Thanachart normalized EPS,

\*\* Fiscal year ends in February for LPF, March for IMPACT and BTSGIF, September for FTREIT

Based on 23-Nov-2021 closing prices

## FUND DETAILS

Name	: BTS Rail Mass Transit Growth Infra Fund
Ticker	: BTSGIF TB
Listed date	: 19 April 2013
Fund size	: Bt62.5bn (5,788 m units @ par Bt10.80/unit)
Type	: Closed-end retail infrastructure fund
Investment A/S	: Rail transit systems / Net farebox revenues
Project life	: No specific term
Sponsor	: BTS Group Holdings (BTS TB)
Fund manager	: BBL Asset Management
Dividend policy	: No less than 90% of adjusted net profit
Payment date	: No less than twice a year
Foreign limit	: No more than 49% of total units

Source: Thanachart

## THANACHART'S SWOT ANALYSIS

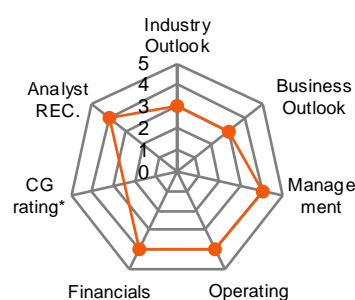
### S — Strength

- The Skytrain business faces little competition and offers stable and strong cash flows.
- The service areas of the BTS Skytrain are in the heart of Bangkok with high potential for passenger growth.
- The fund can gear up to a 3x debt-to-equity ratio, allowing it to invest in other assets without a capital call.

### O — Opportunity

- Route extensions would help to feed passengers into BTS's core Skytrain network.
- More assets, especially new mass-transit lines from BTS, are likely to be injected into the fund.

## COMPANY RATING



### Rating Scale

<b>Very Strong</b>	<b>5</b>
<b>Strong</b>	<b>4</b>
<b>Good</b>	<b>3</b>
<b>Fair</b>	<b>2</b>
<b>Weak</b>	<b>1</b>
<b>None</b>	<b>0</b>

Source: Thanachart; \*CG rating, no rating

### W — Weakness

- The Skytrain's utilization rate is high during peak hours but low during off-peak hours, forcing BTS to expand capacity despite low average utilization.
- Ridership growth is currently organic due to the full capacity of the existing network.

### T — Threat

- The government could prevent fare price hikes if people's pockets feel the pinch.
- Delays to new mass-transit projects could also cap future ridership growth.

## CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
<b>Target price (Bt)</b>	5.96	5.10	-14%
<b>Norm profit 22F (Bt m)</b>	637	1,335	110%
<b>Norm profit 23F (Bt m)</b>	3,825	3,830	0%
<b>Consensus REC</b>	<b>BUY: 5</b>	<b>HOLD: 2</b>	<b>SELL: 0</b>

## HOW ARE WE DIFFERENT FROM THE STREET?

- Our normalized profit for FY22F is much higher than the Bloomberg consensus number, which we attribute to us having higher ridership and average fare assumptions.
- Our DDM-derived TP is lower than the Street's, likely given our lower earnings projections long term.

## RISKS TO OUR INVESTMENT CASE

- Lower-than-expected ridership growth and/or fare hikes would present the key downside risk to our call.
- Higher-than-expected capital expenditure and/or operating costs would be a secondary downside risk.
- BTS's system problems could also dampen the BTS Skytrain's passenger growth, and presents another secondary downside risk.

Sources: Bloomberg consensus, Thanachart estimates

Source: Thanachart

**INCOME STATEMENT**

<b>FY ending Mar (Bt m)</b>	<b>2020A</b>	<b>2021A</b>	<b>2022F</b>	<b>2023F</b>	<b>2024F</b>
Revenue	4,798	2,108	1,368	3,910	4,978
Selling & administration expenses	74	67	34	70	85
<b>Operating profit</b>	<b>4,724</b>	<b>2,041</b>	<b>1,334</b>	<b>3,839</b>	<b>4,893</b>
% operating margin	98.5%	96.8%	97.5%	98.2%	98.3%
Depreciation & amortization	0	0	0	0	0
<b>EBITDA</b>	<b>4,724</b>	<b>2,041</b>	<b>1,334</b>	<b>3,839</b>	<b>4,893</b>
% EBITDA margin	98.5%	96.8%	97.5%	98.2%	98.3%
Non-operating income	20	5	6	6	6
Non-operating expenses	(15)	(9)	(6)	(16)	(20)
Interest expense	0	0	(0)	(0)	(0)
<b>Pre-tax profit</b>	<b>4,730</b>	<b>2,037</b>	<b>1,335</b>	<b>3,830</b>	<b>4,879</b>
Income tax	0	0	0	0	0
<b>After-tax profit</b>	<b>4,730</b>	<b>2,037</b>	<b>1,335</b>	<b>3,830</b>	<b>4,879</b>
% net margin	98.6%	96.7%	97.5%	97.9%	98.0%
Shares in affiliates' Earnings	0	0	0	0	0
Minority interests	0	0	0	0	0
Extraordinary items	(6,730)	(7,872)	(900)	(2,238)	(3,407)
<b>NET INVESTMENT INCOME</b>	<b>(2,000)</b>	<b>(5,835)</b>	<b>435</b>	<b>1,592</b>	<b>1,472</b>
<b>Normalized Net Invest. Income</b>	<b>4,730</b>	<b>2,037</b>	<b>1,335</b>	<b>3,830</b>	<b>4,879</b>
EPS (Bt)	(0.3)	(1.0)	0.1	0.3	0.3
Normalized EPS (Bt)	0.8	0.4	0.2	0.7	0.8

*We assume a ridership recovery back to the FY20 level in FY24F*

**BALANCE SHEET**

<b>FY ending Mar (Bt m)</b>	<b>2020A</b>	<b>2021A</b>	<b>2022F</b>	<b>2023F</b>	<b>2024F</b>
<b>ASSETS:</b>					
Current assets:	89	80	65	65	65
Cash & cash equivalent	39	68	65	65	65
Account receivables	50	13	0	0	0
Inventories	0	0	0	0	0
Others	0	0	0	0	0
Investments & loans	53,369	45,395	44,495	42,257	38,850
Net fixed assets	0	0	0	0	0
Other assets	4	4	5	5	5
<b>Total assets</b>	<b>53,462</b>	<b>45,479</b>	<b>44,565</b>	<b>42,327</b>	<b>38,920</b>
<b>LIABILITIES:</b>					
Current liabilities:	54	158	63	156	195
Account payables	0	0	0	0	0
Bank overdraft & ST loans	0	0	0	0	0
Current LT debt	0	0	0	0	0
Others current liabilities	54	158	63	156	195
<b>Total LT debt</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Others LT liabilities	0	0	0	0	0
<b>Total liabilities</b>	<b>54</b>	<b>158</b>	<b>64</b>	<b>156</b>	<b>195</b>
Minority interest	0	0	0	0	0
Preferreds shares	0	0	0	0	0
Paid-up capital	58,349	56,097	55,197	52,960	49,552
Share premium	0	0	0	0	0
Warrants	0	0	0	0	0
Surplus	0	0	0	0	0
<b>Retained earnings</b>	<b>(4,941)</b>	<b>(10,775)</b>	<b>(10,696)</b>	<b>(10,789)</b>	<b>(10,828)</b>
Net Assets	53,408	45,322	44,501	42,171	38,724

Sources: Company data, Thanachart estimates

**CASH FLOW STATEMENT**

<b>FY ending Mar (Bt m)</b>	<b>2020A</b>	<b>2021A</b>	<b>2022F</b>	<b>2023F</b>	<b>2024F</b>
Earnings before tax	4,730	2,037	1,335	3,830	4,879
Tax paid	(5)	0	0	0	0
Depreciation & amortization	0	0	0	0	0
Chg In working capital	(191)	37	13	0	0
Chg In other CA & CL / minorities	41	104	(94)	93	39
<b>Cash flow from operations</b>	<b>4,574</b>	<b>2,179</b>	<b>1,253</b>	<b>3,922</b>	<b>4,918</b>
Capex	0	0	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	6,838	7,974	900	2,238	3,407
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(6,729)	(7,872)	(901)	(2,238)	(3,407)
<b>Cash flow from investments</b>	<b>109</b>	<b>102</b>	<b>(1)</b>	<b>0</b>	<b>0</b>
Debt financing	0	0	0	(0)	(0)
Capital increase	(3,068)	(2,252)	(900)	(2,238)	(3,407)
Dividends paid	(1,644)	0	(356)	(1,684)	(1,511)
Warrants & other surplus	0	(0)	0	0	0
<b>Cash flow from financing</b>	<b>(4,711)</b>	<b>(2,252)</b>	<b>(1,255)</b>	<b>(3,922)</b>	<b>(4,918)</b>
<b>Free cash flow</b>	<b>4,574</b>	<b>2,179</b>	<b>1,253</b>	<b>3,922</b>	<b>4,918</b>

*Capex is booked in operating expenses, so it is factored in CFFO*

**VALUATION**

<b>FY ending Mar</b>	<b>2020A</b>	<b>2021A</b>	<b>2022F</b>	<b>2023F</b>	<b>2024F</b>
Normalized PE (x)	5.2	12.1	18.5	6.4	5.1
Normalized PE - at target price (x)	6.2	14.5	22.1	7.7	6.1
PE (x)	na	na	56.7	15.5	16.8
PE - at target price (x)	na	na	67.9	18.5	20.1
EV/EBITDA (x)	5.2	12.0	18.4	6.4	5.0
EV/EBITDA - at target price (x)	6.2	14.4	22.1	7.7	6.0
P/NAV (x)	0.5	0.5	0.6	0.6	0.6
P/NAV - at target price (x)	0.6	0.7	0.7	0.7	0.8
P/CFO (x)	5.4	11.3	19.7	6.3	5.0
Price/sales (x)	5.1	11.7	18.0	6.3	5.0
Effective dividend yield (%)	6.7	0.0	0.0	0.0	0.0
Capital reduction yield (%)	11.5	7.2	5.4	15.5	19.8
Cash dividend yield (%)	18.2	7.2	5.4	15.5	19.8
FCF Yield (%)	18.6	8.8	5.1	15.9	19.9
<b>(Bt)</b>					
Normalized EPS	0.8	0.4	0.2	0.7	0.8
EPS	(0.3)	(1.0)	0.1	0.3	0.3
Effective dividend *	0.3	0.0	0.0	-	-
Capital reduction dividend	0.49	0.31	0.23	0.66	0.84
Cash dividend **	0.78	0.31	0.23	0.66	0.84
NAV/unit	9.2	7.8	7.7	7.3	6.7
CFO/unit	0.8	0.4	0.2	0.7	0.8
FCF/unit	0.8	0.4	0.2	0.7	0.8

Sources: Company data, Thanachart estimates

*Our BUY rating is due to its estimated dividend IRR which is high at 11% a year*

**FINANCIAL RATIOS**

<b>FY ending Mar</b>	<b>2020A</b>	<b>2021A</b>	<b>2022F</b>	<b>2023F</b>	<b>2024F</b>
<b>Growth Rate</b>					
Sales (%)	4.2	(56.1)	(35.1)	185.7	27.3
Net profit (%)	na	na	na	266.2	(7.5)
EPS (%)	na	na	na	266.2	(7.5)
Normalized profit (%)	4.5	(56.9)	(34.5)	186.9	27.4
Normalized EPS (%)	4.5	(56.9)	(34.5)	186.9	27.4
Dividend payout ratio (%)***	(224.3)	(30.6)	81.8	105.8	102.7
<b>Operating performance</b>					
Gross margin (%)	100.0	100.0	100.0	100.0	100.0
Operating margin (%)	98.5	96.8	97.5	98.2	98.3
EBITDA margin (%)	98.5	96.8	97.5	98.2	98.3
Net margin (%)	98.6	96.7	97.5	97.9	98.0
D/E (incl. minor) (x)	0.0	0.0	0.0	0.0	0.0
Net D/E (incl. minor) (x)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Interest coverage - EBIT (x)	na	na	na	na	na
Interest coverage - EBITDA (x)	na	na	na	na	na
ROA - using norm profit (%)	8.3	4.1	3.0	8.8	12.0
ROE - using norm profit (%)	8.3	4.1	3.0	8.8	12.1
<b>DuPont</b>					
ROE - using after tax profit (%)	8.3	4.1	3.0	8.8	12.1
- asset turnover (x)	0.1	0.0	0.0	0.1	0.1
- operating margin (%)	98.6	96.7	97.5	97.9	98.0
- leverage (x)	1.0	1.0	1.0	1.0	1.0
- interest burden (%)	100.0	100.0	100.0	100.0	100.0
- tax burden (%)	100.0	100.0	100.0	100.0	100.0
Cost of equity (%)	0.0	0.0	0.0	0.0	0.0
ROIC (%)	0	3.8	2.9	8.6	11.6
NOPAT (Bt m)	4,724	2,041	1,334	3,839	4,893

Sources: Company data, Thanachart estimates

Note: \* Dividend from operations

\*\* Dividend from operations and capital reduction

### 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 Phadthanarak

Construction, Transportation

Tel: 662-779-9112

saksid.pha@thanachartsec.co.th

#### Witchanan Tambamroong

Technical Analyst

Tel: 662-779-9123

witchanan.tam@thanachartsec.co.th