BUY (Unchanged) | **TP: Bt 10.00** (Unchanged) | **20 MAY 2022**

Company Update | **Upside : 13.6%**

Thanachart Securities

Bangkok Exp. & Metro (BEM TB)

On the road to recovery

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Further easing of COVID curbs has led BEM's traffic volume and ridership to continue to recover to 80% and 60% of the pre-COVID 2019 level and we maintain our 53% earnings CAGR estimate in 2022-24F. We also see a short-term share price catalyst from the bid for the potential West Orange Line project this year. Reaffirm BUY.

Reaffirming BUY

We fine-tune our earnings and reaffirm our BUY call on BEM with a SOTP-derived DCF-based 12-month TP (2022F base year) of Bt10/share. We expect share price catalysts from ***1)*** its strong earnings turnaround driven by a recovery in traffic volume and ridership and high operating leverage benefits, and ***2)*** many potential projects, especially the West Orange Line which the Mass Rapid Transit Authority of Thailand (MRTA) targets to open for bidding this year, the South Purple Line which is now under construction with the MRTA likely to open the bid for the operator in 2026-27, and a double-deck expressway project which is under the EIA process.

53% earnings CAGR in 2022-24F

After a plunge in traffic volume to 69% of the pre-COVID 2019 level in 2021 and ridership to 44%, the easing of COVID restrictions saw BEM's traffic volume recover to 78% of the pre-COVID 2019 level and ridership to 55%. So far this month, with schools resuming on-site classes, exhibition centers restarting events, and more foreign tourists after the easing of Thailand's entry curbs, BEM's management has seen its traffic volume at 80% of the pre-COVID 2019 level and ridership at 60%. We estimate BEM's traffic volume at 85/98/100% of the pre-COVID 2019 level in 2022-24F and ridership at 59/83/99% to drive its earnings growth of 110/49/14% y-y in 2022-24F.

West Orange Line bid to open this year

BEM's management expects the MRTA to announce the TOR for the Bt128bn West Orange Line subway project by June this year, submit the bidding prices by October, and announce the winner by year end. We see BEM as the potential winner given ***1)*** its experience as BEM is the only subway operator in Thailand, ***2)*** operational advantages as BEM can use some of its current facilities to operate this line, and ***3)*** construction capabilities as BEM's parent firm is Ch. Karnchang (CK TB, Bt20.3, BUY). If BEM wins the project and we assume a 10% IRR, we roughly estimate an additional value of Bt1/share on top of our TP.

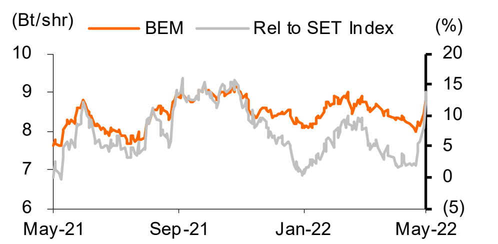
High D/E not a concern to us

The investment in the Blue Line extension, the SOE expressway, and the COVID crisis caused BEM's net D/E ratio to rise to 1.8x in 2021 vs. its covenant of 2.5x. But if we exclude the Bt8bn in debt for the North Purple Line's M&E systems which the MRTA is to repay BEM over the next four years, its net D/E ratio would drop to 1.5x in 2022F. Even if BEM wins the West Orange Line project, we don't expect it to face any financial difficulties as the project requires an investment of only Bt32bn while the remaining Bt96bn would be fully subsidized by the government.

COMPANY VALUATION

Y/E Dec (Bt m)	2021A	2022F	2023F	2024F
Sales	10,727	12,992	15,169	16,119
Net profit	1,010	2,125	3,155	3,586
Norm profit	1,010	2,125	3,155	3,586
Consensus NP	—	*2,671*	*3,857*	*4,442*
Diff frm cons (%)	—	*(20.5)*	*(18.2)*	*(19.3)*
Prev. Norm profit	—	2,216	3,266	3,715
Chg frm prev (%)	—	*(4.1)*	*(3.4)*	*(3.5)*
Norm EPS (Bt)	0.1	0.1	0.2	0.2
Norm EPS grw (%)	(50.7)	110.4	48.5	13.7
Norm PE (x)	133.2	63.3	42.6	37.5
EV/EBITDA (x)	55.0	35.8	27.9	25.3
P/BV (x)	3.6	3.5	3.2	3.0
Div yield (%)	0.9	0.4	0.6	0.7
ROE (%)	2.7	5.5	7.8	8.4
Net D/E (%)	184.1	168.4	146.4	139.7

PRICE PERFORMANCE



COMPANY INFORMATION

Price *as of* 20-May-22 (Bt)	8.80
Market Cap (US$ m)	3,925.1
Listed Shares (m shares)	15,285.0
Free Float (%)	53.7
Avg Daily Turnover (US$ m)	10.8
12M Price H/L (Bt)	9.15/7.60
Sector	Transportation
Major Shareholder	CK Pcl 31.3%

Sources: Bloomberg, Company data, Thanachart estimates

Share price catalysts

We reaffirm our BUY rating on ME given…

We fine-tune our earnings forecasts for Bangkok Expressway and Metro Pcl (BEM) and we reaffirm our BUY call on the shares with a SOTP-derived DCF-based 12-month TP (2022F base year) of Bt10/share as we foresee share price catalysts from the following factors.

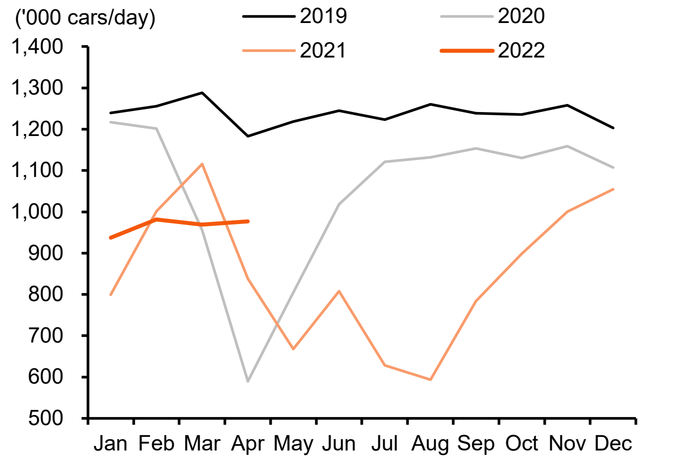
…1) a 53% earnings CAGR in 2022-24F, driven by…

…a strong traffic volume recovery…

…robust ridership growth

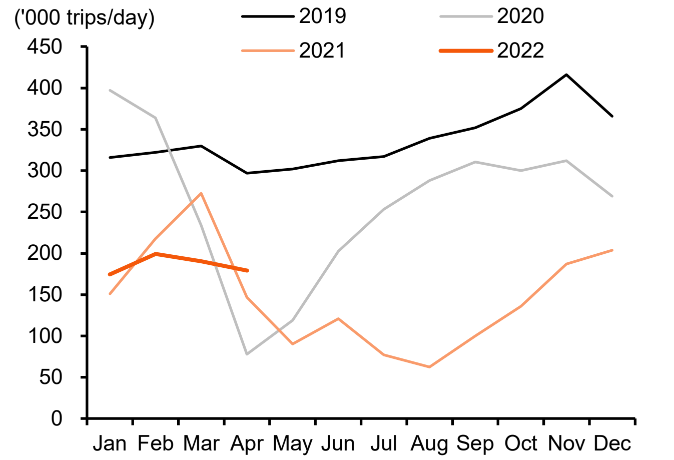
First, we expect a strong earnings recovery with growth of 110/49/14% y-y in 2022-24F, driven by a rebound in its ridership and traffic volume. The easing of COVID restrictions caused BEM's traffic volume to recover from 69% of the pre-COVID 2019 level last year to 78% in 4M22 while its ridership rose from 44% of the pre-COVID 2019 level last year to 55% in 4M22. With a further easing of COVID restrictions allowing schools to resume on-site classes, exhibition centers restarting events, and more foreign tourists entering Thailand, BEM's management has seen its traffic volume recover further to 80% of the pre-COVID 2019 level and ridership to 60% so far this month. Our traffic volume assumptions are at 85/98/100% of the pre-COVID 2019 level in 2022-24F with ridership at 59/83/99%.

Ex 1: BEM's Traffic Volume



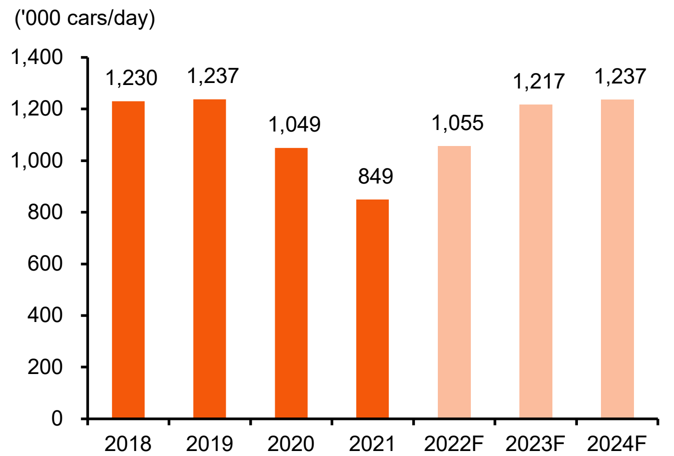
Source: Company data

Ex 2: BEM's Ridership



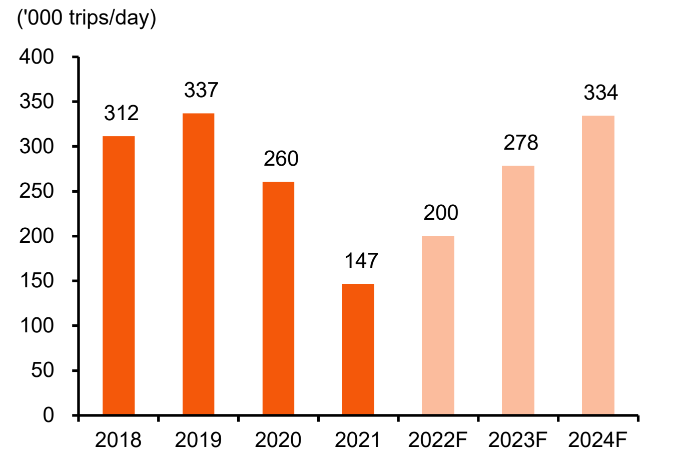
Source: Company data

Ex 3: Our Traffic Volume Forecasts



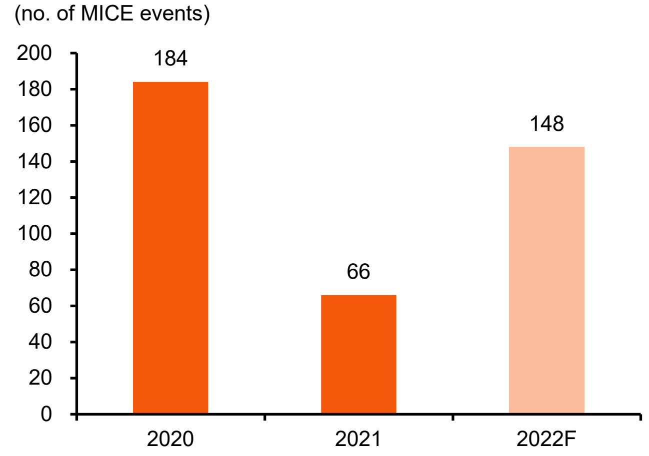
Sources: Company data, Thanachart estimates

Ex 4: Our Ridership Forecasts



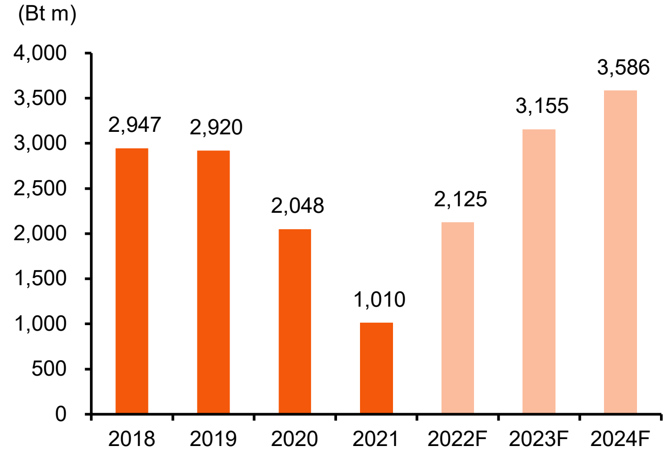
Sources: Company data, Thanachart estimates

Ex 5: MICE Events To Boost BEM's Traffic & Ridership



Sources: Impact Muang Thong Thani, Bangkok International Trade & Exhibition Centre, Queen Sirikit National Convention Center, Thailandexhibition.com

Ex 6: Our Normalized Earnings Forecasts



Sources: Company data, Thanachart estimates

…2) potential infrastructure projects, including…

Second, there are many potential infrastructure projects for BEM which the government plans to open for bidding over the next five years.

…the West Orange Line subway project,…

1) ***The Bt128bn West Orange Line subway project:*** BEM's management expects the MRTA to announce the terms of reference (TOR) by June this year, submit the bidding prices by October, and announce the winner by year end. We foresee BEM being the potential winner because:
   - It is the only subway operator in Thailand.
   - It has operational advantages as some of its current facilities can be used with this project.
   - It has the construction capability as BEM's parent firm is Ch. Karnchang (CK TB, Bt20.3, BUY) and CK is one of only two contractors in Thailand that have experience in building subway projects.

   If BEM wins the project and we assume a 10% IRR, we roughly estimate an additional value of Bt1/share on top of our TP.

Ex 7: Orange Line Project

Source: Company data

Ex 8: Orange Line Project's Details

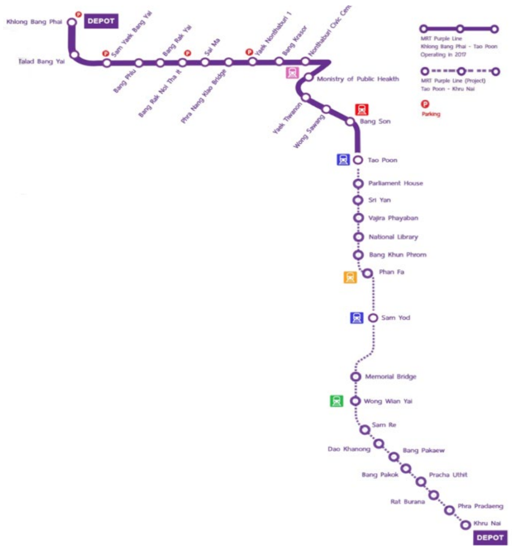
		Orange Line (West)	Orange Line (East)
Distance		17.5km	21km
Station		11 underground stations	10 underground and 7 elevated stations
Concession		PPP net cost	
Expected timeline		2027	2025
Regulator		MRTA	
Project investment	Civil	Bt96,012m (full subsidy)	Invested by MRTA
	M & E	Bt32,116m	
Construction progress			93.55% (Civil work)

Source: Company data

…the South Purple Line project…

2) ***The Bt124bn South Purple Line project:*** The project is now under construction, and it is scheduled for completion by 2028. As this project is an extension of the current North Purple Line which BEM is operating under an O&M contract (BEM obtains fixed service income from the MRTA), we expect the MRTA to negotiate with BEM directly (instead of opening it for bidding) to operate the line for smooth operations and passenger travel. However, given that the negotiations are likely to take place in 2026-27 while no details are available, we have yet to factor this potential project into our model.

Ex 9: Purple Line Project



Source: Company data

Ex 10: Purple Line Project's Details

		Purple Line (North)	Purple Line (South)
Distance		23km	23.6km
Station		16 elevated stations	10 underground and 7 elevated stations
Concession		PPP gross cost	
Expected timeline		Operating	
Regulator		MRTA	
Project investment	Civil	Invested by MRTA	
	M & E	Invested by MRTA	Bt23,064m
Construction progress			Contractors are preparing for construction

Source: Company data

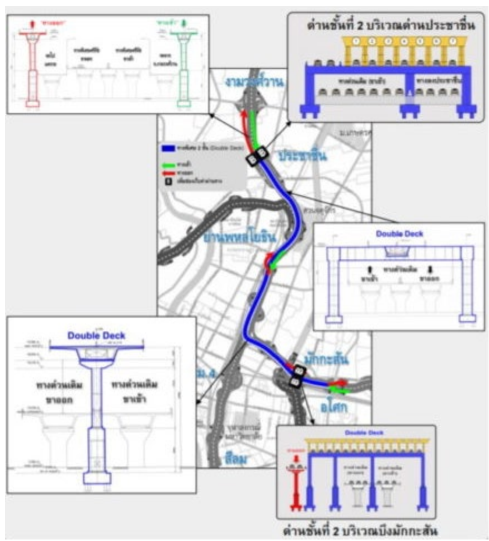
…the double-deck expressway project

3) ***The Bt32bn double-deck expressway project:*** The project is now under environmental impact assessment (EIA) study. As it would be built above BEM's current expressway, we have already factored this project into our model with assumptions of Bt32bn in capex, construction scheduled for 2024-28, and 1.5% y-y traffic volume growth from 2028F onward (from 1% p.a. without the project).

Ex 11: Bottleneck On Current Expressway

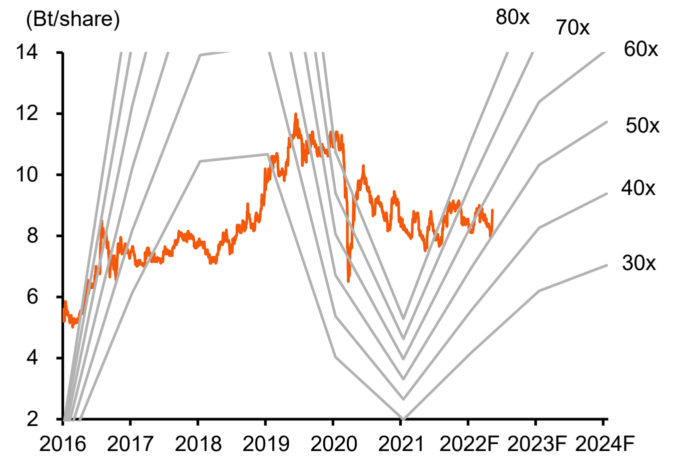
Sources: Company data, Thaipublica.org

Ex 12: Double-deck Expressway Project



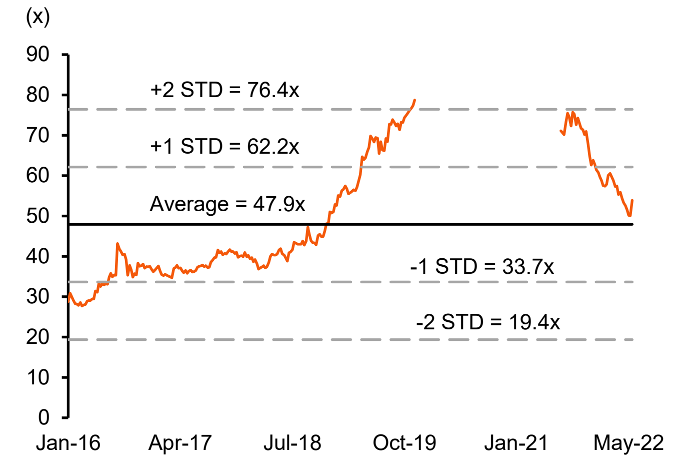
Sources: Company data, Thaipublica.org

Ex 13: BEM's PE Band



Sources: Bloomberg, Thanachart estimates

Ex 14: BEM's Standard Deviation



Sources: Bloomberg, Thanachart estimates

Ex 15: Our SOTP-derived DCF-based 12-month Valuation Of BEM

Sum-of-the-parts	% holding	(Bt m)
Enterprise value		**200,071**
Investment equity value		**15,427**
TTW	18.47%	7,370
CKP	16.64%	8,058
Total enterprise value		**215,498**
(Less) Net debt (as at end-2021)		(69,410)
(Less) Minority interest		(2)
Total equity value		**146,087**
# of shares (fully diluted) (m shares)		15,285
Sum-of-the-parts		**10**

Source: Thanachart estimates

Valuation Comparison

Ex 16: Valuation Comparison With Regional Peers

Name	BBG Code	Country	EPS growth 22F (%)	EPS growth 23F (%)	PE 22F (x)	PE 23F (x)	P/BV 22F (x)	P/BV 23F (x)	EV/EBITDA 22F (x)	EV/EBITDA 23F (x)	Div Yield 22F (%)	Div Yield 23F (%)
Guangshen Railway	601333 CH	China	53.6	na	na	43.8	0.5	0.5	13.2	6.0	0.3	1.2
Central Japan Railway	9022 JP	Japan	na	26.8	14.4	11.4	0.9	0.8	9.9	8.1	0.8	0.8
Keisei Electric Railway	9009 JP	Japan	na	na	17.2	na	1.3	na	19.1	na	0.5	na
MTR Corp Ltd	66 HK	Hong Kong	19.5	8.3	23.7	21.9	1.5	1.4	20.7	16.0	3.0	3.1
Jungfraubahn Holding	JFN SW	Switzerland	na	184.1	55.9	19.7	1.3	1.3	15.2	10.2	1.2	1.9
Jiangsu Expressway	177 HK	China	(16.9)	33.8	9.7	7.3	1.1	1.0	9.6	7.8	6.9	7.0
Shenzhen Expressway	548 HK	China	9.0	5.0	5.8	5.5	0.6	0.6	9.0	8.6	9.1	9.5
Zhejiang Expressway	576 HK	China	43.2	4.6	5.1	4.8	0.8	0.7	4.3	4.1	6.8	7.3
Anhui Expressway	995 HK	China	na	na	na	19.6	0.8	0.7	4.2	3.9	10.6	11.7
Jasa Marga Persero	JSMR IJ	Indonesia	na	32.1	16.0	12.1	1.1	1.0	9.5	7.9	0.9	1.3
Bangkok Express & Metro	BEM TB*	Thailand	110.4	48.5	63.3	42.6	3.5	3.2	35.8	27.9	0.4	0.6
BTS Group Holdings	BTS TB*	Thailand	(16.7)	(4.8)	60.5	63.5	2.0	2.0	74.5	65.6	1.0	0.9
Average			**28.9**	**37.6**	**27.2**	**22.9**	**1.3**	**1.2**	**18.8**	**15.1**	**3.5**	**4.1**

Source: Bloomberg

Note: * Thanachart estimates , using Thanachart normalized EPS

** BTS's FY22 financial year ends in March 2022. Its first forecast year is FY23F.

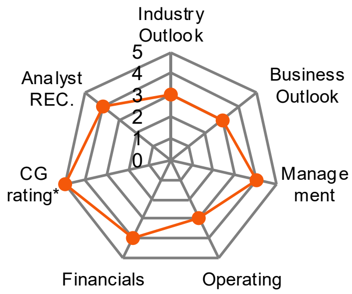
Based on 20-May-22 closing prices

COMPANY DESCRIPTION

Bangkok Expressway and Metro Pcl is the amalgamated company between Bangkok Expressway (BECL) and Bangkok Metro (BMCL). It operates expressway and mass-transit projects in Thailand under build-transfer-operate concession contracts from the Expressway Authority of Thailand and the State Railway of Thailand.

Source: Thanachart

COMPANY RATING



Rating Scale	
Very Strong	5
Strong	4
Good	3
Fair	2
Weak	1
None	0

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- BEM's expressways and subway go through the center of Bangkok, with secure traffic volume and ridership growth.
- Its businesses generate secure and stable cash flows.

W — Weakness

- BEM's revenue-generating market is limited to Bangkok.
- Its businesses are under concession contracts, thereby leading to continuity risk.

O — Opportunity

- The extensions of BEM's networks would help to feed passengers and cars into its systems.
- The government's infrastructure investments will likely create opportunities for BEM to grow.
- There are only two private companies operating mass-transit projects in Thailand at present.

T — Threat

- The government has intervened in the past in BEM's toll and fare rate revisions even though there's a concession contract.
- Delays to the government's infrastructure investments.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	9.90	10.00	1%
Norm profit 22F (Bt m)	2,671	2,125	-20%
Norm profit 23F (Bt m)	3,857	3,155	-18%
Consensus REC	**BUY: 15**	**HOLD: 2**	**SELL: 0**

HOW ARE WE DIFFERENT FROM THE STREET?

- Our earnings in 2022-23F are 18-20% lower than the consensus numbers, which we attribute to us being more conservative on BEM's traffic volume and ridership recovery.
- However, our TP is slightly higher than the consensus number, likely due to us having a more bullish view on its long-term outlook and SOTP value.

Sources: Bloomberg consensus, Thanachart forecasts

RISKS TO OUR INVESTMENT CASE

- The ongoing COVID-19 crisis could continue to put traffic volume and ridership under pressure, causing a downside risk to our earnings forecasts.
- Government intervention in its tolls and fare rate hikes could cause another downside risk to our earnings estimates.

Source: Thanachart

We expect a strong earnings recovery from 2022F onward

INCOME STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Sales	13,489	10,727	12,992	15,169	16,119
Cost of sales	8,427	6,990	7,648	8,448	8,792
Gross profit	**5,063**	**3,737**	**5,345**	**6,721**	**7,327**
% gross margin	37.5%	34.8%	41.1%	44.3%	45.5%
Selling & administration expenses	1,347	1,160	1,169	1,289	1,338
Operating profit	**3,716**	**2,577**	**4,175**	**5,431**	**5,989**
% operating margin	27.5%	24.0%	32.1%	35.8%	37.2%
Depreciation & amortization	1,858	1,129	1,408	1,564	1,759
EBITDA	**5,574**	**3,706**	**5,583**	**6,995**	**7,748**
% EBITDA margin	41.3%	34.5%	43.0%	46.1%	48.1%
Non-operating income	830	755	748	790	796
Non-operating expenses	0	0	0	0	0
Interest expense	(2,113)	(2,187)	(2,266)	(2,276)	(2,301)
Pre-tax profit	**2,433**	**1,145**	**2,657**	**3,945**	**4,484**
Income tax	382	134	531	789	897
After-tax profit	**2,051**	**1,011**	**2,126**	**3,156**	**3,587**
% net margin	15.2%	9.4%	16.4%	20.8%	22.3%
Shares in affiliates' Earnings	0	0	0	0	0
Minority interests	(4)	(1)	(1)	(1)	(1)
Extraordinary items	4	0	0	0	0
NET PROFIT	**2,051**	**1,010**	**2,125**	**3,155**	**3,586**
Normalized profit	**2,048**	**1,010**	**2,125**	**3,155**	**3,586**
EPS (Bt)	0.1	0.1	0.1	0.2	0.2
Normalized EPS (Bt)	0.1	0.1	0.1	0.2	0.2

BALANCE SHEET

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
ASSETS:					
Current assets:	5,044	4,541	4,873	5,321	5,517
Cash & cash equivalent	2,375	1,897	2,200	2,200	2,200
Account receivables	549	473	573	669	711
Inventories	0	0	0	0	0
Others	2,120	2,170	2,100	2,452	2,605
Investments & loans	15,961	16,030	16,030	16,030	16,030
Net fixed assets	76,385	77,289	77,193	76,943	82,500
Other assets	16,226	17,228	15,767	14,303	12,836
Total assets	**113,616**	**115,088**	**113,863**	**112,597**	**116,883**
LIABILITIES:					
Current liabilities:	13,734	10,645	11,725	11,352	11,603
Account payables	1,745	1,492	1,633	1,804	1,877
Bank overdraft & ST loans	3,000	2,000	3,389	3,144	3,197
Current LT debt	8,360	6,544	6,079	5,640	5,735
Others current liabilities	629	609	624	764	794
Total LT debt	**57,902**	**62,763**	**58,304**	**54,090**	**55,003**
Others LT liabilities	3,947	3,982	4,887	5,711	6,089
Total liabilities	**75,582**	**77,390**	**74,916**	**71,153**	**72,695**
Minority interest	42	2	3	4	5
Preferreds shares	0	0	0	0	0
Paid-up capital	15,285	15,285	15,285	15,285	15,285
Share premium	5,817	5,817	5,817	5,817	5,817
Warrants	0	0	0	0	0
Surplus	(147)	(101)	(101)	(101)	(101)
Retained earnings	**17,037**	**16,697**	**17,944**	**20,439**	**23,182**
Shareholders' equity	37,991	37,697	38,945	41,440	44,183
Liabilities & equity	**113,616**	**115,088**	**113,863**	**112,597**	**116,883**

Sources: Company data, Thanachart estimates

Depreciation expenses fell sharply in 2020…

…because of its concession value being fully depreciated

PE is high compared to its pre-COVID PE of 45x…

…but we believe BEM deserves it given its strong earnings recovery and many potential projects

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2020A	2021A	2022F	2023F	2024F
Earnings before tax	2,433	1,145	2,657	3,945	4,484
Tax paid	(366)	(148)	(522)	(785)	(893)
Depreciation & amortization	1,858	1,129	1,408	1,564	1,759
Chg In w orking capital	(261)	(177)	41	75	32
Chg In other CA & CL / minorities	19	(98)	77	(216)	(128)
Cash flow from operations	**3,683**	**1,851**	**3,660**	**4,583**	**5,253**
Capex	(3,651)	(2,033)	(1,300)	(1,300)	(7,300)
Right of use	(87)	(53)	(50)	(50)	(50)
ST loans & investments	0	0	0	0	0
LT loans & investments	1,256	(69)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(665)	(915)	2,405	2,325	1,878
Cash flow from investments	**(3,146)**	**(3,069)**	**1,055**	**975**	**(5,472)**
Debt financing	2,817	2,045	(3,535)	(4,898)	1,061
Capital increase	0	0	0	0	0
Dividends paid	(1,376)	(1,529)	(877)	(660)	(843)
Warrants & other surplus	(1,465)	224	0	0	0
Cash flow from financing	**(24)**	**741**	**(4,412)**	**(5,558)**	**219**
Free cash flow	**32**	**(181)**	**2,360**	**3,283**	**(2,047)**

VALUATION

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Normalized PE (x)	65.7	133.2	63.3	42.6	37.5
Normalized PE - at target price (x)	74.6	151.3	71.9	48.5	42.6
PE (x)	65.6	133.2	63.3	42.6	37.5
PE - at target price (x)	74.5	151.3	71.9	48.5	42.6
EV/EBITDA (x)	36.1	55.0	35.8	27.9	25.3
EV/EBITDA - at target price (x)	39.4	60.0	39.1	30.5	27.7
P/BV (x)	3.5	3.6	3.5	3.2	3.0
P/BV - at target price (x)	4.0	4.1	3.9	3.7	3.5
P/CFO (x)	36.5	72.7	36.8	29.3	25.6
Price/sales (x)	10.0	12.5	10.4	8.9	8.3
Dividend yield (%)	1.1	0.9	0.4	0.6	0.7
FCF Yield (%)	0.0	(0.1)	1.8	2.4	(1.5)
(Bt)					
Normalized EPS	0.1	0.1	0.1	0.2	0.2
EPS	0.1	0.1	0.1	0.2	0.2
DPS	0.1	0.1	0.0	0.1	0.1
BV/share	2.5	2.5	2.5	2.7	2.9
CFO/share	0.2	0.1	0.2	0.3	0.3
FCF/share	0.0	(0.0)	0.2	0.2	(0.1)

Sources: Company data, Thanachart estimates

FINANCIAL RATIOS

FY ending Dec	2020A	2021A	2022F	2023F	2024F
Growth Rate					
Sales (%)	(16.3)	(20.5)	21.1	16.7	6.3
Net profit (%)	(62.3)	(50.8)	110.4	48.5	13.7
EPS (%)	(62.3)	(50.8)	110.4	48.5	13.7
Normalized profit (%)	(29.9)	(50.7)	110.4	48.5	13.7
Normalized EPS (%)	(29.9)	(50.7)	110.4	48.5	13.7
Dividend payout ratio (%)	74.5	121.1	25.0	25.0	25.0
Operating performance					
Gross margin (%)	37.5	34.8	41.1	44.3	45.5
Operating margin (%)	27.5	24.0	32.1	35.8	37.2
EBITDA margin (%)	41.3	34.5	43.0	46.1	48.1
Net margin (%)	15.2	9.4	16.4	20.8	22.3
D/E (incl. minor) (x)	1.8	1.9	1.7	1.5	1.4
Net D/E (incl. minor) (x)	1.8	1.8	1.7	1.5	1.4
Interest coverage - EBIT (x)	1.8	1.2	1.8	2.4	2.6
Interest coverage - EBITDA (x)	2.6	1.7	2.5	3.1	3.4
ROA - using norm profit (%)	1.8	0.9	1.9	2.8	3.1
ROE - using norm profit (%)	5.3	2.7	5.5	7.8	8.4
DuPont					
ROE - using after tax profit (%)	5.3	2.7	5.5	7.9	8.4
- asset turnover (x)	0.1	0.1	0.1	0.1	0.1
- operating margin (%)	33.7	31.1	37.9	41.0	42.1
- leverage (x)	2.9	3.0	3.0	2.8	2.7
- interest burden (%)	53.5	34.4	54.0	63.4	66.1
- tax burden (%)	84.3	88.3	80.0	80.0	80.0
WACC (%)	5.7	5.7	5.7	5.7	5.7
ROIC (%)	3.0	2.2	3.1	4.2	4.7
NOPAT (Bt m)	3,133	2,276	3,340	4,345	4,791
invested capital (Bt m)	104,879	107,107	104,517	102,113	105,918

Sources: Company data, Thanachart estimates

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