



BANGKOK EXPRESSWAY AND METRO PLC

No. 52/2022 5 April 2022

CORPORATES

Company Rating: AIssue Ratings:
Senior unsecured AOutlook: Stable

Last Review Date: 01/04/21

Company Rating History:

Date	Rating	Outlook/Alert
01/04/21	A-	Stable
28/05/20	А	Negative
05/04/16	Α	Stable

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RATIONALE

TRIS Rating affirms the company rating on Bangkok Expressway and Metro PLC (BEM) and the issue ratings on BEM's outstanding senior unsecured debentures at "A-" with a "stable" rating outlook.

The ratings continue to reflect BEM's strong business profile, supported by a portfolio of quality concessional assets, strong and steady operating cash flow from its expressway operation, and the growth prospects of the mass rapid transit (MRT) operation. The ratings also reflect BEM's high leverage, the result of front-loaded investment in the MRT Blue Line made in the past few years.

KEY RATING CONSIDERATIONS

Traffic and ridership volume to gradually improve

The prolonged COVID-19 outbreak over the past two years has affected both BEM's ridership and traffic volume materially. However, we expect ridership and traffic volume to recover gradually as the COVID-19 situation improves with a gradual return to social and economic normalcy.

The successive waves of COVID-19 outbreaks and lengthy lockdowns in 2021 had a huge impact on MRT Blue Line ridership. Average daily ridership plunged by 43.7% year-on-year (y-o-y) to 146,656 trips. Daily revenue also declined by the same magnitude. However, we expect ridership volume to improve as social and economic activities gradually resume. Our base-case forecast projects the average daily ridership of the MRT Blue Line to be around 286,000 trips in 2022 before improving to an average of 450,000-550,000 trips per day in 2023-2024.

The expressway traffic volume was also impacted by the protracted COVID-19 outbreak, but to a lesser extent. In 2021, average daily traffic volume declined by 19% y-o-y to 0.85 million trips per day. Our base-case forecast assumes an average daily traffic volume to recover to 1.06 million trips per day in 2022, before returning to the normal level of over 1.2 million trips per day in 2023.

Earnings to rebound

In line with our assumptions regarding recovering traffic and ridership, our baseline forecast projects BEM's revenue to be around THB14 billion in 2022 and to improve to THB17-THB19 billion per annum during 2023-2024. Earnings before interest, taxes, depreciation and amortization (EBITDA) margin is projected to be around 30% in 2022 and 35%-37% in 2023-2024, translating into EBITDA of around THB4.2 billion in 2022 and THB6.4-THB6.7 billion annually in 2023-2024. Funds from operations (FFO) are forecast to be around THB2 billion in 2022 and THB4-THB4.2 billion annually in 2023-2024. BEM's earnings upside will be driven mainly by the ridership numbers of its MRT Blue Line.

Leverage expected to improve

We expect BEM's financial leverage to decline in tandem with our projected recovery in EBITDA. Our base-case scenario projects BEM's adjusted debt to EBITDA ratio to remain elevated at around 15 times in 2022 before declining to 9-9.5 times in 2023-2024. The adjusted FFO to debt ratio is projected to be around 3%-4% in 2022 and to improve to 6%-8% during 2023-2024. Our baseline forecast incorporates the assumption that BEM's capital spendings





will be THB2.4-THB2.5 billion in total during 2022-2024.

BEM's adjusted debt was THB63.6 billion in 2021. The adjusted debt excludes the THB7.1 billion debt of the MRT Purple Line since this is backed by an agreement with the Mass Rapid Transit Authority of Thailand (MRTA) which stipulates that the debt will be paid back by MRTA in 10 years.

There would be another spike in the leverage ratio if BEM were to invest in the MRT Orange Line or Double Deck Expressway. We view that BEM has some headroom for temporary spikes in the leverage ratio, for its credit profile to remain commensurate with the "A-" rating. However, in the longer term, we expect the company to maintain the adjusted debt to EBITDA ratio not exceeding 10 times.

As of December 2021, BEM's debts consisted of THB17 billion of priority debt out of its total interest-bearing debt of THB64 billion, translating into a priority debt ratio of 26%.

The main financial covenants on its debt obligations require the maintenance of BEM's interest-bearing debt to equity ratio below 2.5 times, and a debt service coverage ratio of more than 1 times. As of December 2021, the ratio was 1.65 times and 1.15 times, respectively. We believe that BEM should have no problems complying with the financial covenants over the forecast period.

Manageable liquidity

We assess BEM's liquidity should be manageable over the next 12 months. The primary funding needs are scheduled debt repayments of approximately THB7 billion, capital spending of around THB1.6 billion, and dividend payments of THB1.2 billion. Primary sources of funds are FFO estimated to be around THB2 billion, plus cash and cash equivalents of THB1.9 billion at the end of 2021. BEM will need to refinance some of its debts. Given its presence in the capital market and relationships with banks, we believe that BEM should have no problems refinancing its debts. In addition, BEM has some financial flexibility from its significant equity investments in TTW PLC and CK Power PLC. The combined market value of these two investments was THB15.2 billion as of 4 April 2022.

Strong business profile

BEM has a strong business profile. Its main lines of business in expressways and mass transit operation are protected by high barriers to entry. Only a few operators in Thailand have the capability and required capital to bid for the construction and operation of expressways or rail mass transit.

BEM's solid business profile is also underpinned by its record of steady and stable earnings in expressway operation, thanks to the strategic location of the Second Stage Expressway (SES) which is connected to the First Stage Expressway (FES). The recent extension of the SES and the Bang Pa-in - Pak Kret Expressway (Sector C+) concessions will help BEM secure steady cash flows in the long term.

BEM is well positioned to capitalize on growth opportunities in its mass transit operation, given the government policies to promote an integrated mass transit network. As an experienced and well-equipped operator, BEM is in an advantageous position to win future concessions. Furthermore, the strategic advantage of the MRT Blue Line as a circle line, allows it to collect feed-in traffic from other rail mass transit lines.

BASE-CASE ASSUMPTIONS

- Revenue to be THB14 billion in 2022 and improve to THB17-THB19 billion per annum during 2023-2024.
- EBITDA margin is forecast to be around 30% in 2022 and 35%-37% in 2023-2024.
- EBITDA of around THB4.2 billion in 2022 and THB6.5-THB6.7 billion annually in 2023-2024.
- Capital spendings will be THB2.4-THB2.5 billion in total during 2022-2024.

RATING OUTLOOK

The "stable" outlook reflects our expectation that BEM's business profile will remain strong with operating cash flows from both the expressway and the mass transit businesses as well as the level of debt in accordance with our baseline forecast.

RATING SENSITIVITIES

The ratings could be upgraded if BEM's operating performance and financial metrics improve materially such that the adjusted debt to EBITDA ratio stays below 7 times for a sustained period. The ratings could come under downward pressure if BEM's financial metrics further weaken either from prolonged deteriorating operating performance or a sizable debt-funded investment such that its adjusted debt to EBITDA ratio stays considerably above 10 times over a sustained period.





COMPANY OVERVIEW

BEM was established on 30 December 2015 through the amalgamation of Bangkok Expressway PLC (BECL) and Bangkok Metro PLC (BMCL). BEM was listed on the Stock Exchange of Thailand (SET) on 5 January 2016. As of 2022, BEM's major shareholder was CH. Karnchang PLC (CK) with 31.79% of outstanding shares.

BEM has three main lines of business: constructing and operating expressways, providing mass rapid transit service, and engaging in commercial development related to its expressway and mass transit networks. In 2021, BEM reported revenue of THB10.7 billion, of which 60% came from the expressway segment, 32% from the mass transit segment, and 8% from the commercial development segment.

BEM built and operates the elevated Si Rat Expressway (SES), the Udon Ratthaya Expressway (Sector C+), and the Sirat - Outer Ring Road Expressway (SOE). All the expressways are operated under 30-year Build-Transfer-Operate (BTO) concessions awarded by the Expressway Authority of Thailand (EXAT). Due to the contract amendment in February 2020, the concessions for SES Sector A, B, C, D, and Sector C+ have been extended to expire in October 2035, while the concession for SOE will still expire in December 2042.

In March 2017, BEM entered into a new MRT Blue Line concession agreement with the MRTA. The new MRT Blue Line concession covers the MRT Initial Blue Line project (Hua Lamphong - Bang Sue Section) which has been operated since 2004 and the MRT Blue Line Extension project (Hua Lamphong - Bang Khae Section and Bang Sue - Tha Phra Section) which became fully operational in March 2020. The new concession will end in 2050. The MRT Blue Line concession is on a Public-Private Partnership (PPP) Net Cost agreement basis with BEM holding the rights to collect fare box revenue, undertake commercial development activities, and bear the risk of ridership.

BEM also operates the MRT Chalong Ratchadham Line (Purple Line) under a 30-year concession on a PPP Gross Cost scheme basis. Under this type of basis, the MRTA paid for all the civil works while BEM advanced the investment in the mechanical & electrical engineering (M&E) systems and the rolling stock. The MRTA gradually repays the cost of the M&E equipment to BEM in 10 years after BEM delivered and transferred ownership of the M&E equipment to the MRTA. BEM provides operation and maintenance (O&M) services to the MRTA until the concession ends in 2043. In return, BEM receives service revenue on a cost-plus basis. BEM does not take the risk of ridership under the Gross Cost scheme basis.

KEY OPERATING PERFORMANCE

Table 1: Revenue Breakdown

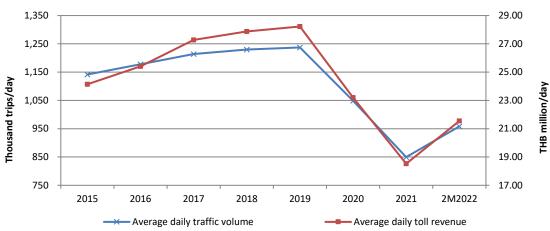
Revenue (Unit: Mil. THB)	2015	2016	2017	2018	2019	2020	2021
Toll road	8,815	9,301	9,957	10,174	10,302	8,145	6,450
Mass transit	2,374	3,230	4,521	4,736	5,022	4,520	3,454
Commercial development	549	573	675	705	783	825	822
Total	11,738	13,104	15,153	15,615	16,107	13,490	10,726
Contribution	2015	2016	2017	2018	2019	2020	2021
Toll road	75%	71%	66%	65%	64%	60%	60%
Mass transit	20%	25%	30%	30%	31%	34%	32%
Commercial development	5%	4%	4%	5%	5%	6%	8%
Total	100%	100%	100%	100%	100%	100%	100%
Change (y-o-y)	2015	2016	2017	2018	2019	2020	2021
Toll road	4%	6%	7%	2%	1%	-21%	-21%
Mass transit	6%	36%	40%	5%	6%	-10%	-24%
Commercial development	10%	4%	18%	4%	11%	5%	0%
Total	4%	12%	16%	3%	3%	-16%	-20%

Source: BEM



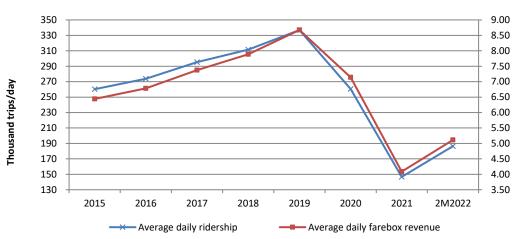
THB million/day

Chart 1: Average Daily Traffic Volume and Revenue



Source: BEM

Chart 2: Average Daily Ridership and Farebox Revenue



Source: BEM





FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Mil. THB

	Year Ended 31 December				
	2021	2020	2019	2018	2017
Total operating revenues	10,762	13,540	16,163	15,641	15,206
Earnings before interest and taxes (EBIT)	669	2,075	3,475	3,978	4,466
Earnings before interest, taxes, depreciation,	1,798	3,994	7,971	8,387	8,670
and amortization (EBITDA)					
Funds from operations (FFO)	(249)	1,960	6,067	6,421	6,827
Adjusted interest expense	1,983	1,940	1,738	1,625	1,556
Capital expenditures	2,108	4,089	8,018	10,484	8,265
Total assets	115,088	113,616	111,697	103,831	98,919
Adjusted debt	63,575	59,516	55,758	51,674	48,128
Adjusted equity	37,699	38,034	38,823	35,612	31,179
Adjusted Ratios					
EBITDA margin (%)	16.71	29.50	49.32	53.62	57.02
Pretax return on permanent capital (%)	0.66	2.12	3.76	4.63	5.42
EBITDA interest coverage (times)	0.91	2.06	4.59	5.16	5.57
Debt to EBITDA (times)	35.36	14.90	7.00	6.16	5.55
FFO to debt (%)	-0.39	3.29	10.88	12.43	14.18
Debt to capitalization (%)	62.78	61.01	58.95	59.20	60.69

RELATED CRITERIA

- Key Financial Ratio and Adjustments for Corporate Issuers, 11 January 2022
- Issue Rating Criteria, 15 June 2021
- Rating Methodology Corporate, 26 July 2019





Bangkok Expressway and Metro PLC (BEM)

Company Rating:	A-
Issue Ratings:	
BEM225A: THB1,000 million senior unsecured debentures due 2022	A-
BEM229A: THB2,000 million senior unsecured debentures due 2022	A-
BEM234A: THB3,500 million senior unsecured debentures due 2023	A-
BEM236A: THB2,000 million senior unsecured debentures due 2023	A-
BEM244A: THB2,000 million senior unsecured debentures due 2024	A-
BEM245A: THB2,000 million senior unsecured debentures due 2024	A-
BEM246A: THB1,000 million senior unsecured debentures due 2024	A-
BEM249A: THB3,000 million senior unsecured debentures due 2024	A-
BEM254A: THB3,500 million senior unsecured debentures due 2025	A-
BEM25OA: THB2,500 million senior unsecured debentures due 2025	A-
BEM264A: THB2,000 million senior unsecured debentures due 2026	A-
BEM265A: THB1,000 million senior unsecured debentures due 2026	A-
BEM266A: THB3,335 million senior unsecured debentures due 2026	A-
BEM27OA: THB3,000 million senior unsecured debentures due 2027	A-
BEM284A: THB1,000 million senior unsecured debentures due 2028	A-
BEM286A: THB2,750 million senior unsecured debentures due 2028	A-
BEM286B: THB500 million senior unsecured debentures due 2028	A-
BEM295A: THB1,000 million senior unsecured debentures due 2029	A-
BEM306A: THB1,300 million senior unsecured debentures due 2030	A-
BEM314A: THB1,000 million senior unsecured debentures due 2031	A-
BEM326A: THB700 million senior unsecured debentures due 2032	A-
Rating Outlook:	Stable

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