CORPORATE DEBT

MARC RATING METHODOLOGY

PORT OPERATORS/ PORT AUTHORITIES

INTRODUCTION

This methodology applies to debt or sukuk issuances raised by maritime port operators. The port operator can be a private entity which holds a long-term concession agreement granted by the government or a port authority to operate port facilities. These concessions are generally governed by compliance standards and mandatory investments to promote growth in trade activities.

For a port operator under a concession, MARC will assess the termination risk of the concession and the execution risk related to the mandated capex programmes under the concession, along with other risks under the general analytical framework that the rating agency employs for corporate debt ratings.

For a port authority, MARC typically will assess the likelihood of the government, federal or state as the case may be, taking timely extraordinary measures that will mitigate the standalone credit risk of the entity during stress periods.

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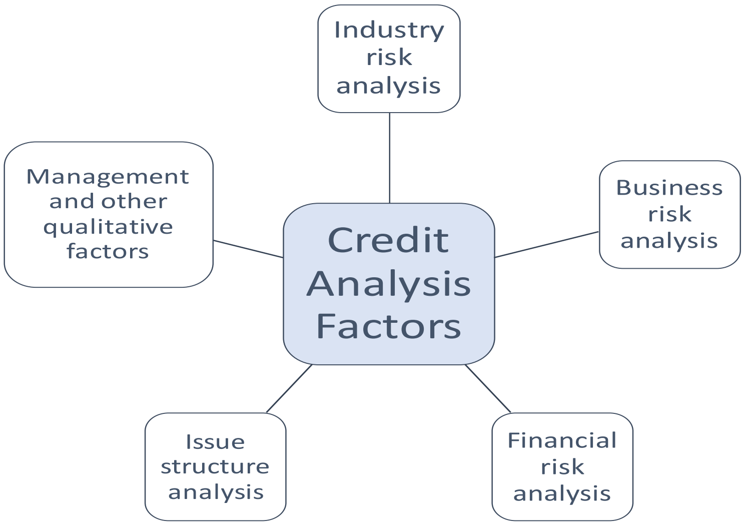
ANALYTICAL FRAMEWORK

The structure of MARC's analysis on a port operator mirrors the corporate debt methodology with five broad criteria as follows:

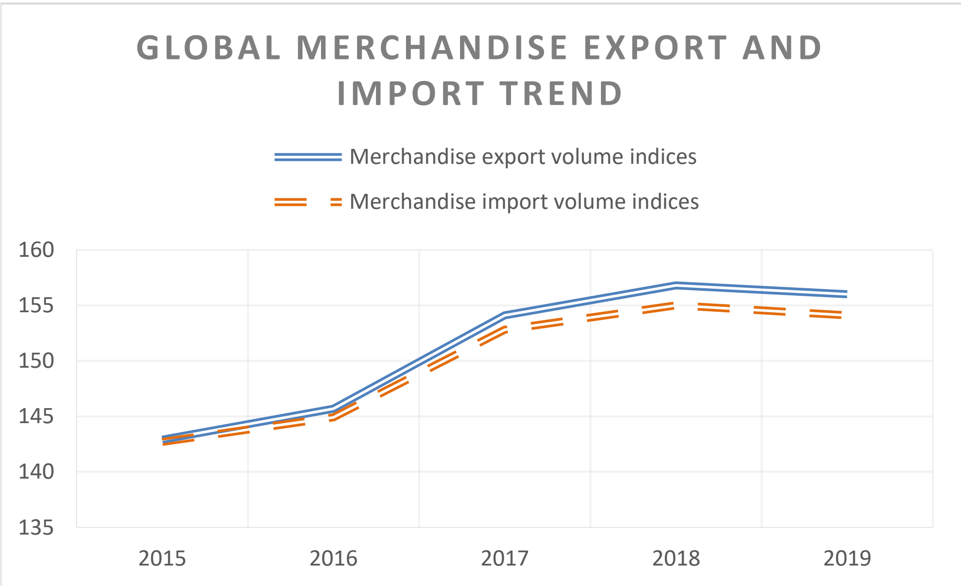


INDUSTRY RISK ANALYSIS

Among key drivers of industry risk that MARC will focus on are global trade volume growth, shipping industry dynamics, potential competition from new entrants, and government regulations.

Trade environment

Exhibit 1: Global trade trend



Source: World Trade Organisation

For a transshipment port, an assessment on global trade will be carried out, using statistics on global trade volume (Exhibit 1) and value of goods traded, among other factors. A transshipment port which has niche routes such as intra-Asia or Euro-Asia may require a more granular assessment on trade activities along such routes. Typically, MARC will look at the economic condition of nations which contribute to sizeable portions of overall cargo volume going through such routes.

For a gateway port, MARC will assess domestic economic conditions that drive import and export activities though the port. In instances where sizeable cargo traffic is derived from a certain sector, such as plantation or electronics, MARC will assess the sector's resiliency and risk profile. Support by the local government by way of subsidies and grants to bolster certain economic sectors in the hinterlands will also be factored into MARC's analysis.

Shipping industry dynamics

Major shipping lines continue to form alliances to consolidate and minimise costs by sharing vessels going through the same routes. A reshuffle in shipping alliances could result in changes in a port of call which could shift its handling volume either positively or negatively. This was evident in 2017 when a major reshuffling of shipping alliances led to the creation of three major alliances which controlled about 77% of the global container market at the time. These new alliances, to some extent, impacted the throughput volume of ports operating in Port Klang. Apart from increasing the bargaining power of shipping liners to the disadvantage of port operators, the reshuffling in 2017 shifted some of the transshipment volume from Port Klang to Port Singapore Authority (PSA).

MARC will also perform an assessment on major changes in the shipping industry, such as type of vessels and viability of routes. The development of new ships with larger capacities could require ports to invest in new infrastructure and equipment to adequately berth these ships. MARC will also monitor impacts stemming from security issues along major shipping routes.

Regulatory risk

For port operators under concessions from the government, MARC will analyse the concession agreements to identify relevant risk factors. Given the strategic importance of ports to a nation's trade activities, the government, by way of concessions, exerts control over the port operations by setting the tenure, tariff rates and capex programmes, among others. Obtaining a government concession is a high barrier of entry.

These risks will include termination and expropriation risks as well as the requirement for mandatory dredging, if any, to determine the impact on the concession holder. For ports where the tariff mechanism is determined by the government, MARC will assess and determine the likely impacts of any changes in tariff rates and mechanism on the port's handling volume and earnings.

Other factors

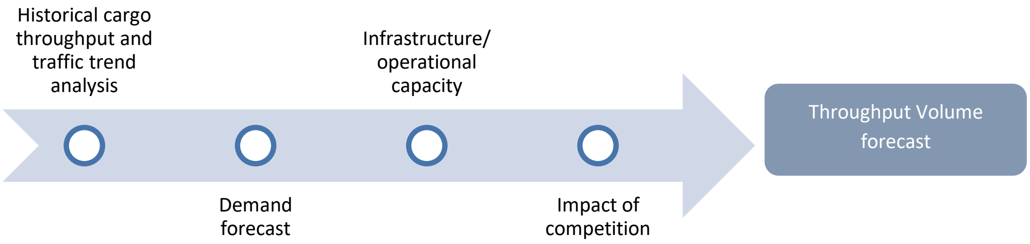
MARC will also consider the following factors if applicable:

- Environmental issues that could pose challenges to port operation
- Change in governmental support

BUSINESS RISK ANALYSIS

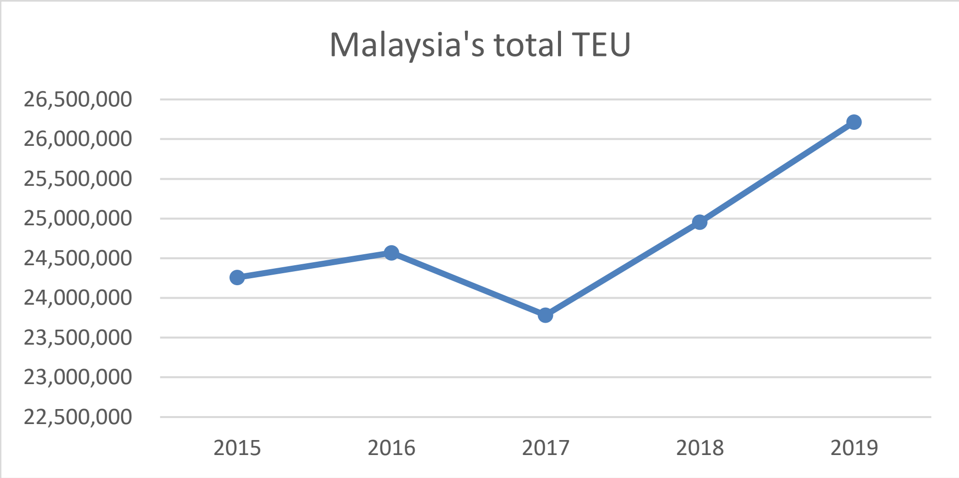
To evaluate the business risk of a port operator, MARC will consider the following factors.

Competitive position



A key factor in determining a port's competitive position is its location. Having a strategic location along major transshipment routes will bode well in attracting transshipment cargoes. For a gateway port, MARC will assess the availability of supporting infrastructure and amenities which will aid the transport of cargoes to and from local economic hubs. Growth prospects for a port over a longer horizon would depend on expansionary plans. In this regard, MARC will assess the availability of land, capital and regulatory hurdles, if any.

Exhibit 2: Malaysia's total TEU trend



Source: Census and Economic Information Centre (CEIC)

One of the key yardsticks in assessing a port's competitive position is the total cargo handling volume. A port with a strong market position would typically contribute a sizeable portion to the nation's overall cargo volume. MARC will also consider the availability of viable competing ports. Given the regulated nature of the industry, an absence or lack of viable alternatives could support the port's competitive position. MARC will assess the port's operational capacity to absorb additional volume from forecast growth in throughput volume and impacts from competition.

Operational capacity

In an effort to optimise cost, shipping liners are more inclined to employ big vessels capable of carrying more than 20,000 twenty-foot equivalent units (TEU). These large vessels will require a deep channel to berth. MARC will identify the types of ships typically used on routes serviced by the port operator and assess the port's ability to berth such vessels. In the event new vessels are introduced and they are seen to be gaining preference with major shipping liners, an assessment of the port's capability to berth such vessels will be carried out.

Apart from channel depth, MARC will also examine congestion levels of the port relative to its peers and the industry benchmark. Key operational metrics examined are the average turnaround time and average wait time. If the port experiences congestion, MARC will consider the port operator's planned capex to improve congestion metrics as part of its assessment on the port's competitiveness in this regard. A sustained increase in the congestion metrics levels will be given more weightage particularly if there are viable competing ports with considerably lower congestion metrics.

Client concentration

MARC will assess the port's customer profile, focusing on client concentration level against its peers. If a customer accounts for more than 10% of the port's overall revenue, MARC will consider this as a concentration risk from a rating standpoint. However, MARC will consider the length of relationship, contractual obligations, and shareholding linkages with major customers as mitigating factors.

Capex programme

Port operators will generally undertake routine maintenance capex to address siltation and congestion issues to remain competitive. Some ports that have reached bottleneck utilisation levels may undertake expansion that could be costly. In this regard, MARC will examine the size of the port's capex programme relative to its earnings and debt repayment profile. While having a smaller proportion of capex relative to earnings is viewed more positively, MARC will also consider the risk of underinvestment to gauge operational efficiencies and highlight such risk as and when appropriate.

FINANCIAL RISK ANALYSIS

For a port operator, an assessment of its historical performance and financial results will reflect its resiliency towards trade and economic trends. It will also provide an overall insight into the company's business strategy and internal policy. The assessment is divided into four parts: profitability, cash flow protection, capital structure and financial flexibility.

Profitability

MARC will assess the port operator's profitability trend through revenue breakdown, operating profit, pre-tax profit and net profit over a five-year period. Important ratios used include operating profit margin and operating profit before interest cover. A sharp reduction in throughput volume would result in earnings deterioration. For port operators, lease rental can be one of the largest components of its operating expenses. The profitability measures and indicators are benchmarked against other MARC-rated ports to ascertain the appropriate risk scoring.

Exhibit 3: Profitability metrics

Key metric	Formula
Operating profit margin	Operating profit/revenue
OPBITDA	Operating profit before interest, tax, depreciation, and amortisation
OPBITDA interest cover	OPBITDA/interest expense

Cash flow coverage

Cash flow represents the principal source of repayment for the port operator's debt obligations. MARC will focus on cash flow from operations (CFO) as the key indicator to measure debt servicing ability rather than other indicators such as earnings before interest, tax, depreciation and amortisation which are not sensitive to working capital deterioration. CFO is typically defined as pre-tax profit adjusted for items not involving movement of funds, principally depreciation, amortisation and other non-cash items, excluding interest and after movements in working capital.

MARC will derive ratios such CFO interest coverage and CFO debt coverage to assess debt servicing capacity. The rating agency will also assess free cash flow (FCF) to determine the magnitude of discretionary items such as capex and dividend payout. Any cash deficits due to high dividend payout or working capital changes unrelated to business development, as opposed to being used as capital investment will be viewed negatively.

As the ratings are forward-looking, MARC will need to evaluate cash flow projections, taking into account the appropriateness of the assumptions. For port operators, the assumptions are normally applied to throughput growth rate, port tariff rate, capex, taxation and dividend policy, among others. Cash flow projections will be stressed to assess the impact of lower throughput volume, a surge in operating cost, loss of significant clients and an economic or market downturn. In the case of an issuance, MARC will monitor the issuer's ability to abide by financial covenants under base and sensitised cash flow projections.

Exhibit 4: Cash flow protection metrics

Key metrics	Formula
CFO interest cover	CFO/interest paid
CFO debt cover	CFO/total debt
FCF	CFO – capex – dividends paid
FCF debt cover	FCF/total debt

Capital structure

MARC will focus on the port operator's borrowings and equity composition. As the life of a port business tends to be long, the debts can be long term in nature with no specific amortisation profile and are likely to be refinanced by new debt or other forms of external capital at maturity. Lack of progress in securing financing for significant upcoming debt maturities would heighten credit risk. For a port that demonstrates a strong cash flow generation ability and is expanding, MARC may exercise a higher tolerance level on leverage position relative to the rating band. MARC will monitor the actual debt-to-equity (DE) ratio against the covenanted DE ratio, if any, in the course of its rating.

Exhibit 5: Capital structure metrics

Key metrics	Formula
DE	Total debt/total equity
Net DE	(Total debt - cash and bank balance)/total equity
Short-term DE	Total short-term debt/total equity
Long-term DE	Total long-term/total equity

Financial flexibility

Unrestricted cash reserves are considered as core liquidity. MARC also considers the accessibility to capital markets, available funding lines as well as the strength of shareholders as factors to assess financial flexibility. Potential constraints on financial flexibility such as legal claims or potential environmental liabilities will be considered.

ISSUE STRUCTURE AND TERMS

An issue structure may influence the port operator's credit risk, thus an issue structure analysis is crucial to identify its effects on the probability of default. MARC will evaluate the issue structure and terms, particularly in terms of the issue size, tenure, type and ranking of the debt, repayment waterfall and schedule, designated accounts as well as covenants and restrictions on dividend payouts.

The issue size and tenure should be in some way related to the assets and activities financed by the instrument. MARC also views positively on clearly defined utilisation of proceeds. Stringent covenants generally provide protection to bondholders/sukukholders as issuers would need to adhere to a disciplined approach to financial management.

For port and port-related issuers, some of the common structural features and bond covenants analysed by MARC are as follows.

Minimum debt/finance service coverage ratio (DSCR/FSCR)

The minimum DSCR/FSCR is the minimum coverage of debt/financing obligations by cash flow generated by operations. Under MARC's rated port issuances, DSCR/FSCR is usually represented by beginning cash balance and net cash flow before debt service to the total debt service. High minimum DSCR/FSCR provides strong cash flow protection to the bondholders; however, issuer's growth may be hampered as it restricts the company from making any one-time investment that requires large cash outflow. Minimum DSCR/FSCR also places control on distribution such as dividends and advances.

Maximum debt/finance to equity (DE/FE) ratio

The DE/FE ratio represents the issuer's total debt relative to its total shareholders' funds. Such covenant limits the issuer from incurring additional debt and also affects recovery post default. MARC monitors the issuers' historical DE/FE ratio as well as the forecasted trend for the entire issuance tenure.

Designated accounts

The purpose of each account, e.g. the finance service reserve account, finance service account, disbursement account, revenue/collection account, sinking fund account, etc, will be identified by the analyst. The requirement to maintain a minimum balance in the designated accounts, which helps mitigate liquidity risk is also considered in MARC's analysis.

MANAGEMENT AND OTHER QUALITATIVE FACTORS

Management is assessed for its role in embarking or implementing long-term strategies for a sustainable competitive advantage. MARC views the strength of the management team to be key in determining the port's ability to be competitive.

Common parameters when assessing a port's management include:

- Innovation and flexibility in reacting to challenges and changes
- Line of succession and management's strength and expertise
- Business philosophy, effectiveness of organisational structure and corporate culture
- Corporate governance
- Strategic planning
- Financial risk tolerance/policies
- Labour relations

MARC will also consider a port's ownership structure and shareholder strength and past evidence of shareholder support extended to the port.

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