# Rating Methodology: Shipping Companies

[Issued in September 2022]

**Background**

With 80% of the overall global trade (volumes) being conducted via the sea, shipping, in many ways, is the lifeline of the global economy. Due to the mobile nature of its asset class (ships), the freight rates ruling on most routes are not very different from others, thereby making the Indian shipping industry heavily intertwined with the global arena. The industry can broadly be classified into four segments on the basis of services provided:

Dry Bulk: Used to carry iron ore, steel, coal, etc.
Wet Bulk (tankers): Used for transporting crude petroleum (crude carriers), downstream refined products (product tankers), and chemicals (specialised carriers, e.g., LNG carriers).
Containership: Used to transport breakbulk (commodities that are shipped in bundles, pallets, bins, etc).
Offshore Shipping: Commodities not covered under the earlier modes.

Given the volatility in the industry, players in the segment report some years of super normal profits while some years of losses. Also, vessels constitute 90% of the gross block for companies, and the age of the fleet has a major bearing on operational efficiency. To maintain healthy operating performance, shipping companies are required to replace their ageing fleet with new vessels and undertake periodic dry docking exercises, thereby rendering the industry capital-intensive. The standardised nature of shipping services makes it difficult for any single company to wield significant pricing power, which lowers the switching costs for customers. Besides, the industry is governed by rules and regulations of the International Maritime Organisation (IMO) and other international bodies, in addition to the fiscal, judicial, and manning requirements of the flag states.

**Demand-supply Dynamics**

The freight rates in the shipping industry depend on multiple macro-economic factors such as global trades, demand shocks caused due to events like wars and a pandemic, political events, natural disasters, etc and as the manufacturing of ships usually takes two to three years, an immediate demand surge cannot be met.
In the longer term, however, the freight rates are affected by supply-side dynamics.
Some of the key demand and supply dynamics impacting freight rates are:
Demand:
Global economic position

Political events impacting the production of natural resources or supply-chain disruption

Natural disasters such as hurricanes, pandemic outbreaks, etc

Supply:
Fleet size

Scrapping of vessels

Delivery schedule of new vessels

Capacity for shipbuilding, as new ships can be built only if there are slots available with shipbuilding yards

## Indian Shipping Industry

The Indian shipping industry is fragmented, with the presence of a number of small players. As of March 31, 2022, the fleet size of the Indian shipping industry aggregated to 19.60 million deadweight tonnage (dwt) with a fleet of 1,505 ships (Source: Directorate Generate of Shipping). Tankers account for the highest share at around 55%, followed by dry bulk vessels at 18%, and containers at 5%. The general lifespan of a vessel ranges from 25-30 years. Of the total Indian fleet, 44% as of December 31, 2021, was over 20 years of age, as compared with the world average of around 15 years.

## Rating Methodology

The rating process of CARE Ratings Limited (CARE Ratings) encompasses a review of the economic as well as industry scenario in which the entity operates, along with an assessment of the entity-specific business risk factors. This is followed by an assessment of the financial risk factors and quality of management of the entity. The various sub-elements of each risk factor are described below:

### A. Business Risk

Business risk is analyzed based on: (i) the economies of scale, (ii) diversification benefits, (iii) fleet deployment strategy, and (iv) operating efficiency.

#### i. Economies of scale

a. **Fleet size:** The economies of scale, as measured by the fleet size, have a bearing on the credit profile of the shipping company. The scale, in terms of larger fleet size, is likely to provide benefits such as discounts from ship brokers, lower port operating costs (dry docking expenses and fees of stevedoring agents), etc, to the company. Besides this, a larger fleet size also improves its flexibility to cater to the global customer base. In contrast, small companies are highly susceptible to the external factors in the shipping industry, such as an increase in bunker cost, and they also experience lower bargaining power vis-à-vis other large players in the industry. Hence, a larger fleet size is viewed as a strength in the revenue generation capability.

#### ii. Diversification

a. **Operating segment:** There are four segments, viz, wet bulk, dry bulk, container ships, and offshore segment. Since the dynamics of these segments are driven by different factors, such as government policies and trade scenarios, among others, a company present in multiple segments gets a natural hedge against the vagaries arising out of any one of these segments.

b. **Geographical reach:** The geographical reach mitigates the volatility in revenues arising out of country-specific regulatory changes, regional demand-supply disparities, and political event risks. This is likely to stabilise revenue streams across trade lanes. There are seven trade lanes operating in the shipping industry, such as (i) Intra-Americas, (ii) Intra-Asia, (iii) Intra-Europe, (iv) Transpacific, (v) Transatlantic, (vi) Asia-Europe, and (vii) the rest of the World. The companies serving on multiple routes reduce the dependence on a particular geography.

c. **Customer base:** Long-term agreements with clients impart revenue visibility for the company. A well-diversified customer base offsets counterparty risks. This, combined with the ability to operate across segments and geographical routes, mitigates the concentration risks, which are viewed as credit strengths.

### iii. Deployment strategy

Movements in freight rates are a function of the global demand and supply of commodities and the availability of vessels. The freight rate in the offshore segment also depends on trends in crude prices and the exploration and production (E&P) spend of oil exploration companies. This renders the freight rates in the spot market volatile, leading to variable cash flow for shipping companies operating in this segment. Hence, the vessel deployment strategy plays a crucial role in determining cash flow stability. While spot contracts provide the upside revenue potential, long-term contracts protect the company from unfavourable variations in the freight rates. Shipping companies can deploy their fleets on the following charter basis:

- **Bareboat charter:** In the bareboat charter, the charterer obtains full possession of the vessel and pays for all the operating expenses, including bunker (fuel), crew, port expenses, etc.
- **Voyage charter:** Voyage charter is the hiring of a vessel and crew for a voyage between a loading port and a discharge port. The charterer pays the vessel owner on a per tonne or lump-sum basis. The owner pays the port costs, bunker (fuel) costs, and crew costs.
- **Time charter:** Time charter refers to the hiring of a vessel for a specific period of time; however, the owner manages the vessel and bears the crew and other running expenses. The charterer bears the bunker (fuel) cost and port charges.

Thus, depending upon the type of charter, the vessel is deployed, and the cost and profitability margins of a shipping company would vary. In addition, the vessel owner is also required to incur dry docking expenses after every two and a half years. Higher the cost structure, the lower will be the ability of the ship to withstand the downturn in charter rates. CARE Ratings considers the judicious mix of spot and contracted earnings as a strength, so as to cover the fixed costs of the company. Higher proportion of contracts for the medium to long term impart steady visibility of the cash flows, which enables companies to align and meet their debt servicing requirements as well as investments in vessel acquisitions. These are, hence, viewed favourably from a credit perspective.

### iv. Operating Efficiency

Given the cyclical nature of the industry and the low pricing power, a high degree of operating efficiency will offset the impact of volatile revenues. The operating efficiency primarily includes factors such as fleet age, combination of owned and leased vessels, fleet type, and utilisation.

a. **Fleet age:** Operating expenses such as bunker cost, dry docking expense, insurance, etc, are higher for the older vessels, which adversely impact the profitability. The higher fleet age also leads to frequent scraping of old vessels and their replacements. In other words, high provisioning is required for asset acquisitions.

b. **Owned v/s Leased vessels:** The outright purchase of vessels requires higher capital outlay, unlike vessels that are taken on lease. By exercising the latter option of leased vessels, the company can increase its capacity (DWT) without incurring an upfront capital expenditure (capex). Hence, the optimum mix of owned and leased vessels and their effective deployment is important and assessed accordingly. From the rating perspective, the track record of the company in successfully implementing its strategy through multiple business cycles is important.

c. **Fleet type:** In line with the IMO regulations, there are restrictions on operating single-hull tanker vessels to minimise risk to the marine environment. Besides, in the dry bulk segment, the geared vessels provide flexibility to operate in a port where there is no adequate material handling systems. As such, the fleet profile, including double hulls as well as geared vessels, provide additional comfort towards continuity of the operations.

d. **Fleet utilisation:** The shipping industry is associated with higher fixed costs, and therefore, the ability of the company to achieve optimal utilisation of the fleet is critical to achieving stable revenue and profitability.

## B. Financial Risk

**Financial Strategy and Capital Mix:**

The shipping companies are required to replace their ageing fleet with new vessels, while also undertaking periodic dry docking exercises, thereby rendering the industry capital-intensive. A major portion of the asset funding is financed through long-term debt, and hence, access to fundraising is crucial. The ability to manage the capital structure while raising funds for asset replacement is important from the credit perspective.

Shipbuilding is a long gestation activity, with an average production timeline of two to three years. Hence, the return on capital deployed in the new acquisitions will accrue with a time lag. Given the high volatility in freight rates (the cyclical nature of the industry), this may impact the companies' ability to service high debt levels, and thus, it is crucial for the companies to maintain an optimal balance between debt and operational cash flows. The return on capital employed (ROCE), overall gearing ratio, and total debt (TD)/gross cash accruals (GCA) are some of the financial metrics evaluated for the financial risk measurement. Besides, other financial ratios are assessed in line with CARE Ratings' methodology on financial ratios – non-financial sector.

**Liquidity**

The operating cash flow of a shipping company is influenced by freight rates and the cost structure associated with the charter philosophy adopted. Therefore, the fleet deployment strategy of the shipping companies, as discussed earlier, along with the liquidity and the treasury management philosophy of the entities is assessed to determine the stability of cash flows. Maintaining liquidity in the form of free cash reserves to finance business and debt-servicing requirements during the lean period (when freight rates are down) is viewed favourably.

## C. Management Evaluation

The fortunes of a company lay in its management's ability to effectively implement strategies. Hence, management evaluation plays a pivotal role in the process of credit assessment of a company. Timely gauging business prospects and pre-empting industry trends are key determinants for assessing the management's capability and vision. CARE Ratings evaluates the management on various parameters as enumerated in the management risk assessment of CARE Ratings' methodology for manufacturing companies.

## D. Industry Risk

Industry risk is an important constituent in the risk assessment, with the freight rates dependent upon the demand-supply dynamics, as discussed earlier. Furthermore, the shipping industry is subject to regulatory guidelines by the IMO, a United Nations organisation, and respective government authorities.

Indian-flagged vessels enjoy the first right of refusal (RoFR) from PSU charterers, so long as they can match the lowest rate offered by a competing foreign-flagged vessel. This offers some traction in terms of cargo or vessel utilisation for Indian shipping companies. Any change in the cabotage law may impact the operations of Indian shipping companies.

IMO has undertaken the reduction of greenhouse gas emissions from shipping. As a part of this endeavour, in April 2018, IMO adopted a policy framework that sets key ambitions, including a reduction in annual greenhouse gas emissions from international shipping by at least half by 2050, compared with their level in 2008. The implementation of such guidelines is likely to impact shipping operations, as the companies will be required to incur additional operational expenditure (opex).

**Environmental, Social and Governance (ESG) risk**

Environmental risks are moderate for Shipping companies, while social risk concerns are limited. Governance risks are critical for all issuers including shipping entities. In this respect, qualitative assessment such as Governance structure (more specifically independence of board, ownership concentration, etc), compliance to various policy framework, transparency and disclosure standards, etc are assessed.

The environmental risk stems from the regulations laid down by IMO for reduction in greenhouse gas emission from shipping entities. Shipping entities would have to incur additional expenditure to meet the specifications set forth by IMO and CARE Ratings assess the impact of such opex on the cashflows.

## Conclusion

The rating process is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE Ratings analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality by taking into account the industry's cyclicality. While the methodology encompasses comprehensive technical, financial, commercial, economic, and management analysis, credit rating is an overall assessment of all aspects of the issuer.

[For the previous version please refer to 'Rating Methodology – Shipping Companies' issued in August 2020]

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**About:**

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