Ocean Freight Rationalisation – An Imperative for the Vikshit Bharat

Deeksha Gupta and Harsha Grover (RIS Interns)

Introduction

India has been a maritime powerhouse since ancient times holding a crucial role in global trade and commerce. Evidence from the Sindhu Saraswati Civilisation (3000BCE-1500 BCE) shows that India had a thriving trade with Mesopotamia, Egypt and Persia using ports of Lothal and Dholavira of Gujarat. India's geographical position makes it a bridge between the east and the west.

Despite a rich maritime history, modern India faces numerous challenges in the shipping industry. A significant portion of India's international trade, both imports and exports, is carried by foreign shipping companies. This heavy reliance on foreign entities means that a huge money flows out of India as freight charges to the tune of $100 billion (Economic Times, 2023)

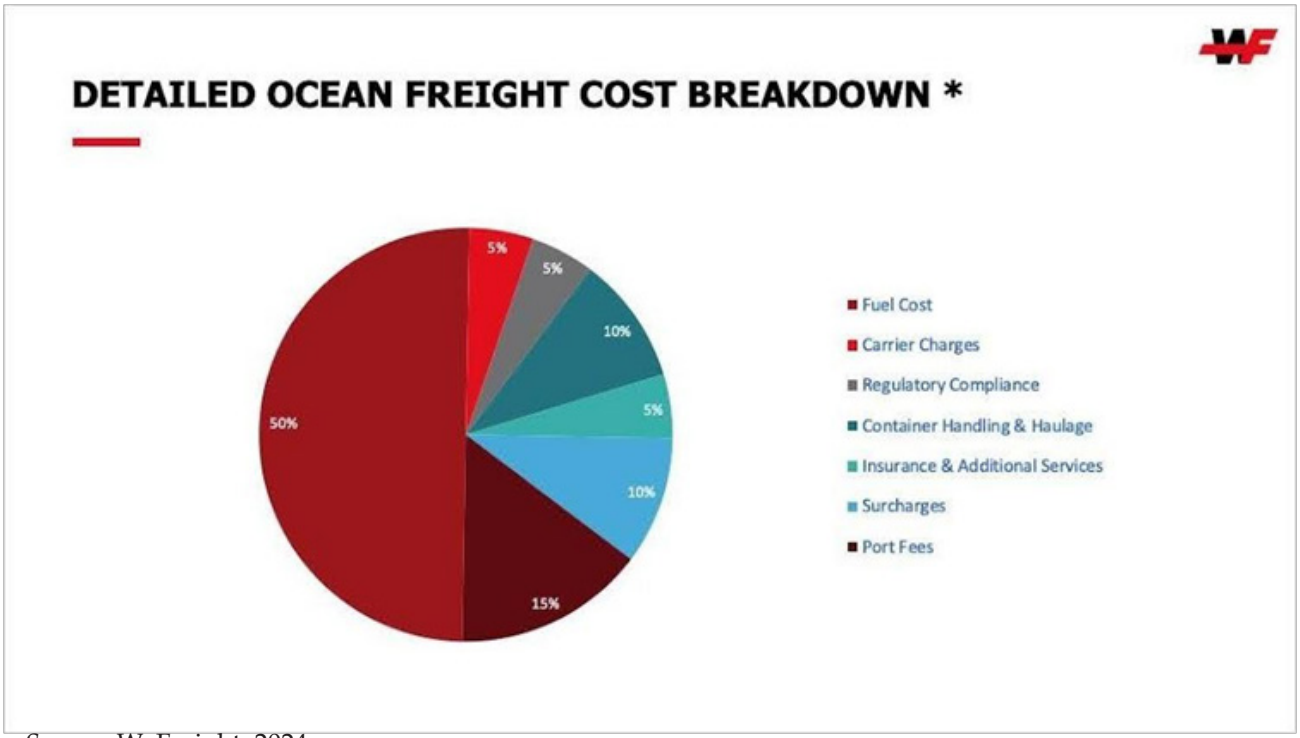
In this commentary, we analyse few of the aspects related to rationalisation of the ocean freight charges in India.

Understanding Ocean Freight Charges

Majorly three types of cargo ships/vessels are used for sea based cargo transfer. A container ship is a vessel that is designed to transfer standardised cargo containers of different sizes. They are categorised based on their capacity, which is measured in twenty-foot equivalent units (TEUs). Dry bulk carriers are the vessels, which carry non-liquid/ non-containerised bulk cargo. They are best suited for transport of dry, unpacked goods such as grains, minerals, etc, across the world's oceans. Thirdly, liquid bulk cargo is designed to carry unpacked liquid such as crude oil, petroleum products and other liquids.

Freight charges are the costs incurred by the shippers or receivers to a carrier for transporting goods from one location to another and it is also known as freight rates. They are affected by factors like distance, weight, size, and modes of transportation. There are more than 50 types of ocean freight charges, including Basic Ocean Freight (BAS), terminal handling charges (THC), customs clearance fees, among others. They affect the competitiveness of the exim trade. Many of these are variable type of charges, like the toll charges, HBL manifestation charges, customs clearance charges, examination charges, shut out charges, SSR charges, which depend on the market forces of that time and discretion of destination port. The complexities of market forces involved in these charges make ocean freight expensive for the Indian exporters and importers.

Figure 1: General Breakdown of Ocean Freight Costs



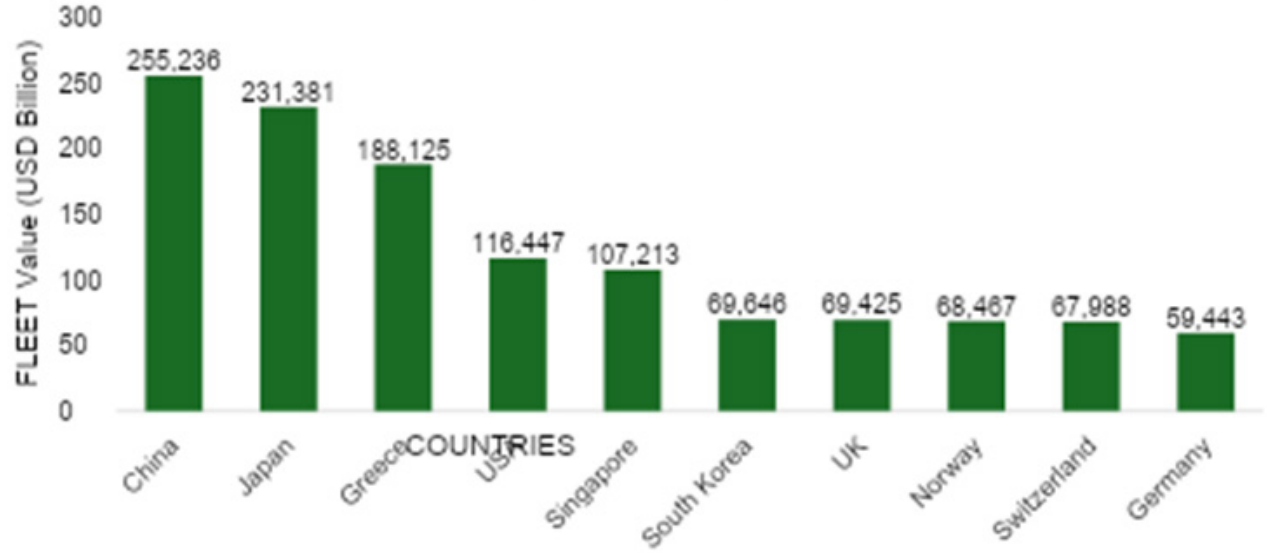
Source: WeFreight, 2024

A simpliflied representation to illustrate the general breakdown of ocean freight costs is given at Fig. 1. The specific percentages allocated to each category, such as fuel costs, port fees, surcharges, and others are based on generalised industry averages and may not accurately reflect the current or specific market conditions. Actual costs can vary significantly depending on various factors, including but not limited to the route, carrier, type and size of cargo, seasonal demand, and global economic conditions. This chart therefore depicts, a conceptual representation to understand the different components, that can influence ocean freight pricing, rather than precise or exhaustive accounting of freight costs (Wefreight,2024).

Shipping Fleet Ownership

The distribution of ship ownership across the globe in terms of total fleet value (in USD billion), is illustrated in the Fig.2. China and Japan lead the fleet ownership valued at USD 255 billion and USD 231 billion, respectively. The U.S.A at USD 188 billion and Singapore at USD 107 billion hold middle positions, while countries like South Korea, the UK, Norway, Switzerland and Germany hold relatively lower but still huge value of fleet ranging from USD 59 billion to USD 70 billion.

Figure 2: Distribution of Top -10 Shipowning Nations



Source: Author's Creation

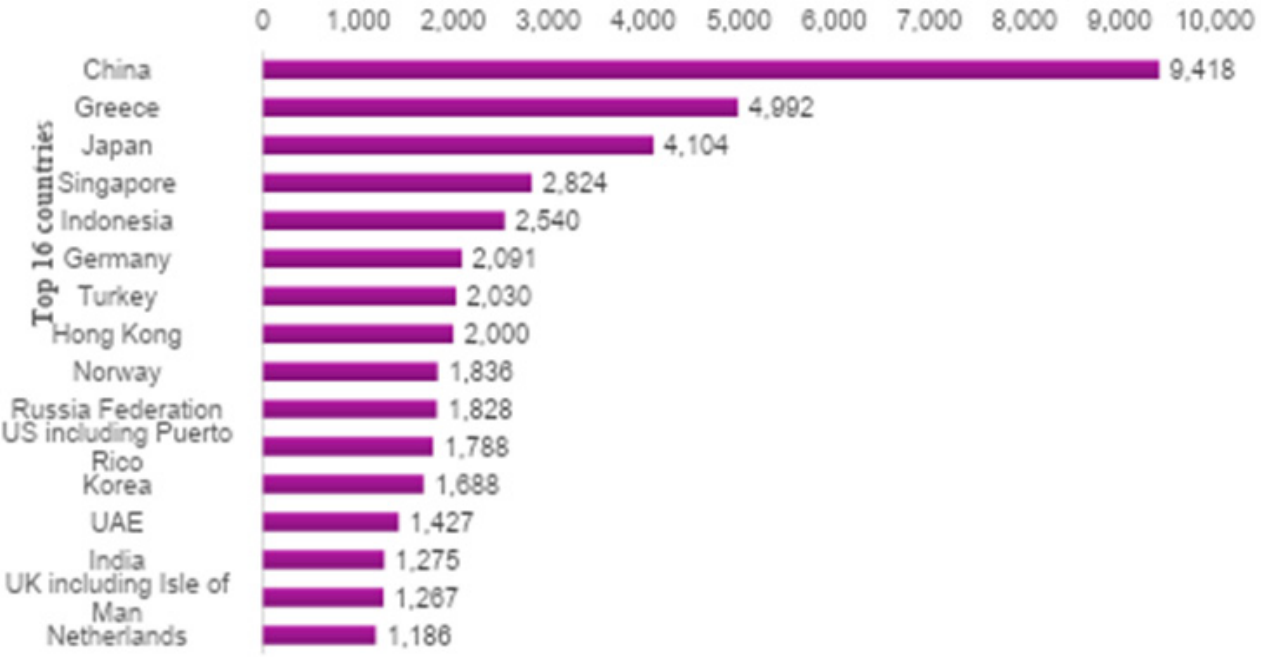
There is also a sharp gap between India and global maritime leaders, in terms of number of vessels registered (Fig.3). Absence of India in top 10 list highlights the limitations of Indian shipping industry in comparison with the other Asian peers like China, Korea, Japan and Singapore in the region. This becomes a pressing issue given the fact that India possesses approximately 11000 km of coastline (Coastal Protection and Development Advisory Committee, 2019) with 12 major ports and 200+ non-major port (Annual Report 2023-24, Ministry of Ports, Shipping and Waterways). It is therefore evident, that for India to bridge this gap, shipping capacities, must be prioritised.

The global fleet distribution by registration, highlights India's relatively small fleet size as compared to leading maritime nations such as China, Greece and Japan. As China dominates with 9,418 registered vessels, India lags with only 1,275 vessels showing its heavy reliance on foreign shipping companies for international trade. Most of the cargo moving in and out of India is transported by major global players such as Maersk, MSC and CMA CGM (Tushar, 2023). This dependence can significantly impacts freight costs, as Indian exporters and importers deal with higher charges dictated by foreign shipping lines. The limited presence of Indian vessels further hampers the bargaining power in freight negotiations which ultimately exposes our trade to external price fluctuations and market volatility. The cargo fleet size and fleet ownership problem is further compounded by an aging maritime infrastructure and slow ship acquisition rates.

While the government initiatives like 'Make in India' aims to boost shipbuilding capacity, we still lag in large scale series production of high-capacity vessels required for competitive transportation. Instruments like Right of First Refusal (RoFR), which supports domestic shipowners by prioritizing Indian flagged vessels for cargo over foreign companies, alone are not sufficient to elevate India's position among top ship-owning nations,without

complementing it with finance, policy reforms and other initiatives.

Figure 3 : Fleet Ownership by Flag Registration



Source: Author's Creation

Accordingly, there are multiple initiatives, undertaken by the Government of India, which include, "One Nation, One Port", "Sagarmala programme", "Maritime Development Fund" and Ship Building Financial Assitance Policy" etc., with a multi-faceted approach – focussing on port-led industrialisation, fleet expansion, and streamlining operations at the ports, which would help India emerge as a key player in maritime economy and trade.

Compounding Challenges to the Indian Shipping Industry

Marine insurance is another major challenge for Indian shipping companies as the cost of insuring vessels and cargo is high due to perceived risks associated with Indian ports, outdated ships and regulatory uncertainties. To add to the above, environmental sustainability is a newer major challenge in the shipping industry. Addressing these challenges is significant for ocean freight rationalisation, because they directly impact costs and competitiveness. Limited affordable finance and insurance, increases costs for Indian shippers and make foreign fleets more competitive.

Indian shipping companies often struggle with financing due to high interest rates and limited access to long term credit (gov.uk). However, this is not the case with global competitors like China and Singapore. Hence, government support in the form of subsidies, low interest loans and tax benefits could help Indian shipping companies expand their fleet

and ultimately reduce dependence on foreign fleet. Similarly, insurance premium often make freight more expensive making us less competitive in global market. Countries like the UK and Singapore have established a network of maritime insurance hubs that provide competitive and flexible rates. However, such arrangement are often missing in the Indian shipping sector. Strengthening domestic insurance ecosystem could further help reduce the freight costs.

International shipping contributes approximately 2% of the global CO2 emissions (Fourth IMO Greenhouse Gas Study, 2020). Therefore, International Maritime Organisation (IMO) aims to achieve net-zero Green House Gas (GHG) emissions from international shipping by 2050, in line with the Paris Agreement. India with its growing maritime trade, could leverage this as an opportunity and move towards towards newer/greener fuels sources for her new fleet aquisitions. On one hand, the shipping sector in India needs to reduce its costs to become competitive in the global market, and, on the other hand, to meet the above GHG commitments/regulations, it must switch to greener fuels which will require significant investment. To balance this dichotomy, India needs to adopt a well-crafted strategy, which ensures, both economic competitiveness and environmental sustainability.

Addressing Digitalisation for Transparency to Lower Costs

A successful example of digital transformation in shipping is Singapore. It has reduced the processing time significantly through advanced digital solutions. Singapore's Maritime and Port Authority (MPA) uses automatic custom clearance, real-time tracking and electronic documentation for the operational purposes. Usage of e-clearances & e-certificates, reduces human errors and ensures seamless flow of goods through operational transparency (Opengovasia, 2024). In contrary, India still depends on paper documentation for custom clearance, cargo movement and container tracking resulting into longer processing time and higher costs.

NLP Marine and the One Nation, One Port (ONOP), initiaives are envisioned as unifying digital processes for all maritime stakeholders, aimed to dismantle the traditional silos that have plagued this sector in India. By providing a single platform for information exchange, regulatory clearances, and documentation, it aims to eliminate the delays and complexities inherent in manual processes. This enhanced efficiency directly translates to lower costs associated with waiting times, administrative overhead, and the risk of errors.

Beyond a single portal, the broader digitalization drive encompasses a range of technologies designed to optimize every facet of maritime logistics. Port Community Systems are integrating port operations, leading to faster vessel turnaround times and reduced port charges. Digital freight platforms can foster competition and better rate discovery. Real-time tracking through IoT can provide much warranted visibility, enabling proactive management and preventing costly disruptions.

The cumulative integration and transformation through the digital interventions is thus most necessary for a transparent, efficient, and collaborative logistics ecosystem.

By empowering stakeholders with real-time information and facilitating seamless communication, digitalization can break down information asymmetry to foster better coordination and lower costs, across the supply chains.

Way Forward

To address the above challenges, India must adopt a multi-faceted approach. First, it is crucial to continuously improve the operational efficiency. This can be done by improving last-mile connectivity and integrated port operations. Gati Shakti integration, is also aimed at efficient cargo movement from manufacturing centres to ports, cutting down on transportation time and the related expenses. Secondly, single window clearances, streamlined customs processes, and tax simplifications are examples of regulatory measures that can reduce bureaucratic red tape and enhance competitiveness. Thirdly, proactive infrastructure set-up needs to be accelerated to ensure cost effective cargo transportation, by anticipating trade flows, preventing capacity bottlenecks, and concentrating on integrated multimodal logistics parks, dedicated freight corridors, and port modernization. Next, promoting direct liner services instead of transshipment will reduce, reliance on intermediate transshipment ports such as Singapore or Colombo. This increases the competitiveness of Indian exports by reducing handling and rerouting expenses in addition to transit time. Further, continuous digitalization and the use of technology, such as electronic documentation, AI-driven route optimization, and real-time tracking, will cut down on inefficiencies, and lessen the cost burden. When taken as a whole, these reforms promote a robust, sustainable, and economical freight environment that is essential to India's economic development and trade competitiveness. Lastly, strengthening finance and insurance mechanism is essential to support domestic shipping firms and making them competitive in global markets.

"One Nation, One Port"

Launched by Ministry of Ports. Shipping and Waterways in 2025, this scheme is a strategic move aimed at co-ordinated and uniform port ecosystem. By merging policies, procedure and planning across both major and non-major ports, the initiative seeks to strengthen port efficiency, reduce logistics costs and operational delays and to create multimodal transport network. This step is crucial in aligning port development, avoiding duplication of charges and to rationalise the freight charges with broader vision of India to become global maritime hub.

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