# India's Maritime Sector: Understanding Maritime Financial Reforms

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Abstract: The Indian Maritime Sector is going through a massive regulatory change with the introduction of major reforms in the institutional architecture, rules of the contracts and fair competition. Tracking the nature of these regulatory reforms, specifically on the port sector, this article attempts to understand how these changes are transforming the maritime sector into a major growth multiplier of the Indian Economy from being a constraint or a persistent challenge. The article shows that these changes, which are referred to in this article as Maritime Financial Reforms (MFR), have been successful in bringing pricing freedom although they haven't been sequenced, which in-turn has the potential to set-off a competition amongst the ports leading to unleashing of the scale economies in their operations. The article does this by first understanding the broad administrative tenets and the regulatory framework of India's maritime domain. It then brings out the factors that have propelled the reforms. The article studies the MFR-model to understand the inherent reasons behind these major reforms and compares it with the erstwhile system. Comparison with the situation prior to the MFR shows, these have brought about remarkable changes in the performance yardstick of the ports. The analysis also demonstrates why growth policies for specific sectors in the Global South should not be preplanned, but allowed to develop in response to market needs. A large number of countries in the South have realised the need for maritime development, but make the cardinal mistake of taking on government-led framework without developing market supportive administrative capacities.

*Keywords:* Indian Maritime Sector, Regulatory reforms, Global South.

### Introduction

hree major changes—in institutions, contracts and competition laws- have begun to transform the Indian maritime sector, that too at a massive scale. As a result,

instead of operating as constraints, the sector spanning ports, shipping and ancillary industries are transforming into a growth multiplier for the Indian economy.

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The changes (referred to now as Maritime Financial Reform or MFR) were often spasmodic, done between 2015 and 2022, with the policy makers not offering a rationale for the sequence in which they were drawn up. But the MFR have begun to acquire a critical mass and has begun to draw attention to the intention of India to build up the sector to serve international trade.

What are the constituents of this MFR? India has liberated the pricing model for ports; begun to change the rules of contract to allow more space for investments in the ports sector; and relaxed the arbitration rules for the sector. The key element of these MFR are they were not sequenced, yet they have begun to show results, bringing in pricing freedom.

As a result, the three parts of MFR have thus the potential to set off competition among the ports leading to the unleashing of scale economies in their operations. We also anticipate possibilities of mergers, going ahead.

# **Literature Review**

Transport economics has not been studied in depth in India, for a long time. Yet these costs constitute a sizeable portion of the end value of any product that is traded over some distance. Taking advantage of the transport revolution makes it possible to offer a range of goods to the end consumers at prices which are competitive. The follow-through implications on world trade are thus obvious.

In India, a national transport policy was not thought of till 2010. "In February

2010, the Government of India formed the high-level National Transport Development Policy Committee".1 This, too, did not include the role of ports explicitly. Yet it is obvious that without such a policy, the critical role of ports and the consequent investment and regulatory changes needed therein shall not fructify. A seminal article proposed a composite operational port performance index (PPI) and carried out a breakpoint (segmented) regression analysis to study the impact of port reforms. Among other things, it proposed that "reforms may lead to competition and cannibalisation of profits and growth of ports in a dynamic environment".2

This issue has also been studied by Monteiro, Jeronimo Guilherme Remigio (2018), who have demonstrated that, on an average, growth in the Major Indian ports between 1996-97 to 2013-14, was due to innovation (technical change) rather than improvements in efficiency (efficiency change).<sup>3</sup>

This has also been elaborated upon in the Sagarmala approach paper issued by the Government of India in 2016 and further revised in 2023.<sup>4</sup> Yet, while the National Transport Policy had stated that there shall be an offer of equity participation and/or viability gap funding to the extent of 20 per cent of the capital cost of public transport systems,<sup>5</sup> such clarity was not feasible for the port-related sectors.

A paper that studies the recent regulatory reform and current institutional structure of the Danish port sector has found that to successfully aid the port sector in realizing its relevant goal of cost-efficiently producing goods handling services, the risk of opportunistic behaviour needs to be explicitly recognised and managed (Merkel, 2019). With regard to the global Maritime Arbitration race, India is trailing far behind. The legal interventions that occur in the process, despite the existence of the amendments, especially with regard to the arbitral awards, are still plentiful. Therefore, only with the legislative allotment of punitive powers and absolute autonomy can the nation be presented as a commercially viable business environment (Shanmugam, 2020).

# The Context

For the purpose of this analysis, we shall focus on the port sector, though it is possible to examine others, like shipping too.

India has run a centralised administrative system for managing the ports. The 12 largest ports spread across various states are run by the central government, with the Ministry of Ports, shipping and waterways as the administrative unit. The rest of the ports are administered by the state governments. This created two classes of ports, Major, run by the central government and Minor, by the states.

The authority to divide these ports in this way emanates from the Union list of the Indian Constitution. "Ports declared by or under law made by Parliament or existing law to be major ports, including their delimitation, and the constitution and powers of port authorities therein". Laws for all other ports can be framed

by the states or the central governments under the Concurrent List.<sup>7</sup>

There is an evident problem when it comes to the difference between the major and minor ports on the basis of traffic handled at the ports. More than one Minor Ports, like Mundra Port in Gujarat, is now larger than eleven of the Major ports. Also, this port is run by a private sector company, Adani Ports and SEZ. The 12 Major Ports are all run by the central government, though a number of terminals at these ports are handled by private companies. We shall examine this dichotomy later. The Minor ports now handle 45 per cent of the total annual traffic throughput at Indian ports, which attests to the diminishing scale of operations of the Major ports.

To administer the Major ports, the central government issued a series of regulations over time. These are:

- 1. Tariff Authority for Major Ports,
- 2. Indian Ports Act, 1908
- 3. Directorate General of Shipping

Since Independence, India had pursued a policy of autarchy, especially till the liberalisation of 1991.8 The fortunes of the port sector were also tied to this level of low ambition.

The changes in the Indian economy post 1991, did not have an immediate impact as the trade volumes did not rise. There was consequently no greater pressure on the port sector to engage with an expansion of capacity.

This has, however, begun to change for the following reasons:

a. Sagarmala programme, which sought to expand the potential of the port sector, but more from the point of

- view of real estate to link them with the hinterland.
- b. The need to expand the sourcing of minerals from overseas, including even coal and now the so-called critical minerals.
- c. The supply shock created by COVID pandemic brought home the realisation that ports are a significant bulwark for national safety.
- d. The felt need to expand trade volumes to realise the ambition of a fastgrowing economy.

As these cumulatively made themselves felt in the economy, the attention of the policy planners turned to the ports. One of the first interventions sought was to build a landlord seaport model, which would not only reduce the public sector budget demands but will also improve seaport performance. This, however, would need a regulatory environment conducive to public-private partnerships. Terminal operators need to be provided with an environment that deems concession contracts viable over the duration of the project (Nicole, et al., 2022). Another study on the identification of key factors impacting the efficiency of the Indian shipping logistics sector highlights that there needs to be a more effective balance between the private and the role of the government intermediated via the role of regulation. It is only on the basis of such clear role play that a public-private partnership can evolve to ease the financial constraints that prevent Indian ports from bringing their facilities and infrastructure up to global standards.

As Monteiro and Jeronimo Guilherme Remigio (2018) show in the absence of these reforms, growth in the Major Indian ports between 1996-97 to 2013-14, was mostly due to innovation (technical change) rather than improvements in efficiency (efficiency change). In the absence of investments as terminals have become congested, 10 "container terminal efficiency has declined". 11

Although the government encourages private sector participation in the development and operation of port infrastructure, the realization of these plans will largely hinge on structural and systematic improvements to achieve necessary infrastructural and operational proficiencies in tune with future trade requirements (Hussain, 2018). There is a need to develop a future recovery strategy for organisations from a long-term perspective and support from the government to overcome the impact of COVID-19 on maritime domain organizations in India (Narsinha, 2021).

For the purpose of this paper, we shall refrain from offering a chronology of these changes, but instead focus on the MFR package. This paper studies only the Major ports.

# The MFR Model

In this segment, we shall study why the MFR model based on the incorporation of price signals is a significant value addition to the maritime sector.

What was the reason for the central government to embark on MFR? Between FY15 and FY23 the operational surplus of the Major ports (difference

between operating income and operating expenditure) has come down from 64.68 to 48.54. It is a consistent decline with no discernible position where there has been an attempt to reverse the decline.

The reasons are as follows. Till the early part of this century, all the Major ports had their tariffs fixed by the Tariff Authority for Major Ports or TAMP. The Tamp model was based on the cost of capital, so typically, a port with a higher cost of capital stood to advantage. This made the Indian ports uncompetitive.

For example, port call costs are higher in India than at foreign ports. Port call costs work out to US\$ 108,437 and US\$ 64,592, respectively, at the New and Old Terminals of Nhava Sheva (JNPT) compared with US\$ 12,043 at Port Klang, US\$ 16,158 at Jebel Ali, US\$ 17,235 at Singapore and US\$ 19,308 at Colombo. These are sizeable orders of difference.

The model made the Indian tariffs higher, but without the incentive to cut capital costs, provided no incentive for these ports to reduce those. Administratively set rates, every year left no room for any incentives based on price signals to operate.

# The MFR Change

The financial viability of the ports in India will get an upswing thanks to three key changes carried out by the Ministry of Ports, Shipping and Waterways (MOPSW). These are a) Revision of Model Concession Agreement (MCA), 2021, b) Formulation of Tariff Guidelines, 2021 and c) Establishment of the Society for Affordable Resolution

of Disputes - Ports (SAROD).

Investors in any sector need certainty in the use of their money. They are comfortable with business risks but would not wish additional risks. For the ports business, which has a long lead time, this is of even more concern.

An investor will be willing to consider the business risk of the rise and flow of traffic at a terminal but will be baulked if there are more risks, like not being able to set prices attractively to bring in more ships, or if there is a dispute with the landlord who has leased out the terminal has the cover of a protracted dispute resolution to scare him from contesting those in courts.

As India now rushes to compete with the global mega ports, offering certainty in the finance for the investors has thus become the sine qua non to bring in finance, for the targets set. The principal target is that by 2030, more than 85 per cent of the cargo handled at the major ports should be by means of Public Private Party operators or concessionaires, which essentially means companies, whether in the private or the public sector.

This is an admirable target because it makes clear how sharp is the challenge in terms of timelines. MOPSW has already broken up some of the targets into implementable bits. For instance, 31 port projects involving mechanisation and modernisation have been identified to be developed on PPP basis to be completed by 2024-25. To put these numbers in perspective, all the berths in the Major Ports are expected to be mechanised by 2030, a seven-year target.

These are all subsumed in the Maritime Vision—2030.

This context brings into relief the enormity of the three reforms undertaken by MOPSW. Combined, these reforms, perform a singular duty. They offer the certainty to the investors that their financial arrangements with the government shall be on rock-solid footing.

All of these are based on the premise that the governance model of the ports will be based on what is called the Landlord Model. In other words, the Port Trust or any other government entity with the ownership rights shall not also try to operate the business end. The Revision of Model Concession Agreement (MCA), 2021, is based on this premise. It restricts the power of the landlord in dealing with the operators which will run the terminals. It not only makes clear the responsibilities and obligations of the authority and private party with the landlord but also introduces clauses related to the termination payment prior to Commercial Operations Date (COD), changes in cargo due to unforeseen circumstances, as well as permissible changes in regulations.

What are the aspects that the new MCA 2021 offers:

- The total project cost shall be deemed to be modified to the extent of variation in Price Index occurring in respect of Adjusted Equity.
- Payment of Royalty by private operators to port shall be based on per Million Tonnes of Cargo handled instead of Percentage of Gross Revenue Basis.

- Rates of royalty per Million tonnes of of Cargo/TEUs will be indexed so as to account for variations in the Wholesale Price Index (WPI) rates announced by the Ministry of Commerce and Industry.
- 4. The royalty payment to ports will undergo the same variation as WPI variation, which is a rise for general inflation and is not an increase in royalty.
- 5. The Agreement has scope for provisions assuring a revenue window of up to 45 years and with provisions to update those.

As a Parliamentary Standing Committee examine the changes, note appreciative, these should enhance the Ease of Doing Business (EoDB) in the ports sector in India.

This is because, in the absence of this revision, it becomes necessary for the parties planning to enter the business with a major port, to work out customised contracts. Those contracts, by their very nature, can become opaque as parties try to work out favorable terms for themselves. A standardized model concession agreement wipes out such possibilities. Given that all and sundry shall be drawing up such contracts, the model frees up valuable space for MOPSW to work out policy issues instead of having to read each agreement for hidden risks.

It is the same concern that animates the second piece of reform, viz Formulation of Tariff Guidelines. These guidelines allow the concessionaires at these Major Ports to set tariffs as per market dynamics and sharing of revenue with the Port Authority as per the bid condition and Concession Agreement.

It is necessary at this stage to pause and consider, the scale of investments being drawn up. Almost since Independence, successive governments have worked on the premise that the ports should not compete on price. Instead, their draw for building volumes at the terminals should be the services they offer. While laudable, this has made the ports entirely dependent on the now defunct government body, Tarif Authority for Major Ports, to change prices in any direction.

Returns on capital for the ports were, therefore, necessarily set at rock bottom rates as there was a long time lag when they could change prices, in response to changing global dynamics of the business. This, in turn, made the ports dependent on government financing to build up new facilities and offer a faster turnaround. It is no surprise then that till now only 35 per cent per cent of total berths at major ports are mechanised. The only exception is Kandla which has all of its berths mechanised. Given the global challenges, MOPSW has rightly decided that all port terminals must be mechanised by 2030. It is therefore essential that the ports must earn the money to make that happen.

The investment required for the ports to make those happen is upwards of Rs 2.5 trillion, just under the Maritime Vision —2030. In fact, it is only now that with the removal of the cobwebs of arbitrary price fixation that the scale of investments is being drawn up. To give an example, two existing major

ports Deendayal Port and Paradip Port, have been identified to be transformed into Mega Ports having cargo handling capacity of 300 plus MTPA. The proposed Vadhavan Port of Mumbai will also be developed as another Mega Port, having a similar cargo handling capacity of above 300 MTPA.

The third leg of this reform is the change in the arbitration procedures in the sector. This is the establishment of the Society for Affordable Resolution of Disputes - Ports (SAROD).

There is no way to assume that despite all the precautions of free pricing and non arbitrary concession agreements, there shall not be disputes between the lessors, the terminal operators and the landlords, the port authorities. In May 2022, MOPSW issued the 'Guidelines for dealing with stressed PPP Projects at Major Ports' for reviving the stuck projects and unlocking blocked capacity".

The changes are in sync with the proactive steps the other departments of the government have brought in to alter the environment for arbitration in India. To put all of that in context, plenty of regulatory changes are happening in the field of arbitration in India. Before 2023 is out the Centre will make public a report of an expert committee to recommend reforms in the Indian Arbitration and Conciliation Act of 1996.

Arbitration happens when parties to a contract seek to avoid a court case, seeking instead a reconciliation mediated by an informed agency. It is a huge business globally, with the seats usually located in the financial capitals of the world. Not a surprise that where arbitration works fast, investments follow suit.

Once the parties choose arbitration as the mode of dispute resolution, the Indian Arbitration and Conciliation Act, 1996, has to become applicable for such proceedings. But till now, due to the perceived weakness of the arbitration ecosystem and the tendency of civil courts to interfere with such awards, cases have moved to foreign seats, mostly Singapore and London.

Sarod, as the name suggests, is the platform that can make arbitration less taxing. Moreover, in the event of the constitution of a statutory Adjudicatory Board as per provisions of the Major Port Authorities Act, 2021 or such other forum with powers to receive and adjudicate upon disputes between the concessionaires and the landlords, all disputes not settled through conciliation, can alternatively be referred to this Board with the mutual consent of the parties, and of course in accordance with the applicable laws.

That this matter is made clear by the response of the investors. Already demands are streaming in to make some of these provisions, apply for existing contracts too. For MOPSW, the demands demonstrate that the steps have arrived at the right time.

For a new sector like that of ports that these have begun to roll out in unison is a huge game changer. A PPP agreement with an easy means to settle disputes outside of court offers the safety of capital essential to swing the investments. For investors peeking into the Indian maritime sector, these are thus

the biggest possible inducements to make their decisions.

# Global South and the Maritime Regulatory Reforms

Tracking the sequence of and the nature of MFR, according to us, is a fine illustration of why growth policies for specific sectors in the Global South should not be preplanned, but allowed to develop in response to market needs. For instance, a recent study by the International Monetary Fund says that emerging markets and developing economies not only need to focus on reigniting the growth but also must be able to manage rising debt (Aligishiev et al., 2023). Explaining how regulatory changes and other market reforms can ease this challenge, the study presents examples of lowering barriers to entry in utilities markets, establishing financial supervision and regulatory frameworks, and lowering restrictions on foreign exchange transactions and cross-border capital flows. There is an inherent cost to such changes, but those are often less, as we shall show for the maritime sector, than those incurred via a supposed ex-ante policy framework run as administrative fiats.

The cost of building a port is often in excess of US \$1 billion. In Africa for instance, less than 10 nations have a GDP of over \$100 billion. This means investment in the maritime sector draws a disproportionate percentage of the resources of a country's economy, with returns often not expected to accrue for close to two decades. In the current indebtedness position of these economies

and the limited resources of multilateral institutions, it is important, therefore, that these trade-offs in terms of policy choices are clearly understood.

The MFRs offer a feedback loop which can potentially reduce the cost of these trade-offs. Small nations not only have fewer resources, but they are also short of administrative experience. To deploy those limited resources in drawing up investment and others in the sector is, therefore, a significant cost. This need not happen as there are price-based policy parameters available and can be drawn upon. For nations with, say, a single port, a price-based package, as the MFR is, can be used to create a competitive environment even across the borders, creating scale economies.

Literature review of developments in the African continent estimates that an "enabling environment is essential to meeting the major investment needs for national and regional infrastructure in Africa through public-private sector partnerships".<sup>14</sup>

Realising these potentials, UNCTAD has called for investment in maritime supply chains to enable ports, shipping fleets and hinterland connections to be better prepared for future global crises, climate change and the transition to low-carbon energy.<sup>15</sup>

As we shall also show, these have the potential to create a growth window that can draw in global finance, despite no apparent specific advantage for the sector. It has happened for India and is, therefore, an easily replicable model.

# Conclusion

The article has discussed the three major reforms that are massively impacting the Indian maritime Sector. These changes in terms of institutions, contracts and nursing competition are transforming India's maritime sector from operating as constraint to propelling the country towards \$2 trillion export economy coupled with strength of ports, shipping and ancillary industries.

Looked at in isolation, the scale of these changes are often unclear. Their combined impact is, however, considerable. The result is expected to be a serious upside in the flow of finance for the sector, including that of shipping. This is something that India has been missing for a long time but is now in line to get reversed. It means the series of steps to bolster availability of finance for the ports and shipping sector put into operation by India, has begun to bear dividend.

To put those numbers in perspective, there is a scope for investment of about Rs 4 trillion in the Indian ports, shipping and inland waterways sector by the end of 2030. This would push the capacity addition in the ports to above 4000 MTPA by then.

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