

“HOW MARITIME INDUSTRY INFLUENCE TOWARDS SUPPLY CHAIN MANAGEMENT”.



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Executive Summery

The relationship between supply chain and maritime sector is like fish and water. Fish will not survive without water.

Supply chain management is effective when the product reached to customers hand timely to a reasonable market prize. For that we should manage that process from sourcing of raw till it come out of the production line as a finished product.

In that supply chain process logistic operation is actively involved in two places. Maritime sector is playing a vital role within that logistic operation.

This is what we are discussing in detail through below article.

Supply Chain Process

Supply chain is the process of a product from its raw material status until it transforms into finish final product.

There are 5 important elements which SCM must fulfil to complete its cycle.

1. Planning
2. Source (Raw materials or services)
3. Manufacturing
4. Delivery
5. Return of unwanted product.

When we consider above 5 segments, Transportation is one of the main components to complete this chain.

When we consider downstream supply chain management, this is significant in several places.



Inbound and out bound logistic operation

We can see through above process map, in two occasions logistics components are connecting this process chain. So, this is the best proof to prove the importance of the transportation sector in this supply chain.

Mainly, if you can control transportation operation efficiently and effectively in this process it will be a successful approach to control the cost of the final product and reach the final product into consumers hand in time.

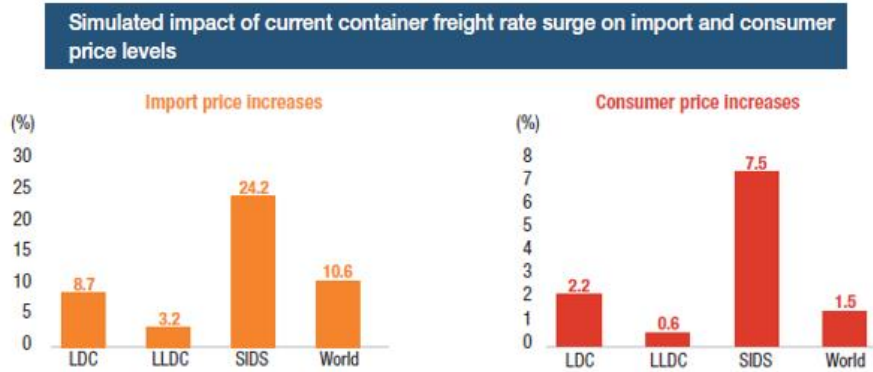


Figure – 01

Source: - United Nations Conference on Trade and Development (UNCTAD)

This transportation can be used in various modes within this chain. Specially internationally or domestically to full fill the requirement according to the product. E.g., Sea, road, air, pipeline, etc.

Main Freight Mode Options in the World

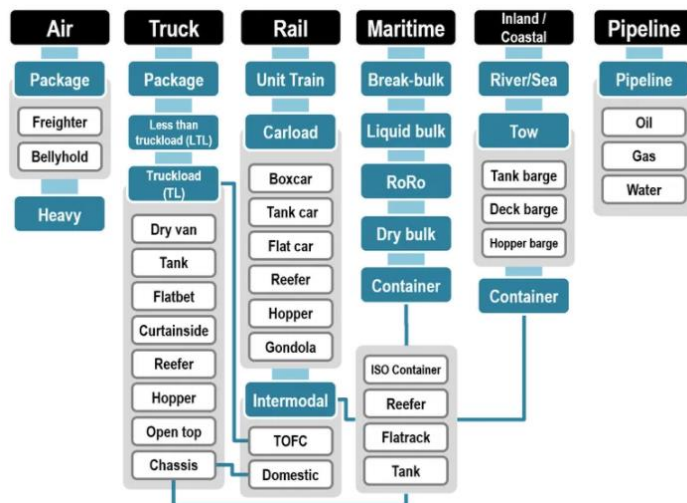


Figure – 02

Source: - *transportgeography.org*

Consumables and Sea Transportation

According to “world economy forum” and “The Ocean”, 90% of the world’s goods are transported by sea and it is continuously increasing and expected to grow to a level of triple by 2050.

Source: - *world economy forum / The Ocean*

From year 2020 various disruptions created so many bottlenecks towards maritime sector in the world. Pandemic conditions due to COVID 19 is one of the main out of several.

National lockdowns created bottlenecks in various sides such as, production plants closed (due to lock down, lack of staff, lack of raw materials, lack of transportation, etc), shops closed due to lock downs, lack of inland transportations due to inland transport restrictions, lack of stevedores to operate port operations efficiently, Increased yard congestions, reduced market buying power due to lost jobs and salary reductions, etc.

As an example, below gauges showing supply shortages for U.S. services and industry

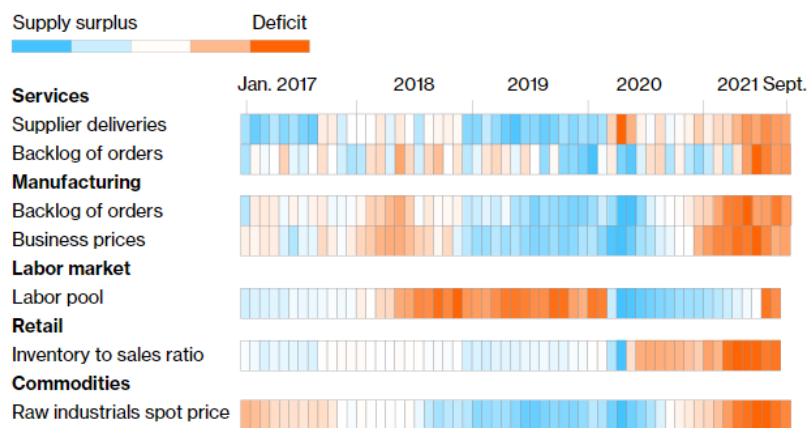


Figure – 03

Source: - *Bloomberg Economics.*

In addition, vessel operators faced various bottlenecks when they operate their vessels within this pandemic conditions. Such as to procure their supplies (fuel, provisions, fresh water, etc), Due to restrictions on crew changes and sea crew stuck months and months onboard vessels after completing their contract, Crew members reported sick on-board vessels, Restrictions on sick crew disembarkation and treatments, Restriction on crew members show leave, Lack of support from show based authorities, Due to precarious onboard situation with the pandemic conditions resistance from sea farers to join the vessels, Undue delays in port rotations, Lack of equipment availability, etc.



“This is a human rights issue. Seafarers’ lives are being made impossible through the crew change difficulties and this can only have a detrimental effect on ship safety and on the supply chain, the longer the situation continues”

IMO Secretary-General Kitack Lim, said.

Source: - Safety4sea.com

Container shortage and world economy

In addition to above explained logjams, said pandemic world market created a huge imbalance in supply and demand. Hence world market is facing a significant container shortage and led to a drastic container price inflation. The same has been badly affected towards the inflation of economy and GDP in most of the countries in the world.

Figure 3.1 Growth of demand and supply in container shipping, 2007–2021, percentage

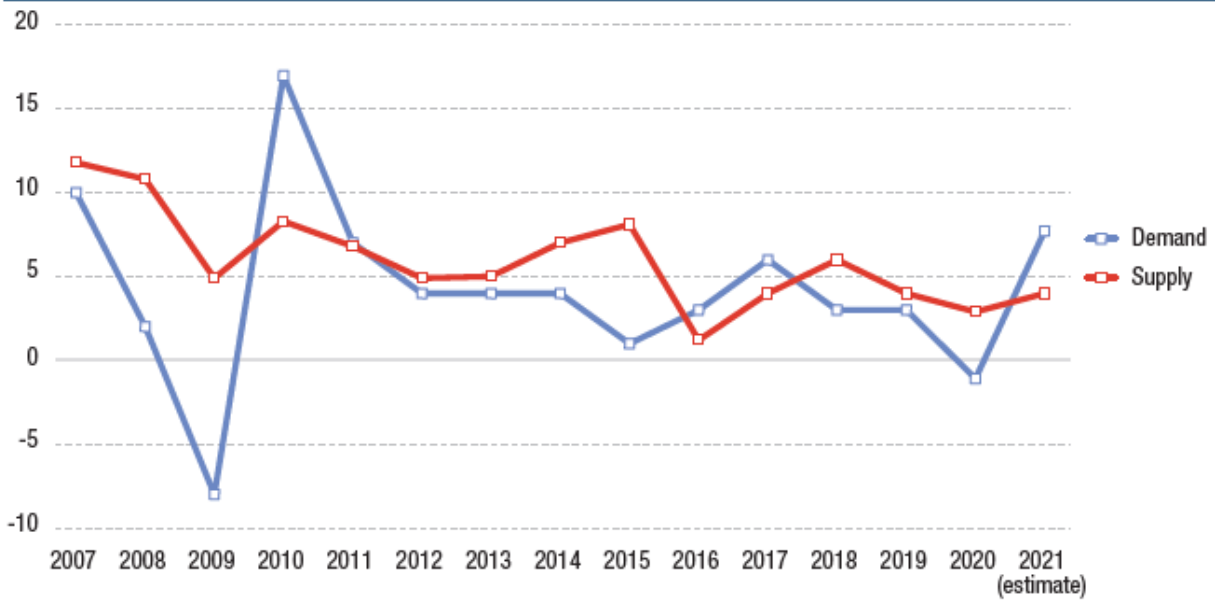


Figure – 04

Source: - United Nations Conference on Trade and Development (UNCTAD)

Top 10 consumer products by predicted % price increase

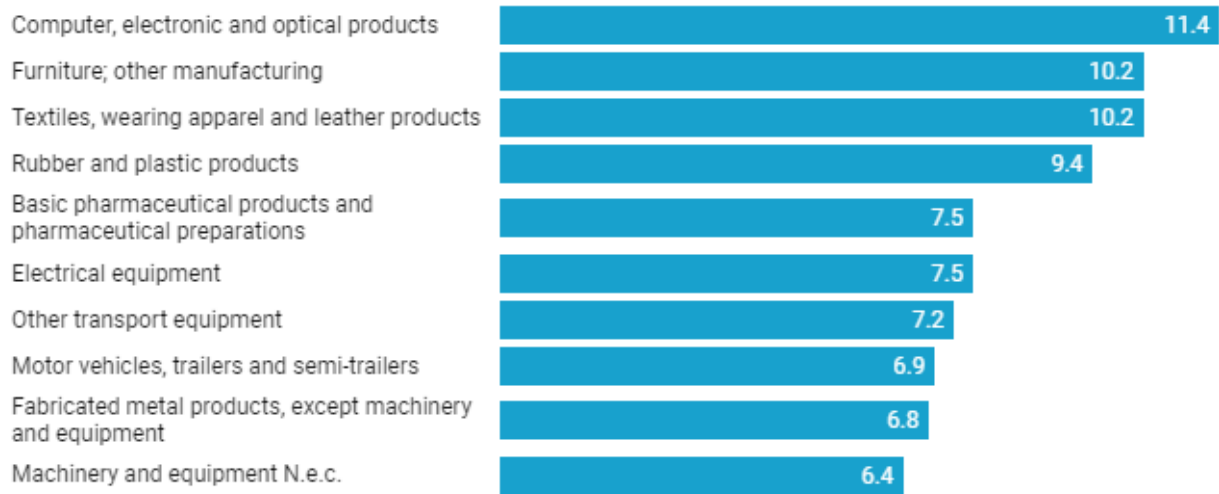


Figure – 05

Source: - United Nations Conference on Trade and Development (UNCTAD)

By Country

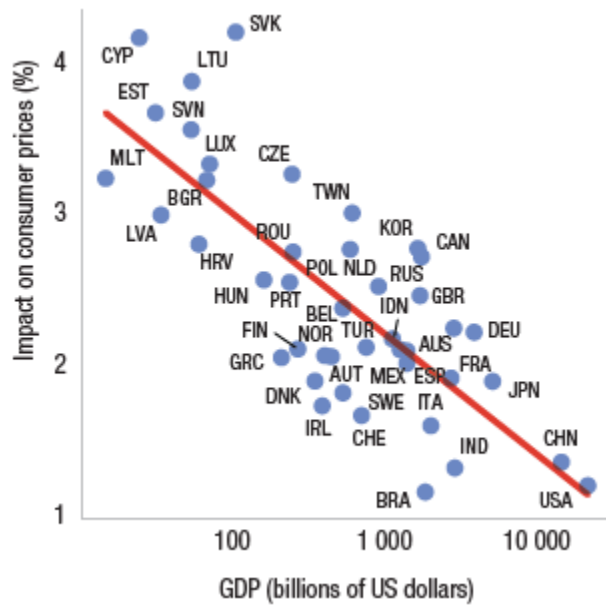


Figure – 06

Source: - United Nations Conference on Trade and Development (UNCTAD)

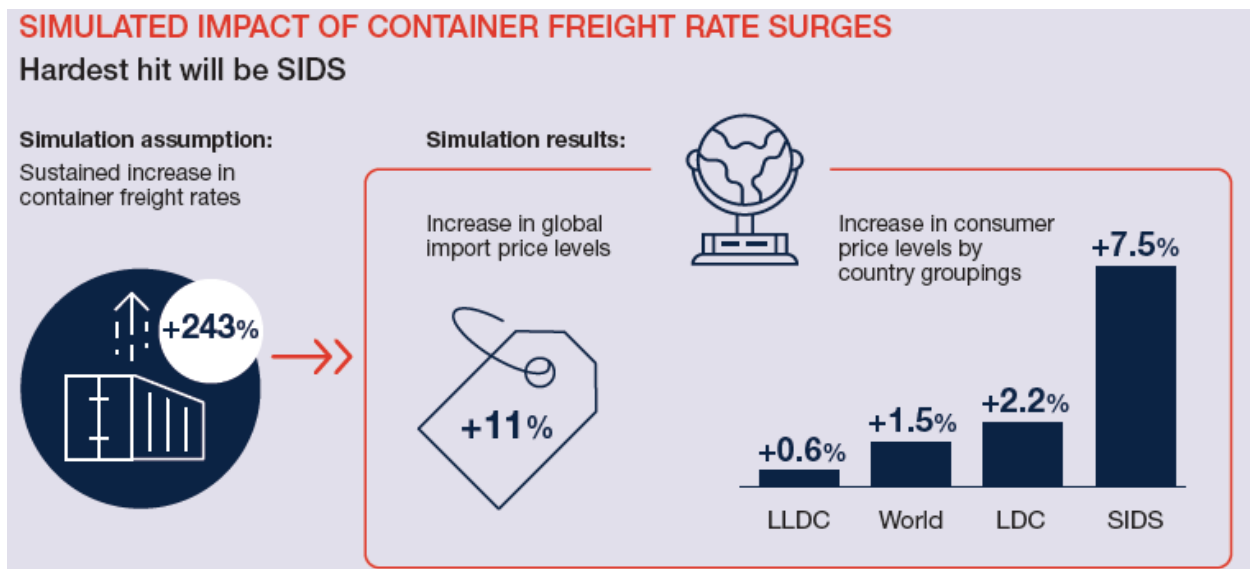


Figure – 07

LLDC – Landlocked developing countries

LDC – Least developed countries

SIDS – Small Island developing states

Source: - United Nations Conference on Trade and Development (UNCTAD)

How to confront these disruptive issues in supply chain

With all above, it is clearly showing the importance of the maritime sector in the world to maintain a healthy supply chain system.

At present, even after opening the market after controlling within the pandemic period, most of the countries failed to control their inflation due to this high freight rates in the shipping market.

According to experts this bottleneck will be there till 2023. No one in the industry is having a straightforward identified solution for this.

But of course, governments, authorities, organization, IMO, shipowners, etc. should get together and place a proper practical strategy to deal with this challenge before it creates a detrimental impact towards the world economy. When we analyse the market, I think the impact is already there and now we must get together and control it without waiting till it burst.

Industry should revamp their strategical thinking patterns and adopt towards the technology where we have successfully used most of them when we suddenly face this pandemic condition.

Newly introduced systems like blockchains, smart container transport, automated container discharging and terminal transportation system, etc. might be useful and will be a better solution to address these issues.

Concept of Smart Container Transport



Figure – 08

Source: - <https://www.youtube.com/watch?v=SQILPiUGETo>



Figure – 09

Source: - Qingdao port (<https://www.youtube.com/watch?v=TZLC4HfP1A>)

In addition, massive container ships introduced into the market, and they cannot approach most of the ports due to their size and draft restrictions. So, their volumes are transhipped via various ports, and this will increase container turnaround time.

Sametime when container transported towards inland areas specially in countries like U.S, Canada, etc. where the breadth of the country is high due to its geographical placement, Empty returning process is very slow due various difficulties in this pandemic condition (land transport shortages, poor weather conditions, slow discharging process due to labour shortage, local holiday, area lockdowns due to various reasons, etc.). If we can find out a smart solution for this, it will create a massive impact on empty retrieval time factor. Especially when transporting those boxes back toward the load ports (e.g., China).

As a solution, if consignees can cross stuff their goods to a consignee owned container or any kind of transport method if the final discharging destination is at a considerable distance from the discharge port.

Authorities can introduce some distance chart to consignees for this (e.g., if the final discharging point is more than 250km from the discharge port, consignee should cross stuff their cargo into their own transport mode in a nominated dry port). In that way line can retrieve their empty boxes back into their port stack within stipulated time. To encourage consignees into this concept, Lines can introduce a concession for their freight if the consignee is willing to do such cross stuffing.

Above are few more areas where marine sector should think about to control this crisis. In addition, industry should allow, encourage, and facilitate all their shipping and logistic sector employees to participate for those operational forums more frequently and come out with their innovative ideas.

Not only trade recognized masters, but some young blood is also having fantastic smart ideas with their education background and experience which we can use to come out of this bottleneck. They should have proper recognition in the international market. We should actively absorb them to the system. Should not think about the age, gender, colour, religion, nationality, etc. When they realize they have a value and expected recognition, they will explore more and more towards the industry. We should not think, Smart and brilliant ideas are not only with the industry giants. It's there with young blood as well. Will use them effectively and efficiently.

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THANK YOU

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