



"Container Freight Procurement & Probable Use of Index Linked Contracts"-An Analysis of Insight Into Shippers' Perspective

KEYWORDS

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ABSTRACT *Looking at the fast growth of global economies and containerization, it did not take much time for more players to get interested in the business and Operators to strive for ever increasing market share. Along with the economic success, also came major complexities in the overall operation of this multifaceted system. Imbalance between supply and demand of slot capacity has created a complex commercial environment among the stakeholders of the containerized industry. While asset owners will remain with the tendency to keep bringing new capacity in the market and look out for enhanced market share in view of enhanced operations and better margins, however in order to overcome such character, industry requires tools to manage the risk of highly fluctuating commercials. With such complex environment, this study critically analyses the attitude of freight procurement by the shippers. The aim of the investigation is to see if the shippers follow traditional methods of procurement and the issues they face doing so. The investigation will also emphasize to find the knowledge of shippers in use of Index Linked Contracts and methodology adopted by them for use of such contracts.*

INTRODUCTION

Liner shipping's inherent commitment of providing fixed and regular services prevent the usual market mechanism from achieving a stable equilibrium and makes the owners vulnerable to fluctuations in demand, and increases the risk of loss.

Earlier and recent pricing models range from Port to Port pricing, Freight All Kind rates to commodity wise pricing, surcharges for bunker adjustment factor, currency adjustment factor, overweight, International Maritime Organization cargoes, port congestion and pricing up to door through rates and term contracts. However, all these types of pricing forms were susceptible to market fluctuations. As and when market (supply and demand) changed there would be revision in the pricing. This price revision can be as low as few ten's of dollars or as seen in 2011-12 onwards, as high as up to one thousand dollars for a dry GP container. In essence, Carriers' and thus the shippers' are highly exposed to risks associated with drastic changes in the market such as oil prices, currency changes, as well as changes to the basic market environment.

Modeling tools, as developed by brokers, have been seen in the market since 2011, though fairly new, but should have caught speed instantly due to the claim that was made, of mitigating risk for high fluctuations in freight rates. Models have been introduced for more than two years in the market. The said benefit of these indexes include Importers or Exporters can better monitor supply chain / cost visibility on the midterm and pre budget a longer term strategy and transport cost component, Indexes can back up rate evolution based on objective market criteria instead of erratic, sea freight movements, Indexes will give mini or maxi rates leading to better transport terms stability and Indexes will ease the use of multiyear contracts and give to carriers a better visibility on capital return investment.

While different industry stakeholders present their views and show signs of acceptance or hesitation, the position is that apart from freight brokers and Index benchmarking agencies, these tools have not yet seen real shippers using them as a substantial part of a risk management strategy. This begs the question if real shippers still feel that the models are not fully conversant with real problems or is it a question of understanding and application of right model or it is like a contemporary Shakespeare could have stated: "using indexes or

not... that is the question".

FREIGHT PROCUREMENT MODELS ADOPTED BY SHIPPERS

Changing containerization environment and business economics have always influenced the way freight procurement has been done. Many models to this extent have been tried and still prevalent in practice.

Spot Rates : is the method where price is taken and negotiated by the customer based on enquiry. Each enquiry is floated and stands individually for specific volume and shipment date.

While the freight procurer tries to influence their vendor by showing earlier and/or future business strength but gives commitment of business for that specific enquiry only. This pricing model takes into consideration only existing market supply and demand scenario and validity of rates are for the enquired shipment only. Past and future capacity supply or demand do not influence these rates.

Usually the business enquiries for freight, in this model are placed on e mails with no supporting or supplementing documents for terms and conditions.

Longer validity rates : While prima facie it may show that this model of procurement is not too different from 'spot rates' and has dissimilarity of only validity period, however that is not correct. This model is based on business commitment of volume and activity in a specified period of time. Validity periods starting from one month up to one year or even more are prevalent in this model.

In practice, the past performance of the customer is seen to evaluate if the customer would fulfill its volume commitment.

The business enquiries are usually floated for freight procurement, in the form of RFQ (Request for Quotation) or in the form of Tenders.

The freight dispenser taken into account of the past trend in supply vs demand along with future forecast of how the supply / demand is going to move. This evaluation and rate offer is based on speculation of how the freight distributor feels

about the availability of capacity in the market and change in demand. Based on which, a rates is offered for the required validity that is different from existing market rates.

The model is used by customers to try and secure themselves from fluctuations in the market and removing the administrative trouble of undergoing negotiations again and again. While the carriers commit themselves to sufficient provision of inventory and space on board, but number of times shippers and consignees have seen issues with availability of inventory and/or space at the time of bookings. There have also been cases where freight distributor has withdrawn the rates during the contracted period, resulting in contracts getting frustrated.

Commodity Pricing – is the model whereby a rate is set between the parties for a specific commodity and trade lane. The typical scenario of any commodity business also shows heavy flow of a product in a particular time frame (season). Here the commitment is done from the cargo owner for volume but looking at the nature of business, nominal variation in the range of 5%-10% is allowed by the freight distributor. The model is tried by many cargo owners and intermediaries to achieve advantage by economies of scale.

Pricing under such model is heavily influenced by availability of inventory and management of space aboard. It is also noteworthy, that most of the commodities have heavy cargo weight whereas; the income of any vessel is governed by slots (containers) she fills irrespective of the weight of the container. Thus, this pricing model puts extreme pressure on the contract due to stress on inventory and space availability.

Components of Freight

The freight is divided into four main parts:

Basic Ocean Freight – This is main freight rate for the carriage of cargo by sea. In other words it is the vessel's earning for carrying normal homogenous cargo. This is free of any surcharges.

Basic Ocean Freight is calculated by the freight distributor on the basis of vessel's fixed costs, operating costs and container costs. Once these costs are aligned a market view is taken by the freight distributor on vessel slot capacity supply and demand of real cargo movement.

In practice, if the capacity supply is high and the supply-demand gap is wide, the freight rates are under pressure and lie low.

Surcharges – These are additional charges to the BOF (Basic Ocean Freight) that have different nomenclature by virtue of their applicability. The idea of surcharge application by the freight distributor is coverage of costs that are applicable under different scenarios. While this is said, it will be highly optimistic to say that freight distributors do not make any margins in such surcharges.

Some of the main surcharges are:

BAF (Bunker Adjustment Factor) – Applied for covering bunker (fuel) charges and adjusted time to time (usually monthly) to cover fluctuations in bunker prices.

CAF (Currency Adjustment Factor) - Applied for covering currency adjustment, since each country business for a freight distributor may be done in a currency that is different from their home currency.

Entry Summary declaration / Automated Manifest System – These are charged by the freight distributor to cover costs against declaration or manifestation of goods to Authorities for Port entry. These are charged only in specific countries in the world.

International Ship and Port facility Security - Charged by the freight distributor to cover costs against security charges levied by Ports.

International Maritime Organization Surcharge - Applied when transporting goods classified by the United Nations as hazardous in accordance with the IMDG code (International Marine Dangerous Goods code), the freight carrier imposes. This is to cover the additional handling required for planning the goods at the terminal and onboard the ship.

THC (Terminal Handling Charge) - Levied by freight distributor to cover costs applied by Container Yard / Container Freight Station operators for goods passing through their operations. This is applied separately at origin and destination.

Heavy Weight Surcharge – Surcharge for exceeding certain weight. Application of this surcharge is different by different Carriers in terms of weight limitation. Usually a vessel is expected to maximize its carrying capacity when carrying average weight between 12-15 MT.

Port Congestion Surcharge - applied to cover losses caused by congestion and idle time for vessels serving that port. Port congestion surcharges are calculated as a percentage of the freight rate.

PSS (Peak Season Surcharge) - is usually added to cargo moving from ASIA. This fee remains in effect for the duration of a typical Peak Season.

1. **Origin Charges** – These are charges applied at the origin by the vendor for services and activities respectively. These services may include, but not limited to, BL (Bill of Lading) Fees, DO (Delivery Order) Fees, Customs Clearance or Brokerage or other Shipping Line charges (Washing / Maintenance charges, Manifestation etc.)
2. **Destination Charges** - These are charges similar to Origin but for the activities carried out at destination by the vendor. Again, these services may include, but not limited to, BL (Bill of Lading) Fees, DO (Delivery Order) Fees, Customs Clearance or Brokerage or other Shipping Line charges (Washing / Maintenance charges, Manifestation etc.)

REVIEW OF LITERATURE

Jagt, N. V. D. (2003)-The growth or decline of any industry depends on the total supply and demand balance. It is the matching of this supply and demand that leads to stability of services and prices, as suggested by the secretary general of ESC (European Shipper's Council), Earlier and recent pricing models range from Port to Port pricing, Freight All Kind rates to commodity wise pricing, surcharges for bunker adjustment factor, currency adjustment factor, overweight, International Maritime Organization cargoes, port congestion and pricing up to door through rates and term contracts. However, all these types of pricing forms are susceptible to market fluctuations. As and when market (supply and demand) changed there would be revision in the pricing.

Heaver, T. D. (2002), suggests in his paper that lines need to consider the value of shippers and other supply chain members and how to structure businesses to meet their needs profitably. This phenomenon was also researched by Na, H. K. (1996), and suggested that shippers and carriers are part of the logistics activity of each other.

While the industry recognizes above, models have been tried in the form of freight indexes for more than 2 years in the market. As projected by Jean Philippe (2012), the benefit of these indexes include Importers/exporters can better monitor supply chain / cost visibility on the midterm and pre budget a longer term strategy and transport cost component, Indexes can back up rate evolution based on objective market criteria instead of erratic, sea freight movements, Indexes will give

mini / maxi rates leading to better transport terms stability and Indexes will ease the use of multiyear contracts and give to carriers a better visibility on capital return investment. This is also supported by Richard Heath (2013) during the 5th Annual Capital Link – Global Commodities Freight forum.

Where the above depicts a typical Carrier perspective, shippers have been showing similar signs, though with hesitation. As put by Bjorn Jensen (2012) from Electrolux that the overall idea is to keep it simple, fair and protected from risks with a long term partner. However, also indicates that the concept is still imperfect and lags adjustment, due to its factors such as lack of global indexes and the present models are workable only for long term contracts.

Intermediaries like Logistic Service Provider's or Freight Forwarders, especially with large carrying volumes and associated with international retailer and traders have also a large role to play for what they feel and influence on both sides. Bill Rooney (2011), explains in his presentation the same volatility of conventional pricing and projects that just one tool will not resolve the issue. Multiple approaches are more likely to be successful. This sentiment has also been shared by Dominik Tichelkamp, that Index linked contracts allow both parties to put more focus on service needs, continuous innovation and process improvements as less time is spent re-negotiating freight rates.

Drewry in their white paper 'Index Linked Container Contracts' published June 2012 showcase reactions from various industry stakeholders, with a sign of conceptual acceptance, and goes further comparing Contracts vs Spot market rate movements, eventually showing a risk mitigation exercise and concluding that an index linked Contract as a viable solution. The paper also illustrates 'Time Lag' & 'Real Time' working models with variants. Freight Derivative broker Ben Gibson & Cherry Wang (Feb 2012) of Clarkson puts it to Lloyds List as "The ambitious general rate increases announced by major lines has caused disruption in the derivatives markets, where shippers that had not hedged their positions earlier would have been left wondering whether it is too late.

PURPOSE OF STUDY

The objective of the study is to provide insight into the real world scenario of use and application of different pricing models from perspective of Shippers and reveal their willingness to achieve risk control mechanisms.

The study will also investigate the understanding these Shippers towards Index Linked Pricing methodologies.

METHODOLOGY

The study is designed in nonrepresentational structure within which investigation is conducted.

The investigation has planned and logical approach to find out the answer to the issues. It comprises the plan for the data collection and measurement for analysis of the same, through sampling technique.

The sample is selected, purely based on the convenience of the researcher. It's a non probability sampling which involves the sample being drawn from the part of the population. Sample population is selected because it is readily available and convenient. The researcher using such a sample cannot scientifically make generalizations about the total population from this sample because it would not be representative enough.

Here the population is infinite and finite sample is being taken for data collection. The sample area covers the data collected from selected Shippers from All India, who are using marine containers for transportation of their cargoes. The sample size is 50.

Sources of Data: Primary Data-The instrument used to collect the primary data is a well-designed questionnaire. Further to the responses on the questionnaire, the Researcher also collected data through a series of discussions and scheduled interviews with the respondents.

Secondary Data: These data were collected from the business records and industry information for the respective respondent firms. Questionnaire is designed to cover the issues that the shipper are expected to face with the complexities of present volatility in freight rates and related environment. It covers multiple choice questions and open ended questions.

Analysis and Statistical Tools

Collected data were arranged in logical format.

To analyze the data, percentage analysis has been made through simple tables, bar and pie charts.

ANALYSIS & INTERPRETATION

The survey questionnaire was sent to a total of 55 Shippers in India. Following was the

response level on overall basis, as shown in Table No.1. The inferences are drawn based on Shippers who have answered the survey questionnaire.

Particulars	Respondents	Percentage
Survey Answered	50	91%
Survey Not Answered	5	9%
Total	55	

Table : 2 Classification of Shippers by Industry

Particulars	Respondents	Percentage
Commodity Industry	14	28%
Retail & Fashion	10	20%
Consumer & Industrial	26	52%
Total	50	

Inference

From the above table, it shows that out of the total customers who answered the survey questionnaire, 14 customers i.e. 28% of the total Answered population belong to Commodity Industry, 10 customers i.e. 20% belong to Retail & Fashion Industry and 26 customers i.e. 52% belong to Consumer & Industrial vertical.

Table : 3 Classification of Shippers by Extent of Business

Particulars	Respondents	Percentage
Local Shipper	18	36%
National Corporation	25	50%
Multinational corporation	7	14%
Total	50	

Inference

The above table shows that out of the total customers who answered the survey questionnaire, 18 shippers i.e. 36% of the total Answered population are Local Shippers who are Indian entities and operate only out of single locations in India, 25 shippers i.e. 50% are National Corporations who are Indian entities and operate out of multiple locations in India and abroad, and 7 Shippers i.e. 14% out of total Answered population are Multinational Corporations who are foreign entities and operate out of multiple location in India and abroad.

Table : 4 Present Model of Procurement

Particulars	Respondents	Percentage
Spot Purchase	15	30%
Period purchase	35	70%
Index linked contracts	0	0%
Total	50	

Inference

As seen in the above table, 15 respondents i.e. 30 % of the total answered population are doing Spot Procurement of

freight and 35 respondents i.e. 70% of the them are doing Period Purchase, meaning procurement for a specific period of time.

ILCC (Index Linked Container Contracts) are not used by any respondents.

Table: 5 Issues Experienced with Present Model of Procurement

Particulars	Respondents	Percentage
Inventory	32	64%
Rate Change	3	6%
Shut outs/Roll overs	15	30%
Total	50	

Inference

As seen in the above table, 32 respondents i.e. 64% of the total answered population are facing issues of inventory, 15 respondents i.e. 30% are facing issues of roll overs and shut outs due to various reasons, and 3 respondents i.e. 6% of the total answered population are facing frustration of contracts where even the rates are withdrawn due to charge in market.

Table:6 Ventured into Hedging or Index Linked Container Contracts

Particulars	Respondents	Percentage
Used Hedging	3	6%
Used ILCC	0	0%
Used None	47	94%
Total	50	

Inference

As seen in the table above, only 3 shippers i.e. 6% of the total answered population have ever used hedging techniques and none of the shippers have ever used ILCC (Index Linked Container Contracts).

A total of 47 shippers i.e. 94% have never used any either any hedging technique or ILCC.

Table : 7 Understanding about Impact or Use of ILCC & its Methods

Particulars	Respondents	Percentage
Not Aware	21	42%
Aware	1	2%
Not Answered	3	6%
Interested to know	25	50%
Total	50	

Inference

As seen in the table above, 21 customers i.e. 42% of the total answered population are not aware of methods and impact of ILCC (Index Linked Container Contracts) neither have they ever used ILCC. Only 1 customers i.e. 2% of them claim to understand use and impact of ILCC. The reality of their usage of ILCC is unknown. 3 customers i.e. 6% have not answered

to the relevant questions and thus difficult to say if they understand the use and impact of ILCC.

A total of 25 customers i.e. 50% of total answered population though are ready and willing to learn more about the ILCC.

Table: 8 Strive for Stable Freight Rate Environment

Particulars	Respondents	Percentage
Yes	50	100%
No	0	0%
Total	50	

Inference

As seen in the table above, all the respondents do agree that a stable freight environment will enhance the strength of their supply chain.

FINDINGS

- Majority of shippers i.e. 70% of them are doing their freight procurement for specific period of time. These times periods typically are one month, three months, six months and one year.
- All the customers experience one or more type of issue which are either related to inventory, roll overs or rate change. Most of the issues are related with inventory and shut outs.
- 100% of the customers believe that the freight rate environment shall be more stable and such stable situation can make their supply chain more robust.
- Most of the customers (94%) have never used any type of hedging or ILCC.
- Most of the customers (42%) are not aware about the use and impact of ILCC and that such type of model may mitigate risk in their freight procurement.
- Almost all customers (50%) have indicated that they would like to know more about the use of ILCC, its methods and implications.

CONCLUSION

Present freight procurement models, either as Spot freight procurement or Freight procurement for a time period; do pose a challenge to shippers. Businesses differ by the type of industry and their challenges faced also accordingly differ. These challenges range from small issues of roll overs to even up to frustration of contracts where agreed rates are not maintained by the freight distributor.

While the study projects clear indication that rarely do the shippers today know and use the Index Linked Freight contracts but it also depicts their openness to learn more about such models.

Therefore, while knowledge and widespread marketing of ILCC to freight procurers may not be the answer to industry's quest of risk mitigation and stable freight procurement environment but it is certainly a start to find out if that is so.

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