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How to reduce shipping costs under FOB contract: allocation of obligations

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Abstract: *FOB contracts have approximately two hundred years of history, but the definition has experienced transformations in accordance with changes of transportation. In an era of harsh economic competition controlling costs means to some extent an increase in profits. In import-export the most significant costs occur in the shipping process. In order to figure out how to reduce shipping costs it is necessary to be aware of the fact that FOB contracts occupy an important position in international trade. Before assessing the costs involved in the shipping process under FOB contracts, the definition and the types of FOB contracts must be presented. The costs are determined by the allocation of obligations. Shipping costs are borne by both seller and buyer, but a number of external elements determine the degree of the costs. Although the parties involved in a sale contract cannot change those elements, they still can reduce the costs by making contractual terms more accurate and precise.*

Keywords: *FOB contracts; Cost reduction; Allocation of obligations*

1. Introduction

In its history of approximately 200 years, FOB was used in the domestic market and in export. There was no certain definition of FOB and this term could be used in any associated transport. But the situation changed with Incoterms 1990, which replaced the combined transport modes of FOB with FCA (Free Carrier). Incoterms 2000 maintains the function of FCA.[1] The case of Pyrene Co Ltd v Scindia Navigation Co Ltd contains two issues: Whether the seller is a party of the carriage contract; The types of FOB contracts. In the mentioned case the seller claimed tort negligence in order to avoid the Hague Rules which provide clauses of exemption for the carrier. The court held that buyer, seller and carrier were joined in a contract and that seller should be bound by the Hague Rules. The case illustrates three types of FOB contracts: Classic FOB; Seller arranges carriage; Buyer employs forwarding agent.[2]

1.1 Comparing the Hague Rules, Hague-Visby Rules and Hamburg Rules.

The Hague Rules have a number of disadvantages in the modern maritime market. The liabilities of the carrier have quite some exceptions. These can be expressed in the period of transportation, in deck cargo exclusion, in absence of liability for a delay, and in case of a navigational fault.[3] Article1 (e) states that: “Carriage of goods” covers the period from the time when the goods are loaded on to the time when they are discharged from the ship. This statement can imply that the period is only “tackle-to-tackle”. If the cargo is damaged in dock or in storage at dock, or before or after shipping, the carrier would not bear liability for the damages. Article1(c) describes for which cargo the carrier has liability. It states that: " ‘Goods’ includes goods, wares, merchandise and articles of every kind whatsoever except live animals and cargo which by the contract of carriage in stated as being carried on deck and is so carried”. Deck cargo is excluded. Moreover, liability for a delay is excluded by the Hague Rules. But a delay may affect the potential economic opportunities for the shipper. In addition, Article4 para.2 indicates that: “Neither the carrier nor the ship shall be responsible for loss or damage arising or resulting from: (a) Act, neglect, or default of the master, mariner, pilot, or the servants of the carrier in the navigation or in the management of the ship”. This paragraph is quite controversial. Furthermore, electronic methods of communication and data systems are not included in the Hague Rules.[4]

The Hague-Visby Rules modified the liability of the carrier. Its Article IV para.5 (e) presents that:[3]

(e) Neither the carrier nor the ship shall be entitled to the benefit of the limitation of liability provided for in this paragraph if it is proved that the damage resulted from an act or omission of the carrier done with intent to cause damage, or recklessly and with knowledge that damage would probably result.

The carrier will undertake liability if the carrier intentionally or recklessly damages the cargo. However, the modification cannot completely offset the defects of the Hague Rules.

The Hamburg Rules provide the distinction of "carrier" and "actual carrier", and extend the definition of "contract of carriage" as well as the period of the carrier's liability. The rules also abolish the exceptions for the carrier's responsibilities. A carrier is defined as the person who is in a carriage contract. The real carriage of cargo will be entrusted to the "actual carrier". The definition of "contract of carriage" is widened as "a contract which involves carriage by sea and also carriage by some other means is deemed to be a contract of carriage by sea for the purposes of this Convention only in so far as it relates to the carriage by sea"[5]. According to Article 4, the period of responsibility is "the period during which the carrier is in charge of the goods at the port of loading, during the carriage and at the port of discharge"[5]. Moreover, the provisions providing exceptions for the carrier are absent in the Hamburg Rules. As a party in the contract of carriage, the carrier will have to undertake the responsibilities during the period which is mentioned in Article 4.

1.2 The Three Types of FOB Contracts.

Concerning various FOB contracts, Devlin J. identified three types. First, the classic FOB: "Seller makes contract of carriage, but buyer nominates vessel"; Second, "Seller nominates vessel, and makes contact of carriage"; Third, "Buyer nominates vessel, and makes contract of carriage". [6]

The classic type was represented by the case Wimble Sons v. Rosenberg & Sons.[7] The buyer has the duty to nominate the ship. The seller's responsibility is to place the goods on board and to procure a bill of lading. The seller is not an agent of the buyer and he will arrange for a carriage contract. The seller is a party of the carriage contract until the name on the bill of lading is changed to the name of the buyer. In order to negotiate with the buyer, the bill of lading nowadays tends to be named by the seller.[2] The reason is the seller's "desire for security after delivery and pending payment."[2] According to Michael Bridge, the functions of a bill of lading are: Providing evidence for the terms of the carriage contract; Providing evidence for the condition of the goods; A receipt for the goods; Negotiable form which can be transferred through endorsement.[2]

Sellers undertake the duties and risks to pay for the transportation costs. They pay expenses for collection, handling and insurance until the goods cross the ship's rail. This means that under FOB contract, the property of goods and the risks are transferred simultaneously.[8] The duties of the seller can be summarised as follows: Provide goods; Provide the necessary information or an invoice for the buyer to insure the goods; Pack and mark the goods properly; Bear risks and expenses for the exporting licences; Carry out customs formalities; Load the goods within an appropriate time; Pay all costs on the goods and undertake the risks of loss or damage until the goods pass the ship's rail.[9] The main duty of the buyer is to nominate a suitable ship. Marine insurance will also be borne by the buyer. But the seller can arrange for the insurance on request of the buyer.[10]

This explains that under the mentioned circumstances, "the goods pass ship's rail" cannot be the condition to transfer risks to the buyer. When loss or damages happen, the buyer can refuse to recognise the delivery to the carrier as a delivery to himself.[8] The duties of the buyer in the classic type are as follows: Pay for the goods; Nominate a ship; Notify the nomination to the seller; Undertake all risks and pay all costs when the goods have passed the ship's rail; Bear all the costs for documents.[9]

The second type is named as "FOB with additional services". The seller arranges for the carrier without any nomination of a ship by the buyer. The name on the bill of lading will be the seller's name, which can be transferred to the buyer by endorsement or manual delivery. The seller is a principal of the carriage contract and he undertakes the costs of the freight and of the insurance. These will be reimbursed by the buyer at a later date. So, the buyer should bear the risks of the market fluctuation.[2] The duties of seller and buyer are the same as in the case of the classic FOB contract. The extra obligation for the seller is to arrange for insurance and for a suitable ship.

The third type is recognised as a "modern FOB contract". The buyer himself or his/her own forwarding agent may book shipping space and procure a bill of lading.[2] The shipping arrangements are on behalf of the buyer. The seller should load the goods on board of the nominated ship and procure a mate's receipt. By handing over the mate's receipt, the forwarding agent is able to obtain a bill of lading. The duties of the seller are: Load the goods and bear all costs for the loading; Provide the invoice for the buyer to insure; Transfer documents, e.g. mate's receipt for the buyer to procure a bill of lading.

2. The Allocation of Costs in the Shipping Process

2.1 The buyer' s obligation to notify

Usually the buyer has the duty to select a carrier, so that he has the obligation to inform about the arrival of the ship. The standard FOB contract includes the nomination clauses which give the buyer some days to notify. If the contract does not contain the clauses, the duty of notice should be "reasonably in time".[2] Under FOB contract, the buyer is provided at least fifteen continuous days to notice the probable readiness of the ship to load, so that the seller can prepare the goods ready to load. The question has arisen whether the "in time nomination" is a contractual condition or an intermediate term. According to Michael Bridge and the decisions of the Bunge case, there are six reasons to prove that it is a contractual condition.[2]Therefore, the seller can terminate the contract when the buyer breaches the contract by delayed notice.

Due to the uncertainty of maritime transport, the expected arrival date of the ship is not guaranteed, although the buyer may have notified in time. The buyer undertakes the risk that, even though he/she has performed his/her obligation, he/she might still breach the contract. However, in modern trade the buyer can "invoke a contractual extension".[2] The seller may bring about termination based on the failure of the buyer's notice of readiness and this may prevent the usage of the extension. A bad notice does not breach the contract if there is time left to replace it by a good notice. So, a good notice within the contract delivery period should be allowed. Based on GAFTA 119, the buyer should pay for the right to invoke an extension, thus avoiding carrying costs[11]. The daily rate of this payment is based on the contract price of the goods. The provision may pre-estimate the loss for the seller concerning the costs of handling and storage.[9]

2.2 Substitution of the Ship

The buyer has the duty to provide the ship, which is ready to load within the shipment period. But the nominated ship is not the core of a FOB contract. So, the nomination of a ship which can be substituted, should be allowed if the originally nominated ship is delayed. The buyer should be able to provide adequate notice to comply with the contract. The expenses of the substitution are borne by the buyer.[9] The failure of the seller to accept the nomination of the substituted ship may put him in breach of contract.[9,16]

In practice, there are four possible approaches to the issue of substituting a ship:[12] Firstly, the buyer may indicate the name of the ship informally and provide a formal nomination which may stipulate a different vessel; Secondly, the implied provision of substitution is included in the contract. The buyer will only inform the name to the seller to allow the seller to load within the shipment period; Thirdly, the contract expressly prohibits substitution; Finally, substitution is permitted by the contract within a limited time. Because it is not clear who will undertake the storage costs and risks, initiating litigation will take time and increase the costs for both buyer and seller.

2.3 The Obligations of Port Nomination Under Three Types of FOB Contracts

2.3.1 Under a Classic FOB Contract

Firstly, when the loss happens before the endorsement of the bill of lading, there are two aspects to take into account. Before the bill of lading is endorsed to the buyer, the seller will perform the obligations required by the carriage contract. The first hypothesis is that if the port is nominated by the seller, the carrier may recover his/her losses from the seller. Based on contractual obligation, the seller should pay for the compensation. As the carriage arranging obligation of the seller in the FOB contract is an additional service, his/her possible risks and efforts must be covered by the price of the goods. The second hypothesis is that if the port is nominated by the buyer, the carrier will initially ask recovery from the seller based on the carriage contract, and then the seller may pursue the payment from the buyer based on their FOB contract. One problem may immediately occur. The seller may argue that the liability of an unsafe port nomination is made by the buyer and the carriage contract should ultimately be between buyer and carrier. So, the buyer should bear the losses of the carrier. The buyer may hold the opinion that the bill of lading has not been passed on to him and that the losses happened before the buyer has responded to the risks. So, the seller should bear the compensation for the carrier. The argument may be solved by involving the purpose of FOB contracts. Because the purpose of FOB contracts is to minimise the liability of the seller, and because the duties of the seller can be reflected in the price of the goods,

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the carriage contract between seller and carrier can be understood as a transition. If the contract requires the buyer to nominate a port, an inappropriate performance of nomination may breach the contract. Therefore, the buyer may finally be responsible for the compensation.

Secondly, when the losses happened after the transfer of the bill of lading, there are also two aspects to be discussed. The simple situation is that the nomination is made by the buyer. At this moment the buyer is a party of the carriage contract and he is liable for his/her nomination. If the seller nominates the port, the initial compensation for the carrier will also be paid by the buyer. Whether the buyer will seek payment from the seller depends on the terms in the FOB contract. Because the buyer may pay a higher price for the goods as a result of the nomination by the seller, the burden for the loss caused by an unsafe port seems a double duty for the buyer.

2.3.2 Under the FOB Contract in Which Seller Arranges the Carriage

This type is similar to CIF contract. The seller initially makes a contract with the carrier. The additional duties for the seller are to nominate the ship or/and to arrange for insurance of the cargo. The difference with the CIF contract is the endorsement of the bill of lading. Ultimately, the carriage contract is between buyer and carrier. The analysis of the liabilities to offset the loss from the unsafe port is the same as in the classic FOB contract.

2.3.3 Under the Modern FOB Contract

Buyer nominates a suitable ship and arranges the carriage contract. The bill of lading goes to the buyer directly. If the buyer nominates a port, the losses for the carrier can directly be recovered by the buyer. If the seller nominates a port, the losses will still initially be undertaken by the buyer. It is not convenient to ask the seller to nominate a port. Because the ship will be nominated by the buyer, the buyer has to notify the seller about the description of the ship well in advance, and the seller has to notify the port arrangements to the buyer in an appropriate time. In the modern FOB contract it is easy to distinguish the obligations of buyer and of seller. Concerning compensation to the carrier, the most efficient way to save the costs of a legal procedure is for the buyer to nominate a port.

3. Cost Reduction in the Shipping Process

3.1 Factors Affecting Shipping Costs and Suggestions for Cost Reduction

3.1.1 Factors

Insurance costs are an important part of the shipping costs. On average, approximately 2% of trade value is taken up by insurance fees, which are about 15% of the total maritime charges.[13] It can be inferred that the high value of goods will be charged higher insurance fees per weight unit. In addition, if the goods need to be carried by special transportation, the costs of insurance and freight rates will increase.

The costs of ocean transport are made up by the distance, the quality of shipping services and the weight or value of the goods. Distance is an obvious factor to determine transport costs. Berthelon and Freund found (2004) that 25% of international trade is between countries which share a border and that 50% of trade happens between countries which are less than 3000 km apart.[14]

The third element is container transport. Many containers full on delivery are hauled back empty.[13] Traders have to undertake more costs because of the ineffective usage. As the most efficient port in the world, Singapore has the lowest container handling charges and a short customs clearance time, namely two days.[15]

Finally, the infrastructure determines how efficient a port can be. If the quality of the infrastructure is good, it can speed up the process of delivery and save costs. The International Monetary Fund has shown that in the cases of CIF/FOB contracts, insufficient infrastructure is responsible for 40% of predicted shipping costs for coastal countries, and up to 60% for landlocked countries.[14]

3.1.2 Cost cutting in the buyer-seller relationship

As the lean enterprise theory shows[15], costs can be reduced at every value creating step of the process. The connection between every step is very tight. The failure of one step may cause the whole process to stop. The relationship between seller and buyer should be very close, because the tight supply chain relies on trust.[16]

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For a company, the costs are separated into three levels: Direct costs, activity-based costs and transaction costs. Direct costs result from the manufacture of products, which includes materials, labor and machines. Activity-based costs are from any activities which do not directly relate to products, such as administration which has to be performed in relation with the manufacturing and the delivery of products. Transaction costs are the expenses in the field of information and communication with suppliers and customers in sales contracts, the shipping costs can be divided into activity-based costs and transaction costs. First, the selection of a carrier and the arrangement for a ship, port and insurance can deliver cargo. These administrative processes constitute the core costs of maritime transportation. Second, the invoice and notice between seller and buyer are the costs of communication and transfer of information.

There are three methods to reduce the costs for an enterprise: Product development, manufacturing costs management, and the seller-buyer interface. Among them, the seller-buyer interface is highly relevant to the shipping process. All activities involved in the transfer of goods can be adjusted by interface management.[17]

The processing costs consist of information sharing and of the carriage. The certainty cost is mainly about insurance. The carriage costs include the carrier selection and the freight costs negotiation. There are two strategies which can reduce the shipping costs in a sales contract.[18] First, the relationship with the forwarder is important. Second, renegotiation on shipping, freight and insurance can save costs. The trick when cutting shipping costs is not to sacrifice the quality of services, because, for example, late delivery will negate the reduced costs.[18] The selection of the carrier, sea lane allocation and bid evaluation is the basis to reduce costs.

3.2 The benefits of FOB contracts to control costs

Due to the fluctuation of transportation costs, FOB pricing reduces costs for the buyer. First, the transportation costs can be controlled by the buyer. In CIF contract, in order to avoid the fluctuation of costs, the seller may require higher payment to cover the shipping costs. In FOB contracts, the buyer can negotiate with the carrier about the carriage payment, which will be closer to the actual price. Second, the buyer can manage the schedule of transportation. Buyer and carrier are bound by a carriage contract. The carrier will promptly notify the shipping situation and the schedule to the buyer. Third, the carrier/shipowner/charterer will positively assist the buyer to transfer the bill of lading, clear customs, check the goods, and solve other problems in shipping. Finally, the buyer can control the loading time. The seller can also benefit from an FOB contract. The obligations of the seller end after the cargo has passed the rail of the vessel. The losses and risks of damage are all transferred to the buyer. The seller does not undertake the costs of carriage and of insurance. Although FOB pricing is lower than CIF pricing, the seller runs less risk.

FOB pricing is easier for the buyer to reduce waste and to cut costs. On the one hand, the transportation costs paid to the carrier are closer to the actual price, which is usually lower than the payment in CIF contracts. On the other hand, the buyer can manage each step of the shipping process, so that he can reduce the costs of the process by renegotiation and by building a good relationship with carrier and seller. He can also control the selection and payment of insurance. The seller can diminish costs through time management. He can shorten the storage time of the goods in a port, but this largely depends on the precision in the readiness notice given by the buyer. Hence, efficient communication with the buyer is very significant.

4. Conclusion

FOB is one of the basic terms for direct exporting, which has a long history. Incoterms 2000 defines FOB as “seller delivers when the goods pass the ship’s rail at the named port of shipment.” The case of Pyrene Co Ltd v Scindia Navigation Co Ltd states three types of FOB contracts. In the classic type, a buyer must nominate a ship and the seller initially arranges the carrier for the carriage contract, until the bill of lading is transferred to the buyer. The FOB with additional services requires that the seller arranges the carrier without any nomination of a ship by the buyer. In modern FOB contracts, the buyer nominates a ship and procures the bill of lading himself. In FOB contracts the obligations of buyer and of seller directly lead to the costs. Shipping costs are allocated by three procedures: Carrier selection, port nomination and delivery.

The costs of shipping are not only determined by the shipping process and by contractual terms, but

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also by several external elements which build physical barriers to reduce costs. The maritime transportation cost is one of the reasons why its proportion of international trade decreases. Insurance costs influence the profits of trade. The infrastructure of a port determines the efficiency of loading. In order to reduce costs caused by external barriers, a change of policy and of management are necessary. For traders, the only method to cut costs is to increase the level of internal management. According to the lean enterprise theory, the costs at each step which can produce value, can be diminished. Management can build a good relationship between buyer and seller. It can evaluate the carrier and choose an appropriate insurance.

Costs can also be prevented by considering relevant terms in the contract. First, the time for the buyer to nominate a ship may be considered in the FOB contract because the nomination is a contractual condition. Second, the terms about unexpected delay of arrival may be included in contract. It may be clearly stipulated in a FOB contract whether the seller should continue to load or not, and whether the contractual extension is allowed or not. Since buyer may pay for demurrage and the contractual extension requires the buyer to pay, it seems that the seller's acceptance to continue to load costs less, because the buyer only needs to pay demurrage. Third, the terms for the substitution of a ship may be included in the contract. Sales contract parties can decide whether substitution is allowed. Fourth, a clause about the costs for storage or the risk when waiting for the arrival of a ship, is necessary in FOB contract, because this aspect has not been conclusively analysed. Fifth, based on the discussion of three types of FOB contracts, a port nomination by the buyer is more convenient and less costly.

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