

DECLARE VALUE TRANSPORTATION

An Incomplete Contracting View

Ren Ying and Wang Qingyun

School of Economics and Management, Beijing Jiaotong University, Beijing, China

Keywords: Declare value transportation, Incomplete contract, Investment incentives.

Abstract: Declare value transportation is a necessary part of carrier liability regime. In this paper, we perform in-depth analysis of limited liability regime. Using the incomplete contracting theory, we examine the relation that between declare value transport and security investment incentives. Our analysis shows that the declare value transport play an active role in prompting security investment and improving the safety level of transport.

1 INTRODUCTION

Written in "Hague Rules" in 1921, declare value transportation has become common international practice in the transport industry, used by a variety of means of transportation. Attempted to use the analysis framework of incomplete contracting theory, this paper analyses the necessity of the existence of declare value transportation and its basic functions, and puts forward recommendations for its development based on the comprehensive understanding of its essential attributes.

2 BACKGROUND OF DECLARE VALUE TRANSPORT

If the value of goods after reaching its destination is higher than its current value and the shipping fee, there is a need to transport goods, and thus the expected value of the carried goods must be higher than the freight charged by carriers. Because the transport process contains a variety of risks leading the loss or delay of goods, if the carriers bear the financial liability if those occurred during the transportation, the carriers may take liabilities far beyond its actual economic income. Conversely, the owners would suffer the financial loss. How to resolve this contradiction in order to protect the economic interests of both sides? Declare value transportation come into people's mind.

Declare value transportation is a special mode of

transportations that confirmed between the carriers and the consignors, which recognizes the value of goods declared by consignors is the basis of compensation. By this way, the consignors should pay the basic transportation costs, in addition, and pay preservation surcharge according to the value of goods. After that, if the carriers are responsible for causing the damage, they will compensate within the limit of declared value of goods in accordance with actual loss.

Originated in shipping industry in 19th century, declare value transportation is the product of world's maritime trade and economic development. Before 19th century, by the limitations of the communication technology, the consignors lost contact and control of the goods after delivery, and the carriers were effectively able to control and grasp the specific circumstances happened during the transportation, thus the law was very strict with common carriers. For example, English law set: for the loss due to natural disasters, acts of public enemy, freight shipper, inherent defects of goods and damage caused by consignors' fault, common carriers may be exempted from liability, apart from that, they must bear the responsibility for all damage and loss of goods in transit. As a balance, English law allowed the carriers based on principle of "contractual freedom" to include exemption clauses in the bills of lading to release their duty for goods in sea transit. After 19th century, England monopolized shipping industry. Under the strong pressure of owners' forces, shipping capitalists used principle of "contractual freedom" to declare

exemption clauses in the bills of lading, and thus the owners were forced to bear most risks of goods during the transportation. This behaviour of the carriers damaged the interests of owners, banks and insurance companies which business had be related to the bills of lading, affecting the circulation of bills, and made contradictions between the trading and shipping industry more acute. To change this situation, "Hague Rules" provided the limited responsibility of the carriers in 1921, limited the abuse practice of exemption clause using in bills of lading, and made the policy of the carriers' limited liability for compensation to protect all shippers' interests, on this basis, the law used declare value transportation to meet the actual needs of shippers and carriers. Since then, the policy of the carriers' limited liability for compensation in shipping industry became the reference in railway transport, while air transport and road transport, and declare value transportation became a common practice of cargo transportation. Chinese four modes of transports, civil aviation, railway, highway and waterway, provide declare value transportation. "Civil Aviation" and "maritime law" refer to the term as declare value transportation, while "Railway Law" and the motor transport, water transport regulations refer to the term as the insured transport. They are the same concepts in fact.

If the owners can realize the economic compensation from insurance, why do they need declare value transportation? The reason is that the essential attributes of insurance is to pay financial compensation by small probability event, and insurance helps economic agents get back to the state before loss occurred as soon as possible, which would help to maintain the normal order of the operation of social economy. The insurance industry follows the basic principle of subrogation. In property insurance, if insurance loss caused by a third party, insurers have rights to recovery through the compensation from the third party after performing compensative liability according to the insurance contracts. Therefore, if the loss of goods at transport caused by carriers' liability, the insurers are entitled to ask the carriers to pay the compensation. So, given the negligence liability as the classical theory, no matter whether the consignors or the

owners buy cargo insurance, the carriers shall be responsible for the fault by their negligent actions.

In a word, under the law of low-fare and high responsibility, the key issue of the carrier liability is the arrangement of economic interests, namely, how to ensure realization of the economic interests of consignors and carrier? The evolution process of the policy of the carriers' limited liability for compensation and the declare value transportation is illustrated by the following picture.

3 TRANSPORT CONTRACT IS A TYPICAL INCOMPLETE CONTRACT

The evolution process of declare value transportation system matches the analysis paradigm of incomplete contracting theory. Emerged in the late 20th century, incomplete contracting theory generates two major branches thought along the Coase theory: one is transaction cost economics (TCE), whose main representative is Williamson; another is property rights theory (PRT), whose representative is Hart. Both hold bounded rationality, opportunism and asset specificity as the main reasons for incomplete contract, but there are significant differences between the key issues and ideas in the analysis: transaction cost economics holds that the transaction costs in the context of incomplete contracts should be adjusted mainly after the transportation, therefore, the key point is to choose a best system to save transaction costs by comparing different governance structures; property rights theory, in a relatively narrow definition of transaction costs, holds that the main problem caused by incomplete contracts is the effects exerted on the specific investment incentives, so it advocates to protect the investment incentives by designing a mechanism. Cargo transport contract is the contract concerned with carriers shipping fee and transportation goods from one location to another, the existence of the following reasons lead to the incompleteness of transport Contract: The document margins should be the following:

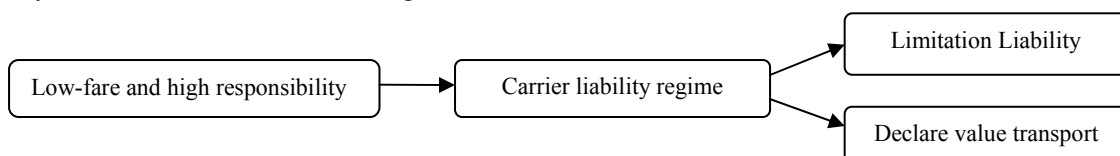


Figure 1: Limitation liability and declare value transport.

3.1 Transaction Costs is the Fundamental Reason

Transportation is a complex system. Even under current level of technology, the process of transportation and production still exists many probabilistic factors, such as external factors during transport and inherent defects of transport system, which makes the parties unable to predict all of the contingent conditions. Besides, the delaying or loss of goods would bring damage to owners' economic interests, and can only be observed after the transport process. Second, even if the party can foresee probabilistic state, it is still difficult or too expensive for two sides to write into contract without dispute. One classic example is the evolution process of carriers' liability provisions: at that time, high-risk of maritime transport has become widely recognized, and shippers and carriers can expect the possibility of loss in transit, but the trading and shipping industry experienced an extremely long process of negotiation arguing who should bear the loss in the contract. Third, transport process involves the collaboration between carriers and consignors. For the information of the goods inherent quality, the true state at the shipment time, the case of the goods in transit, the carriers or consignors can master to some extent, which means the two sides can observe some important information in the contract. For the third party, such as the consignee or the court and the arbitral institution, it can not be confirmed, which can be demonstrated by the history that litigation cases related to transport compensation were numerous.

3.2 Bounded Rationality and Opportunism

Simon proposed the concept of bounded rationality to modify the fully rational assumptions about people in traditional economics. He believed that due to limitations in the ability of neuropsychology and language and the external affairs' uncertainty, complexity, people in economic activities pursue rationality, but they only do this limitedly, which means human rationality is limited. Williams held that people are economically self-interested, and they are not only self-interested, but also without hesitation to harm others if it is good for themselves. In the contract signed by consignors and carriers, limited rationality, opportunistic tendency and complexity and uncertainty of the objective environment make it impossible to predict all possible future contingencies, not to say the

determination of the appropriate countermeasures and calculation of the effectiveness of the contract after results for a variety of possible events. When shipping fee is certain, the carriers tend to reduce the input and fulfil the contract of carriage at the minimum cost, while consignors tend to pay less shipping fee and want more services. That means both parties want to maximize own interests. Without appropriate incentives, they tend to be lack of willingness to invest in transportation and production.

3.3 Asymmetric Information

Asymmetric information is the core concept of information economics, one party of the contracts holds some information that the other party does not know, especially when the other party can not verify the information, which may be caused by inefficiency or impracticability in economic matters. As mentioned before, there are serious problems of information asymmetry during the conclusion and implementation of the contracts. Consignors know the value of their cargo better than the carriers do before the contracts are concluded, for instance. Those hidden information tend to be mixed, leading to the incompleteness of the contracts' provisions. Apart from that, both parties may take the advantage of the information asymmetry to lower their risks as well as responsibilities. Therefore, the contracts of carriage are always problematic in terms of its incompleteness.

In short, the characteristics of transport activity lead to the incompleteness of the contracts of carriage. Both parties can only negotiate after the loss, rather than make the provisions in respect of all the possible cases. The rights and the arrangements predetermined are the most concerned.

3.4 An Effective Way to Amend the Incompleteness of the Contracts of Carriage

Using the analysis frame of the incomplete contracting theory, the article proves the reasonableness of the declare value transportation. The incompleteness of the contracts of carriage hampers the specific investment. For this reason, a mechanism should be designed, for example, protecting the investment incentives by law, avoiding the inefficiency by legislation or by judicial procedures. The production of the declare value transportation system is a classic example of avoiding the inefficiency through legal intervention.

There are many uncertainties during the transport process. We could investment more in some aspects, such as transport facilities and the packaging quality, to avoid the uncertainties to a certain extent and enhance the safe levels. However, as some uncertainties are unable to eliminate, there is no easy way round the difficulty—the compensation to the parties for loss. Which party should bear the responsibilities, if the security investment and financial compensation are regarded as specific investment?

Since the incompleteness of the contracts of carriage, the carriers and the consignors would not take the initiative to invest, and they would be inclined to minimize the cost of signing and keeping the agreements to achieve their maximum benefit. Therefore, with the accumulation of a large number of homogeneous precedents, the law defined the provision of carriers' closed compensation and fault liability, that is, enterprises are required by law to achieve some certain safety level of production. If the carriers breached the rule, they would be viewed as the erring party and bear proper share of the responsibility. By this means, the carriers are encouraged to make some investment to ensure the safety of transportation. At the same time, the provision of closed compensation is required to ensure the carriers' residue rights of control. If the carriers satisfied the basic requirement for safety, they would hold the liability for compensation within the limit. With the declare value transportation, which encourages the consignors to invest for the cargo's safety, if the consignors demand a higher level of safety, they would be better-served by targeted services in terms of reducing the probability of loss, after they pay the declare value transportation fee according to the value of the cargo.

4 THE FUNCTION AND NECESSITY OF THE DECLARE VALUE OF TRANSPORTATION

The declare value transportation is an effective mechanism to encourage the consignors to make security investment. The effectiveness of the mechanism is based on the fact that the consignors possess the residual rights of control, which consists of the rights of requiring the cargo's safety as well as economic compensations after the losses, that is, the declare value of transportation should include two basic functions: loss prevention and loss

compensation. Thus, targeted security services and high-quality claim settlement services are the fundamental functions of the declare value transportation. The consignors can not fully participate in the transport activities; therefore, it is unable to grasp the information of goods' statement during the transportation and the quality of the carriers' service. As the quality of the claim settlement services plays an essential role in the consignors' assessment of the carriers' service as a whole, it is better to let the consignors attend the claim settlement by themselves.

In summary, the declare value transport and the carrier liability limitation are effective mechanisms to deal with the incompleteness of transport contracts by law, play an active role in prompting the consignors to make security investment and improving the safety level of social production. As long as there is incompleteness in contracts of carriage, carriers would take the responsibility for fault of concluding, which leads to the necessity of the existence of the declare value transportation.

REFERENCES

- Hart O., J. Moore, 2004. Agreeing Now to Agree later: Contracts That Rule Out But Do Not Rule In. Working Paper.
- Hart O., J. Moore, 1999. Foundations of Incomplete Contracts. *Review of Economic Studies*.
- Hart, Oliver, 1995, Firm, Contract and Financial Structure, *Oxford Univ. Press*.
- Nie Huihua: Analysis and Integration of Incomplete contracting theory in New Institutional Economics. *Journal of Renmin University of China*, No. 1, 2005.
- Railway Law of PRC*, 1991. the Ministry of Railways.
- Chen Jingling, Shang Er Bin, 1991. *Declare Value Transportation of Railway Goods*. China Railway Press.
- YaoXinchao, 2003. *International Trade and Transportation*, Foreign Economic and Trade University Press, 2nd edition.
- Zhang Junhao, 1997. *Principles of Civil Law*. China Politics and Law University Press, 3rd edition.
- Qi Yanming, Ji Xiaohong, 2004. *A Number of Legal Problems of Declare Value Transportation*. Railway Freight.
- Zheng Mian, 2007. *Relationship between Declare Value Transportation and Transportation Insurance*. Railway freight.
- Yang Ruilong, Nie Huihua, 2006. *Incomplete contracting theory: A Review*. Economic Research.
- Chen Zhijun, 2000. *A Review on Incomplete contracting theory*. Economics News.
- Nie Huihua, 2004. *Variation of Cost Economics: Past, Present and Future*. Management World.

- Nie Huihua, 2005. *Analysis and Integration of Incomplete contracting theory in New Institutional Economics*. Renmin University of China.
- Oliver E. Williamson, 2002. *The Theory Of The Firm As Governance Structure: From Choice To Contract*. Economic Perspectives.

