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Research on Shipping Business Market Challenges and Solutions

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Abstract. With the vigorous development of global trade, the shipping market has put forward higher requirements for the legal applicability and risk allocation mechanism of charter contracts, and the rent payment clause in time charter contracts directly affects the balance of rights and obligations between carriers and charterers. Time charter contract is a special legal phenomenon in the field of contract law,which as an important part of maritime law as well as adjusted by various countries' contract laws,it involves numerous complex legal issues.The time charter contract contains massive contracts,this article focuses on the identity that carrier assumes under the rent payment clause in the shipping market and reduces the risk of cargo transportation by studying the contract and find out the problems' solutions.The discussion on the optimization of the risk allocation mechanism of charter ship contracts not only helps to safeguard the rights and interests of all parties, but also provides theoretical support for improving international maritime shipping rules and promotes the standardized development of the shipping market.

Keywords: Chartering Transportation, Carrier, Cargo Transportation Contact

1. Introduction

Charting Transportation,as an important port mode of international cargo transportation,it plays a crucial role in the large-scale bulk cargo market with its economic and flexible characteristics.In recent years, shipping has also become a hot topic in today's society, such as intelligent route planning and fuel savings,The integration of port dynamic data (such as berth availability status, and calculating tidal times) will significantly reduce ship waiting times and improve port turnover rates.For example, the Australian Maritime Safety Authority increases the search and rescue rate by more than 30% through fusing data and it can also coordinate nearby ships to participate in rescue by combining real time data sharing.

The "Tide Prediction Model" from Rotterdam Port combines with machine learning and historical tidal data to optimizes the imports and exports for large vessels, which keeps vessel's from waiting extra 1-2 hours . The International Maritime Organization shares ETA data with the Singapore Maritime Authority to achieve safe data exchange between port shipping companies and the single document processing time has been reduced from two days to four hours.

This article will focus on the concept of the carrier relationship under voyage chartering contracts and analyze the reputation issues faced by carriers in the chartering business market.

2. Challenges faced by shipping carriers in chartering transportation market

In recent years, global economic growth has slowed down.Factors such as geopolitical conflicts and trade disputes between China and the US have led to fluctuations in demand for bulk commodities and industrial goods.

These directly impact chartering demands for shipping restrictions on some traditional routes and posing significant challenges to capacity allocation for emerging routes. In the bulk shipping industry, various types of contracts are commonly used in charter agreements, such as the Bill of Lading (B/L) for changing the port of discharge, splitting, or switching Bills of Lading.

Through issuing these contracts, charterers need to make commitments to indemnify shipowners for potential losses in exchange for the shipowners' agreement. The contracts may bring convenience to social commerce and shipping ,but it also risks that are hidden and could lead to massive losses. [1]

The chartering market refers to the place where charterers(buyers) to negotiate with shipowners or owners (sellers). However, many shipping companies do not own vessels themselves.Instead, they charter vessels to undertake shipping operations which emerges a series of legal identities:the non-vessel carrier refers to those who engage in the carriage of goods by sea without owning or operating the vessels,the cargo owner means is someone require for shipping vessels.

In traditional charter contract, the charterer is responsible for vessel operations scheduling and association for voyage costs , while the shipowner is responsible for vessel safety, vessel management matters,and bears the fixed costs [2].

3. Credibility issues faced by shipping carriers in charter market

The Ocean Carrier is not the actual carrier,instead it means acting in the identity of a carrier and accepts cargo from the shippers, then issues its own B/L or other transport document as well as collects freight from the shipper, finally arranges for the international carriage of goods by sea through a liner company.The ocean carrier also assumes carrier liability and establishes legal regulations to provide international maritime cargo transportation services [3].

Theoretically, most scholars recognize the existence of the legal identity known as the "Actual Carrier" under charter agreements. The primary contention is whether the actual Carrier behaviors are accepted by the Ocean Carrier during the voyage chartering.Beyond shipping the carriage of goods, there must also exist a legal relationship about commission and passing commission between the Actual Carrier and the Ocean Carrier.

For example,when vessel’s charter time has been updated and the actual carrier sub-charters the vessel.At this time,the Sub-time charterer qulifies as the “actual carrier”,while others contend that both the sub-time charterer and the first-hand carrier should be consider as actual carriers [4].

4. Conditions for charter contract establishment

When establishing an contract,it requires the participation of two or more parties and reach mutual assent,a contract can not be formed with only one party.furthermore,the parties involved must satisfy the definition of natural persons of legal entities under the Civil Code and possess the capacity for civil rights and the capacity for civil conduct.The terms of contract are generally determined by the contracts and typically include the name or designation of the contracts, quantity, price, remuneration, time limit, place,performance, liability for contract and methods of dispute resolution.

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However, many charter contract agreements are explicitly delivered without presentation of the original Bill of Lading (B/L), switching B/L, or splitting B/L .

When agreeing charterer to use the contract in advance,the shipowner releases the cargo without presentation of the original bill and the charterer has to stand their credit as a guarantee to undertake and compensate for any losses occurred on ships. Therefore, the use of the contract inherently carries significant risks with slight errors.For time charter, which is based on a signed contract and lease vessels during a fixed period.

Throughout the entire charter period, the charterer may use and dispatch the vessels independently.During the vessel leasing term, expenses incurred by the charterer in operating the vessel such as bunker fuel costs, port charges, loading or unloading fees,and materials costs are undertaken by the charterer [5].

5. Reducing the risks of cargo transportation

5.1. Berth

Voyage Chartering refers to the point-to-point transportation of cargo by ship from the loading port to the destination port.This shipping method is characterized by no fixed routes, no fixed schedules and thefreight rates are negotiated between the charters and shipowners.

Take the oversized cargo chartering as an example, each stage of the process including chartering requirement analysis, stowage,securing plans, port entry/exit formalities, vessel delivery requires rigorous specifications [6].

5.2. Loading and entering/leaving port

Due to the varying navigational conditions at different ports, the risks of draft restrictions maximize the vessel's loading capacity and it should be borne by the charterer. Similarly, any time loss incurred when awaiting a tidal window for departure after completing loading shall also be borne by the charterer.

5.3. Freight rates

During voyage execution, the actual loading quantity may occasionally fall below the contractually agreed volume. These causes can arise from multiple factors, such as stowage compactness of cargo, tier stacking within concealed spaces and number of trimming cycles for bulk cargo.Additionally, when draft or stability limits are exceeded, the vessel can’t continue loading or at the time encountering severe sea conditions,overturning risks may hugely increased [7].

5.4. Supply delay

Supply delay constitutes one of the primary causes of disputes.Particularly,vessels may endure port waits about ten days to over a month for scheduled cargo. Consequently, identifying remedies for supply delays remains a recurring challenge for vessel owners.

It is generally recognized that delayed supply constitutes merely a violating warranty and the charterer shouldn’t terminate the contract.Otherwise, the owner may face counterclaims from the charterer for anticipatory breach [8].

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5.5. Loading and discharging efficiency

When vessels lack onboard crane capability, ports might deploy cranes for operations. Terminals typically provide 2–3 gangs working and 24-hour shifts based on vessel size. While port congestion is infrequent, operations face significant weather disruptions ,particularly Summer thunderstorms in Southeast Asia. Due to cargo's waterproof nature, mandatory hatch closure is implemented during rain events.

These factors substantially reduce handling efficiency, often causing loading and discharging delays far exceeding scheduled time, thereby contracts can't be guaranteed properly. Consequently, contracts may specify loading and discharging rates to reflect them in freight pricing. How to maximize charterers' profits still requires ongoing process during voyage execution.

6. Carriers' operational notes

According to the charter agreement, the lessee shall bear bunkers costs during the charter period in addition to the vessel's daily hire. The quantity of bunkers on board shall be measured and recorded and after returning the vessels ,the difference in bunker quantities between these two measurements shall be settled by payment to the shipowner at the contractually agreed rates [9].

Cargo insurance is typically purchased by shipper, who concurrently acts as the carrier.Essential information required by insurers includes termination dates,navigation,cargo value and detailed cargo specifications.

The carrier is due to act in utmost faith to discharge contractual duties and should truthfully inform the circumstances related to the contract.After the contract is concluded,the carrier and ship owner should actively fulfill the obligations stipulated by law and the contract [10].

7. Conclusion

This article focuses on the shipping charter market. On one hand, it starts from the current charter business and analyzes the conditions required for the creation and establishment of the contract ,as well as the identity and risks that the charterer assumes in the contract to identify possible business risks.

On the other hand, it summarizes the factors that can reduce commercial conflicts between the cargo owner and the charterer, from aspects such as loading and unloading efficiency, navigation and cargo placement to clarify the obligations of the charterer and the shipowner, to ensure the execution of the voyage. To further enhance cooperation and minimize disputes, future charter agreements could incorporate advanced technologies such as cargo tracking and AI-driven route optimization, ensuring real-time transparency and efficiency.

References

[1] Hao, Q. (2021) Talk about the Letter of Guarantee in the Contract of Bulk Transportation Charter. World Shipping, 44, 44-48.
[2] Yu, P., Yang, K.X. and Zhang, Z.Q. (2025) Research on CII Liability Conflict and Coordination of Fixed-Term Charter Contracts under the Background of Green Shipping. Journal of Shanghai Maritime University, 1-9.
[3] Xie, S. (2024) The Real Dilemma of the Lessor as the Actual Carrier under the Fixed-Term Charter Contract and Its Countermeasures. Water Transportation Management, 46, 11-15.
[4] Dongxia, H. (2014) Research on the Application of the Law of the Actual Carrier in the Charter Transportation of Navigation. East China University of Political Science and Law.

DOI: 10.54254/2755-2721/2025.BJ25290

[5] Xiantang, S. (2024) Some Thoughts on Ship Transportation on China's Economic Development. Ship Supplies and Market, 32, 23-25

[6] Wenze, J. (2025) Risk Prevention of Large Logistics in Ship Cargo Transportation. China Aviation Weekly, *9*, 55-57.

[7] Mingyao, Y. (2023) Introduction and Voyage Implementation of Single-Sail Charter Business of Potash Fertilizer in Laos. China Aviation Weekly, 24, 48-50.

[8] Yuyu, L. (2012) The Supplier's Obligation of the Lessee in the Domestic Charter Transportation. Journal of Shanghai Maritime University, 33, 76-80+85.

[9] Peng, G. and Xiao, Z. (2021) Briefly Talk about the Charter Transportation of Large Materials. China Water Transport, 13, 102-103.

[10] Qiuying, G. (2025) On the Principle of Honesty and Credit after the Conclusion of the Contract in Marine Insurance. Tianjin Sailing, 1, 42-43+47.