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Rules for the Calculation of Common Pecuniary Losses

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Abstract. The common allowance calculation rules are an important guarantee for the common allowance system to achieve risk sharing and interest balance. With the development of shipping practices, existing calculation rules face new issues concerning expense recognition, procedural connection, and special risk handling. This paper takes the 2022 "Common Maritime Loss Calculation Rules of the China Council for the Promotion of International Trade" as the main research object and compares them with the 2016 "York-Antwerp Rules" and the current "Maritime Law of the People's Republic of China". Based on existing research and judicial practice, it analyzes four issues: expenses after a port of refuge and transfer port, environmental pollution-related expenses, efficiency of the calculation procedure, and the determination of pirate ransom. The study finds that the current rules remain unclear in the connection of expenses after a second port of refuge and transfer port, the exceptional recognition of pollution prevention and reduction expenses, procedural diversion, and the treatment of pirate ransom and incidental expenses. Accordingly, this paper proposes clarifying the scope and attribution of port-of-refuge expenses, adopting a rule of "principle exclusion and exception inclusion" for environmental expenses, improving submission deadlines and simplified calculation procedures, and clarifying the recognition and allocation standards for pirate ransom and related reasonable expenses.

Keywords: common maritime loss, calculation rules, maritime law, judicial practice

1. Introduction

Common maritime loss is a long-standing risk-sharing system in maritime law, with its origin tracing back to the shipping practices in ancient Mediterranean regions. During the same maritime voyage, when ships, goods, and other properties encounter a common danger, the special sacrifices or special expenses directly caused by intentional and reasonable measures taken for the common safety are shared proportionally among the beneficiaries [1-3]. This system redistributes the special sacrifices and expenses made for the common safety among the beneficiaries, both encouraging the shipowners to take timely preservation measures in emergency situations and avoiding a specific party bearing the costs of expenditures for the overall benefit alone. Despite the continuous development of modern shipping technologies and maritime insurance, common maritime loss still widely exists in maritime transportation contracts and shipping practices.

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The effective operation of the common salvage system not only depends on whether the common salvage action is established, but also on how the losses and expenses are recognized, how the value is apportioned, and how the settlement process is carried out. The current "Maritime Law of the People's Republic of China" stipulates that the common salvage settlement shall give priority to the settlement rules agreed upon in the contract; if no such agreement exists, the provisions of Chapter 10 of this law shall apply. In practice, the 2022 "Common Salvage Settlement Rules of the China Council for the Promotion of International Trade" and the "York-Antwerp Rules" both have significant influence [2, 4]. Different rules differ in aspects such as port of refuge expenses, environmental pollution-related expenses, settlement period, and the determination of special expenses, which can easily lead to disputes over the basis for settlement, the underlying facts, and the scope of expense recognition. Judicial practice also indicates that courts usually need to review from three aspects: the eligibility of the settlement, the settlement rules and the factual basis, and whether specific expenses can be recognized [5].

This article will, based on the review of the common marine damage settlement rules system, compare the settlement rules of the China Council for the Promotion of International Trade with the 2016 "York-Antwerp Rules", focusing on analyzing issues such as the cost of refuge ports, environmental pollution-related expenses, settlement efficiency, and pirate ransom payments. It will also propose corresponding improvement suggestions to enhance the clarity and operability of China's common marine damage settlement rules, and better balance the interests of both ships and cargo parties.

2. Research status and issues of the rules for calculating common salvage

In this section, this article will separately review the existing research status of the new "Beijing Calculation Rules" and the 2016 "York-Antwerp Rules", clarify the focus of the existing academic achievements and the remaining research gaps. Based on this, it will clarify the core issues that this article intends to focus on, evaluate the practical application effect of the new "Beijing Calculation Rules" in shipping and calculation practices, and further explore the conflict, connection paths and coordinated application issues between the domestic calculation rules of China and the 2016 "York-Antwerp Rules" in judicial and calculation practices.

2.1. The current research status of the new "Beijing Calculation Rules"

The early studies on the calculation of common marine losses in China mostly focused on the 1975 "Beijing Calculation Rules", mainly discussing the basic principles of the rules, the scope of expenses, the calculation procedures, and their relationship with the "Maritime Law". After the release of the 2022 "Common Marine Loss Calculation Rules of the China Council for the Promotion of International Trade", China's calculation rules have made new institutional arrangements in terms of the scope of common marine losses, the burden of proof, the expenses for refuge ports, and the calculation period. However, due to the relatively short implementation period of the new rules, relevant cases and calculation practices still need to be accumulated. Currently, domestic research mainly focuses on the comparison of old and new provisions and the analysis of differences with the "York-Antwerp Rules". Existing studies have pointed out problems such as insufficiently detailed provisions for refuge ports, stricter handling of environmental pollution-related expenses, longer calculation periods, and unclear attribution of pirate ransom. Corresponding improvement ideas have been formed. However, the discussions on various issues in the existing results are still relatively scattered, and insufficient attention has been paid to the connection

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between rule selection, specific expense recognition, and judicial review. How to retain the concise characteristics of the Chinese rules while enhancing their clarity and operability still requires further research [6].

2.2. The current research status of the York-Antwerp Rules

In comparison, domestic research on the "York-Antwerp Rules" is relatively abundant. The existing research includes not only an introduction to the overall structure, letter rules, and number rules of the 2016 rules, but also specialized studies on issues such as the carrier's fault, the constituent elements of common salvage, rescue expenses, and judicial review of the settlement report. These studies help distinguish different levels such as whether common salvage has been established, whether a certain expense can be excluded, and whether the right to claim for apportionment can be realized. They also provide a foundation for understanding rules A, C, D, and the numerical rules such as the port of refuge and rescue expenses. However, the existing literature mostly focuses on individual provisions or specific cases, and lacks a concentrated comparison of the provisions of the 2016 rules and the new "Beijing Settlement Rules" on the same issues. Particularly in aspects such as port of refuge and expenses after transfer, environmental damage prevention expenses, submission deadlines, and settlement efficiency, the differences between the two sets of rules and their significance for improving China's rules still need to be further clarified [1, 5, 7-9].

2.3. The main issues that this article intends to discuss

In conclusion, previous studies have provided a relatively comprehensive explanation of the conditions for the establishment of joint salvage, the types of expenses, and the calculation procedures. However, there is still room for further discussion regarding the practical application effect of the new Chinese rules and how they coordinate with the 2016 York-Antwerp Rules. Judicial practice indicates that when courts review the calculation of joint salvage, they not only need to determine whether the calculation institution and rules are qualified, but also verify the factual circumstances on which the calculation is based, and review item by item whether the relevant expenses should be included in the joint salvage. Therefore, this article will not provide a comprehensive introduction to both sets of rules, but will focus on four closely related issues in connection with the calculation operation: First, whether the scope of recognition of expenses for refuge ports and ports of transshipment is sufficiently clear; second, how to coordinate the exclusion principle of environmental damage and the exception of costs for preventing and mitigating environmental damage; third, how to improve efficiency while ensuring accuracy in the submission of materials and calculation procedures; fourth, whether and how the ransom for pirates and its incidental expenses can be included in the joint salvage. The following text will analyze these issues through rule comparison and in combination with relevant cases, laying the foundation for proposing improvement suggestions [6].

3. Problems in China's Common Salvage Calculation Rules and comparative analysis

Based on this, this article will conduct a comparative analysis of the existing problems in China's common marine loss settlement rules, mainly including: The regulations regarding the costs of refuge ports still need to be further clarified; The exclusion rules for costs related to environmental pollution have become increasingly strict; The setting of the settlement procedures and the efficiency of the settlement process still have room for improvement; The determination and

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apportionment rules for the common marine loss of the ransom paid by pirates have not yet been clearly defined.

3.1. There is still room for further clarification regarding the regulations on port of refuge fees

Compared with the 1975 rules, the 2022 "Common Salvage Calculation Rules of the China Council for the Promotion of International Trade" have made more detailed provisions regarding the ports of refuge, the place of refuge, and the costs of transshipment, providing a clearer basis for the parties and the calculation institutions to determine whether certain costs can be included in the common salvage.

However, the current rules still fall short in terms of the connection of costs after transshipment: they explicitly recognize temporary repair fees, towing fees, etc. that occur during the transfer as common salvage, but do not further explain the legal status of the second port and how the relevant costs during the extended voyage should be handled. In contrast, the 2016 "York-Antwerp Rules" Rule 10 clearly regards the second port or location where the transfer occurs as a port of refuge or a place of refuge, and Rule 11 applies to the extended voyage period caused by the transfer. From this, it can be seen that the Chinese rules still have room for further clarification in terms of the scope of costs after transshipment and the applicable conditions [4, 7].

3.2. The exclusion rules for costs related to environmental pollution are rather strict

The new "Beijing Calculation Rules" have for the first time made specific provisions on environmental pollution issues. The sixth item of Article 1 of this rule generally excludes losses and expenses caused by environmental pollution or due to the leakage of property or the discharge of pollutants. This regulation is conducive to preventing the excessive expansion of the scope of common marine salvage, but it does not further distinguish between "environmental damage itself" and "expenses incurred for preventing and mitigating environmental damage". The 2016 "York-Antwerp Rules" rule C also established a principle of exclusion, while rule 11, item 4 of the rules listed several environmental damage prevention and reduction expenses that could be included in common marine salvage, forming a structure of "principle exclusion, exception inclusion". The Chinese rules lack similar exception listings, which can easily lead to uncertainty in the determination of related expenses [4, 7]. The common marine salvage dispute case of the "FRONT PAGE" vessel also reflects this distinction issue. In this case, the court included the rescue expenses incurred to save the vessel and other property from danger in common marine salvage, but held that the anti-pollution expenses specifically incurred to prevent and mitigate oil pollution damage did not have the direct purpose of the common safety of the ship and cargo, and therefore should not be included in common marine salvage. This indicates that environmental protection measures often have both the purposes of property rescue and pollution prevention, and it is necessary to clearly define the inclusion standards for different expenses [5].

3.3. The calculation process and efficiency can still be improved

In cases of joint maritime disasters, multiple parties such as the shipowner, cargo owner, and insurer are involved, and there are numerous loss items and supporting documents. The calculation period is often affected by the submission of materials, fact verification, and disputes over costs. The 2022 rules have set a procedural deadline through Article 7, requiring the announcement of joint maritime loss and the submission of supporting documents within a certain period. If the deadline is missed,

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the calculation institution can make an estimate based on the available materials. This helps to enhance procedural efficiency. However, this rule mainly addresses the issue of the submission deadline for materials and does not stipulate the completion deadline for the entire calculation process. Additionally, the new rule does not retain the simplified calculation mechanism from the 1975 rules, lacking corresponding procedural diversion for cases with small amounts and clear facts. Compared with the 2016 "York-Antwerp Rules", both sets of rules place significant emphasis on the submission of materials and evidence requirements, but both lack rigid constraints on the overall calculation period. Therefore, how to ensure the accuracy of the calculation while shortening unnecessary processing time remains a practical issue in the application of the rules [4, 6].

3.4. The common maritime loss nature and apportionment rules of the pirate ransom remain unclear

When pirates hijack ships and cargoes and demand ransom, both the ships and the cargoes are placed in danger together. The current new "Beijing Calculation Rules" and the 2016 "York-Antwerp Rules" have not made specific provisions regarding pirate ransoms. Therefore, in practice, it is still necessary to judge whether they can be recognized as part of the common maritime loss based on the general constituent elements of common maritime loss. If the payment of ransom is indeed to enable the ships and cargoes in the same voyage to escape from the common danger, and the payment behavior is necessary and reasonable, then there is a possibility of recognizing it as a common maritime loss;

However, whether the incidental expenses such as negotiations, legal services, and fund transfer are not recognized, and how to determine the specific allocation scope, still lack clear rules. Therefore, the focus of this section is not to pre-determine that all pirate ransoms belong to common maritime loss, but rather to point out that the current rules still lack clear criteria for recognition and allocation of this special expense.

4. Improvement of the rules for calculating common seafloor losses in China

To improve the common marine loss settlement rules in China, it is necessary to address the prominent disputes. Firstly, the specific scope of salvage port expenses needs to be further clarified, and the rights and responsibilities for various expenses after the ship's transfer to a new port should be defined. The judicial and settlement practices should also have consistent judgment standards. Secondly, the exclusion rules for environmental pollution-related expenses should be adjusted, and a "principle exclusion, exception inclusion" regulatory model should be established. Thirdly, the procedural deadlines for each stage of settlement should be detailed, and a simplified settlement mechanism should be explored to shorten the settlement period and improve the efficiency of handling common marine loss cases. Finally, the conditions for recognizing ransom payments by pirates and related reasonable expenses should be clarified, the common marine loss attributes and allocation rules of such expenses should be determined, and the applicable dilemmas in theory and practice should be resolved.

4.1. Further clarify the scope of port-of-refuge fees and the attribution of fees after port transfer

The new "Beijing Calculation Rules" have made more detailed provisions regarding safe ports, safe locations, and related costs compared to the old rules. The current Article 203 of the "Maritime

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Law" also clearly defines the common marine salvage nature of port fees during necessary repairs, crew salaries and provisions, fuel and materials, as well as unloading, storage, and reloading costs. However, there is still room for further refinement regarding the second safe port, the costs after transferring ports, and the connections between different cost items. Based on the existing norms, the related costs for safe ports can be roughly classified as port and voyage maintenance costs, repair and transfer port costs, and costs for cargo handling, storage, and reloading. In essence, these costs should be directly related to the common danger and the act of seeking refuge; and they should be reasonable and necessary. In terms of procedure, the party claiming to recognize the common marine salvage shall submit materials such as logbooks, accident reports, expense lists, and invoices to prove it [2, 4].

In cases where a ship is unable to complete necessary repairs at its original refuge port and has to transfer to another port, the provisions of Rule 10 of the 2016 "York-Antwerp Rules" can be adopted. The second port that meets the conditions can be regarded as a refuge port or refuge area, and the reasonable expenses incurred during the transfer and extended voyage should be subject to the corresponding rules. This approach can not only reduce disputes between the ship and the cargo parties regarding the nature of the expenses, but also prevent normal operating costs from being improperly included in the common salvage [7].

4.2. Establish a rule of "principle exclusion and exception inclusion" for environmental damage costs

The "Beijing Calculation Rules" take "common safety" as the core for the determination of common marine losses. The disposal of environmental pollution is more oriented towards public interests such as the marine environment, and there are certain differences from the institutional purpose of protecting the specific interests of the voyage cargo and the direct protection object of the common marine loss protection. Therefore, for the already occurred pollution damage and the expenses solely for the purpose of eliminating the pollution consequences, in principle, they should not be included in common marine losses; however, if the relevant measures also serve the common safety of the ship and cargo at the same time, it is necessary to further judge whether the expenses can be exceptionally included.

Although the current rules clearly exclude losses and expenses caused by environmental pollution or the leakage of property, or the discharge of pollutants, there is a lack of further regulations on whether specific pollution prevention and reduction expenses can be exceptionally included. The 2016 "York-Antwerp Rules" rule C also establishes an exclusion principle, and rule eleven's fourth paragraph sets an exception for the expenses for preventing and reducing environmental damage in specific circumstances. This "principle exclusion, exception inclusion" structure helps to distinguish the environmental damage itself from the prevention and reduction expenses that also have the purpose of common safety.

Therefore, the Chinese rules can retain the existing principle exclusion provisions for pollution losses and expenses, and refer to the practice of the 2016 "York-Antwerp Rules", setting an exception for specific reasonable expenses spent for preventing or reducing environmental damage. The specific determination should still be based on the common safety of the ship and cargo, and combined with the necessity of the measures, the direct correlation between the expenses and the common marine loss act, and other factors to be strictly grasped, to avoid improperly expanding the scope of common marine losses under the pretext of environmental protection [4, 7].

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4.3. Improve the procedural time limits and study the simplified calculation mechanism

The new "Beijing Calculation Rules" have set relatively clear procedural deadlines for the declaration of common salvage and the submission of supporting documents. According to Article 7, the declaration of common salvage should be made within 48 hours after arriving at the first port, and the relevant supporting documents should be submitted within one year after the end of the voyage. The 2016 "York-Antwerp Rules" Rule E also stipulates a twelve-month submission period and allows the adjuster to make an estimate if the materials are not submitted on time, while requiring a response within two months after receiving the estimate. Compared with these, the distinctive feature of the Chinese rules mainly lies in setting a 48-hour requirement for the declaration of common salvage [4, 7].

There is still room for further refinement of the procedural deadlines. The submission period of materials is not equivalent to the completion period of the entire calculation process, nor is it the same as the statute of limitations for the common salvage apportionment claim stipulated in Article 290 of the Maritime Code. In the future, while retaining the one-year submission period, it is advisable to encourage the early submission of key materials such as damage records of goods and cargo lists, and prompt the calculation institution to promptly indicate any material deficiencies, thereby reducing procedural delays caused by delayed materials [2].

The procedural deadlines of the current rules still have room for further refinement. The submission period of materials is not equivalent to the completion period of the entire calculation process, nor is it the same as the statute of limitations for the common salvage apportionment claim stipulated in Article 290 of the Maritime Code. In the future, while retaining the one-year submission period, it is advisable to encourage the early submission of key materials such as damage records of goods and cargo lists, and prompt the calculation institution to promptly indicate any material deficiencies, thereby reducing procedural delays caused by delayed materials [6].

4.4. Clearly define the criteria for recognizing the payment of ransom and related reasonable expenses by pirates

The current 2016 "York-Antwerp Rules" and the new "Beijing Calculation Rules" neither make specific provisions on the determination and apportionment of pirate ransoms. In this regard, it is inappropriate to automatically conclude that all ransoms belong to common salvage. Instead, it is necessary to return to the general constituent elements for judgment: when the ship and cargo are indeed in a common danger, the payment of the ransom is intentionally taken for the common safety, and it is necessary and reasonable, then consideration can be given to recognizing it as common salvage. To reduce the uncertainty in practice, this determination standard can be further clarified in the new "Beijing Calculation Rules" [2, 6].

Once the ransom is recognized as a case of joint maritime loss, the incidental expenses such as negotiation, legal consultation, and fund transfer should not all be included. Instead, their necessity, rationality, and direct correlation with the elimination of the common danger should be separately examined. Regarding the apportionment, the general apportionment value rule of joint maritime loss should be applied. Each beneficiary should bear the apportionment value proportion determined by Article 208 of the Maritime Code, without using the market value at the time of the pirate incident as a standard. Insurance compensation falls under the insurance contract relationship and should be handled separately in accordance with the relevant provisions of the insurance contract and the Maritime Code. This does not affect the determination of the joint maritime loss apportionment liability itself [2].

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By clearly defining the criteria for recognizing the ransom paid by pirates and their associated expenses, and aligning them with the existing rules for apportioning common maritime losses, it is possible to enhance the predictability of the rules without excessively expanding the scope of common maritime losses, and better balance the risk burdens on both the ship and the cargo parties.

5. Conclusion

The rules for calculating common maritime losses are an important guarantee for the reasonable sharing of risks under the common maritime loss system, and are of great significance for properly handling the interests of ships and cargo and maintaining the shipping order. This article compares the new "Beijing Calculation Rules" with the 2016 "York-Antwerp Rules" and analyzes the practical application issues of China's common maritime loss calculation rules. The research shows that the current rules still have room for further clarification and improvement in aspects such as the scope of refuge port expenses and the attribution of expenses after port transfer, environmental pollution-related expenses, the efficiency of the calculation process, and the determination of pirate ransom.

To address the above problems, this article proposes: further clarifying the scope of refuge port expenses and the attribution of expenses after port transfer, reducing the differences in determination in calculation practice and judicial review; on the basis of retaining the principle of exclusion for environmental pollution damage, setting exceptions for specific prevention and reduction expenses; improving the deadlines for submitting materials and exploring a simplified calculation mechanism to improve the efficiency of calculation; clarifying the conditions for recognizing pirate ransom and its accompanying reasonable expenses, and aligning them with the existing common maritime loss allocation rules. Overall, the improvement of common maritime loss calculation rules should seek a balance between fair interests of ships and cargo, calculation efficiency, and the operability of the rules, by reasonably absorbing international rule experience and combining with China's shipping practice, further enhancing the clarity and applicability of China's common maritime loss calculation rules.

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