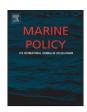
ELSEVIER

Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol



Acceptance of the international compensation regime for tanker oil pollution – And its implications for China



Bingying Dong ^a, Ling Zhu ^b, Kevin Li ^c, Meifeng Luo ^{b,*}

- ^a IMC-Frank Tsao Maritime Library and R&D Center, The Hong Kong Polytechnic University, Hong Kong
- ^b Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University, Hong Kong
- ^c Department of International Logistics, Chung-Ang University, South Korea

ARTICLE INFO

Article history:
Received 5 November 2014
Received in revised form
28 July 2015
Accepted 2 August 2015
Available online 25 August 2015

Keywords: International compensation regime Tanker oil pollution Fuzzy-set Qualitative Comparative Analysis Ordered Probit China's approach

ABSTRACT

The international compensation regime for tanker oil pollution has been successful in providing adequate and prompt compensation to pollution victims in its member states. Nevertheless, the attitudes of different countries toward acceptance of this regime have varied considerably. This paper aims to explain three main factors in the acceptance of the regime, including: (1) The level of economic development; (2) the risk of exposure to tanker oil spills; and (3) the financial burden associated with adherence to the International Oil Pollution Compensation Fund (IOPC). Using both fuzzy-set Qualitative Comparative Analysis and an Ordered Probit model, this study found two patterns causing upper-middle and high income countries to have a high acceptance level: (a) Those facing a medium risk of oil spills and having a low financial burden; and (b) those facing a high risk of oil spills. The study reveals that, for a country with a high risk of exposure to tanker oil spills, such as China, with its improvement in economic status it is far better for it to join the IOPC Fund, so as to provide better protection both for potential pollution victims and for the marine environment. The results of this study can also be applied to other countries that are considering whether or not to accept the international compensation regime for tanker oil pollution.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Currently, the international compensation regime for tanker oil pollution damage follows a three-tier structure based on a series of international conventions and their amendments (see Table 1). In the first tier, strict liability is imposed on the owner of a tanker causing oil pollution. This liability, guaranteed by the shipowner's liability insurer, is limited according to ship tonnage. Any pollution damages over such a limit is protected in the second tier by the International Oil Pollution Compensation Fund (IOPC), which is financed by levies imposed on oil receivers according to the 1992 Fund Convention. Currently, the maximum level of second tier compensation is 203 million Special Drawing Rights (SDR). Beyond such limit, it is possible for the third tier of protection to be drawn from the 2003 Supplementary Fund Convention, which expands the upper limit of compensation by up to 750 million SDR.

This three-tier compensation regime that shares the financial burden between shipowners and oil receivers has been deemed successful in protecting pollution victims [1]. Its success can be seen in its worldwide ratification. So far, 114 countries have ratified the 1992 Fund Convention. Among them, 30 have also acceded to the 2003 Supplementary Fund Convention. However, not all countries are exhibiting the same attitude towards its acceptance. The geographical location of the five groups of countries classified by the ratification of these conventions is shown in Fig. 1. From this it is clear that there are still a large number of countries that have very low acceptance levels (i.e., a group numbering less than 3). For certain countries, such as the USA, the low participation rate is due to a high limit under their national compensation regime. Also, many coastal states that have a high risk of tanker oil spill incidents and low national compensation limits do not have a high acceptance level (i.e., they have not acceded to the conventions in tiers 2 and 3). Therefore, if a major oil pollution incident does occur, there is a danger that pollution victims in these countries will not be able to obtain sufficient compensation. Faced with such a high degree of variation in the acceptance level of the compensation regime, it is instructive to investigate the major factors that promote a high acceptance level.

^{*} Corresponding author.

E-mail address: Meifeng.Luo@polyu.edu.hk (M. Luo).

¹ 1 SDR=US\$ 1.529 as at 12 August 2014, according to the website of the International Monetary Fund.

 Table 1

 International compensation regime for tanker oil pollution damage.

The First Tier (Funded by Shipowner)

The Second Tier (Funded by Oil Companies)

The Third Tier (Funded by Oil Companies)

The 1969 International Convention on Civil Liability for Oil Pollution Damage and its 1976/1992 Protocols and 2000 Amendments (1969/1992 CLC)

The 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1992 Fund Convention)

The Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (2003 Supplementary Fund Convention)

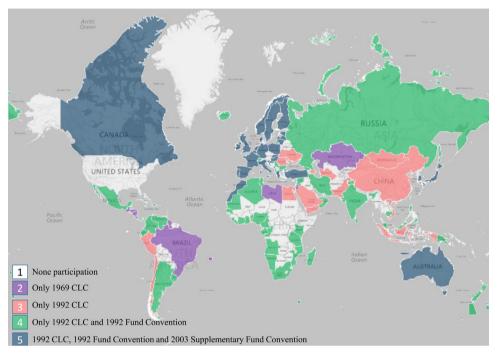


Fig. 1. Five country groups according to the ratification of international conventions on compensation for tanker oil pollution damage (Sources: Explanatory Note of the IOPC Fund, August 2014).

In tandem with its very fast economic development and escalation in the demand for its energy resources, China suffers with very heavy tanker traffic along its coastal areas. This heightened risk of oil pollution could bring about serious damage to the coastal resources and marine environment [2]. However, China has not yet become a Member State of the IOPC Fund. A domestic compensation fund was established in 2012 to provide supplementary compensation for vessel-source oil pollution damage in China [3]. However, this domestic compensation level is much lower than that provided by the international conventions in tiers 2 and 3. Therefore, it is essential that China considers the benefits of acceding to the 1992 Fund Convention in order to provide better protection for its pollution victims.

This paper studies both the logical and statistical relationships between the high acceptance levels among certain countries of the international compensation regime for tanker oil pollution damage, as well as the major factors that determine such an acceptance level. This is done by combining fuzzy-set Qualitative Comparative Analysis (fsQCA) and an Ordered Probit model. Our results show that wealthy states, that is, those better off than middle income countries, will display a high acceptance level when facing a high risk or medium risk situation and low financial burden associated with adherence to the IOPC Fund. These results could serve as inputs for policy makers in China when considering the necessity of accepting the 1992 Fund Convention.

2. Theoretical background

Few studies have explained the factors determining the

acceptance level of the international compensation regime for tanker oil pollution. A report published by the United Nations Conference on Trade and Development (UNCTAD) provided a list of considerations for national policymakers to help them assess the merits of acceding to these conventions [4]. For the purpose of this study, two of them are addressed, namely, the risk of exposure to tanker oil spills, and the financial burden associated with adherence to the conventions. In addition, we also include the level of economic development for analyzing how these three factors determine the high acceptance rate.

2.1. Risk of exposure to tanker oil spills

The risk of oil spill is defined as the product of the probability of spills and its consequences [5]. Countries located in highly exposed areas not only have a high probability of oil spills, but may also face catastrophic losses if a major oil spill incident occurs. The adoption of the 1992 CLC can help provide oil pollution victims with substantial financial compensation [4]. Further, if a country is a Member State of the IOPC Fund, the risk of suffering a major oil pollution incident, as well as the financial losses incurred, are shared among the large number of oil receivers who contribute to the IOPC Fund [6]. Therefore, countries facing a high risk of oil spills are more likely to accede to the 1992 Fund Convention or the 2003 Supplementary Fund Convention.

2.2. Financial burden

Becoming a Member State of the 1992 Fund Convention or

Download English Version:

https://daneshyari.com/en/article/7489879

Download Persian Version:

https://daneshyari.com/article/7489879

Daneshyari.com