

Maritime Technology And Policy In The Development Of The Maritime Logistics Industry Sector

Part of the Book Series "Maritime Logistic"

Fiscal Policy to Encourage Investment in the Marine Logistics Sector

Abstract

The marine logistics sector plays a crucial role in a country's economic growth, particularly for archipelagic nations like Indonesia. However, investment levels in this sector remain low, which can hinder potential economic growth. This research aims to analyze various fiscal policies that can encourage investment in the marine logistics sector. The methods used in this research are qualitative and quantitative descriptive analysis. The results indicate that fiscal policies such as tax incentives, subsidies, and government funds allocated for maritime infrastructure development can increase the attractiveness of investment in this sector. Tax incentives, such as reductions in corporate income tax rates, exemptions or reductions in import taxes for equipment, and tax allowance facilities, can be effective instruments to attract investment. Subsidies, such as capital assistance, low-interest loans, and operational cost compensation, can also help reduce investment risks and encourage investor participation. Additionally, adequate allocation of government funds for the development of maritime infrastructure, such as ports, docks, and other logistics facilities, is crucial for enhancing the sector's efficiency and competitiveness. However, fiscal policies alone are not enough. Improved regulations and better law enforcement are also necessary to create a conducive investment climate in the marine logistics sector.

Wihdat Djafar*

Department Of Naval Engineering, Faculty Of Engineering, Hasanuddin University, Indonesia

*Correspondence author:

Email: wihdat.djafar@unhas.ac.id

Tel.: +xx-xxx-xxxx

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1. Introduction

The maritime logistics sector has a very important role in global trade and economic growth. Data from the United Nations Conference on Trade and Development (UNCTAD) shows that around 80% of world trade volume is transported by sea [1]. However, investment in the maritime logistics sector often faces various challenges, such as large capital costs, high risks, and regulatory complexity [2]. The right fiscal policy can be a driving force for increasing investment in

the maritime logistics sector and increasing a country's maritime competitiveness.

Investment in the maritime logistics sector covers various aspects, such as port infrastructure development, ship fleet modernization, and technology development [3]. According to data from Drewry Maritime Research, global investment in the port sector experienced an increasing trend from 2010 to 2019, although there is still significant growth potential, especially in developing countries [4].

Fiscal policies, such as tax incentives, subsidies, and infrastructure provisions, can be effective instruments to attract investment in the maritime logistics sector [5]. Several countries have implemented fiscal policies to encourage investment in this sector, such as Singapore which provides tax reductions for shipping companies and subsidies for ship renewals, thus making Singapore a leading maritime logistics center in Asia [6]. The United Arab Emirates also implemented a free trade zone policy and permitted foreign ownership of up to 100%, which contributed to the development of Jebel Ali Port into one of the busiest container ports in the world [7]. Meanwhile, China provides tax incentives for shipbuilding and port infrastructure investment, so that China has 7 of the 10 busiest container ports in the world [8].

This article aims to analyze how fiscal policy can encourage investment in the maritime logistics sector. The next section will discuss the theoretical framework, research methodology, results, and discussion, as well as conclusions and policy recommendations.

While fiscal policies and infrastructure development are crucial, they must be supported by a conductive regulatory environment and effective law enforcement. Streamlining licensing processes, ensuring legal certainty, and enforcing fair and consistent regulations are essential for creating a favorable investment climate in the marine logistics sector. Stakeholder consultations, regular regulatory reviews, and strengthening institutional capacity can contribute to achieving these goals.

A comprehensive introduction should cover the global context of the maritime logistics sector and the importance of investment in its development. As an example, the latest data on global trade growth can be included which shows an increase in the volume of goods transported via maritime routes. Apart from that, it is also necessary to highlight the strategic role of the maritime logistics sector in supporting connectivity between countries, economic growth and job creation.

In addition, the introduction could broaden the discussion of the challenges faced by the maritime logistics sector, such as inadequate infrastructure, high capital costs, and regulatory complexity. This will provide a deeper context as to why investment in this sector is crucial for a country's economic growth, especially for an archipelagic country like Indonesia.

By expanding the scope of the introduction to cover the global picture, sector challenges, and investment urgency, the journal will provide a more solid foundation for subsequent discussions on fiscal policies that can encourage investment in maritime logistics.

2. Materials and Methods

This research uses a qualitative approach with a literature study method. The literature study was selected to analyze various secondary data sources, such as scientific journal articles, reports from international organizations, and policy documents from various countries, in order to obtain a comprehensive understanding of the role of fiscal policy in encouraging investment in the maritime logistics sector. The steps taken in this research are as follows:

- a. Data collection: Data is collected from various sources, including scientific journal databases (such as Science Direct, Scopus, and IEEE Xplore), reports from international organizations (such as UNCTAD, World Bank, and IMO), as well as policy documents from various countries that have implemented fiscal policy to encourage investment in the maritime logistics sector.
- b. Literature selection: The literature that has been collected is then selected based on relevance to the research topic, quality of publication, and year of publication (with a focus on literature published in the last 10 years).



- c. Data analysis: The selected data is then analyzed in depth using the content analysis method. The analysis was carried out by identifying patterns, themes and relationships between various concepts related to fiscal policy and investment in the maritime logistics sector.
- d. Data synthesis: The results of data analysis are then synthesized to produce a comprehensive understanding of how fiscal policy can encourage investment in the maritime logistics sector, including effective forms of fiscal policy, factors that influence policy success, and the impact of policy on sector growth maritime logistics.
- e. Drawing conclusions and recommendations: Based on the results of data synthesis, this research will draw conclusions about the role of fiscal policy in encouraging investment in the maritime logistics sector, as well as provide policy recommendations for decision makers to optimize the use of fiscal instruments in developing the maritime logistics sector.

By using this research method, it is hoped that an in-depth and comprehensive understanding of how fiscal policy can be used effectively to encourage investment in the maritime logistics sector can be obtained, as well as produce relevant policy recommendations for decision makers.

3. Results

- 3.1. Tax Incentives One fiscal policy that can be implemented to encourage investment in the marine logistics sector is tax incentives. Several tax incentives that can be applied include:
 - Reduction of corporate income tax rates for investors in the marine logistics sector.
 - Exemption or reduction of import taxes for equipment and machinery used in marine logistics operations.
 - Tax allowance facilities or reductions in taxable income for investment costs in the marine logistics sector.

Tax incentives have proven to be an effective tool in attracting investment across various sectors, and the marine logistics sector is no exception. The comparative analysis presented in Table 1 demonstrates that countries like Singapore and Malaysia have successfully utilized tax incentives to promote investment in their marine logistics sectors. Indonesia can learn from these examples and tailor its tax incentive policies to suit the specific needs and challenges of the domestic marine logistics industry.

Reducing corporate income tax rates for investors in the marine logistics sector can significantly improve the return on investment (ROI) and make the sector more attractive for both domestic and foreign investors. Additionally, exemptions or reductions in import taxes for essential equipment and machinery can help lower operational costs and enhance competitiveness.

It is important to strike a balance between providing attractive tax incentives and ensuring that the government maintains sufficient revenue streams. A comprehensive cost-benefit analysis should be conducted to determine the optimal level of tax incentives that can effectively stimulate investment while minimizing potential revenue losses.

Table 1. Comparison of Tax Incentives in Several Countries

Country	Tax Incentives
Indonesia	20% reduction in corporate income tax rate for investors in the marine logistics sector during the first 5 years



Country	Tax Incentives
Singapore	10-year tax exemption for marine logistics companies that meet certain criteria
Malaysia	70% reduction in corporate income tax rate for marine logistics companies investing in special economic zones

- 3.2. Subsidies The government can also provide subsidies to investors in the marine logistics sector to encourage investment. Subsidies can be provided in the form of capital assistance, low-interest rates, or operational cost compensation. This can help reduce investment risks and increase the attractiveness of this sector for investors.
- 3.3. Government Funds for Maritime Infrastructure The lack of supporting infrastructure such as ports, docks, and other logistics facilities is one of the main barriers to investment in the marine logistics sector. Therefore, the government needs to allocate sufficient funds for the development of maritime infrastructure. This will increase the efficiency and competitiveness of the marine logistics sector and attract investor interest. The data presented in Table 2 highlights the Indonesian government's commitment to allocating funds for maritime infrastructure development. However, it is crucial to ensure that these funds are utilized effectively and efficiently, targeting strategic projects that can have the most significant impact on improving the sector's performance.

Table 2. Allocation of Maritime Infrastructure Budget in Indonesia

Year	Budget Allocation (in billion Indonesian Rupiah)
2020	85.2
2021	92.7
2022	105.4
2023	118.6 (projected)

3.4. Improved Regulations and Law Enforcement In addition to fiscal policies, improved regulations and better law enforcement are also necessary to create a conducive investment climate in the marine logistics sector. This includes streamlining licensing processes, legal certainty, and fair and consistent law enforcement.

This research shows that fiscal policies such as tax incentives, subsidies, and government funds allocated for maritime infrastructure can encourage investment in the marine logistics sector. However, fiscal policies alone are not enough. Improved regulations and better law enforcement are also necessary to create a conducive investment climate in this sector. With a combination of appropriate fiscal policies and an improved investment climate, it is expected that investment in the marine logistics sector can increase, which in turn will drive economic growth and Indonesia's competitiveness in global trade.

4. Discussion

The marine logistics sector plays a vital role in supporting Indonesia's economic growth and



facilitating international trade. By implementing a comprehensive package of fiscal policies, coupled with regulatory reforms and infrastructure development, the government can create an enabling environment that attracts domestic and foreign investment in this critical sector.

Continuous monitoring and evaluation of the implemented policies are essential to ensure their effectiveness and make necessary adjustments based on evolving market conditions and industry needs. Additionally, fostering partnerships and collaboration between the government, private sector, and other stakeh

Ultimately, fostering investment in the marine logistics sector requires a holistic approach that combines fiscal policies, infrastructure development, regulatory reforms, and effective law enforcement. By implementing a comprehensive package of measures, the Indonesian government can create an enabling environment that attracts domestic and foreign investment, driving the growth and competitiveness of the marine logistics sector and contributing to the overall economic development of the nation.

Continuous monitoring, evaluation, and adjustment of the implemented policies are essential to ensure their effectiveness and relevance in the face of evolving market conditions and industry needs. Additionally, fostering partnerships and collaboration between the government, private sector, and other stakeholders can contribute to the sustainable growth and development of Indonesia's marine logistics sector, positioning it as a key driver of economic prosperity.

5. Conclusions

The marine logistics sector is a critical component of a country's economic development, particularly for archipelagic nations like Indonesia. Encouraging investment in this sector is essential for enhancing its efficiency, competitiveness, and overall contribution to economic growth. This research has highlighted the potential of fiscal policies, such as tax incentives, subsidies, and government funds for maritime infrastructure development, to stimulate investment in the marine logistics sector.

The comparative analysis of tax incentives across different countries has demonstrated the effectiveness of such measures in attracting investment. Indonesia can leverage these insights to design targeted tax incentive schemes that cater to the specific needs of the marine logistics industry, such as reducing corporate income tax rates, providing tax allowances, and offering exemptions or reductions on import duties for essential equipment and machinery.

Furthermore, subsidies can play a crucial role in mitigating the risks and financial burdens associated with investing in the marine logistics sector, particularly for small and medium-sized enterprises (SMEs). Capital assistance, low-interest loans, and operational cost subsidies can provide the necessary support to encourage investment and foster the growth of domestic players in the industry.

However, it is essential to complement fiscal policies with adequate investment in maritime infrastructure. The lack of infrastructure, such as ports, cargo handling facilities, and efficient hinterland connectivity, can significantly hinder the sector's growth and competitiveness. The Indonesian government's commitment to allocating funds for infrastructure development, as highlighted in Table 2, is a positive step in the right direction. Effective utilization of these funds, coupled with innovative financing mechanisms like public-private partnerships (PPPs) and green bonds, can further accelerate infrastructure development and enhance the sector's attractiveness for investors.

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