Model Implementation Of Indonesian Sea Toll Service Policy In Supporting Regional Economic Growth Reducing Disparity Of Prices And Improving Community Welfare

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Abstract

The purpose of this study are to find out and analyze 1) The process and implementation of the Sea Toll Policy in terms of the Policy Content and Concept of the Sea Toll Policy, 2) To analyze the relationship of the Sea Toll Service policy to regional economic growth, decreasing price disparities and increasing community welfare, 3) Analyzing the implementation model of the Sea Toll policy in supporting regional economic growth, decreasing the disparity of price and increasing people's welfare. This study uses a combined method approach, namely quantitative using a positivism methodology paradigm, and a qualitative approach using an interpretive methodology paradigm. Prositivism and interpretivism are two extreme extreme paradigms about the nature and source of knowledge. The results of the study strengthen the policy model that has been studied by Grindle (1980), and Sabatier and Mazmanian (1980), namely the results ofthe SEM analysis show that 1) The process and results of the implementation of the Sea Toll policy have the greatest impact on improving people's welfare through regional economic growth compared to price and availability disparities. basic necessities. 2) Opinions and expectations from stakeholders regarding the implementation of the Sea Toll policy, which is related to the design of the Sea Toll route, are closely related to the involvement of local governments, inter-ministerial involvement, rehabilitation of stacking fields, private involvement and regulations of the ministry of trade. Some of the problems that often occur are infrastructure development, both at the port or port entrance access, obstacles in the port, coordination between stakeholders, readiness and duration of the loading and unloading process and regional cultural factors. 3) The relationship of Sea Toll service policies and regional economic growth, decreasing price disparities and improving people's welfare in the province of NTT is that the content of the

policy and the policy context have a positive effect on Sea Toll policy activities, Sea Toll policy activities have a positive effect on the availability of basic goods, decreasing disparities in the price of goods and regional economic growth. As well as the availability of basic necessities and a decrease in the price disparity of goods have a positive effect on regional economic growth. In the end, the availability of basic necessities, regional economic growth and the decrease in price disparity have a positive effect on improving people's welfare. 4) The Sea Toll policy implementation model in supporting regional economic growth, decreasing the disparity of price and improving people's welfare, needs to pay attention to the level of clarity and consistency of the goals and objectives of the Sea Toll policy, coordination and synergy between the central and regional governments, private parties, improving main and supporting infrastructure, not only focusing on regional economic growth but also on the availability of basic necessities and reducing disparities in the price of goods which will have a positive effect on regional economic growth and improving people's welfare. The recommendations given are 1) coordinating and synergizing between local governments, relevant ministries and entrepreneurs in designing the Sea Toll Route, 2) rehabilitating port infrastructure, 3) Infrastructure development both in ports, regions and road access, 4) improving the system for the loading and unloading process. loading and suitability of ship type. 5) Review regulations at the regional government and the Ministry of Trade that hinder investment and trade in goods out of the region, especially abroad. 6) Evaluation of the implementation of the Sea Tollthat has been running to get a solution to the effectiveness ofthe implementation of the Sea Toll .

Keywords Public Policy, Sea Toll, Price Disparity, Economic Growth, Public welfare.

Introduction

The high cost of shipping goods per container using sea transportation services between regions in Indonesia causes the price of goods in destination areas such as outside Java to be high. This causes economic disparities between the inner region and the front

region. The inner region is an area that is easier to reach and becomes the center of nationaleconomic growth. The front area is an area that is more difficult to reach and more isolatedbecause the means of transportation that serve in that area are still lacking. The Sea Toll Policy is one solution to reduce the cost of population mobility, reduce national logistics costs and increase the competitiveness of national products, as well as ensure the availability of goods. The Government's policy on the Sea Toll aims to balance the number of sea transportation for the mobilization of people and goods in the front and inner areas through new economic growth centers in the front area. The Sea Toll policy can facilitate the flow of people and the flow of goods and services, so as to increase the flow of the economy, reduce disparities in the price of goods between regions, and improve people's welfare. Development in the logistics sector facilitates national and international trade, increases competitiveness within countries, and thus appears to be an important determinant of growth and development (Hayaloglu, 2015). If the weak factor in the implementation of the sea toll service policy is not evaluated and corrected, then the purpose of this policy is to support regional economic growth, reduce disparities in goods prices, and improve people's welfare in NTT province. Therefore, in order to obtain a more detailed and comprehensive understanding of the extent to which the weakness or success of the implementation of the maritime Toll service policy in supporting regional economic growth, reducing the disparity of prices, and increasing the welfare of the people in the province of NTT, it is necessary to conduct a scientific study to determine how the process and results of the implementation of the maritime Toll policy are viewed from the aspect of

the policy content and the concept of the Sea Toll policy. The relationship of the Sea Toll service policy to regional economic growth, decreasing price disparities and improving people's welfare in the province of NTT and the implementation model of the Sea Toll policy in supporting regional economic growth, reducing disparity of price and improving people's welfare.

The objectives to be achieved from this research are 1) Analyzing the process and

results of the implementation of the Sea Toll policy in terms of the Policy Content and Concept of the Sea Toll Policy, 2) Analyzing the relationship between the Sea Toll Servicepolicy on regional economic growth, decreasing price disparities and improving the welfare of the people in the region. NTT province, 3) Analyzing the implementation modelof the Sea Toll policy in supporting regional economic growth, reducing disparities in goods prices, and increasing community welfare

Review Of Theory And Empirical Research

Dye (1995: 1) explains "whatever the government chooses to do or not to do. The definition put forward by Dye is sufficient to describe public policy, but is still considered not to clearly provide the meaning of what the government decides to do and what the government actually does. Experts argue that in formulating policies, they should pay attention to the definition of the policy which describes what actions are actually being carried out, and what is proposed in actions related to a particular problem. Public policy isalso a set of goals and objectives of government programs (Islamy, 1986: 18). The implementation of public policies often experiences various kinds of obstacles that interfere with the effectiveness of the policy implementation process, so that the achievement of policy objectives cannot be realized as desired. This indicates that the policy implementation process is something that must receive careful attention. Policy implementation can be interpreted as a series of actions carried out in a planned and sustainable manner from various activities that have previously been carried out through the establishment of a policy.

The logistics system is one of the important things in an industry and the economic

continuity of a particular area or region. This relates to the supply chain system, which generally describes the transfer of goods from producers to consumers for consumption. Both logistics and supply chain both focus on physical goods from raw goods to finished goods. In this case, logistics is targeting the concept of distribution which represents storage and flow from initial production to delivery to final use (See Rushton, et al., 2010).In the Indonesian economic structure, the logistics sector is described as the transportation and warehousing sector. As such, developments in the logistics sector have become the driving force associated with the country's growth. Increasing investment in this field and establishing a logistics network has brought benefits to the country. As a result, countries today have increased their investment in this area and the logistics sector has become prominent as a fast-growing segment. Including the flow of information, logistics includes an extensive range of activities that contain the transformation and distribution of raw material sources of goods to the final market where the goods are consumed (Rodrigue, 2004). Research in China by Mody and Wang (1997) studied the various determinants of economic growth using data collected from 23 industrial sectors located in seven coastal regions of China. Demurger (2001) examined the relationship between infrastructure investment and economic growth over a 24-year province in China. Chu (2010) studied the

relationship between logistics and economic growth in 30 Chinese provinces for the period between 1998 and 2007. Hu et al. (2016) analyzed the relationship between investment logistics infrastructure and regional economic growth for the central China region. In this study, the relationship between logistics investment, value added logistics and gross domestic product (GDP) was investigated by time series analysis method. Banerjee et al. (2012) studied access to the impact of transportation networks on economic growth for various regions of China in the period between 1995 and 2010 where the results of the analysis showed that proximity to transportation networks had a moderate, significant, and causative impact on GDP.

Research Methods

This research uses a combined approach, namely the first (first) stage is quantitative research and the second stage is interpretive qualitative research. The type and design of the research phase I was carried out by means of observational analysis with cross-sectional and survey designs. This type of research phase aims to identify problems and develop a model for implementing the Indonesian Sea Toll service policy in NTT Province. The structural analysis model in this study is formed by 7 latent variables with each manifest/observed/indicator variable, namely: (1) exogenous latent variable of policy content (IK) with 4 manifest/observed/indicator variables; (2) latent variable exogenous policy context (KK) with 4 manifest/observed/indicator variables; (3) the endogenous latent variable for Sea Toll service policy activities (AKPTL) with 4 manifest/observed/indicator variables; (4) endogenous latent variable availability of basic necessities (KBKP) with 3 manifest/observed/indicator variables; (5) the endogenous latent variable of regional economic growth (PER) with 3 manifest/observed/indicator variables;

(6) the endogenous latent variable decreasing the price disparity of goods (PDHB) with 3

manifest/observed/indicator variables; (7) the endogenous latent variable of increasing public welfare (PKM) with 4 manifest/observed/indicator variables. Phase II research is aninterpretive qualitative research that aims to describe and understand the phenomena studied. This model was analyzed using structural equation model analysis/SEM with AMOS software version-24. Narimawati and Sarwono (2007) explain that the advantages of SEM compared to multiple regression include 1) allowing for more flexible assumptions; 2) use of confirmatory factor analysis to reduce measurement errors by having multiple indicators in one latent variable; 3) attractiveness of the graphical modeling interface to make it easier for users to read the output of the analysis results; 4)

the possibility of testing the model as a whole rather than the coefficients individually; 5) the ability to test models using multiple dependent variables; 6) the ability to model the intermediate variables; 7) the ability to model the error term fault; 8) the ability to test the coefficients outside between several groups of subjects; 9) the ability to handle difficult data, such as time series data with autocorrelation errors, abnormal data, and incomplete data.

Analysis Of Results And Discussion

Results of Interviews with Stake Holders regarding the issue of the Sea Toll Category of Ship Operators represented by Operator KM Kendagha 1 (PT. Pelni). Broadly speaking, the informant only conveyed how the shipping activities of PT. Pelni has the obligation of sea toll routes. The Regulator Category is represented by the Head of UPP

Class II Larantuka and UPP Class III Lewoleba as port operators in the research area. As well as several local entrepreneurs in each district. This interview focused on several previous studies conducted by Iksan (2017) which examined the impact of increasing port facilities on prices and production costs becoming cheaper and Setiawan (2018) in his research results stated that the cause of high logistics costs in Indonesia was uncompetitive infrastructure performance. . The results of the evaluation of the results of the interview on the implementation of the sea Toll policy (the 5 largest) can be explained in the following two tables, the first is related to the concept of the design of the sea toll route.

Table 1 *Design Of The Sea Toll Route*

No.	Nodes	Reference
1	Local Government Engagement	14
2	Inter-Ministry & Institutional Engagement	12
3	the stacking field Rehabilitation	11
4	Private Involvement	6
5	Ministry of Trade Regulation	5

Source: processed data (2022)

In table 1 it is explained that in compiling the design of the sea Toll route, it must involve the Regional Government, synchronization between ministries and institutions as well as the readiness of the stacking field. While the second is the problem of implementing the sea toll.

Tabel 2 *The Problems of Sea Toll*

No.	Nodes	Reference
1	Infrastructure development	20
2	Port Problem/barrier	15
3	Stakeholders Coordination	13
4	Readiness and duration of loading and unloading activities	9
5	Ship Suitability	4

Source: processed data (2022)

In table 2, it is explained that the biggest problems of the sea Toll are infrastructure development, port readiness constraints during bad weather and stakeholders coordination.

1.   *Structural Equation Model of Respondents*

2.   *Goodnes of Fit Test*

Based on the Chi-square analysis criteria, the model may be categorized as a suitable model if the chi-square probability level is 0.05. For the analysis of the probability level of 0.005, the model matrix is no different from the sample covariance matrix, therefore these two analytical models are suitable. The results of the analysis show that the goodness of fit (GFI) indicator of the model is 0.948. Usually, the GFI value is in the range between zero and one (0 GFI 1) and is categorized as a suitable model if the GFI value is

0.90. Another AFM indicator is the root mean square residual (RMR). The RMR is actually the square root of the difference between the residuals of the sample covariance

matrix and the hypothetical or estimated covariance matrix. If RMR is 0.05, then the model is a suitable model. In addition to AFM, to find out or measure the fit of the model is the Incremental Fit Measure (IFM) with three indicators including the Normed Fit Index (NFI), Incremental Fit Index (IFI), and Comparative Index (CFI) along with established rules of thumb. In this study, we can know the value of the AFM test from the two analytical models calculated because each analysis has a Directional Influence. The rule ofthumb for the NFI value must be 0.90 before the model can be categorized as a good fit model.

Table 3 Chi-square Test

Indicators	Absolute Fit Measure			Incremental Fit Measure		
	Chi-square	Goodness of Fit Index`	Root Mean square Residual (RMR)	Normed Fit Index (NFI)	Incremental Fit Index (IFI)	Comparative Fit Index (CFI)
Coeficient	58	-	-	-	-	-
Degree of freedom	263	-	-	-	-	-
Probability Level	0,005	-	-	-	-	-
Deflaut Model	-	0,948	0,048	0,927	0,932	0,970
Saturated Model	-	1,000	0,000	1,000	1,000	1,000
Independent Model	-	0,362	0,202	0,000	0,000	0,000

Source: processed data (2022)

Based on the goodness of fit test, it can be concluded that the model analysis is suitable for further evaluation regarding the effect of 2 exogenous construct variables (policy content and policy context) and 5 endogenous construct variables (policy activities of Sea Toll services, availability of basic goods, regional economic growth and decrease in the disparity of goods prices) on the construct variable of increasing people's welfare. However, because all construct variables (exogenous and endogenous) are predicted by manifest variables, it must be ensured that all manifest variables are good predictors of construct variables examining the standard loading factor (SLF) as a convergent validity tool in Confirmatory Factor Analysis (CFA). . Good convergent validity is indicated by a high SLF value, namely by the rule of thumb for SLF values 0.5

1.   *Reliability Test*

Reliability is a measure of the internal consistency of the indicators of a variable that shows the degree to which each indicator indicates a general variable. There are two ways that can be used, namely composite (construct) reliability and variance extracted. The cut-off value of construct reliability is minimal or at least 0.70 while the cut-off value for variance extracted is at least 0.50 (Ghozali and Yuswaningrum, 2005).

$$PKM = \frac{(3,560)^2}{(3,560)^2 + 0,794} = 0,94$$

$$PER = \frac{(2,401)^2}{(2,401)^2 + 1,057} = 0,85$$

$$PDHB = \frac{(2,553)^2}{(2,553)^2 + 0,816} = 0,89$$

$$KBKP = \frac{(3,346)^2}{(3,346)^2 + -1,039} = 1,10$$

$$AKPTL = \frac{(3,676)^2}{(3,676)^2 + 0,564} = 0,96$$

$$KK = \frac{(3,607)^2}{(3,607)^2 + 0,710} = 0,95$$

2.   *Reliability Test*

The calculation of Construct Reliability above shows that all dimensions and indicators of the research construct have a standard load factor value of > 0.70 so that all of them have good validity.

3.   *Variance Extracted*

Variance Extract is a measure of the amount of variance captured by the construct isrelated to the amount of variance due to measurement error.

4.   *Variance Extracted Test*

$$PDHB = \frac{2,184}{2,184 + 0,816} = 0,73 \qquad PER = \frac{1,943}{1,943 + 1,057} = 0,65 \qquad KBKP = \frac{4,039}{4,039 + -1,039} = 1,35$$

$$AKPTL = \frac{3,436}{3,436 + 0,564} = 0,86 \qquad KK = \frac{3,290}{3,290 + 0,710} = 0,82 \qquad IK = \frac{3,313}{3,313 + 0,687} = 0,83$$

The Variance Extracted test above shows that all dimensions and indicators of the researchconstruct have a value of 0.50, so all of them have good validity.

5.   *Structural Equation Model Analysis /SEM*

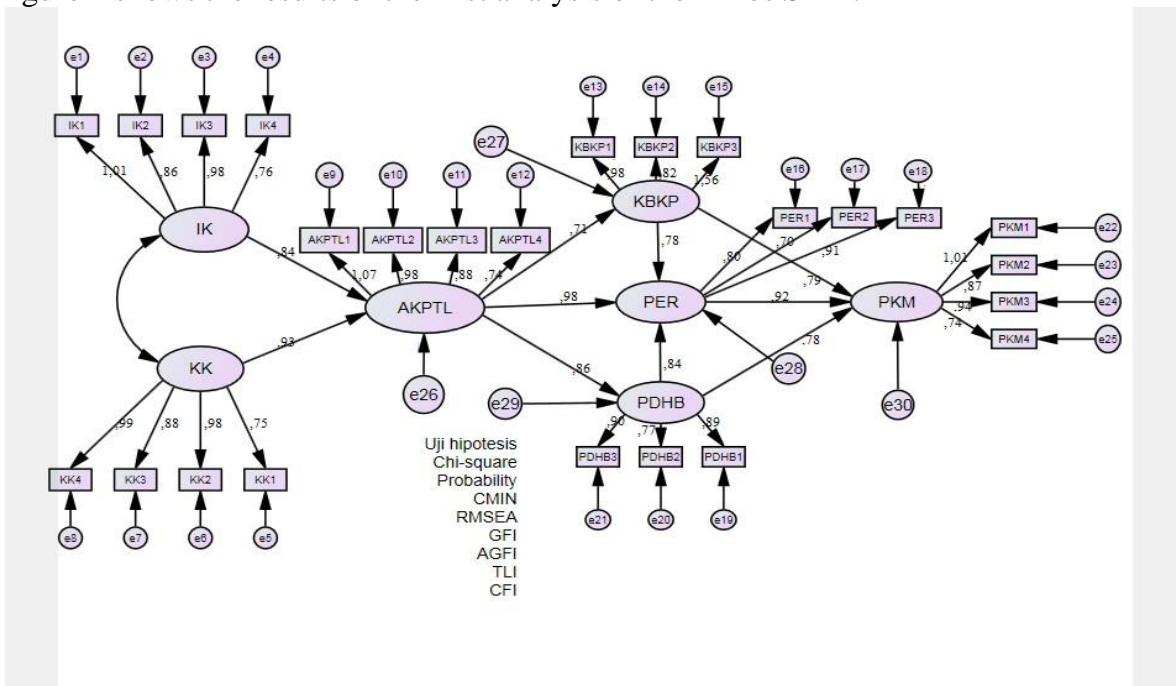Figure 1 shows the results of the first analysis of the Amos SEM.

Figure 1 *Hierarki SEM*
Source: processed data (2022)

The results of the SEM analysis provide clarity that in improving the welfare of the community, six variables that have an indirect influence on the welfare of the community

are the content of the policy, and the policy context through the Sea Toll service policy activities with standard regression coefficients of 0.84; 0.93. As for the sea toll service policy activities, it has an indirect effect on improving people's welfare through the availability of basic necessities, regional economic growth, and decreasing the disparity of goods prices with standard regression coefficients of 0.71; 0.98; 0.86. the direct influence of the availability of basic necessities, regional economic growth, and the decrease in price disparity of goods on the improvement of people's welfare with standard regression coefficients of 0.78; 0.79; and 0.92. All of these standardized coefficients indicate that if we can improve the clarity and consistency of goals or targets, allocation of supporting resources, coordination between implementing agencies, policy implementation, availability and distribution of superior products, product quality, and employment to around 1% through regional economic growth. then the impact on improving the welfare of the community is about 0.92%

6.   *Hyphotesis Test*
The results of this test are based on processing research data based on the Standardized Regression Weight table with the requirements, namely > 1.96 for CR, and < 0.05 for p whose results are as follows:

Table 4 *Standardized Regression Weight Confirmatory Factor Analysis*

Regression Weights	CR	P
IK ☐ AKPTL	11,83	0,0000
KK ☐ AKPTL	9,18	0,0000
AKPTL ☐KBKP	10,02	0,0000
AKPTL ☐PDHB	6,79	0,0000
AKPTL ☐PER	11,13	0,0000
KBKP ☐ PER	9,6	0,0000
PDHB ☐ PER	10,066	0,0000
KBKP ☐ PKM	12,94	0,0000
PER ☐ PKM	12,90	0,0000
PDHB ☐ PKM	11,66	0,0000

1.   Hypothesis 1: Policy content has a positive effect on Sea Toll Policy Activities, H1 is acceptable.
2.   Hypothesis 2: Policy context has a positive effect on Sea Toll Policy Activities, H2 is acceptable.
3.   Hypothesis 3: Sea Toll Policy Activities have a positive effect on the Availability of Basic Needs, H3 is acceptable.
4.   Hypothesis 4: Sea Toll Policy Activities have a positive effect on the Decline in the Disparity of Goods Prices, H4 is acceptable.
5.   Hypothesis 5: Sea Toll Policy Activities have a positive effect on Regional Economic Growth, H5 is acceptable.
6.   Hypothesis 6: Availability of Basic Needs Goods has a positive effect on Regional Economic Growth, H6 is acceptable.
7.   Hypothesis 7: Decrease in price disparity of goods has a positive effect on Regional Economic Growth, H7 is acceptable
8.   Hypothesis 8: Availability of staple goods has a positive effect on increasing community welfare, H8 is acceptable
9.   Hypothesis 9: Regional Economic Growth has a positive effect on Increasing Community Welfare, H9 is acceptable

10. Hypothesis 10: Decrease in price disparity of goods has a positive effect on increasingcommunity welfare, H10 is acceptable

By adopting the variables in the policy implementation model of Grindle (1980), and Sabatier and Mazmanian (1980), the research results strengthen the policy model studied by Grindle (1980), and Sabatier and Mazmanian

Conclusions And Recommendations

The conclusions from the results of this study are 1) The process and results of the implementation of the Sea Toll Policy with the aim or target namely the Implementation of Public Service Obligations for the Transportation of Goods from and to Remote, Outermost, and Border Disadvantaged Areas that have the greatest impact on Improving Community Welfare through Regional Economic Growth compared to Price Disparity and Availability of Basic Necessities. 2) In addition, there are several opinions and expectations from Stakeholders regarding the implementation of the Sea Toll policy, namely related to the Design of the Sea Toll Route which is closely related to the involvement of local governments, inter-ministerial involvement, Rehabilitation of stacking fields, private involvement and regulations of the Ministry of Trade. Some of the problems that often occur are infrastructure development, both at the port or port entrance access, constraints in the port, coordination between stakeholders, readiness, and duration of the loading and unloading process, and regional cultural factors. 3) The relationship between the policy of the Sea Toll Service on regional economic growth, decreasing price disparities, and improving the welfare of the people in the province of NTT is that the Policy Content and Policy Context have a positive effect on the Marine Toll Policy Activities. In addition, the Sea Toll Policy Activities have a positive effect on the Availability of Basic Needs Goods, Decrease in Price Disparity, and Regional Economic Growth. On the other hand, the Availability of Basic Necessities Goods and Decreasing Disparity of Prices have a positive effect on Regional Economic Growth. In the end,

Availability of Basic Needs, Regional Economic Growth, and Decreasing Disparities in Prices of Goods have a positive effect on Improving Community Welfare. 4) To obtain a model for implementing the Sea Toll policy in supporting regional economic growth, decreasing the disparity in the price of goods, and improving the welfare of the community, based on the results of interviews and statistical tests, the informants provide opinions, among others, need to pay attention to the level of clarity and consistency of the objectives and targets of the Sea Toll policy, coordination and synergy between the Central Government, Regional Governments, and Private Parties, improving main and supporting infrastructure, not only focusing on Regional Economic Growth but also on Availability ofBasic Needs Goods and Reducing Disparity of Prices which will have a positive effect on Regional Economic Growth and Improvement Public welfare.

Recommendations that can be given are 1) coordinating and synergizing between local governments, relevant ministries, and entrepreneurs in designing the Sea Toll Route,

2) rehabilitating port infrastructure, 3) Infrastructure development both at ports, regions, and road access, 4) improving the process system loading and unloading and suitability of ship type. 5) Review regulations at the regional government and the Ministry of Trade thathinder investment and trade in goods out of the region, especially abroad. 6) Evaluation ofthe implementation of the sea toll that has been running to get a solution to

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