

**7 YEARS OF DWELLING TIME POLICY
(Case Study at the Port of Tanjung Perak Surabaya)**

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ABSTRACT

This study aims to gather responses from stakeholders regarding the Dwelling Time policy that has been in place for seven years, hoping to find new evidence to reduce logistics costs. This study uses a qualitative approach with a Case Study approach by conducting interviews with stakeholders operating in the *Tanjung Perak* Port related to goods importation. As a result, this study is expected to formulate more concrete and effective recommendations for improving the loading and unloading processes at the port and reducing logistics costs, eventually supporting the improvement of Indonesia's economic growth. The study shows that implementing the Dwelling Time policy to reduce logistics costs does not provide the expected outcome. Instead, it results in higher logistics costs due to *PLP*. Thus, the government needs to evaluate future policies. Collaboration among related agencies, namely port operators and regulators, by not carrying out *PLP* if the *YOR* position does not reach 60-70% and the extended stay indicator is a maximum of 7 days is a solution the author can provide. The government is also expected to continually evaluate policies that have been implemented if they have been running for more than five years. With the discovery of new evidence related to Dwelling Time, the definition of the problem also changes, requiring new solutions or more adaptive policies related to these changes.

Keywords: *Dwelling Time, Import, Logistics, Policy*

A. INTRODUCTION

As the center of export and import activities, ports play a vital role in bolstering a country's economic growth, including Indonesia (Puspasari et al., 2022; Zaki et al., 2022). However, the efficiency and effectiveness of these activities are often encumbered by lengthy processes, one of which is the dwelling time (Ricardianto et al., 2018; Safira et al., 2023). Dwelling time is defined as the time difference between the arrival of a ship and when the container can exit the port facility (De Wibowo Muhammad Sidik et al., 2020; Irannezhad et al., 2019; Sunarmin et al., 2019). This process involves three stages: pre-clearance, customs

clearance, and post-clearance (Herusantoso & Saputra, 2020; Purwoko & Maulina, 2019). The pre-clearance stage involves unloading a container from the ship, handling legal documents for imported goods, and the customs clearance stage, which includes submission of import documents to customs and payment of import taxes. The final stage, post-clearance, involves removing goods from the storage yard to the importer's warehouse (Listiwati et al., 2022).

The problem of high dwelling time in Indonesia has been a major concern for the government, especially since 2015 when President Joko Widodo instructed improvements in the loading and unloading at various major ports. This arose due to the high logistics costs of imported goods caused by dwelling time. The statement by World Bank (2014) that Indonesia's Logistics Performance Index (*LPI*) is still lower than other ASEAN countries like Thailand, Vietnam, Malaysia, and Singapore underscores the urgency of improvements in this port process. The high dwelling time is associated with the need for more efficiency and effectiveness of customs and port infrastructure services (Puriningsih, 2022; Sudarsono, 2022). If not addressed, it could hamper international trade activities and suppress Indonesia's economic growth.

The first study focused on the role of customs in effectively implementing Dwelling Time in export-import activities, with *Tanjung Perak* Port as a case study (Adelia et al., 2023). The second study evaluated the influence of Dwelling Time on the efficiency of loading and unloading at *Tanjung Priok* Port, looking for factors causing the length of Dwelling Time and its impact (Safira et al., 2023). While the third study evaluated the effect of pre-clearance and post-clearance times on the total Dwelling Time at *JICT Tanjung Priok* Port using a multiple linear regression analysis method (Kusharyanto et al., 2020). The commonality of these three studies is their focus on Dwelling Time and how this time affects efficiency and logistics costs. All the research aims to find a solution to reduce Dwelling Time with the ultimate goal to cut back logistics costs and increase efficiency. However, the difference is that the first study emphasizes the role of customs in managing the time and efficiency of the loading and unloading process. The second study focuses on the contributing factors to the lengthy Dwelling Time. The third study centers on the impact of pre- and post-inspection times on the total dwell time. Meanwhile, the upcoming study is currently trying to understand stakeholder responses to Dwelling Time Policy that has been in place for seven years to get new evidence that could be used to reduce logistics costs.

Even though Dwelling Time has been extensively studied and its policy has been implemented for seven years in Indonesian ports, according to data and field realities, logistic costs and inefficiency issues still need to be lowered. This indicates a gap between theory and practice on the ground. Implementing an effective and efficient Dwelling Time policy should reduce logistic costs and increase the efficiency of cargo loading and unloading at ports. However, the facts show this goal has yet to be fully achieved. This gap creates serious issues affecting Indonesia's economic performance, especially related to the high logistic costs and relatively low port efficiency compared to other ASEAN countries. It also led to Indonesia's lower Logistics Performance Index (*LPI*) score. Therefore,

it is necessary to understand further what factors are causing this to happen and how various stakeholders respond to the implemented Dwelling Time policy. Thus, this research examines the question: What is the feedback from stakeholders regarding the Dwelling Time policy that has been implemented for seven years? Hoping to find new evidence to suppress logistic costs.

B. METHOD

In this study, the author employs a qualitative research approach aimed at exploring and understanding meaning from a group of individuals (Creswell, 2008), using a case study method (Yin, 2017) that consists of several stages, namely:

1. Problem identification: The problem to be researched is related to the answer to the question, "What is the opinion of stakeholders regarding the dwelling policy implemented at *Tanjung Perak* Port from 2016 until now?".
2. Data collection: This study uses primary and secondary data collected in March 2023
 - Primary data is obtained through field observations and semi-structured interviews with participants related to dwelling time or import loading and unloading activities. The main participants are determined through the purposive sampling of stakeholders who manage import containers at *Tanjung Perak* port, such as *PPJK*, *EMKL*, and Forwarding, with a minimum category of having been active for ten years, understanding the import procedure as a whole, and as direct practitioners in the field (conducting pre-clearance, customs clearance, post-clearance activities). Other participants include *PT. Terminal Petikemas Surabaya* and *PT. Terminal Teluk Lamong* as Operators and *PT. Pelindo III* and Customs as Regulators.
 - Secondary data comes from literature studies from reputable journals accessed through the Airlangga University campus library application using the string and boolean "dwelling time" AND Port AND Perak AND Priok AND Makassar AND Belawan, government reports, data from official or internal agency websites, field observations, and documentation.
3. Data analysis: The researcher will understand the narratives given by participants by identifying themes, structures, events, contexts, and personal experiences conveyed and connecting the narrative with previously identified themes. Subsequently, conducting data triangulation and seeking other supporting evidence for the theme conveyed.
4. Data presentation: Data will be presented in narrative images and accompanied by tables, charts, or diagrams to demonstrate the research findings more easily understood.

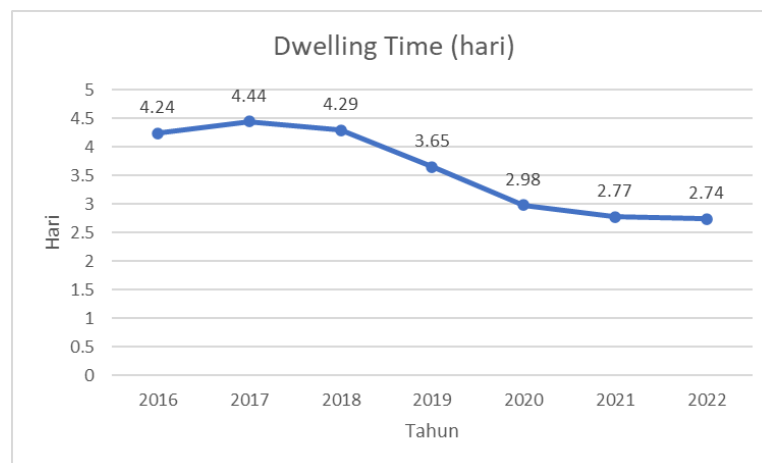
This article will consist of several parts. The first part is the discussion divided following the stages from the rationality model (Simon, 1977) in public policy analysis, namely, Problem Identification, influencing factors, root problems, problem impacts, policy alternatives, policy choices taken, considerations for policy choices, and requirements for the policy to be

implemented as well as discussion. The second part is Suggestions and Recommendations, and the last is the conclusion.

C. RESULTS AND DISCUSSION

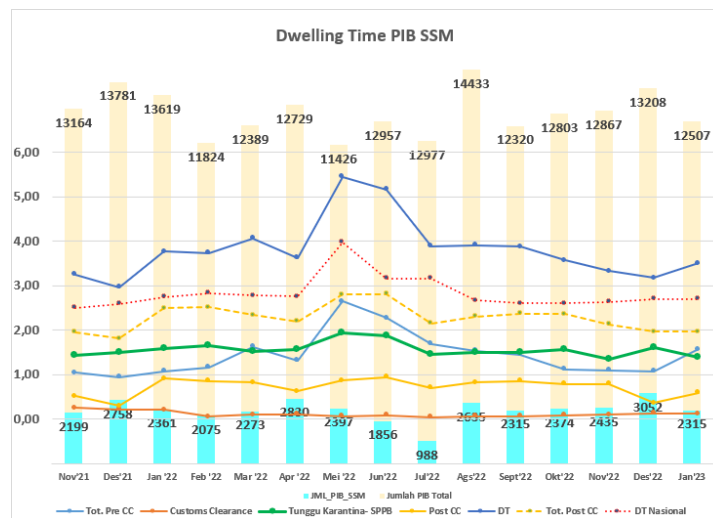
Problem Identification

This research determined a sample of 20 stakeholder interviews according to the set criteria. After conducting interviews with 12 participants, the narratives delivered tended to be similar or no new information emerged, so the researcher decided not to continue the interview with the following participants as it was considered to have reached saturation (Ma et al., 2021; Wang et al., 2021; You et al., 2020). The result of the interviews with all participants stated that the loading and unloading process at the *Tg. Perak* Port (PT. et al. and *PT. Terminal Teluk Lamong*) runs faster than a few years ago. However, a new problem arose: the increase in logistics costs due to the Transfer of Pile Location (*PLP*) or overbridge. *PLP* is the transfer of the piling location of imported goods from the original temporary storage place (*TPS*) (line 1) to the destination *TPS* (line 2) within one supervision area of the Customs Office (Direktori Peraturan DJBC, 2020). There are 2 Line 1 *TPS* and 12 Line 2 *TPS* in Perak port. Another complaint conveyed by participants was the absence of notification related to containers affected by *PLP* by the Line 1 *TPS* party, as well as differences in tariffs at each Line 2 *TPS* due to different distances and pile locations. Secondary data indeed states that the dwelling time at Perak port from 2017 - 2022, as shown in Figure 1, has decreased on average to 2.74 days in 2022 with a maximum time limit of 3 days. This is due to improvements made by related agencies from the pre-clearance, customs clearance, and post-clearance stages, with details in Figure 2 taken from November 2021 - January 2023.



Source: (INSW, 2023)

Figure 1. Dwelling Time Chart at *Tg. Perak* and *Tg. Emas* Ports



Source: (DJBC, 2023)

Figure 2 Pre-clearance, Customs Clearance Graph

Factors causing the issue

This occurred due to the implementation of the *Peraturan No. 116 Tahun 2016* by the Ministry of Transportation (Ministry of Transportation, 2016a) regarding the Transfer of Goods Overstaying Time (Long Stay), which sets the maximum stacking time for goods at *TPS Line 1* as three days since the goods were stacked in the stacking field. Moreover, it applies to Indonesia's five principal ports: *Belawan Port Medan*, *Tanjung Priok Port Jakarta*, *Tanjung Perak Port Surabaya*, and *Makassar Port*. If the time limit is exceeded, *TPS Line 1* must apply for a *PLP* to the Customs so the goods can be moved to *TPS Line 2*. If analyzed further, the actual drop in dwelling time appeared fictitious. Indeed, the dwelling time dropped rapidly, but not due to the effect of business process improvement or system. This policy seemed successful but needed to be (Howlett & Mukherjee, 2017).

Next, the need for more collaboration between stakeholder agencies in the port. *TPS Line 1* always applies for a *PLP* to Customs when a container is declared long stay to be moved to *TPS Line 2*, and the application is always approved. The Customs only reject the application if the container proposed for *PLP* already has an import goods notification number (*PIB*). In this case, the importer has submitted documents for customs clearance processing. Although in fact, the Customs have the authority not to grant the *PLP* proposed by the *TPS Line 1* if the position of the Yard Occupation Ratio (*YOR*) has yet reached 60% (Howlett & Mukherjee, 2017). However, this was not implemented, even though the *YOR* figures for *TPS Line 1* from January 2021 – December 2022 were maintained below 40% (Table 1). This is also not in line with the Strategic Plan of the *Tanjung Perak Main Port Authority Office* for 2020-2024, where they set a target *YOR* realization for *TPS Line 1* for 2020-2024 at 60% (Kepala Otoritas, 2021).

Table 1 Yard Occupation Ratio Numbers of *PT. Terminal Petikemas Surabaya (TPS)* and *PT. Terminal Teluk Lamong (TTL)* in 2021 and 2022

YOR	2021	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des	Average
	TTL	15.04	40.49	17.89	13.21	14.58	13.79	17.09	14.79	12.45	13.11	11.35	24.88	15.3
TPS	42.7	31.11	39.88	41.93	42.51	42.3	53.3	40.27	36.56	36.77	38.14	25.4	39.2	
YOR	2022	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des	
	TTL	41.78	30.58	23.46	24.7	28.36	17.98	23.52	27.08	22.07	19.36	16.3	22.59	22.9
TPS	32.51	36.52	34.49	35.89	47.5	41.84	37.59	40.17	34.67	36.36	33.31	31.93	34.23	

Source: (Kemenhub, 2023)

Another cause is the side impact of the implementation of the Ministry of Transportation Regulation Number 116 of 2016, which has resulted in an increase in the number of second-line *TPS*, from less than 5 in 2016 to now 12 *TPS* (Ministry of Transportation, 2016b). The growth of second-line *TPS* creates new jobs, so there may be necessary to keep this ecosystem running by consistently relocating containers to these 12 locations. Every policy itself never has a neutral effect; some parties benefit, and those that lose (Howlett & Mukherjee, 2017).

The root of the Problem

The root of the Problem that the author can conclude based on the primary and secondary data analysis is the failure to evaluate policies. In 2016, the government established the policy by considering the problems that exist at the *Tanjung Priok* port in Jakarta, where the loading and unloading process was delayed due to several factors: port infrastructure (Facilities, yard capacity, quality of human resources) that did not meet international standards so the Yard Occupancy Rate (*YOR*) always exceeded 80%, no synchronization between ministries related to import permit licensing for restricted goods, leading to a highly long pre-clearance process because it was manually done, ineffective and inefficient bureaucratic administration during customs clearance, and many unscrupulous charges. After five years journey, the evidence has changed where. Many new ports, including dry ports and bonded logistic centers, have been built as support. The digitalization due to the COVID-19 pandemic has led to synchronization between ministries related to import licensing being fully executed through the *INSW* application; customs clearance now stands at 0.2-0.5 days, the establishment of the Red and White Task Force in 2019 has decreased or nearly eliminated unscrupulous fees, and the implementation of the automated system during post-clearance. Thus, it is only fitting that the government should respond with more adaptive policies in response to the changes in evidence.

Impacts of problems

Initially, the Dwelling time figure was lowered to make logistics costs cheaper. However, with this regulation, stakeholders are evidently forced to incur extra costs, as shown in Figure 3, which include loading and unloading costs, trucking, and storage. The absence of clear regulations causes the entrepreneurs of *TPS* line 2 to apply different rates, which tend to be more expensive than those at *TPS* line 1, making stakeholders feel disadvantaged.

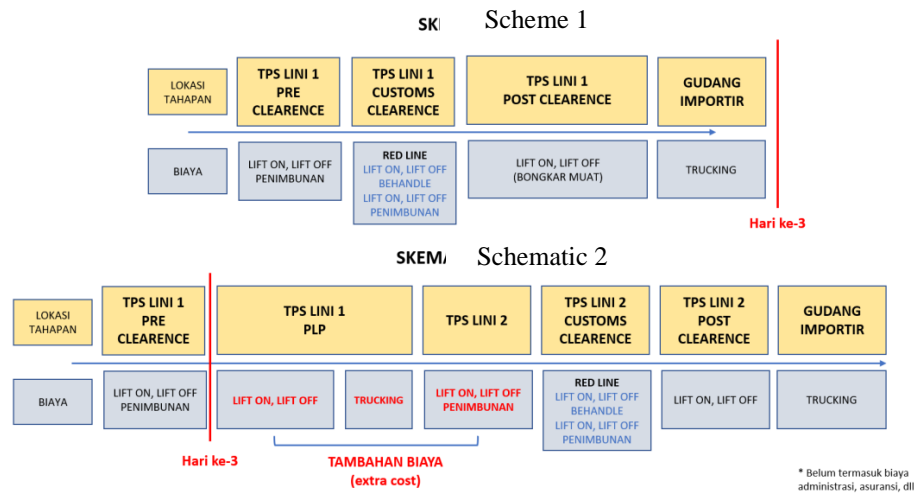


Figure 3 Flow of Movement of Imported Containers

Alternative Policies/Strategies

Based on the data above, several alternatives are explicitly offered for Tanjung Perak Port's conditions and could be adopted nationally to provide solutions for the existing problems. First, revise the regulations and long stay indicators from 3 days to 7 days since, as per interviews with stakeholders, understand that 7 days would be adequate for processing permits during pre clearance and warehouse circulation due to limited storage capacity. Meanwhile, investing in port infrastructure, such as expanding the yard and upgrading unloading facilities to keep the YOR below 70%, accommodates long-stay containers in a seven days scheme. Second, a collaboration between relevant agencies (Callens, 2022; French et al., 2022) where neither the port operator nor regulator will perform PLP if YOR has yet to reach 60-70 % and the maximum long stay indicator is 7 days. Third, collaboration between agencies, organza, importer organizations, forwarding, and logistics equalizes relocation and stacking rates at TPS line 2 to prevent one party from being disadvantaged or benefited and minimize the game of unscrupulous individuals to manipulate the PLP placement location choice.

Best Solution Alternative

According to the author, the best solution is collaborating between the port operator and regulator by not executing the PLP if the YOR hasn't reached 60-70% and/or the maximum long stay indicator is seven days.

The Rationale for an Alternative Solution

This solution seems more feasible and flexible. Firstly, it involves internal government actors: TPS line 1 as Operator and Pelindo III, Customs, and Port Authority as regulators. Secondly, although this policy could grant more discretion to the port operator, this can be managed by customs regulations and supported by strategic plans of the port authority aiming for the YOR target of 60%. This is more manageable and quicker than revising the central regulation to

change the long stay category from 3 to 7 days, as it would require comprehensive discussions and a considerably longer time for evaluation and reformulation of policies on a national scale. The first option may take time to be implemented as it would require a change from the central ministry with extensive discussions and a long time for evaluation and policy reformulation due to its national scale impact. Secondly, the new ecosystem formed might disrupt the operational activities of *TPS* line 2 as containers would no longer be entering from *TPS* line 1. As for the third option, since it involves a lot of parties, i.e., operator, regulator, and private sector, they might be reluctant to collaborate (Holden et al., 2023; Lawuyi, 2023) due to the difference in interests between the government agencies and the private sector. The private sector will likely seek ways to maintain their profits in the business. Thus, it might be challenging to reach an agreement - a "game theory" (Dixit & Nalebuff, 2010).

What are the conditions for that alternative to be implemented

The requirements for implementing the alternative are a challenging task, even if only a few parties are involved and it is still within the human resource sector. This is because there may still be a sectoral ego that arises. Therefore, several requirements must be fulfilled to realize the solution to the problem.

1. Effective and visionary leadership is required to direct and collaborate among relevant agencies to achieve goals. A leader who can identify and understand the interests of various parties and build support for proposed policies will facilitate policy implementation (Crosby & Bryson, 2005).
2. Effective communication and collaboration between government agencies, regulators, and operators will ensure that all parties have the same understanding of the policy and its objectives. It also opens wider communication with the private sector, such as *Apindo*, *Ginsi*, and *Alfi*, to get policy input (Ansell & Gash, 2008).
3. Transparency and accountability from all parties by opening all data related to *YOR*, container numbers, and other data that can be accessed together so that decision-making can be done wisely based on data and evidence. This can increase credibility and maintain trust and support from each party (Lampoltshammer et al., 2023; Witvliet et al., 2022).
4. Active participation from all parties to ensure good understanding and support for the policy to be taken so as to reach a consensus (Berliner et al., 2022).

Fulfilling all these elements will allow the alternative policy to be implemented well without any obstacles because it is accompanied by goodwill, exemplary leadership, and support from all parties in the government and stakeholders.

Discussion

In the last seven years, the government's dwelling time policy has had an excellent report, with several improvements from the pre-clearance, customs clearance, and post-clearance sides. Some of the improvements made are:

1. Pre Clearance: Application of *INATRADE*, Implementation of Single Submission System (*SSM*) Licensing, and Simplification of Import Regulations

2. Customs Clearance: Establishment of Integrated Customs Service Area (*KPPT*), Single Submission System (*SSM*) or one-stop service system, Establishment of Bonded Logistics Center (*PLB*)
3. Post-clearance: Application of Auto-gate system, Establishment of National Logistics Ecosystem (*NLE*), Implementation of Integrated Cargo Release System (*I-Care System*)
4. Other policy regulations

These policies and programs effectively reduced the national dwelling time to 2-3 days (DJBC, 2023). However, this did not correlate with a decrease in logistics costs because logistics costs did not get cheaper but became more expensive with the addition of the Transfer of Custody Location (*PLP*) fee. The decrease in dwelling time also did not have much effect on the Logistics Performance Index (*LPI*) of Indonesia in 2023 at 3.00 which decreased 0.15 points compared to 2018, still stagnant from 2014-2023 in the range of 2.94 - 3.15, lagging behind Singapore, Malaysia, Thailand, Philippines, and Vietnam as shown in Graph 3 (World Bank, 2023).

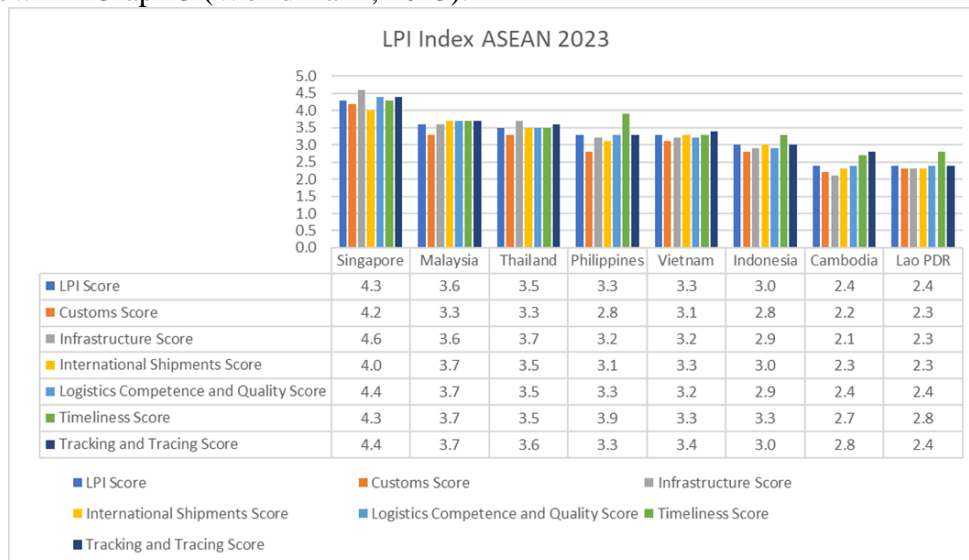


Figure 4 ASEAN Logistics Performance Index (*LPI*) scores for 2023
Source: (World Bank, 2023)

This provides new evidence related to dwelling time, necessitating modifications to regulations or other policies that can suppress logistics costs and improve the Logistics Performance Index. Further research is expected to find the ideal composition (equilibrium) between dwelling time and resulting logistics costs, thus making it easier for government agencies to make further policies related to dwelling time. The limitation of this study is that the case study was conducted at the *Tg. Perak* Surabaya Port, where the total *PLP* per month is only 7% of the total container imports (DJBC, 2023), there are still four other ports that have different characteristics, it is expected that the next author can provide a more comprehensive case picture in other places, and the sample participant collection was done with a different method. Hence, it produces a completely other picture to be presented.

This research provides new empirical evidence on the impact of a seven-year dwelling time policy at *Tanjung Perak* Port Surabaya. The research findings suggest that reducing dwelling time does not always impact decreasing logistics costs and improving the Logistics Performance Index (*LPI*) score. This finding contributes to the theoretical knowledge that the dominance of dwelling time policy to reduce logistics costs needs to be reconsidered and should involve other influential factors. In addition, this study also creates a new understanding that each port has unique characteristics and requires tailored solutions to improve its logistics efficiency and performance.

The theoretical implication of this research is that it provides a new understanding that the implementation of the dwelling time policy should be accompanied by other synergistic policies to suppress logistics costs, such as improving licensing systems, optimizing the use of technology in the clearance system, and other policies that assist the rotation of goods in the port. Moreover, this study breaks down the old assumption that reducing dwelling time automatically decreases logistics costs and improves logistics performance. This research also opens room for further studies seeking a balanced formula between dwelling time and logistics costs in other ports with differing characteristics.

D. CONCLUSION

Implementing the dwelling time policy to reduce logistic costs has not produced the expected outcome but has instead resulted in rising logistic costs. Therefore, an evaluation of the policy should be conducted by the government—collaboration between agencies concerned with imported goods at *Tg. Perak* Harbor is key to this issue. With the policy of not carrying out the *PLP* unless the *YOR* has reached 60-70% or the extended stay indicator is a maximum of 7 days, it is hoped that the logistic costs to be paid by stakeholders can be reduced. Therefore, it is expected that the government will always evaluate policies that have been implemented for more than five years to see if the evidence has changed or not because, with the change of evidence, the definition of the problem also changes, thus requiring a new solution or a more adaptive policy to the changes.

Based on research findings, there are several suggestions and recommendations for policy instrument use (Howlett, 2018) to suppress logistic costs without sacrificing the predetermined dwelling time. These include:

1. Optimizing the synergy between stakeholders at the ports, namely the Ministry of Finance, Ministry of Trade, Ministry of Industry, Ministry of Home Affairs, and the Governor to handle issues related to evidence changes in enforced policies through the revision of the *Inpres No. 5 Tahun 2020* (Mandatory Instrument)(Central government, 2020).
2. Optimizing the National Logistics Ecosystem, which is still in trial at ten major ports in Indonesia, with unsatisfactory results due to the low Logistics Performance Index (*LPI*) in 2023, it is necessary to establish law as the legal umbrella for inter-agency cooperation in the execution of this program (Compulsory Instrument).

3. Accurately identifying problems with complete data, involving stakeholders such as service users, business and logistic associations, and academicians so that formulated policies do not generate new problems. The current policy, which is yet to impact as Indonesia's *LPI* stagnates internationally, needs to be re-evaluated (Voluntary Instrument).
4. Moving towards creating an integrated *PLP* system where the state-owned enterprises only transport from *TPS* line 1 to *TPS* line 2. It can provide special facilities like fuel subsidies, toll tariffs, and electricity transport. With this, relocation costs can be minimized as much as possible (Mixed Instruments).
5. The government needs to evaluate future policies. Cooperation between related agencies, namely port operators and regulators, by not implementing *PLP* if the *YOR* position does not reach 60-70%, and the extended stay indicator of a maximum of 7 days is a solution the author can provide. The government is also expected to continue to evaluate policies that have been running for more than five years. In finding new evidence about Dwelling Time, the problem definition also changes, requiring a new solution or a more adaptive policy related to that change.

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