

ANALYSIS OF FINANCIAL PERFORMANCE OF STATE OWNED SEAPORT COMPANIES FOR THE PERIOD BEFORE AND AFTER MARINE TOLL IMPLEMENTATION DURING 2011 – 2018

Ostinasia Tindaon
Wiwiek Mardawiyah Daryanto

ABSTRACT

Although in the last eight years, Indonesia has been able to record positive economic growth, but the Government understands that there is still development imbalance in each region in Indonesia which is reflected in inequality of Gross Development Products in each region, the quality of the Human Development Index (HDI), and the centralization of the population in Java due to the Indonesian economy is still concentrated in the Western area of Indonesia. In addition to facing the problem of economic inequality in its regions, Indonesia also faces the challenge of economic globalization. Connectivity is the key in responding to the challenges of economic globalization. The government implements the Marine Toll Program as an effort to optimize Indonesia's marine and improve the Indonesian economy. The purpose of the marine toll program is to strengthen Indonesia's identity as a maritime nation which will bring impact to reduce national logistics costs and increase the competitiveness of national products by balancing the amount of cargo/commodity transportation between the front and inner regions. The purpose of this research is to analyze the health level of financial performance of SOE seaport companies: Pelindo I, Pelindo II, Pelindo III and Pelindo IV for the period of before and after the implementation of the Marine Toll Program during 2011 – 2018 using the financial analysis based on the Decree of the BUMN Minister No.KEP-100/MBU/2002 and to evaluate whether there is any significant difference in the performance of the sea port companies for the period of before and after the implementation of the Marine Toll Program. Paired t-test was conducted by doing comparison of the financial performance before the implementation and after the implementation of the Marine Toll Program. According to the paired t-test result of the four companies' financial performance, there is the significant difference for the TATO (Total Asset Turnover) ratio between the period of before and after the implementation of the Marine Toll Program.

Keywords: financial ratio, financial performance, seaport company, Marine Toll, Paired t-test

I. INTRODUCTION

Indonesia's economic structure in the year 2018 is still dominated by the investment in Java Island which contributes to GDP by 58.48% (Badan Pusat Statistik, 2019). Nation wise, there are imbalances between region, namely, resources, income, demographics of unemployment, employment opportunities, regional growth, migration levels, differences in demand, structural and social changes, polarization, and so on (Nurhadi, 2012). It is known widely that there is imbalance between the areas of East and West Indonesia; in Java Island and outside Java (Rustiadi et al., 2011).

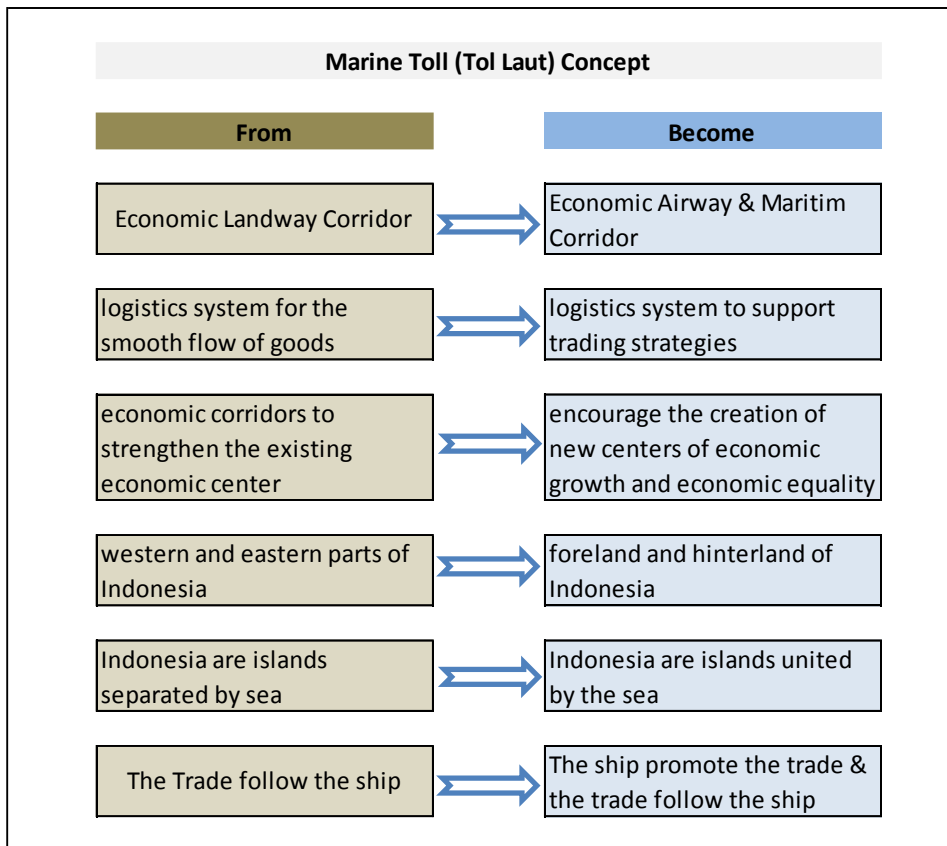
Approaches to macroeconomic growth tend to ignore the occurrence of large regional development gaps. Designing the programs that can overcome disparities between regions is necessary (Goschin, 2014). The government tends to achieve more balanced development through the decentralization of government and followed by direct cooperation between the central and regional government (Vickerman, 2015).

The role of infrastructure is very important in supporting economic improvement. Transportation is a supporting and stimulating factor for the economic development. For this reason, in order to support good economic development, it is important to reach the balance between supply and demand for transportation services (Nasution, 2004). The development of the transportation sector is expected to be a sustainable development (Brotodewo, 2010).

Marine Toll Concept in Indonesia

The Marine Toll Program is a manifestation of President Joko Widodo's *Nawacita* program policy. In the *Nawacita* program, the first priority is to strengthen Indonesia's identity as a maritime nation and to build Indonesia from the periphery by strengthening regions and villages within the framework of a unitary state. The President's program implementation was then outlined in the Rencana Pembangunan Jangka Menengah 2015-2019 or Medium Term Development Plan 2015 – 2019 and started the implementation in 2015 (Putra, 2019).

The Marine toll concept is a solution for a vast archipelago such as Indonesia to reduce national logistics costs and increase the competitiveness of national products in a way balance the amount of cargo/commodity transport between the front area and the inner region. Marine Toll elements include: a) reliable ports; b) the adequacy of the cargo of goods; c) inland effective access; d) shipping industry; and e) regular and scheduled shipping. (Badan Perencanaan Pembangunan Nasional, 2014)



Source: Badan Perencanaan Pembangunan Nasional, 2014

Figure 1. Marine Toll Concept

Figure 1 summarizes the impact of Marine Toll implementation. The table on the left shows the conditions before Marine Toll implementation and it is expected that Marine Toll will give the impact as shown on the right table. The Indonesian economy which previously was still relied on the land transportation for economic flows then will be transformed into the airway and maritime-based economic infrastructure. In point 2, the logistics system that was previously created to facilitate the smooth flow of goods will be then transformed into a logistic system which is oriented to support trading strategies. Furthermore, infrastructure that was previously focused on strengthening the existing economic centers will be transformed into the infrastructure that supports the growth of new economic centers and the equal economic. Previously, Indonesia was seen as being divided into two areas, namely West and East and it was hoped with the implementation of Marine Toll, the maritime area will be divided foreland and hinterland. Indonesia will be no longer seen as an archipelagic country which divided by the sea but then will be seen as country united by the sea. The last point shows the conditions of trade where with the implementation of Marine Tolls, the shipping lanes will be not only followed by the trade but also promote the trade.

Indonesia is an archipelagic country which consists of about 17,504 islands extending 5,150 kilometers from East to West, between the Indian and Pacific Ocean in Southeast Asia. Indonesia has the third largest coastline of 54,720 km. The government understands the important role of sea transportation in Indonesia and then announced the Marine Toll Concept. Sea transportation consists of shipping route and terminal/port system. Indonesia as the largest archipelagic country has Alur Laut Kepulauan Indonesia (ALKI) or The Indonesian Archipelago Sea Channel which pivots North-South and is acknowledged by international sea law through UNCLOS 1982 while Indonesia's domestic shipping route pivots in East-West direction.

Other main component in sea transportation is the terminal or sea port. A transport terminal is the set of inter modal infrastructures which taking advantage of a geographical location, advising the level of accessibility not only to local but also to regional and global.

Indonesia has four companies that manage seaports in Indonesia. These four companies are divided based on their working areas, namely Pelindo I, II, III, and IV which engage in port services; the duties, authorities and responsibilities of these companies are in logistics, specifically in the management and development of ports in Indonesia. The Pelindos' business fields cover the supply and operation of harbor for shipping traffic and berths; facilities for loading and unloading of goods and animals; warehousing and piling facilities; terminals for container; terminals for passenger ship services; supporting facilities such as electricity, drinking water and telephone in the working area of the port; land for industry, buildings and public office space; and freight Services as well as traffic centers

Marine Toll development commitment in the period of 2015 – 2019 was consisted of the construction of 24 new ports, construction of crossing ports in 60 locations, procurement of 26 pioneer cargo vessels and 50 units of ferries, and the procurement of 2 livestock vessels and 500 units of peoples ships.

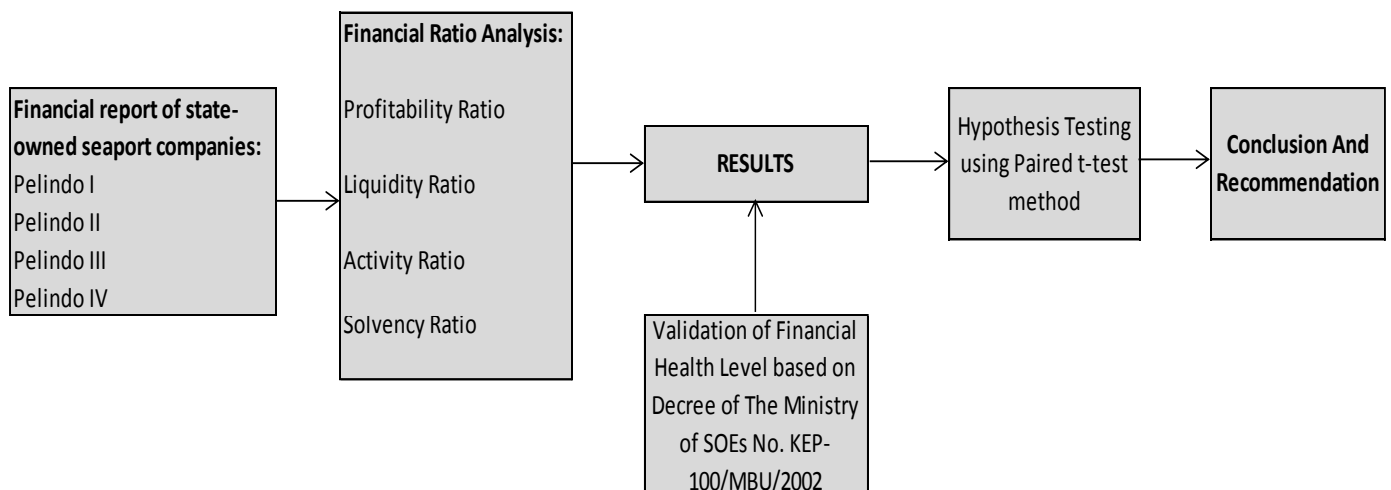
II. PREVIOUS RESEARCH ON FINANCIAL PERFORMANCE

Financial ratio analysis of a company is used to identify the performance of a firm; to understand the weaknesses and strength of the company. Financial analysis is useful in evaluating a company’s performance and the trend of the performance. In brief, an analyst can translate the data into financial metrics and using it as supporting data for decision making. Analysts pursue to answer such questions as: How has the company successfully performed, relative to its financial performance and relative to its competitors? And how likely is the company to perform in the future? (Henry et al: 2011). There were a large number of studies on different industries around the world regarding the financial performance analysis (Tugas, 2012; J. Pavithra, 2018; Al-Nasser, 2014; Daryanto, 2018; Nurfadilah, 2018). Hence, there are still limited resources which examine the financial performance of seaport companies in Indonesia.

III. METHODOLOGY

IV.

This study was conducted to see the performance of the Indonesian seaport company as the state-owned company. Assessment of company performance is completed by analyzing the financial statements of these companies based on accounting principles so that evaluation can then be made with reference to the Decree of The Minister of State Owned Enterprise Kep-100/MBU/2002.



Source: Author, 2020

Figure 2. Conceptual framework

This research uses descriptive and quantitative analysis. The analysis of financial performance of the four state-owned seaport companies will be based on the Decree of the Ministry of SOEs No. KEP-100/MBU/2002. The Decree is used to determine whether the financial performance is healthy, less healthy or unhealthy. The paired t-test is used to figure out the significant difference for the period of before (2011 – 2014) and after Marine Toll implementation (2015 – 2018). This method has been used in the previous researches (Nurfadilah, 2018; and Hestiwati, 2018). This research is using secondary data which is publicly available. Author obtained the financial data from the published audited financial statements of the companies.

The Decree of The Ministry of the State-Owned Enterprises (SOE)

The Decree of The Ministry of SOEs No. KEP-100/MBU/2002 is a stipulation of the assessment of the health level/performance of state-owned enterprises in Indonesia. According to the decree, the assessment of health level as stipulated in the decree is mandatory for all state-owned enterprises in Indonesia. State-owned enterprise is an enterprise with the shares owned by the government at least of 51%. There are two categories of state-owned enterprises; non-financial enterprises and financial enterprises. In terms of non-financial enterprises, the categories are divided in two sectors; non-infrastructure and infrastructure. According to the Decree, seaport companies are categorized as infrastructure companies.

According to Decree of The Ministry of SOEs No. KEP-100/MBU/2002, the financial analysis uses eight financial ratios, they are; Return on Investment (ROI) and Return on Equity (ROE) as the measurement for profitability ratio, Cash and Current Ratio as the measurement for liquidity ratio, Collection Period, Inventory and Total Asset Turnover as the measurement for activity ratio, and Total Equity to Total Asset as the measurement for solvency ratio. The assessment is to determine the total weight score based on the result of the eight financial ratios of the financial performance of the companies. The weight score for financial performances are as depicted in Table 1.

Table 1. List of Weight Score for Infrastructure Company

Indicators	Weight Score
Return on Equity (ROE)	15
Return on Investment (ROI)	10
Cash Ratio	3
Current Ratio	4
Collection Period	4
Inventory Turn Over	4
Total Asset Turn Over (TATO)	4
Total Equity to Total Asset (Solvency)	6
Total Weight Score	50

Source: The Decree of the Ministry of SOEs No. KEP-100/MBU/2002

According to the decree, the level of SOEs health is classified into category as stipulated on Table 2.

Table 2. Assessment of Health Level Based on Category

Category	Rating	Total Score
Healthy	AAA	Total Score > 95
	AA	80 < Total Score ≤ 95
	A	65 < Total Score ≤ 80
Less Healthy	BBB	50 < Total Score ≤ 65
	BB	40 < Total Score ≤ 50
	B	30 < Total Score ≤ 40
Unhealthy	CCC	20 < Total Score ≤ 30
	CC	10 < Total Score ≤ 20
	C	Total Score ≤ 10

Source: Decree of the Ministry of SOEs No. KEP-100/MBU/2002

The study also uses the pair t-test method to find out whether there is significant difference of the companies' financial performance for the period before and after the Marine Toll implementation. There are two types of t-test, they are; the independent t-test and the paired t-test. Independent t-test is when the comparison of two groups of data are independent of each other. Paired t-test is when the two groups of data compared on each other are dependent (Kim; 2015).

The first step is to state the hypothesis being tested. The null hypothesis is a statement about the value of a population parameter developed for the purpose of testing numerical evidence. Often, the null hypothesis begin by starting, "There is no significant difference between...". The alternate hypothesis is the statement that is accepted if the sample data provide sufficient evidence that the null hypothesis is false. (Lind, et.al, 2018). This study is using two hypotheses; they are the null hypothesis and the alternative hypothesis. The null hypothesis assumes that there is no difference between the true mean (μ) and the comparison value (m_0) while the alternative hypothesis assumes that there is difference between the true mean (μ) and the comparison value (m_0) (Statistics solutions, 2019).

One of the Marine Toll program is the construction and development of seaport as the place for loading and unloading goods in Indonesia whereas managed by four state-owned companies, namely Pelabuhan Indonesia (Pelindo) I - IV. The construction and development of the seaports will directly impact the business of Pelindo I - IV and inevitably will affect the financial performance of these companies. Therefore, to find out the significant difference of financial performance of seaport companies before and after the Marine Toll implementation, this study uses the paired t-test. The alternative hypotheses used in paired t-tests are as depicted in Table 3.

Table 3.Hypotheses

Ratio	Hypothesis 0 (H0)	Hypothesis 1 (H1)
ROE	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
ROI	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
Cash Ratio	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
Current Ratio	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
Collection Periods	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
Inventory Turnover	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
TATO	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation
TETA	There is no significant different in the period of before and after Marine Toll implementation	There is significant different in the period of before and after Marine Toll implementation

V. RESULT AND DISCUSSION

A. Profitability Ratio Analysis

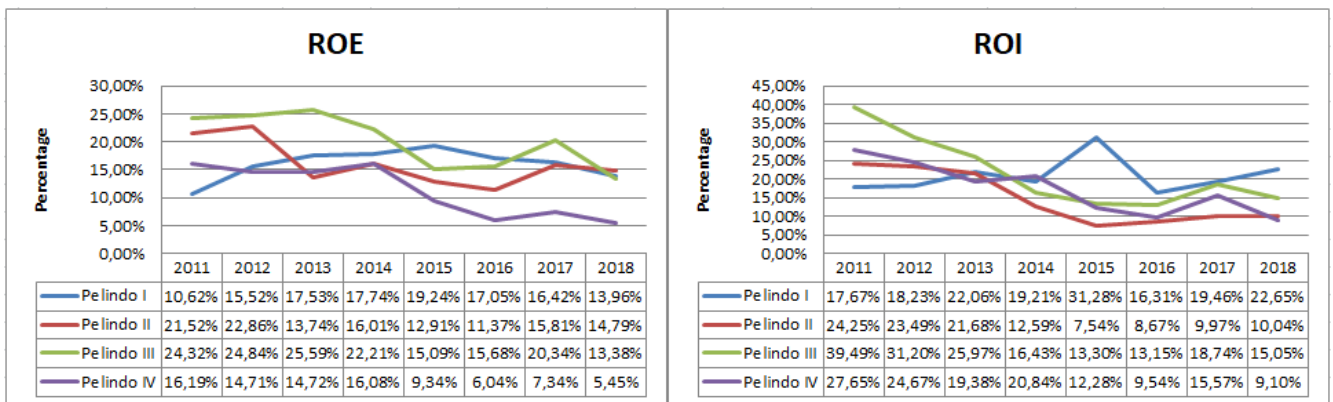


Figure 3. Profitability Ratio

Profitability Ratio consists of ROE and ROI. For ROE, the four companies showed fluctuated trend but slightly downward from 2011 to 2018. Amongst the four seaport companies, Pelindo IV shows the lowest ROE. For ROI Ratio, downward trend is shown for all companies from 2011 to 2018, but Pelindo I in 2015, showed the fluctuated ROI compared to other companies which impacted by the significant increment of EBITDA Overall, the four seaport companies booked positive profitability with different trend for every company. Despite the fluctuated and downward trend for profitability ratio is shown in figure 3, none of the seaport companies showed significant difference of the ROE and ROI for the period before and after Marine Toll implementation.

B. Liquidity Ratio Analysis

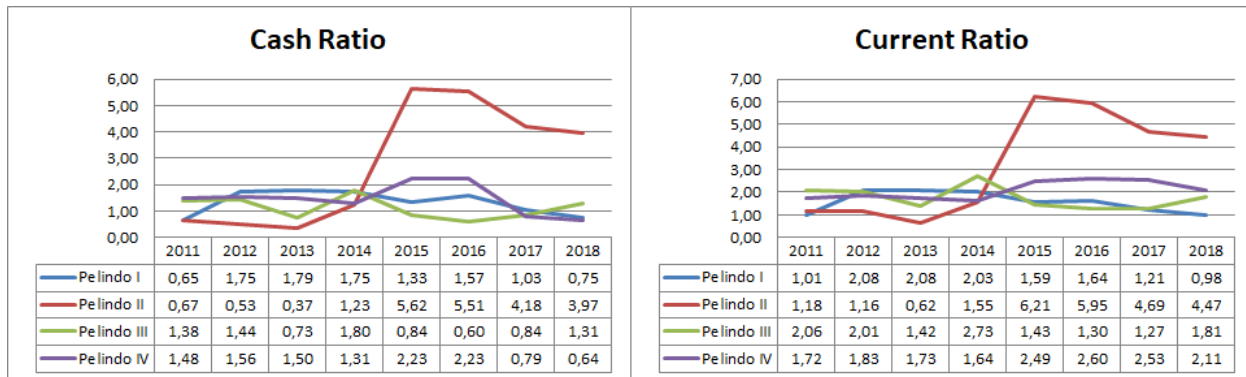


Figure 4. Liquidity Ratio

Liquidity ratio analysis consists of two ratio, they are Cash Ratio and Current Ratio. Amongst the seaport companies, Pelindo II recorded the significant fluctuated cash ratio and current ratio. For Cash Ratio, the four companies show the fluctuated trend. Pelindo I, and Pelindo IV shows almost the same trend which is constant from 2011 to 2014 and slightly increased in 2015 and 2016 but then decreased in 2017. Pelindo II showed the most significant fluctuation started in 2014 which mainly derived from the increment of time deposit. Pelindo III recorded fluctuated cash ratio from 2011 to 2014 and then showed declining trend of cash ratio up to 2017. In 2018, the cash ratio is booked higher than the past three years due to the significant increment in time deposit. For current ratio, the significant fluctuation is also shown from Pelindo II, while other companies show the same trend as in cash ratio. Hence, the fluctuated of current ratio for the four seaport companies was still maintained in average higher than 1.0 which indicates that every company was able to fulfill its short term obligation. In brief, the significant difference of the liquidity ratio for the period before and after Marine Toll implementation is only showed in Pelindo II.

C. Activity Ratio Analysis

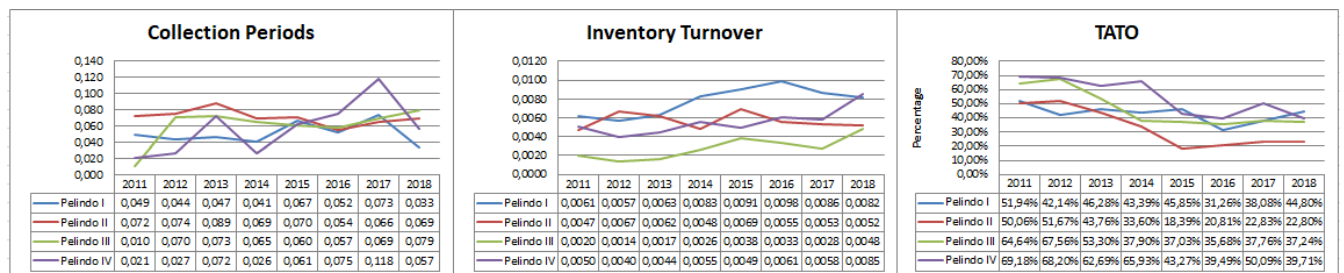


Figure 5. Activity Ratio

Activity ratio consists of Collection Periods, Inventory Turnover and Total Asset Turnover (TATO) ratio as shown in figure 5. The collection periods shows the fluctuated trend form 2011 to 2018. However, the collection periods for all the companies shows that they collected the revenue mainly in cash which resulted the collection period is less than one day. There is no significant difference in collection strategy of the four seaport companies for the period before and after the Marine Toll implementation. For inventory turnover, it is important to understand that the seaport company industry is in service industry which indicates that the company generally holds small amount of inventory. Inventory recorded at the four companies is spare part, fuel and lubrication, and medicine. Therefore, despite the figure 5 shows that there is a fluctuated and upward trend in the inventory turnover for the four companies, the average was still lower than one day. For TATO ratio, the four companies show the downward trend from 2011 to 2018. The declining of TATO ratio was significantly showed in the period of 2015 – 2018.

D. Solvency Ratio Analysis

TETA (Total Equity to Total Asset) Ratio represents firm’s ability to fulfill its long term obligation which shows that the higher TETA ratio, the less leverage the company has, which means that the larger portion of its assets are owned by the company. Figure 5 shows the downward trend from the period 2011 to 2018. Pelindo I recorded the lowest TETA ratio in 2018 which impacted by the decreasing equity in 2018. Pelindo II shows the downward trend since 2014 until 2017 which impacted by the significant increment in total asset in 2014 but the TETA ratio is slowly increased by 2018 due to the significant increasing equity in 2018. While Pelindo III, TETA ratio was recorded with downward trend since 2014 due to the significant increasing in total assets that is not in line with an the increasing in total equity. Pelindo IV booked the highest TETA ratio amongst the seaport companies in Indonesia and started the downward trend in 2017.

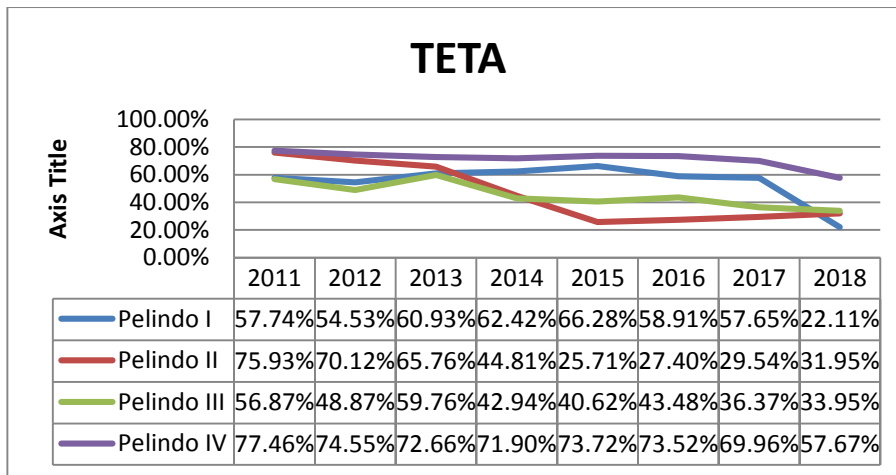


Figure 6.Solvency Ratio

VI. Validation Testing

The validation the health level of seaport companies in Indonesia is using The Decree of the Ministry of SOE No.KEP-100/MBU/2002 referring to the financial ratio analysis above. Total score and total weight are determined using the table score as specified in the Decrees. The results are showed as follows:

Table 4.Financial Assessment of Pelindo I

Indicators	Score															
	2011		2012		2013		2014		2015		2016		2017		2018	
ROE	10,62%	10,5	15,52%	15,0	17,53%	15,0	17,74%	15,0	19,24%	15,0	17,05%	15,0	16,42%	15,0	29,19%	15,0
ROI	17,67%	9,0	18,23%	10,0	22,06%	10,0	19,21%	10,0	31,28%	10,0	16,31%	9,0	19,46%	10,0	22,65%	10,0
Cash Ratio	65,5%	3,0	175,1%	3,0	179,2%	3,0	175,0%	3,0	132,7%	3,0	157,3%	3,0	102,7%	3,0	74,7%	3,0
Current Ratio	100,7%	2,0	207,7%	3,0	208,2%	3,0	203,3%	3,0	158,5%	3,0	294,2%	3,0	121,2%	2,5	98,0%	1,5
Collection Periods	0,0493	4,0	0,0440	4,0	0,0466	4,0	0,0408	4,0	0,0666	4,0	0,0520	4,0	0,0729	4,0	0,0328	4,0
Inventory Turnover	0,0061	4,0	0,0057	4,0	0,0063	4,0	0,0083	4,0	0,0091	4,0	0,0098	4,0	0,0086	4,0	0,0082	4,0
Total Asset Turnover	51,94%	1,5	42,14%	1,5	46,28%	2,5	43,39%	1,5	45,85%	2,5	31,26%	1,0	38,08%	3,5	44,80%	3,5
Total Equity to Total Asset	57,74%	5,0	54,53%	5,0	60,93%	4,5	62,42%	4,5	66,28%	4,5	58,91%	5,0	57,65%	5,0	22,11%	4,0
Total Score		39,0		45,5		46,0		45,0		46,0		44,0		47,0		45,0

Pelindo I						
Period	Years	Total Score	Total Weight	Value	Level	Category
Before	2011	39	78,00	65<TS<=80	A	Healthy
	2012	45,5	91,00	80<TS<=95	AA	Healthy
	2013	46	92,00	80<TS<=95	AA	Healthy
	2014	45	90,00	80<TS<=95	AA	Healthy
After	2015	46	92,00	80<TS<=95	AA	Healthy
	2016	44	88,00	80<TS<=95	AA	Healthy
	2017	47	94,00	80<TS<=95	AA	Healthy
	2018	45	90,00	80<TS<=95	AA	Healthy

Source: Annual Report of Pelindo I, calculated by Ms. Excel

Table 4 represents the financial health level for Pelindo I by comparing the result of the period before and after Marine Toll implementation. Pelindo I recorded the lowest level of health in 2011. The health level for the period before Marine Toll implementation shows slightly compare to the period after Marine Toll implementation. Though, there is no substantial difference in the total weight score of the company between the period of before and after Marine Toll implementation. In brief, the company's financial performance was recorded healthy before and after Marine Toll implementation.

Table 5. Financial Assessment of Pelindo II

Indicators	Score															
	2011		2012		2013		2014		2015		2016		2017		2018	
ROE	21,52%	15,0	22,86%	15,0	13,74%	13,5	16,01%	15,0	12,91%	12,0	11,37%	12,0	15,81%	15,0	14,79%	13,5
ROI	24,25%	10,0	23,49%	10,0	21,68%	10,0	12,59%	7,0	7,54%	4,0	8,67%	4,0	9,97%	5,0	10,04%	5,0
Cash Ratio	66,7%	3,0	52,9%	3,0	37,2%	3,0	123,3%	3,0	562,0%	3,0	551,3%	3,0	418,0%	3,0	397,5%	3,0
Current Ratio	117,9%	2,5	116,2%	2,5	61,8%	0,0	155,1%	3,0	621,0%	3,0	595,0%	3,0	468,8%	3,0	446,6%	3,0
Collection Periods	0,0722	4,0	0,0744	4,0	0,0885	4,0	0,0687	4,0	0,0705	4,0	0,0543	4,0	0,0656	4,0	0,0691	4,0
Inventory Turnover	0,0047	4,0	0,0067	4,0	0,0062	4,0	0,0048	4,0	0,0069	4,0	0,0055	4,0	0,0053	4,0	0,0052	4,0
Total Asset Turnover	50,06%	1,5	51,67%	2,0	43,76%	1,5	33,60%	1,0	18,39%	0,5	20,81%	3,0	22,83%	2,5	22,80%	1,0
Total Equity to Total Asset	75,93%	4,3	70,12%	4,3	65,76%	4,5	44,81%	5,5	25,71%	4,0	27,40%	4,0	29,54%	4,0	31,95%	6,0
Total Score		44,3		44,8		40,5		42,5		34,5		37,0		40,5		39,5

Pelindo II						
Period	Years	Total Score	Total Weight	Value	Level	Category
Before	2011	44,25	88,50	80<TS<=95	AA	Healthy
	2012	44,75	89,50	80<TS<=95	AA	Healthy
	2013	40,50	81,00	80<TS<=95	AA	Healthy
	2014	42,50	85,00	80<TS<=95	AA	Healthy
After	2015	34,50	69,00	65<TS<=80	A	Healthy
	2016	37,00	74,00	65<TS<=80	A	Healthy
	2017	40,50	81,00	80<TS<=95	AA	Healthy
	2018	39,50	79,00	65<TS<=80	A	Healthy

Source: Annual Report of Pelindo II, calculated by Ms. Excel

The financial performance health level for Pelindo II is presented in Table 5. In the period after the implementation, Pelindo II recorded lower score which resulted decreasing Health level from AA to A. The decreasing score after Marine Toll implementation period was derived from the lower profitability ratio and TETA ratio. Despite the lower total score, Pelindo II is still categorized healthy according to the Decree.

Table 6. Financial Assessment of Pelindo III

Indicators	Score															
	2011		2012		2013		2014		2015		2016		2017		2018	
ROE	24,32%	15,0	24,84%	15,0	25,59%	15,0	22,21%	15,0	15,09%	15,0	15,68%	15,0	20,34%	15,0	13,38%	13,5
ROI	39,49%	10,0	31,20%	10,0	25,97%	10,0	16,43%	9,0	13,30%	8,0	13,15%	8,0	18,74%	10,0	15,05%	9,0
Cash Ratio	138,1%	3,0	144,4%	3,0	73,2%	3,0	179,6%	3,0	84,1%	3,0	60,3%	3,0	83,6%	3,0	130,7%	3,0
Current Ratio	205,8%	3,0	201,0%	3,0	141,9%	3,0	273,5%	3,0	143,0%	3,0	130,2%	3,0	126,8%	3,0	180,8%	3,0
Collection Periods	0,0104	4,0	0,0702	4,0	0,0728	4,0	0,0653	4,0	0,0599	4,0	0,0575	4,0	0,0686	4,0	0,0795	4,0
Inventory Turnover	0,0020	4,0	0,0014	4,0	0,0017	4,0	0,0026	4,0	0,0038	4,0	0,0033	4,0	0,0028	4,0	0,0048	4,0
Total Asset Turnover	64,64%	2,0	67,56%	2,0	53,30%	1,5	37,90%	1,0	37,03%	1,0	35,68%	1,0	37,76%	1,0	37,24%	1,0
Total Equity to Total Asset	56,87%	5,0	48,87%	5,5	59,76%	5,0	42,94%	5,5	40,62%	5,5	43,48%	5,5	36,37%	6,0	33,95%	6,0
Total Score		46,0		46,5		45,5		44,5		43,5		43,5		46,0		43,5

Pelindo III						
Period	Years	Total Score	Total Weight	Value	Level	Category
Before	2011	46,00	92,00	80<TS<=95	AA	Healthy
	2012	46,50	93,00	80<TS<=95	AA	Healthy
	2013	45,50	91,00	80<TS<=95	AA	Healthy
	2014	44,50	89,00	80<TS<=95	AA	Healthy
After	2015	43,50	87,00	80<TS<=95	AA	Healthy
	2016	43,50	87,00	80<TS<=95	AA	Healthy
	2017	46,00	92,00	80<TS<=95	AA	Healthy
	2018	43,50	87,00	80<TS<=95	AA	Healthy

The level of financial performance health for Pelindo III is as depicted in Table 6 which shows the stable healthy level at AA in the period before and after Marine Toll implementation. However, looking further to the score, Pelindo III recorded slightly lower total score since 2015 which resulted from the lower profitability ratio and TETA ratio.

Table 7. Financial Assessment of Pelindo IV

Indicators	Score															
	2011		2012		2013		2014		2015		2016		2017		2018	
ROE	16,19%	15,0	14,71%	13,5	14,72%	13,5	16,08%	15,0	9,34%	10,5	6,04%	6,0	7,34%	7,5	5,45%	6,0
ROI	27,65%	10,0	24,67%	10,0	19,38%	10,0	20,84%	10,0	12,28%	7,0	9,54%	5,0	15,57%	9,0	9,10%	5,0
Cash Ratio	148,0%	3,0	156,2%	3,0	149,9%	3,0	131,0%	3,0	222,9%	3,0	222,6%	3,0	78,7%	3,0	63,7%	3,0
Current Ratio	172,1%	3,0	183,1%	3,0	173,4%	3,0	164,2%	3,0	248,6%	3,0	260,4%	3,0	253,1%	3,0	211,2%	3,0
Collection Periods	0,0210	4,0	0,0268	4,0	0,0725	4,0	0,0259	4,0	0,0614	4,0	0,0745	4,0	0,1184	4,0	0,0569	4,0
Inventory Turnover	0,0050	4,0	0,0040	4,0	0,0044	4,0	0,0055	4,0	0,0049	4,0	0,0061	4,0	0,0058	4,0	0,0085	4,0
Total Asset Turnover	69,18%	2,0	68,20%	2,0	62,69%	2,0	65,93%	2,5	43,27%	1,5	39,49%	1,0	50,09%	1,5	39,71%	1,0
Total Equity to Total Asset	77,46%	4,3	74,55%	4,3	72,66%	4,3	71,90%	4,3	73,72%	4,3	73,52%	4,3	69,96%	4,5	57,67%	5,0
Total Score		45,3		43,8		43,8		45,8		37,3		30,3		36,5		31,0

Pelindo IV						
Period	Years	Total Score	Total Weight	Value	Level	Category
Before	2011	45,30	90,60	80<TS<=95	AA	Healthy
	2012	43,75	87,50	80<TS<=95	AA	Healthy
	2013	43,75	87,50	80<TS<=95	AA	Healthy
	2014	45,75	91,50	80<TS<=95	AA	Healthy
After	2015	37,25	74,50	65<TS<=80	A	Healthy
	2016	30,25	60,50	50<TS<=65	BBB	Less Healthy
	2017	36,50	73,00	65<TS<=80	A	Healthy
	2018	31,00	62,00	50<TS<=65	BBB	Less Healthy

The level of financial health for Pelindo IV is as shown in Table 7. Changes in the soundness of Pelindo IV's financial performance have been seen since the implementation period of Marine Toll. In the period before implementation, Pelindo IV recorded the health level of AA but after implementation, there is a significant decrease which is to record the financial health level to be Less Healthy. The decrease in health level after Marine Toll implementation is because Pelindo IV recorded a decrease in the ratio of ROE and ROI which is affected by the increase in assets that is not followed by an increase in company profit.

Hypothesis Testing

Table 8 shows the result of the paired sample t-test. Overall, only one hypothesis is accepted and seven hypotheses are rejected. The result revealed that TATO ratio has significant difference in the period before and after Marine Toll implementation.

Table 8. Hypotheses Testing Result

Ratio	Period	Mean	t stat	t table	Result
ROE	Before	18,39%	2,21638898	3,182446305	Reject the Hypothesis 1
	After	14,34%			
ROI	Before	22,80%	2,162197234	3,182446305	Reject the Hypothesis 1
	After	14,54%			
Cash Ratio	Before	1,25	-0,767564982	3,182446305	Reject the Hypothesis 1
	After	2,09			
Current Ratio	Before	1,68	-0,86200923	3,182446305	Reject the Hypothesis 1
	After	2,72			
Collection Periods	Before	0,0531	-1,227357583	3,182446305	Reject the Hypothesis 1
	After	0,0663			
Inventory Turnover	Before	0,0047	-3,091436189	3,182446305	Reject the Hypothesis 1
	After	0,0062			
TATO	Before	53,27%	4,331837004	3,182446305	Accept the Hypothesis 1
	After	35,32%			
TETA	Before	62,33%	2,258988822	3,182446305	Reject the Hypothesis 1
	After	46,80%			

VII. LIMITATION

This research is limited on the financial aspect of four state-owned seaport companies in Indonesia for the period of 2011 – 2018 refer to the Decree of Ministry of SOEs No.KEP-100/MBU/2002. Other aspect of four state-owned seaport companies, i.e., the operational and business strategy is not discussed in this study. However, the author recommends further studies regarding other aspects. It is recommended to perform the research with other companies in sea transportation industry regarding Marine Toll implementation to develop more generalized result.

VIII. CONCLUSION AND RECOMMENDATION

The purpose of this research is to calculate and to analyze the financial performance of seaport companies in Indonesia based on the Decree of the Ministry of SOEs No.KEP-100/MBU/2002 about the assessment of SOEs financial health and to examine the significant difference of financial performance before and after Marine Toll implementation. Based on The Decree KEP-100 / MBU / 2002, the four companies for the period before Marine Toll were listed as healthy companies at AA. However, after the Marine Toll period, there were differences in health level for each company. Pelindo I and Pelindo III, stably recorded the Health level at AA. In Pelindo II, there were fluctuations in health conditions, the level Healthy AA was only recorded in 2017 but in 2015, 2016 and 2018, the Healthy level was at lower level which is A. Pelindo IV significantly showed changes in health level. In 2016 and 2018, Pelindo IV recorded the health level at BBB or categorized as Less Healthy and in 2015 and 2017, the health level was at A which categorized as Healthy but still lower compared to its healthy level before Marine Toll implementation. From the results of paired t-test, which showed significant differences before and after Marine Toll implementation only on the TATO (Total Asset Turnover) ratio, while for other ratios, there is no significant difference for the period before and after Marine Toll implementation. This research has expanded the beneficial of financial ratio analysis of seaport companies. Further studies are needed to find out what variables influenced the significant difference in TATO ratios for each company for the period before and after Marine Toll implementation. It is also recommended to carry out research with other companies in sea transportation industry regarding Marine Toll implementation to get wider insights that can be useful for the practitioners and academicians.

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Ostinasia Tindaon
Sekolah Bisnis dan Manajemen, Institut Teknologi Bandung
Email: ostinasia.tindaon@sbm-itb.ac.id

Wiwiek Mardawiyah Daryanto
Sekolah Tinggi Manajemen IPMI
Email: wiwiek.daryanto@ipmi.ac.id