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FINANCIAL PERFORMANCE ASSESMENT OF PT PELABUHAN INDONESIA II (PERSERO) IN COMPARISON WITH OTHER PORT COMPANIES LOCALLY AND GLOBALLY

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Abstract

Two-thirds of Indonesia is water. Thousands lined the island of Sabang to Merauke. As an archipelago, marine transportation plays an important role in the development of Indonesia. Supported by Indonesia's strategic location as it is situated at the crossroads of world trade routes. Therefore it required sea transportation system that is reliable and efficient. This can be achieved if the management of the navy, both shipping companies and port operator operates properly and professionally. This study focuses on the performance of the port operator, PT Pelabuhan Indonesia II, which has its head office in Jakarta. PT Indonesia II port operational areas of the company covers 10 provinces and it has three subsidiaries, affiliate one, two business units and one joint operation. The performance that discussed in this study focused on financial performance, since only a company with good financial performance that can perform the operations well too. This final will discuss the performance of PT Pe4labuhan Indonesia II and will also be compared with other companies in the same industry both locally and globally. The author will use some framework. In the end, come to the conclusion and recommendation for PT Pelabuhan Indonesia II to achieve better performance. As a conclusion, PT Pelabuhan Indonesia II almost rivaling global competition a leader in several assessment framework, with an optimal capital structure when the WACC minimized at 53% of debt and 47% of equity while the maximum of firm value of IDR 8,620,465,240,669.

Keywords: Archipelago, Port, Performance, Comparison, Financial statements analysis.

Introduction

Indonesia has some of the companies that manage ports in Indonesia. One of the companies that manage the port is PT Pelabuhan Indonesia II, which took place in Jakarta. PT Pelabuhan Indonesia II has operations in 10 provinces and manages 12 harbors a cultivated, namely: Port of TelukBayur in West Sumatra, port of Jambi in the Province of Jambi, Port of Palembang in the Province of South Sumatra, port of Bengkulu in the province of Bengkulu, Port of Panjang in the province of Lampung, port of Tanjung Pandan and port of Pangkal Balam in the Province of Bangka Belitung, port of Banten in the province of Banten, the Port of TanjungPriok and SundaKelapa in the province of DKI Jakarta, port of Cirebon in the province West Java and the Port of Pontianak in the province of West Kalimantan. In addition the company has three subsidiaries and two affiliated companies.

For several years PT Pelabuhan Indonesia II has been managing the ports in Indonesia. PT Pelabuhan Indonesia II is the last company that until now has been established by BUMN. PT Pelabuhan Indonesia II has the opportunity to develop other business activities related to existing business activities. Among others in the field of information services, managing cargo distribution center, and inland container depots and other fields, both managed by the company itself, as well as those carried out in cooperation with private businesses. Of the situation the writer wanted to know, how performance PT Pelabuhan Indonesia II so far?

The author wants to analyze the performance of PT Pelabuhan Indonesia II compared with other port companies in Indonesia and global competition.

1. How does the performance of PT Pelabuhan Indonesia II compare to other port companies in Indonesia?
2. How does the performance PT Pelabuhan Indonesia II compared with other global port companies in the world?
3. What is the recommendation to PT Pelabuhan Indonesia II in order to improve their performance?

Theoretical Foiundations

Financial Statement Analysis

Financial statement analysis is a process, which examines past and current financial data for the purpose of evaluating performance and estimating future risks and potential. There are three basic components accounting statement in financial analysis, it included balance sheet, income statement, and statement of cash flow.

Balance Sheet

The balance sheet will present a summary statement of the company's financial position at a given point in time

Income Statement

Revenue is defined as inflows of entity from delivering or producing goods, services, or other activities that constitute ongoing major or central operations. And expense is defined as outflows from delivering or producing goods, services, or carrying out other activities that constitute ongoing major and central operations.

Statement of Cash Flow

Cash flow data also explain the changes in consecutive per balance sheets and supplement the information provided by the income statement.

A. Financial Ratio Trend Analysis

The trend analysis is used to estimate the company's financial position's growth and company's past performance from the several indicators that related to the operational and market activity. The trend will describe the peroformance of the firm based on the time series period. To analyze the performance trend of the company, Compound Annual Growth Rate (CAGR) methods calculated using financial ratio.

This can be written as follows:

$$\mathrm{CAGR}(t_0, t_n) = \left(\frac{V(t_n)}{V(t_0)}\right)^{\frac{1}{t_n - t_0}} - 1$$

Where,
V(tn) = ending value
V(t0) = beginning value
tn – t0 = number of years

Financial ratios can be divided for convenience into five basic categories, which are liquidity ratio, activity ratio, debt ratio, profitability ratio (revenue and return), and market ratio.

B. BUMN Financial Scoring

As the one of State-Owned Company, the regulation in the company will be regarded to the Decision Regulation of State-Owned produced by the Ministerial Decree BUMN Indonesia.

The assessments of BUMN companies are classified into:

TABLE I. BUMN ASSESSNENTS

HEALTHY, consisted of :	
AAA	TS ≥95
AA	80 < TS ≤ 95
A	65 < TS ≤ 80
LESS HEALHTY, consisted of :	
BBB	50 < TS ≤ 65
BB	40 < TS ≤ 50
B	30 < TS ≤ 40
LESS HEALTH, consisted of :	
C	20 <TS≤30
CC	10 <TS≤20
CCC	TS≤10

PT Pelabuhan Indoneisa II is classified as a non-financial service company that categorized in BUMN Infrastructure in the transportation field.

There are several indicators used in Decision of Ministry State-Owned Company (*Keputusan Menteri Badan Usaha Milik Negara) No. KEP-100/MBU/2002.*

TABLE II. BUMN FINANCIAL INDICATOR

Financial Indicators	**Score**
Return on Equity (ROE)	15
Return on Investment (ROI)	10

Cash Ratio	3
Current Ratio	4
Collection Periods	4
Inventory Turnover	4
Total Asset Turnover	4
Total Equity/Total Assets	6
TOTAL SCORE	**50**

C. Leverage

Leverage is a ratio used to measure a company's mix of operating costs, giving an idea of how changes in output will affect operating income. Fixed and variable costs are the two types of operating costs, depending on the company and the industry, the mix will differ.

Degree of Operating Leverage (DOL)

$$DOL = \frac{\%\ \text{Change in EBIT}}{\%\ \text{Change in Sales}}$$

Degree Of Financial Leverage (DFL)

$$DFL = \frac{\%\ \text{Change in EPS}}{\%\ \text{Change in EBIT}}$$

Degree Of Combined Leverage (DCL)

$$DCL = \frac{\%\ \text{Change in EPS}}{\%\ \text{Change in Sales}} = DOL * DFL$$

D. Capital Structure

The company capital consists of two components, which are debt capital and equity capital. Debt capital from the long-term liabilities, which is company lend from the bondholders.

Cost of Debt

Cost of Debt is the money that company pays from their decision of raising capital through leveraging. Cost of debt each company describes the company's ability to doing the payment. The formula for cost of debt after tax is:

$$ri = rd \times (1 – T)$$

Where,
rd = Cost of debt
T = Company Tax

TABLE III. INDONESIA ADJUSTED MARKET INTEREST RATE

Bond Rating	Interest Coverage Ratio	Indonesia Market Interest Rate
AAA	(>12,5)	6.4%
AA	9,5 – 12,5	6.9%
A+	7,5 – 9,5	7.05%
A	6 – 7,5	7.15%
A-	4,5 – 6	7.4%
BBB	4 – 4,5	8.25%
BB+	3,5 – 4	9.5%
BB	3 – 3,5	10.5%
B+	2,5 – 3	11.25%
B	2 – 2,5	11.75%
B-	1,5 – 2	12.5%
CC	0,8 – 1,25	14.5%
C	0,5 – 0,8	15.25%
D	(< 0,5)	16.25%

Cost of Equity

Issuing equity either proffered stock or common stock both make company pay interest in form of dividend to the shareholders it is called cost of equity.

Bottom up beta theory use for calculating beta for private company.

The leverage beta could be found with this calculation

$$\beta 1= \beta u \times [1 + (1 – Tax) (\text{Debt to equity company})]$$

CAPM is the method that describes the relationship between required return and the nondiversifiable risk of the firm as measured by the beta coefficient. The calculation for CAPM model is

$$rs = Rf + [b \times (rm – Rf)]$$

where,
Rf = risk-free rate of return
b = beta
rm = market return, return on the market portofolio of assets

Weighted Average Cost of Capital (WACC)

$$WACC = \frac{E}{V} \times Re + \frac{D}{V} \times Rdx\,(1 - Tc)$$

Where,
Re = cost of equity
Rd = cost of debt
E = market value of the firm's equity
D = market value of the firm's debt
V = E + D
E/V = percentage of financing that is equity
D/V = percentage of financing that is debt
Tc = corporate tax rate

Firm Value

$$\text{Value of Firm} = EBIT \times \frac{(1 - Tax)}{WACC}$$

Where,
EBIT = earnings before interest and taxes
WACC = weighted average cost of capital

II. METHODOLOGY

In this final project, the main company to observe is PT Pelabuhan Indonesia II (Persero). The case study will be regarding to PT Pelabuhan Indonesia II (Persero). In doing this research paper, the author arrange several steps that will be described the process making on doing this final project.

- Problem Identification
- Literature Review
- Methodology
- Data Collection
- Data Analysis
- Conclusion

There are several steps that will be conducted by the author to analyze the financial performances of the company. The first step to valuating the performance of the company is calculating financial ratios and finding the Compound Annual Growth Rate (CAGR) of each company. The Annual Report of the company provides this calculation.
The second step, assess the performance by using BUMN Scoring methods that usually a common assessment framework in Indonesia. Then author will continue do the measurement using leverage and capital structure.
The comparison data between PT Pelabuhan Indonesia II (Persero) with other port company will be used to compare the performance from each company. From the scoring rating, the author will analyze which companies that have good financial performance.

Data Analysis

A. Trend Analysis

TABLE I. TREND ANALYSIS OF PT PELABUHAN INDONESIA II

	2007	**2008**	**2009**	**2010**	**2011**	**CAGR**
Liquidity						
Current Ratio	2.85	2.3	2.12	2.34	1.35	-13.89%
Quick Ratio	2.62	2.29	2.1	2.2	1.34	-12.56%
Activity						
Inventory Turnover	2.06	1.91	2.11	2.16	1.56	-5.47%
Average Collection Period (Days)	23.52	14.92	13.7	22	34.89	8.20%
Total Asset Turnover	37.52%	38.31%	35.48%	38.74%	48.41%	5.23%
Profitability						
Gross Profit Margin	29.93%	23.83%	32.98%	34.01%	24.59%	-3.85%
Operating Profit Margin	51.08%	52.42%	53.21%	48.86%	42.95%	-3.41%
Net Profit Margin	43.29%	42.61%	37.81%	41.69%	33.36%	-5.08%
Return						
Return on Asset (ROA)	15.66%	16.33%	13.42%	16.24%	16.16%	0.63%
Return on Equity (ROE)	29.77%	30.98%	20.08%	20.86%	17.36%	-10.23%
Market						
Earning per share (Rp)	834,399	1,025,444	925,062	1,243,791	1,463,698	11.90%
Book value per share	4,132,067	4,783,705	5,180,112	5,978,035	6,801,586	10.48%
Debt						
Debt Ratio	21.83%	23.24%	24.28%	21.34%	24.07%	1.98%
Debt to Equity	28.15%	30.51%	32.31%	27.35%	31.90%	2.53%

Over the five years period, the ratio's liquidity of PT Pelabuhan Indonesia II was declined from time to time, resulting a negative growth in CAGR. Because of the negative growth in CAGR, it indicates that the company has lack ability to meet its short-term obligation.

In activity point of view, the inventory turnover was not stable. As a result the CAGR of its ratio is negative. Different with other indicator, average collection period and total asset turnover that both have a positive CAGR. The average collection period has rose from 23.52 days in 2007 to 34.89 days in 2011, in fact the higher the ratio, the longer the company will turn the receivables, then its not good for the company. For the total asset turnover, it indicates that PT Pelabuhan Indonesia II is efficiency at using its assets in generating revenue.

Financial performance of PT Pelabuhan Indonesia II in 2011 was not as good as those in previous years. For example, its gross profit margin ratio declined sharply in 2011 to 24.59% from the highest 34.01% in 2010 and even if we compared with 29.93% in 2007. As a result, the CAGR in the last 5 years was negative of 3.85%. Other indicators such as operating profit margin ratio and net profit margin ratio have showed a similar picture, where both have experienced negative CAGRs at -3.41% and -5.08% respectively. The author suspect a big jump in expenses in 2011 relative to its revenue has resulted in a drop in company's profit.

From the return point of view, the ROA has a relatively stable at around 16% during that period, with a CAGR at 0.63%, indicates that PT Pelabuhan Indonesia II has maximized in asset utilization. However, ROE declined significantly in 2011 to only 17.36% from 29.77% in 2007 showing that the company hasn't maximized the use of its equity, that's why the ROE result in the negative growth. And it also implies that the percentage of return earned by the investors has descended over the five years.

Despite a declining company's ROE, earning per share (EPS) has increased to IDR 1,463,698 in 2011 from IDR 834,399 in 2007 with 11.90%. Because of the EPS has increased, the book value per share also increased. The rise of book value per share is also caused by the amount of equity, which increases each year.

The debt portion in PT Pelabuhan Indonesia II has continued to increase to 24.07% in 2011 from 21.83% in 2007, an increase by around 1.98% CAGR. Similarly, the debt to equity ratio rose by 2.53% CAGR to 31.9% in 2011 from 28.15% in 2007. This condition indicates that the liabilities of PT Pelabuhan Indonesia II have continued risen over the period.

B. CAGR

By doing a financial comparative analysis among companies the author found that most companies have experience difficulties time during the period of 2007 until 2011. On the liquidity indicator, both of the current ratio and quick ratio of PT Pelabuhan Indonesia II has experienced a negative growth. Even if its compare to the CAGR's average and others company, the ratio of current ratio and quick ratio of PT Pelabuhan Indonesia II is the smallest. Only PSA International that experienced a positive growth, with 25.05% in current ratio and 25.72% in quick ratio.

On the activity indicator, PSA International has more effective in inventory turnover than the others. It is show by the result of its ratio in the positive growth. For PT Pelabuhan Indonesia II, the result of the inventory turnover ratio is below from the average. However, for the average collection period ratio and total asset turnover ratio PT Pelabuhan Indonesia II has already pass the average, 8.20% and 5.23%. But for the average collection period, the higher the ratio, the longer the company will turn the receivables, then the average collection period of PT Pelabuhan Indonesia II it's not good enough. Because even though it passes the average, PT Pelabuhan Indonesia II has the highest score than the others, and Hutchison Whampoa has the optimal score.

On the profitability indicator the author found that most companied have negative CAGRs, such as in gross profit margin where all companies have negative CAGR around 2% until 5%, except PT Pelabuhan Indonesia III and DP World Ltd, which experience positive CAGR of 0.27% and 1.02%, respectively. However, on the operating profit margin ratio almost all companies have experienced a negative CAGR, except Hutchison Whampoa Ltd who had a positive growth of 4.97% CAGR. The similar picture can be seen in companies' net profit margin where most companies have also negative CAGRSs, except PT Pelabuhan Indonesia III and Hutchison Whampoa Ltd with positive growths of 5.5% and 16.04%, respectively. The author suspect that all companies have been impacted by a severe global economic turn down in 2008 that resulted in a significant drop on their sales in 2009 onward. On the other hand, the drop in operating expense is not as deep as in that in sales.

On the return indicator point of view, the author found again that PT Pelabuhan Indonesia III and Hutchison Whampoa are the best companies among their peers, by having positive CAGRs for both ROA and ROE ratios, 9.78% and 6.38% for PT Pelabuhan Indonesia III and 20.05% and 11.38% for Hutchison Whampoa Ltd, while PT Pelabuhan Indonesia II only had a slightly positive CAGR for ROA at 0.63%.

On the market indicator, since the three PT Pelabuhan Indonesia companies have yet to become a public company, the data is not available. Only the market indicator for PT Pelabuhan Indonesia II is available, with 11.90% CAGR for EPS and 10.46% CAGR for book value per share. However, for the three global companies we found that DP World was the best performance compared with others, as its shares value continued rose by 55.9% CAGR for EPS and 69.1% CAGR for book value per share.

On the debt point of view, actually the author can indicate the strategy of each company to finance its business activity. It is a very interesting to note that each company has different strategy. For example PT Pelabuhan Indonesia II, PT Pelabuhan Indonesia I and DP World Ltd have a strategy to use more debt financing rather than equity financing, showing by positive CAGR debt ratio and debt to equity ratio. While, PT Pelabuhan Indonesia III and Hutchison Whampoa Ltd have used more equity financing than debt financing, indicating by positive CAGR debt ratio and debt to equity ratio. However, as already mentioned in the previous section that there is no exact a perfect 'combination' of debt and equity, which is used as guideline. A company can finance its operation through debt or equity financing. Each type of financing has its own advantages and disadvantages.

C. Industry Average Ratio

By doing an average analysis among companies in this study, the author found that PSA International has the highest ratio in both current ratio and quick ratio. It shows that PSA International is the more capable paying its obligations than other companies. Then it followed by PT Pelabuhan Indonesia III and then PT Pelabuhan Indonesia II. Actually PT Pelabuhan Indonesia II also has a good ratio, its ratio pass the average but still below PSA International and PT Pelabuhan Indonesia III.
rom the activity ratio, Hutchison Whampoa has the highest ratio in both inventory turnover and average collection period, at 28.75 and 94.25. In inventory turnover Hutchison Whampoa is way above the companies' average of 7.67, same as the average collection period of the average of 50.56. However, in average collection period, the higher the ratio means it's not good for the company. Then the smallest ratio is the good the company is, which is PT Pelabuhan Indonesia I with ratio of 18.01 days. It indicates that the company has greater ability to meet its short-term obligations so that it will automatically affects the company's capability to take on debt.

The company that has the highest gross profit margin ratio in 2011 is Hutchison Whampoa Ltd, with the gross profit margin ratio at 60.2%, much higher than the average of 35.76%. It then followed by PT Pelabuhan Indonesia III with ratio of 38.7%. On the other hand, the company with the lowest gross profit margin ratio is PT Pelabuhan Indonesia I with the ratio at 24.2%, followed by PT Pelabuhan Indonesia II with the ratio of 24.6%.

However, in term of the operating profit margin ratio PT Pelabuhan Indonesia II has the highest ratio at 42.95%, followed by PSA International Pte Ltd at 38.4%, which both way above the companies' average of 28.2%. Meanwhile Hutchison Whampoa Ltd experienced the lowest operating profit margin ratio at only 8.8% and then followed by DP World Ltd at 15.8%. In term of the net profit margin ratio the company that has the largest ratio is PSA International at 76.8% followed by PT Pelabuhan Indonesia II at 33.4%, compared with the average among companies of 34.4%. On the other hand, PSA International and PT Pelabuhan Indonesia II have the lowest ratio at 17.9% and 18.2%, respectively.

From the return point of view PT Pelabuhan Indonesia III has the highest average return ratio for both return on asset and return on equity at 18.7% and 24.3%, respectively, compared with the total companies average of 10.3% and 15.5%, respectively. This indicates that the company has been optimizing in using its asset and equity in the business activity. Whilst the company that less efficiency in utilizing its asset and equity is DP World Ltd with the average return ratio of 4% (ROA) and 9.1% (ROE).

However, in term of the company's contribution to share holders, among local companies, PT Pelabuhan Indonesia II gives the highest average earning per share of IDR 1,463,698 compared with PT Pelabuhan Indonesia I at only IDR 464,413 (note: data for PT Pelabuhan Indonesia III is not available) and the average local companies of IDR 964,056. Similarly the average book value per share of PT Pelabuhan Indonesia II is also higher than that of PT Pelabuhan Indonesia I. For the global company point of view, DP World Ltd has the largest earning per share at USD 82.3 as well as the largest book value per share at USD 900.9, compared with the average of global companies at USD 28.6 and USD 308.1, respectively. While Hutchison Whampoa Ltd has the lowest market ratio at only USD 1.7 for earning per share and USD 9.1 for book value per share in 2011.

D. BUMN Financial Scoring Framework

After calculating each financial indicator of each company using BUMN financial scoring, the author combined the result of the local port and global port companies, then it can be known the ranked of the company from comparison in global.

TABLE II. BUMN SCORING RANKING COMPARISON

Rank	Company	Total Score
1	PT Pelabuhan Indonesia III	41.75
2	PT Pelabuhan Indonesia II	41.15
3	Hutchison Whampoa Ltd	41
4	PSA International Pte Ltd	36.3
5	PT Pelabuhan Indonesia I	31.4
6	DP World Ltd	31.2

Based on the BUMN Financial Scoring Framework, it can be concluded that PT Pelabuhan Indonesia III was in the first position with total score 41.75 out of 50. PT Pelabuhan Indonesia III has evidently performed well. In the second position, there's PT Pelabuhan Indonesia III with a total score 41.15. The total score between PT Pelabuhan Indonesia III and PT Pelabuhan Indonesia II is quite close. The difference was only 0.6 point. In the third position there was Hutchison Whampoa Ltd with 41 point. Slightly below Hutchison Whampoa Ltd, there was PSA International Pte Ltd with a total score 36.3. Moreover, there was PT Pelabuhan Indonesia with 31.4 point. And in the last position there was DP World Ltd with 31.2 point. The difference between PT Pelabuhan Indonesia I and DP World Ltd was almost the same, only different 0.2 point.

Actually the scores that given above was indicate the health of the company. The higher of the total score is then the healthier the company is.

E. DuPont Analysis

DuPont analysis tells that three things affect ROE. First is operating efficiency, which is measured by profit margin. Second one is asset use efficiency, which is measured by total asset turnover. And the third is financial leverage, which is measured by the equity multiplier. By breaking the ROE into distinct parts, it can be examine how effectively a company is using equity, since poorly performing components will drag down the overall figure.

TABLE III. ROA DUPONT ANALYSIS

ROA	Net Profit / Sales	Sales / Total Asset	ROA
PT Pelabuhan Indonesia II	33.36%	48.45%	16.16%
PT Pelabuhan Indonesia III	28.96%	64.64%	18.67%
PT Pelabuhan Indonesia I	18.16%	65.69%	6.13%
PSA International Pte Ltd	76.79%	25.40%	6.80%
Hutchison Whampoa Ltd	31.61%	32.43%	10.25%
DP World Ltd	17.86%	15.87%	4.00%

From the table above, compared to others, PT Pelabuhan Indonesia II is in the second place below PT Pelabuhan Indonesia III. It means that PT Pelabuhan Indonesia II has already maximized the use of its asset to generate profit although PT Pelabuhan Indonesia II is in the second place. Because the difference of the score its not quite far between PT Pelabuhan Indonesia II and PT Pelabuhan Indonesia III. As described above, the ROA broke down into two components, which are net profit margin and total asset turnover.

The second element of ROA is total asset turnover, which represents the efficiency asset utilization. PT Pelabuhan Indonesia II is in the second place in the total asset turnover ratio with 48.45%. It shows that PT Pelabuhan Indonesia II is not effective enough in maximized its assets to generate revenue. PT Pelabuhan Indonesia II has more focus on maximizing asset utilization.

TABLE IV. ROE DUPONT ANALYSIS

ROA	Net Profit / Sales	Sales / Total Asset	Total Asset / Total Equity	ROE
PT Pelabuhan Indonesia II	33.36%	48.45%	1.33	17.36%
PT Pelabuhan Indonesia III	28.96%	64.64%	1.30	24.32%
PT Pelabuhan Indonesia I	18.16%	65.69%	1.73	10.62%
PSA International Pte Ltd	76.79%	25.40%	1.91	13.02%
Hutchison Whampoa Ltd	31.61%	32.43%	1.81	18.52%
DP World Ltd	17.86%	15.87%	2.28	9.14%

After analyzing the ROA, the author wants to analyze by the ROE value. ROE will cover three aspects, which are operating efficiency, asset utilization, and financial leverage. Since operating efficiency and asset utilization has been elaborated above, the author will focus on financial leverage that represents by equity multiplier. PT Pelabuhan Indonesia II is in third position from the ROE ratio. It indicates that PT Pelabuhan Indonesia II is not effective enough in maximized its equity to generate profit.

After the author calculating the ROA and ROE using DuPont analysis, the author make a evaluation that the low value of ROE and ROA in PT Pelabuhan Indonesia II was due to inefficiency of asset and equity utilization. Thus, in the future, the company should focus in maximizing asset and equity to generate more profit.

F. Leverage

TABLE V. LEVERAGE OF PT PELABUHAN INDOESIA II

PT Pelabuhan Indonesia II					
	2007	2008	2009	2010	2011
DOL	1.27	-1.71	22.70	1.18	0.66
DFL	5.16	-15.04	-0.25	1.41	0.57
DTL	6.53	1.12	-5.77	1.66	0.38

Overall the best leverage is happened in the year 2008 at 1.12.

G. Capital Structure

Key Assumption

There are several assumption needed to get the optimum capital structure:

- Risk premium for PT Pelabuhan Indonesia II is 6.68% based on Country total risk premium Damodaran (January 2012)
- Tax Rate is 25% based on Indonesia regulation on company tax rate
- Risk free rate is 6.5% which is Bank Indonesia current rate (1 semester 2012)
- Debt does not bear market risk

There are two public listed port company to benchmark beta of PT Pelabuhan Indonesia II. The company are:

TABLE V. BENCHMARK COMPANY

Firm	Beta	Debt/Equity
Hutchison Whampoa Ltd	1.03	0.04
Shanghai International Port Co Ltd	0.99	0.04
Average	1.01	0.04

Then the bechmark beta must be unleverage so the beta for PT Pelabuhan Indonesia II can be calculate each debt level.

TABLE VI. COST OF EQUITY

Debt Ratio	D/E Ratio	Unlevered Beta	Levered Beta	Cost of Equity
0%	0.00%	0.98	0.98	13.06%
10%	11.11%	0.98	1.06	13.61%
20%	25.00%	0.98	1.17	14.29%
30%	42.86%	0.98	1.30	15.17%
40%	66.67%	0.98	1.47	16.34%
50%	100.00%	0.98	1.72	17.99%
60%	150.00%	0.98	2.09	20.45%
70%	233.33%	0.98	2.70	24.55%

80%	400.00%	0.98	3.93	32.75%
90%	900.00%	0.98	7.61	57.36%

The company EBIT will remain the same at each debt ratio for the calculation of cost of debt. We assume that the proceeds from debt to buy back stock

.

Maximum Tax Benefit = EBIT x Marginal Tax Rate

= IDR 1,343,643,182,179 x 25%

= IDR 335,910,795,545

TABLE VII. COST OF DEBT

Debt Ratio	Debt	Intrst Rate on Debt	Interest expense	Interest Cvg Ratio	Bond Rating	After Tax Cost of Debt
0%	-	6.40%	-	-	-	4.80%
10%	748,694,595,425	6.40%	Rp47,916,454,107	28.04	AAA	4.80%
20%	1,497,389,190,849	6.40%	Rp95,832,908,214	14.02	AAA	4.80%
30%	2,246,083,786,274	7.05%	Rp158,348,906,932	8.49	A+	5.29%
40%	2,994,778,381,699	7.15%	Rp214,126,654,291	6.27	A	5.36%
50%	3,743,472,977,124	7.40%	Rp277,017,000,307	4.85	A-	5.55%
60%	4,492,167,572,548	11.25%	Rp505,368,851,912	2.66	B+	8.44%
70%	5,240,862,167,973	11.75%	Rp615,801,304,737	2.18	B	8.81%
80%	5,989,556,763,398	12.50%	Rp748,694,595,425	1.79	B-	9.38%
90%	6,738,251,358,822	12.50%	Rp842,281,419,853	1.18	B-	9.38%
100%	7,486,945,954,247	15.25%	Rp1,141,759,258,023		CC	11.44%

TABLE VIII. COST OF CAPITAL

Debt Ratio	Cost of Debt	Equity Ratio	Cost of Equity	WACC
0%	4.80%	100%	13.06%	13.06%
10%	4.80%	90%	13.61%	12.73%
20%	4.80%	80%	14.29%	12.39%
30%	5.29%	70%	15.17%	12.21%
40%	5.36%	60%	16.34%	11.95%
50%	5.55%	50%	17.99%	11.77%
53%	5.55%	47%	18.61%	11.69%
60%	8.44%	40%	20.45%	13.24%
70%	8.81%	30%	24.55%	13.53%
80%	9.38%	20%	32.75%	14.05%
90%	9.38%	10%	57.36%	14.17%

100%	11.44%	0%	13.06%	11.44%

With the WACC aprroach, the capital structure of Pelabuhan Indonesia II will be minimize at 53% cost of debt and 47% cost of Equity.

TABLE VIIII. FIRM VALUE

Debt Ratio	**Cost of Debt**	**Equity Ratio**	**Cost of Equity**	**WACC**	**FIRM VALUE**
0%	4.80%	100%	13.06%	13.06%	Rp7,716,174,476,526
10%	4.80%	90%	13.61%	12.73%	Rp7,916,200,994,770
20%	4.80%	80%	14.29%	12.39%	Rp8,133,433,306,168
30%	5.29%	70%	15.17%	12.21%	Rp8,253,336,499,871
40%	5.36%	60%	16.34%	11.95%	Rp8,432,907,001,123
50%	5.55%	50%	17.99%	11.77%	Rp8,561,872,443,791
53%	5.55%	47%	18.61%	11.69%	Rp8,620,465,240,669
60%	8.44%	40%	20.45%	13.24%	Rp7,611,271,802,373
70%	8.81%	30%	24.55%	13.53%	Rp7,448,132,938,908
80%	9.38%	20%	32.75%	14.05%	Rp7,172,472,502,735
90%	9.38%	10%	57.36%	14.17%	Rp7,111,731,733,481
100%	11.44%	0%	13.06%	11.44%	Rp8,808,849,533,516

An optimal capital structure exists if the WACC minimized at 53% of debt and 47% of equity, PT Pelabuhan Indonesia II reached the maximum firm value IDR 8,620,465,240,669. It indicates that PT Pelabuhan Indonesia II should manage its financial to have 53% of debt ratio to its equity.

TABLE X. EPS

Debt	0%	53%	95%
EBIT	1,343,643,182,179	1,343,643,182,179	1,343,643,182,179
Interest	-	293,638,020,326	Rp889,074,832,067
Profit before taxes	1,343,643,182,179	1,050,005,161,853	454,568,350,112
Taxes	335,910,795,545	262,501,290,463	113,642,087,528
Profit after taxes	1,007,732,386,634	787,503,871,390	340,926,262,584
Number of share outstanding	1,021,194	479,961	51,060
EPS	986,818	1,640,766	6,677,013

It was maximized at 53%, similar when the WACC was minimized and firm value was maximized at that point, but then rose again at 77% and beyond.

III. Conclusion & Recommendation

A. Conclusion

Based on each individual company's analysis the author found that each company has severely been affected by a global economic crisis in 2008 as indicated by a sharp decline in its sales and financial performance in 2009 before it start to recover in 2010 onward. Each company has also a different strategy in financing its business activities. Some companies tend to focus more on the debt financing than the equity financing, especially for global companies. While local companies tend to focus more on the equity financing rather than debt financing.

By doing a comparative analysis among the companies for a period 2007-2011, the author found that the performance of PT Pelabuhan Indonesia II is not very good, compared to others company. Especially in liquidity and profitability indicator, all growth is in negative. Mostly the positive trends are only activity, market and debt indicator. However, in term of the company's contribution to share holders, among local companies, PT Pelabuhan Indonesia II gives the highest average earning per share of IDR 1,463,698 compared with PT Pelabuhan Indonesia I at only IDR 464,413 (note: data for PT Pelabuhan Indonesia III is not available) and the average local companies of IDR 964,056. Similarly the average book value per share of PT Pelabuhan Indonesia II is also higher than that of Pelabuhan Indonesia I.

From the debt ratio, interestingly we can see the strategy of the company in financing their business activity. Most global companies are heavily reliance on the debt financing as we shown by DP World Ltd and PSA International Pte Ltd with the debt ratio reached 56.2% and 47.8%, much higher than the industry average of 39.7%. Similarly, debt to equity ratio in those two global companies was also high. On the other local companies are less rely on the debt financing, particularly for PT Pelabuhan Indonesia II, which the debt ratio and debt to equity ratio only at 24.07% and 31.9%, respectively. However, theoretically there is no exact a perfect 'combination' of debt and equity which is used as guideline. A company can finance its operation through debt or equity financing. Each type of financing has its own advantages and disadvantages.

From the BUMN framework, achieved the second position below PT Pelabuhan Indonesia III. Actually the total score between PT Pelabuhan Indonesia III and PT Pelabuhan Indonesia II is almost the same, PT Pelabuhan Indonesia III at 41.75 point, while PT Pelabuhan Indonesia II is 41.15 point, only different 0.6 point. PT Pelabuhan Indonesia II get lower score in total asset turn over at 1.5 point while PT Pelabuhan Indonesia III at 2.5

point. And both are categorized as healthy. Only PT Pelabuhan Indonesia I and DP World Ltd that categorized as less healthy.

In DuPont Analysis, PT Pelabuhan Indonesia II achieved second position in ROA analysis and third position in ROE analysis. It indicates that PT Pelabuhan Indonesia II is not effective enough in maximized its asset and equity to generate profit.

An optimal capital structure of PT Pelabuhan Indonesia II exists when the WACC minimized at 53% of debt and 47% of equity, PT Pelabuhan Indonesia II reached the maximum firm value IDR 8,620,465,240,669. It indicates that PT Pelabuhan Indonesia II should manage its financial to have 53% of debt ratio to its equity.

In Indonesia, PT Pelabuhan Indonesia II is one of a monopoly company. The only local competitor they had is PT Pelabuhan Indonesia III, PT Pelabuhan Indonesia I, and PT Pelabuhan Indonesia IV. PT Pelabuhan Indonesia II is the largest port than others, however if it look from the financial performance, PT Pelabuhan Indonesia II still not good enough compared to PT Pelabuhan Indonesia III.

B. Recommendation

In order to improve the performance of PT Pelabuhan Indonesia II, the author will give some recommendation. The recommendation suggested could be used as the strategy to reach more opportunities. These are the recommendations:

Increase liquidity indicator

There's a several ways for PT Pelabuhan Indonesia II to increase the liquidity indicator. First, PT Pelabuhan Indonesia II should increasing cash by having long-term finding. For example issuing bonds with a tenor of 5 to 7 years. Second, refinancing by replacing short-term debt to a long-term debt. And the third is right issue by issuing more stocks so the equity will rise.

Reducing average collection period days

There's a several ways for PT Pelabuhan Indonesia II to reducing the average collection period. Firs is the process client selection should be improve and become more prudent. Second, setting a down payment for each transaction. And the third is improving the management of collection by having a better law enforcement.

Increase return indicator

Actually, asset is the most important element in company performance. A good utilization of asset will lead to a greater Return on Asset (ROA), Return on Equity (ROE), liquidity, and also company profitability. Management of asset will improve the performance of ROE also. Since the ROE value affected by the equity multiplier that engaging assets' proportion effectiveness.

ROA and ROE of the company have relatively lower than others. This means that the company has not been optimal in utilizing their asset for its operations. In other words the company needs more generate sales to boost its profit. Similarly, if the asset turnover increases, the firm generates more sales for every unit of asset owns for resulting a higher overall ROE.

Strengthen the debt division

Although the debt portion of PT Pelabuhan Indonesia II is relatively low compared with other companies in the industry, the increasing trend of debt ratio in this company indicates that the company may shift toward debt financing in the mid-term. If this the case then the company needs to strengthen its debt division to monitor and analysis the debt burden for the company in the future.

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