

## **FINANCIAL IMPROVEMENT OF PT ADHI KARYA (PERSERO) TBK. TO COMPETE IN ASEAN CONSTRUCTION INDUSTRY**

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**Abstract** – In 2016, Asean Economic Community (AEC) will effectively begin. The purpose of this international collaboration is to enforce economic power in South-East Asia region to become single market and production base. However with policies that may apply according to AEC agreements, there will be challenges for each country in South East Asia region especially because of the tighter competition that might occur. The purpose of this research is to see the readiness of national company to compete in Asean level and to give recommendations to company's future improvement.. Author chooses PT Adhi Karya (Persero) Tbk. as the object of this research because they have statement in their vision to become the leading company in South East Asia. Moreover, PT Adhi Karya (Persero) Tbk is a company that involved in the industry of construction, one of the most strategically critical industries in developing country like Indonesia. To assess the readiness of PT Adhi Karya (Persero) Tbk., author use analysis of financial ratios to determine the current financial performance of the company. In addition, author also use BUMN framework scoring to get more information about company financial performance. As a benchmark, 3 companies in Indonesia and 3 companies from foreign country in Asean region. The analysis shown that PT Adhi Karya (Persero) Tbk. have many rooms to improve in their current financial performance. The company needs to increase their efficiency. Currently they need averagely 65 days to collect their receivables, which is considerably too long. The company also has to utilize their asset more efficiently since the findings shown that their significant increase in asset did not followed by high increase on sales. For leverage, PT Adhi Karya (Persero) Tbk could increase their debt to increase their financial leverage. They also could considering to merger or joint venture with foreign company from South-East Asia to prepare the competition of AEC since there are some foreign companies that perform well in construction industry,

*Keywords: Finance, financial performance, financial ratio analysis, construction industry, state-owned enterprises, Asean Region.*

### **Introduction**

Construction sector have a significant impact on growth of developing countries. Construction industry influenced almost all field of economics. Development of road, dam, irrigation system, housing and real estate, supporting facilities of healthcare and education, and other construction project is a physical basis that will be the infrastructure of other business opportunities in the efforts to conduct improvements of the standard of living. For developing countries, the contribution of construction industries that has those significant impacts for country's economic growth should be enhanced by improvement of national construction industry's capacity and capability. The effort that could be conducted is including improvement in time and cost efficiency, and also advancing technologies to increase construction quality.

Strategic role of construction sector also could be seen from the relation to another sectors, either it support sectors which providing material as well as all sectors that utilizing product of construction.

This means the growth of construction sector will be able to pull the hopper of economic growth and push the other development sectors.

In order to improve the ability of construction companies in Indonesia to compete on global level competition, there are several factors that need to be concerned. The factors are including internal factor, external factor, and market force. The internal factors are the most important factor that influences 42% of companies' success. The internal factors are including management, equipment, human resources, company culture, and financial performance.

In Indonesia, one of the companies in the field of construction is PT Adhi Karya (Persero) Tbk. which currently registered as a state-owned enterprise under the Indonesian ministry of state-owned enterprise or *Kemerntrian Badan Usaha Milik Negara Republik Indonesia*. After decades of business activities that they have been through, ADHI has taken a significant part in the development of Indonesia. With that experience, currently ADHI has a new vision to become a leading company that active on construction sector in South-East Asia.

In 2015, Asean economic communities (AEC) will start to enforced. The purpose of this program is to integrate economic activities among Asean country with policies to achieve a single market and production base, highly competitive economic region, a region of equitable economic development, and a region fully integrated into global economy.

With the occurrence of this Asean collaboration, ADHI has to ensure their readiness of their company to compete in global market to achieve their vision. Current position of ADHI should be shown a conditioned state because of their vision that shown desire to compete in Asean level.

One of the tools that could be use to assess companies performance is by the analysis of their financial report. To assess financial performance of the company, several ratios will be calculated and compared with other companies in the same field of industry from one period to another. These ratios is use to inform the company's profitability, financial position, and operational efficiency. This information could be considered as one financial point of view for company's future decision making process.

## Literature Review

### Financial Ratios

Financial ratio analysis is a process of determining and interpreting relationships between the items of financial statements to provide a meaningful understanding of the performance and financial position of an enterprise. Ratio analysis is an accounting tool to present accounting variables in a simple, concise, intelligible and understandable form. Ratio analysis is a study of relationship among various financial factors in a business.

Ratio classification on Gitman's book is including liquidity, activity, leverage, profitability, and market ratio. Because of this research is focusing on internal factors of the companies, market ratios are excluded on calculation and analysis. This research also excluding inventory turnover ratio from efficiency ratio because of the main business of construction services did not have inventory in financial statement, however the difference of entities of companies that including inventory in it makes irrelevant data to be compared and analyzed.

Ratios	Formula
<b>Liquidity Ratio</b>	
Current Ratio	Current Asset : Current Liabilities
Quick Ratio	(Current Asset-Inventory): Current Liabilities
<b>Activity Ratio</b>	
Inventory Turnover	Cost of Goods Sold : Inventory
Average Collection Period	Account Receivable : Average Sales per day
Total Asset Turnover	Sales : Total Assets
<b>Debt Analysis</b>	

Debt Ratio	Total Liabilities : Total Assets
Times Interest Earned Ratio	EBIT : Tax
Debt to Equity Ratio	Total Liabilities : Total Equity
<b>Profitability Ratio</b>	
Gross Profit Margin	Gross Profit : Sales
Operating Profit Margin	Operating Profit : Sales
Net Profit Margin	Earnings Available for common stockholder : Sales
EPS	Earnings Available for common stockholder : Number of Shares
ROA	Earnings Available for common stockholder : Total Asset
ROE	Earnings Available for common stockholder : Common Stock Equity

### Du Pont Analysis

DuPont analysis is a system that uses particular approach to ratio analysis by evaluating the effectiveness of the company. Du Pont analysis is a popular approach for focusing on the factors that determine profitability. It helps investors to determine how the company generates value to its shareholders.

DuPont analysis consists of 3 parts of generally accepted factors for determining company's performance which is profitability, efficiency and leverage. It decomposed the return on equity into those 3 factors expressed by formula below:

$$\text{ROE} = \text{Net Profit Margin} \times \text{Asset Turnover} \times \text{Equity Multiplier}$$

### BUMN Financial Scoring

As one of the state-owned enterprise under the ministry of *Badan Usaha Milik Negara (BUMN)*, PT Adhi Karya follows a financial scoring framework based on ministerial decree number: KEP-100/MBU/2002. Under this framework, there are several aspects that need to be concerned

Indicator	Weight	
	Infrastructure	Non-Infrastructure
1. Return on Equity (ROE)	15	20
2. Return on Investment (ROI)	10	15
3. Cash Ratio	3	5
4. Current Ratio	4	5
5. Collection Periods	4	5
6. Inventory Turnover	4	5
7. Total Asset Turnover	4	5
8. Total Equity to Total Asset	6	10
<b>Total Weight</b>	50	70

### Methodology

This research had been conducted to analyzed current financial situation of PT Adhi Karya (Persero) Tbk. and its competitors in order to knowing ADHI's position and provide alternative suggestion for them to strengthen their existence in ASEAN market.

The problem that has been identified from background will be answered by suggestions from the result of this research. To discover the result, financial analysis of several ratios will be executed. For finding the ratios, first the data should be collected.

Steps to find the results are:

1. Identify the problem
2. Determine the research objectives
3. Literature Study

4. Data collection
5. Analysis
6. Conclusion and recommendation

Because financial performance assessment need competitors data to be compared as benchmark, relevant competitors within this research limitation need to be founded. To find the relevant competitors author collect information from media, mainly from Bloomberg Business. For choosing competitors, several factors that considered are the field of industry, similarity of business model, business scale, and reviews on media. From that, the national competitors of PT Adhi Karya (Persero) Tbk that will be used as benchmark are PT. Wijaya Karya (Persero) Tbk, PT PP (Persero) Tbk, PT Waskita (Persero) Tbk, and Asean competitors are Yong Nam Holdings from Singapore, IJM Corporation Berhad from Malaysia, and Toyo-Thai Company Ltd. from Thailand.

### Data Analysis

#### Financial Performance Analysis

In financial performance analysis the author uses ratio analysis which involves methods of calculating and interpreting financial ratios to analyze and monitor company's performance. The basic inputs to ratio analysis are the company's income statement and balance sheet. Basis for comparison is needed to understand the company's situation. This research is using combined approach of time series and cross sectional analysis to get more satisfying result.

In calculation, ratio of 3 national competitors will be averaged to get the average ratio of national competitors. Besides that, ASEAN average that will be used as benchmark is the average number of all companies excluding PT Adhi Karya (Persero) Tbk.

#### Liquidity Ratios

Liquidity ratio shows the ability of company to pay short term debt without have to experience financial distress when they come due. Ideally, a good company will maintain their liquidity ratio on one point or more as a proof of their ability in paying their short term debt. There are two ratios included in liquidity ratio, which are current ratio and quick ratio.

Table 1: Current Ratio

	2010	2011	2012	2013	2014
ADHI	1.14	1.10	1.24	1.39	1.34
WIKI	1.41	1.14	1.10	1.10	1.12
PTPP	1.40	1.30	1.36	1.34	1.38
WSKT	1.10	1.04	1.47	1.43	1.36
IJM	2.08	2.18	2.21	1.91	2.60
TTCL	0.63	0.8	0.90	0.94	0.74
YN	1.28	1.24	1.25	1.83	1.53

Table 2: Quick Ratio

	2010	2011	2012	2013	2014
ADHI	1.13	1.09	1.22	1.37	1.32
WIKI	1.17	0.97	0.93	0.94	1.03
PTPP	1.00	0.99	1.10	1.15	1.12
WSKT	1.03	0.96	1.39	1.38	1.28
IJM	1.89	1.96	2.04	1.78	2.42
TTCL	0.63	0.82	0.90	0.94	0.74
YN	1.28	0.82	0.88	1.35	1.16

The result shows that PT Adhi Karya (Persero) Tbk. have a good performance on liquidity factors. Even though they also have decline in 2011 which caused by the high increase of current liabilities did not matched by the increase of current assets, they have managed their liquidity ratio above 1.00. it means that PT Adhi Karya (Persero) Tbk. did not have trouble to fulfill its short term obligation.

#### Activity Ratios

Activity ratios measured company's operating efficiency. There are 3 ratios that calculated in this ratio category which are; Average collection period, Inventory turnover, and total asset turnover. However, the inventory turnover is excluded from analysis because in construction services, there are no inventory incorporated and slight difference in business entity could have high impact on inventory level while the cost of goods sold is accounted in single account which is cost of revenue.

Table 3: Average Collection Period

	2010	2011	2012	2013	2014
ADHI	70.28	55.28	64.27	56.00	82.41
WIKA	54.52	62.38	49.53	45.43	57.48
PTPP	66.39	58.24	61.07	53.55	67.56
WSKT	37.10	48.78	60.68	64.45	81.85
IJM	197.41	183.85	152.20	144.13	162.41
TTCL	20.02	74.72	48.93	57.95	36.43
YN	60.02	51.70	51.61	35.01	47.60

The result is showing the underperformance of PT. Adhi Karya (Persero) Tbk. especially in 2014 where the most sharp incline occurs and reached 82.41 points. The feasibility of improvement is showed by the national competitors that could maintain the average collection period below 60 for 5 years except for 2014 where almost all companies seemed to have increase in their collection periods. However, PT. Adhi Karya (Persero) Tbk is still performs better compared to ASEAN Average that always reached above 60 days for the last 5 years.

Table 4: Total Asset Turnover

	2010	2011	2012	2013	2014
ADHI	1.15	1.10	0.97	1.01	0.83
WIKA	0.96	0.93	0.90	0.94	0.78
PTPP	0.81	0.90	0.94	0.94	0.85
WSKT	1.44	1.42	1.05	1.10	0.82
IJM	0.32	0.30	0.33	0.31	0.19
TTCL	1.43	1.29	1.48	1.07	0.86
YN	1.19	0.62	0.51	0.60	0.37

Total asset turnover for all ASEAN companies averaged shown similar pattern which is tend to decline. It means almost all companies have not maximized the utilization of their assets to generate sales. It could also means the industry is not in good condition or troubled. However, PT Adhi Karya (Persero) Tbk. has performed better than National and ASEAN Average. The better performance just shown by PT Waskita Karya (Persero) Tbk. and Toyo-Thai Company limited. It could means that although the industry is not in good condition, PT Adhi Karya (Persero) Tbk. have managed their asset turnovers above it competitors.

## Debt Analysis

Debt analysis highlighted the company's level of financial leverage. More debt means more other people's money being used to generate income. However it also means higher risk level that held by the company

Table 5: Debt Ratio

	2010	2011	2012	2013	2014
ADHI	0.82	0.84	0.85	0.84	0.83
WIKA	0.70	0.73	0.74	0.74	0.69
PTPP	0.77	0.79	0.82	0.84	0.84
WSKT	0.89	0.88	0.76	0.73	0.77
IJM	0.49	0.48	0.50	0.52	0.67
TTCL	0.58	0.76	0.70	0.62	0.72
YN	0.58	0.65	0.87	0.75	0.47

Debt ratio shows the percentage of asset that being financed by debt. From graph above, we could see that PT Adhi Karya (Persero) Tbk. shows stable points or stagnancy while the National and ASEAN Average have slight tendency to decline over years. It shows higher level of leverage that being held by PT Adhi Karya (Persero) Tbk. It also means PT Adhi Karya (Persero) Tbk have higher risk than average construction companies in ASEAN.

Table 6: Times Interest Earned Ratio

	2010	2011	2012	2013	2014
ADHI	2.46	2.27	2.02	2.34	2.22
WIKA	2.92	2.64	2.67	2.59	2.90
PTPP	2.61	2.35	2.31	2.22	2.37
WSKT	2.07	2.08	2.23	2.51	2.97
IJM	3.73	3.43	3.19	3.05	3.33
TTCL	3.6	3.52	4.04	4.90	8.41
YN	5.08	6.34	9.05	3.66	-1.81

The result shows that ASEAN Average is quite far higher than National Average. It means national companies have lower performance than ASEAN Companies to achieve more EBIT compared to the interest expenses. In addition to that, PT Adhi Karya (Persero) Tbk. has performed slightly under the National Average. It could be caused by the higher level of debt of PT Adhi Karya (Persero) Tbk.

Table 7: Debt to Equity Ratio

	2010	2011	2012	2013	2014
ADHI	0.71	0.25	0.71	1.05	0.93
WIKA	0.40	0.44	0.57	0.64	0.49
PTPP	0.36	0.29	0.52	0.81	1.00
WSKT	0.46	0.13	0.53	0.41	0.69
IJM	0.53	0.53	0.57	0.58	1.61
TTCL	0.01	0.13	0.10	0.05	0.72
YN	1.00	1.00	1.00	1.00	0.36

PT Adhi Karya (Persero) Tbk. indicates higher inclines than the National and Average to 2013 but slight decline on 2014 which move the debt level back closer to the industry average. It could means that the incline was too high and makes company in over-leveraged condition and bear far

higher risk than the industry so they decided to lower their debt level in 2014. We could see from 2 ratios before that what company did is right decision since debt ratio of the company is higher than average and times interest earned ratio shows underperformance compared to the competitors average.

#### Profitability Ratios

Profitability ratios measure company's capability to earned profit. There are 6 ratios included in profitability analysis which are; Gross profit margin, Operating profit margin, Net profit margin, Earning per share, Return on asset, and Return on equity.

Table 8: Gross Profit Margin

	2010	2011	2012	2013	2014
ADHI	0.13	0.11	0.13	0.12	0.12
WIKA	0.11	0.10	0.09	0.11	0.14
PTPP	0.09	0.11	0.09	0.11	0.12
WSKT	0.10	0.09	0.07	0.09	0.11
IJM	0.24	0.28	0.22	0.26	0.31
TTCL	0.16	0.12	0.07	0.09	0.06
YN	0.29	0.31	0.16	0.11	-0.15

From the table above we could see a significant difference between National and ASEAN average. ASEAN average seemed to have a strong start in 2010 but start to declines in 2011 to 2014 while National average is having slow yet constant incline from 2010 to 2014 until at the end of 2014 national average have better gross profit margin than ASEAN average.

The result could mean the strong national economic growth or excellent development of national construction company. However, if we see the performance of PT Adhi Karya (Persero) Tbk., it was not follow the national growth and tend to have stagnant performance with slight tendency to decline. It could mean that PT Adhi Karya (Persero) Tbk. is underperformed to catch up with national growth of construction industry.

Table 9: Operating Profit Margin

	2010	2011	2012	2013	2014
ADHI	0.08	0.06	0.07	0.08	0.09
WIKA	0.08	0.08	0.09	0.10	0.11
PTPP	0.07	0.09	0.09	0.09	0.10
WSKT	0.07	0.06	0.07	0.07	0.10
IJM	0.19	0.23	0.22	0.22	0.31
TTCL	0.09	0.06	0.07	0.05	0.06
YN	0.20	0.23	0.07	0.01	-0.15

Operating profit margin of National and ASEAN Average have similar pattern with the gross profit margin. It shown the inclines of national average while the ASEAN experiencing a significant declines.

However, PT Adhi karya (Persero) Tbk. shows better result than the gross profit margin. The growth seems to keep up with the national incline. It could mean that although the gross profit margin of the company is not at it optimum, the company successfully managed it operating expenses to get better operating profit. Nevertheless, the growth of PT Adhi Karya (Persero) Tbk. is still below national average.

If we saw back at the bad performance of gross profit margin of PT Adhi Karya (Persero) Tbk., the underperformance of getting high revenue or pushing the minimum cost revenue should be

improved. With that improvement, PT Adhi Karya (Persero) Tbk could have better performance than National and ASEAN performance.

Table 10: Net Profit Margin

	2010	2011	2012	2013	2014
ADHI	0.03	0.03	0.03	0.04	0.04
WIKA	0.05	0.05	0.05	0.05	0.06
PTPP	0.05	0.04	0.04	0.04	0.04
WSKT	0.02	0.02	0.03	0.04	0.05
IJM	0.11	0.13	0.12	0.12	0.13
TTCL	0.06	0.05	0.05	0.04	0.02
YN	0.16	0.19	0.14	0.02	-0.04

The net profit margin shows similar pattern with the operating profit margin. The ASEAN average experienced significant declines while the National average has slight improvement overtime and PT Adhi Karya (Persero) Tbk. is following the growth of National industry average.

The difference that we could see is the drop of ASEAN average net profit margin is not as significant as the gross profit margin. The declines stop at the same point of PT Adhi Karya (Persero) Tbk. performance.

Table 11: Earning Per Share

	2010	2011	2012	2013	2014
ADHI	107.83	103.64	117.46	225.38	179.91
WIKA	50.15	60.59	76.01	92.84	100.19
PTPP	42.00	50.00	64.00	87.00	110.00
WSKT	6.89	9.56	38.00	38.20	51.90
IJM	25.21	23.88	29.84	30.46	32.63
TTCL	0.70	0.83	1.19	1.23	0.82
YN	4.38	5.06	3.45	0.44	-0.67

Earning per share shows different result. National and ASEAN average shows similar result which is a constant incline while the National average has slightly leading growth. In this ratio, PT Adhi Karya (Persero) Tbk. have a far higher EPS than ASEAN and National average. It shows a significant incline in 2013 with just slight decline on 2014 yet still far above all competitors' average.

Table 12: Return on Asset

	2010	2011	2012	2013	2014
ADHI	0.04	0.03	0.03	0.04	0.03
WIKA	0.05	0.05	0.05	0.05	0.05
PTPP	0.04	0.03	0.04	0.03	0.04
WSKT	0.03	0.03	0.03	0.03	0.04
IJM	0.03	0.04	0.12	0.04	0.02
TTCL	0.09	0.06	0.05	0.04	0.02
YN	0.10	0.12	0.14	0.01	-0.01

Return on asset shows similar pattern with the operating and net profit margin. The ASEAN average tends to decline over time while National average shows stagnancy and slowly grows. PT Adhi Karya (Persero) also follows the trend of National Average but have slower growth in 2012 after successfully catch up in 2014.



Table 13: Return on Equity

	2010	2011	2012	2013	2014
ADHI	0.22	0.18	0.18	0.26	0.19
WIKA	0.16	0.18	0.18	0.19	0.15
PTPP	0.16	0.17	0.19	0.21	0.22
WSKT	0.28	0.28	0.13	0.15	0.18
IJM	0.07	0.07	0.08	0.08	0.07
TTCL	0.22	0.24	0.25	0.12	0.07
YN	0.23	0.22	0.13	0.02	-0.03

Return on equity shows different result for ADHI, National average, and ASEAN average. All of them seem to have close starting point at 2010 and slight declines until 2012. From 2012, ASEAN average seems to continue declining until the bottom point in 2014 while National average tends to have constant performance to 2014. As for PT Adhi Karya (Persero) Tbk., the company got significant incline in 2013 far above the other but back declining in 2014 to the same point as the National Average.

#### DuPont Analysis

Dupont analysis highlighted one ratio that considered the most important ratio for prospective shareholders which is the return on equity. Dupont analysis breaks the return on analysis on 3 point of views which represents profitability, efficiency, and leverage to find out where the difference of RoE is coming from.

Table 14: Return on Equity

	2010	2011	2012	2013	2014
ADHI	0.22	0.18	0.18	0.26	0.19
WIKA	0.16	0.18	0.18	0.19	0.15
PTPP	0.16	0.17	0.19	0.21	0.22
WSKT	0.28	0.28	0.13	0.15	0.18
IJM	0.07	0.07	0.08	0.08	0.07
TTCL	0.22	0.24	0.25	0.12	0.07
YN	0.23	0.22	0.13	0.02	-0.03

As described in previous chapter, the best performance of return on equity is shown by PT Adhi Karya (Persero) Tbk. because of significant incline in 2013 while the ASEAN average declining and National average tends to stagnant. From that data, we could analyze the source of RoE movement for each in the relevance to improve the future performance of PT Adhi Karya (Persero) Tbk

Table 15: Net Profit Margin

	2010	2011	2012	2013	2014
ADHI	0.03	0.03	0.03	0.04	0.04
WIKA	0.05	0.05	0.05	0.05	0.06
PTPP	0.05	0.04	0.04	0.04	0.04
WSKT	0.02	0.02	0.03	0.04	0.05
IJM	0.11	0.13	0.12	0.12	0.13
TTCL	0.06	0.05	0.05	0.04	0.02
YN	0.16	0.19	0.14	0.02	-0.04

The result of net profit margin shows that PT Adhi Karya (Persero) Tbk. is still underperformed compared to National average. It should be improved in the future because there is a huge opportunity in industry. The ASEAN construction industry is tend to decline while the National construction industry is growing. PT Adhi Karya (Persero) Tbk. should catch up with National industry to become the leading company in ASEAN.

Table 16: Total Asset Turnover

	2010	2011	2012	2013	2014
ADHI	1.15	1.10	0.97	1.01	0.83
WIKA	0.96	0.93	0.90	0.94	0.78
PTPP	0.81	0.90	0.94	0.94	0.85
WSKT	1.44	1.42	1.05	1.10	0.82
IJM	0.32	0.30	0.33	0.31	0.19
TTCL	1.43	1.29	1.48	1.07	0.86
YN	1.19	0.62	0.51	0.60	0.37

Total asset turnover shows similar pattern for PT Adhi Karya (Persero) Tbk., ASEAN, and National average. All of them are shown tendency to declines over years. However, from all declines, PT Adhi Karya (Persero) Tbk. still have the best average performance. Still that slight difference is not enough to make the huge difference on RoE calculation. So we could assume that total asset turnover is not the main factor of the RoE differences.

Table 17: Equity Multiplier

	2010	2011	2012	2013	2014
ADHI	5.62	5.62	4.41	4.62	4.57
WIKA	3.86	3.77	3.17	3.31	3.29
PTPP	5.72	6.17	6.67	6.28	5.97
WSKT	3.49	3.75	3.89	3.90	3.20
IJM	4.31	4.86	5.16	6.26	6.11
TTCL	9.06	8.25	4.17	3.69	4.40
YN	1.95	1.94	2.00	2.07	2.06

From the result, we could see the significant differences from the data. ASEAN average start below National Average and ADHI and continue to declining away from the start point in 2010. On the other hand, ADHI have the same starting point with National average in 2010. However, starting from 2011 the 2 data goes separate ways. Equity multiplier of PT Adhi Karya (Persero) Tbk. goes up while the National average is declining. This could be the main factors of PT Adhi Karya (Persero) Tbk. high RoE. But it could also mean a risky situation as the equity multiplier that slowly declining closer to National average in 2013 and 2014. This could represent the over-leveraged situation of the company and the company bears the higher risk than it should so they decide to lower their debt level and ultimately decline their RoE.

## BUMN Financial Framework Scoring

Table 18: BUMN Framework Scoring Result

BUMN Framework Scoring (year 2014)								
Ratios	ADHI	Score	WIKA	Score	PP	Score	WASKITA	Score
ROE	0.227	20	0.1508	20	0.2226	20	0.1759	20
ROI	0.0727	6	0.1933	15	0.0679	5	0.0955	7.5
Cash Ratio	0.1148	2	0.2715	4	0.2653	4	0.2199	3
Current Ratio	1.3415	5	1.1225	4	1.3768	5	1.3618	5
Collection Period	82.4137	4.5	57.4839	5	67.5573	4.5	81.8491	4.5
Inventory Turnover	51.5682	5	23.9358	5	75.4927	4.5	21.4412	5
Total Asset Turnover	0.9124	4	1.3099	5	0.9175	4	0.9774	4
Total Equity to Total Asset	0.1675	6	0.3128	10	0.1636	6	0.2271	7
TOTAL		52.5		68		53		56
Ratios	IJM	Score	TTCL	Score	YN	Score		
ROE	0.0745	10	0.0684	10	(0.0283)	0		
ROI	0.0912	7.5	0.0316	4	(0.0770)	1		
Cash Ratio	0.4229	5	0.1385	2	0.0372	0		
Current Ratio	2.6006	5	1.3477	5	1.5320	5		
Collection Period	162.4120	3	36.4299	5	47.5984	5		
Inventory Turnover	52.5171	5	2.5153	5	103.6246	4		
Total Asset Turnover	0.4872	2.5	1.2486	5	0.8588	3.5		
Total Equity to Total Asset	0.4853	9	0.2827	7	0.5268	8.5		
TOTAL		47		43		27		

Based on table above we can see that the score for PT. Adhi Karya (Persero) Tbk is 52.5. The overall score of PT Adhi Karya (Persero) Tbk. is the lowest in national competition. The highest score is earned by PT. Wijaya Karya (Persero) Tbk which is 68, followed by PT. Waskita Karya (Persero) Tbk with 56, and PT. PP (Persero) Tbk with 53. It turns out that based on BUMN Framework scoring the national companies have better score than the companies from other countries. Even though the score of PT. Adhi Karya (Persero) Tbk is still lower than to the national competitors, it is better than the ASEAN competitors.

There are a few indicators that already in good condition compared to all competitors. They are Return on Equity, Current Ratio, and Inventory turnover. These ratios are above other companies or have the same score with certain competitor. However PT. Adhi Karya (Persero) Tbk needs to improve both the ratios that already in good condition and the ratios that still underperformed if the company wants to excel the competition nationally and in ASEAN zone. Moreover, to be able to compete in AEC competition, the company needs to achieve a way better financial performance.

According BUMN Framework Scoring, PT. Adhi Karya (Persero) Tbk current cash hold is still lacking, the company needs to increase its cash ratio to 35% to reach the healthy ideal level. For the Return on Investment, the company needs to increase the ratio to 15% by increasing its EBIT or reducing the company's asset by retire its' the unproductive asset.

## Conclusion and Recommendation

### Conclusion

This research objective is to find the readiness condition and prepare recommended actions of PT Adhi Karya (Persero) Tbk. to compete in AEC using financial performance analysis of PT. Adhi Karya (Persero) Tbk using 3 approach of measurements; combined time series and cross section analysis, Dupont analysis, and BUMN Framework Scoring.

#### a.) Combined Financial Statement Analysis

Liquidity analysis shows that management of PT Adhi Karya (Persero) Tbk. has done a good work for maintaining company's liquidity above 1.00 point for the last 5 years. Although almost all companies have difficulties in 2011 which shown by the decline of industry average and National average that touch below 1.00 point, PT Adhi Karya (Persero) Tbk. could managed their liquidity to show their capability in fulfilling their short term obligations.

Efficiency analysis that measured by activity ratios shown difference result for PT Adhi Karya (Persero) Tbk. The average collection period of the company shows the underperformance of the company's receivable collection system compared to National average. It shows by the fluctuation of the numbers of average collection period that goes up and down every year for the last 5 years. Moreover, in every incline of the ratio, the numbers goes over 60 points which is considered too high. Total asset turnover also shows the underperformance of the company. For the last 5 years, the numbers tends to decline over years. Although it might be caused by the decline of the industry condition which is shown by all the average that also declining, management of PT Adhi Karya (Persero) Tbk. should figure out the core problem to optimize the utilization of their assets that continuously dropping since 2010.

Leverage analysis that measured by debt ratios also shown underperformance condition. The ratios indicate that the company is on over-leverage position. Debt ratio of PT Adhi Karya (Persero) Tbk. is higher than industry average while the times interest earned ratio is on lowest position. Fortunately, the management already starts anticipating the problem which is shown by the debt to equity ratio that already declining closer to industry average.

For profitability, the analysis also shows some indication of underperformances. Gross profit margin is underperformed compared to the 2014 growth of national average. Operating and net profit margin moves slowly to catch up with the growth of National average, yet it still below the National average from 2010 to 2014. Earning per share shows good indication which represent by far higher number than the industry average. However EPS on 2014 is declining. Return on asset and return on equity shows quite good performance. The ratios are above the ASEAN average and keep up with the growth of National average. In fact, the RoE of PT Adhi Karya (Persero) Tbk. is leading the industry although it was back declining in 2014.

#### b.) DuPont Analysis

From DuPont analysis, we could see that the high performance of the company's RoE is from the leverage factor. The equity multiplier of PT Adhi Karya (Persero) Tbk. is the highest from the competitors' average while the net profit margin is not above the National average and total asset turnover is declining along with the industry. The information about the good RoE performance could be indication of over-leverage condition because the only factor that makes high RoE is the leverage while the profitability and efficiency is on underperformed condition.

#### c.) BUMN Framework Scoring

According to BUMN Framework Scoring, the total score for PT. Adhi Karya (Persero) Tbk is 6.73. The overall score of PT Adhi Karya (Persero) Tbk. is the lowest in national competition. However, even though the score of PT. Adhi Karya (Persero) Tbk is still lower than to the national competitors, it is higher than the ASEAN competitors. Compared to the leading company with the highest score, there are 15.5 differences in the score. PT. Wijaya Karya (Persero) Tbk has the overall score of 68, while PT. Adhi Karya (Persero) Tbk has the overall score of 52.5. PT. Wijaya Karya (Persero) Tbk also

reach highest score for all indicators except current ratio. PT. Adhi Karya (Persero) Tbk is still underperformed than PT. Wijaya Karya (Persero) Tbk in certain ratios such as Return on Investment, Cash Ratio, Collection Period, TATO, and Total Equity to Total Asset. But other than those ratios, PT. Adhi Karya (Persero) Tbk has already performed well with high score.

### **Recommendation**

For the Management of PT Adhi Karya (Persero) Tbk.

The company should maintain the liquidity ratio of the company as it's already in a healthy state. However, the company should increase its cash hold proportion in its current asset because currently the company cash hold is considered unhealthy.

The company should improve their project payment terms, because the collection period is considered undesirable. The company should improve the ratio to the desirable number in order to keep the company cash flow undisturbed because currently the receivables collection is considered too long.

The company should maximize the utilization of its asset, since the company asset is still not fully utilized to its maximum potential to generate sales. It could be done by optimize the productive asset to generate more revenue, or to retire the unproductive asset.

The company should figure a way to push down the cost of revenues. The operating profit margin shows a good result of performance yet the gross profit margin was underperformed compared to the industry. If the cost of revenue could be pressed, it will increase the company's net profit margin for better profitability ratio.

The company could consider further study about capital structure. The result of analysis indicates that the company is already in high-leveraged position. Debt analysis indicates the over-leveraged position which shown by the highest debt ratio with the lowest times interest earned. However from DuPont analysis, the leverage factor is the key of the company's high RoE. Further study should find the optimal capital structure for the company so it will not be in over-risky position but not interfere with good RoE.

According to annual report of PT Adhi Karya (Persero) Tbk., even though AEC market seems to be a burden to domestic construction service, the participation of Foreign Construction Services Business Entity is limited to 55%. So to be able to win the AEC competition, PT. Adhi Karya (Persero) Tbk should cooperate with Foreign Construction Services Business Entity in a form of joint venture or joint cooperation. By doing joint venture or joint cooperation, it gives mutual advantages since PT. Adhi Karya (Persero) Tbk will get additional investment and the foreign construction services business entity will be allowed to enter Indonesian market. However, PT. Adhi Karya (Persero) Tbk should be selective in choosing foreign companies to be partner in future cooperation. After we see the analysis of Asean Company's financial performance, the idea of cooperating with other Asean company seems reasonable. In term of choosing their future partners, PT Adhi Karya (Persero) Tbk. should make further study since Asean companies tends to perform worse than national companies. Based on this research, preferable Asean Company that could be future partner for PT Adhi Karya (Persero) Tbk. is IJM Corporation Berhad from Malaysia.

For Further Research

Because of this research limitation, there are many rooms for further study to support the findings of this result. Recommendations that author could suggest to further research are:

- a. Further research about company's optimal capital structure is necessary. Limitation of this research about leverage analysis was not provides a satisfying recommended action for company's debt position.
- b. In literature review, there are many versions of financial ratio classification and interpretation. From that many versions, author choose to use textbook version from Gitman and Zutner. Further research could try to use different main frame of ratios and see the result support the findings of this research or contrary to it.

- c. From the research background, there are 3 factors that determine the performance of construction companies which is internal factors, external factors and market forces. This research is limited to analyze a part of internal factor which is financial performance. Further research could discuss more about the other part of internal factors like the quality of human resource or the application of technology.

## References

- Ayu, A.A. 2015. *Analysis of Financial Statement and Sustainability of CDMA Service Provider Company*. Bandung: SBM ITB Journal
- Babalola, Y. A., & Abiola, F. R. 2013. *Financial Ratio Analysis of Firms: A Tool for Decision Making*. International Journal of Management Sciences
- Budimanta, Arif. 2014. *Konstruksi Sebagai Penggerak*. Jakarta: Republika.
- Collier, H.W., Grai, T., Haslitt, S. and McGowan, C.B., 2004. *An example of the use of financial ratio analysis: the case of Motorola*.
- De Franco G, Kothari SP, Verdi RS. *The benefits of financial statement comparability*. Journal of Accounting Research. 2011 Sep 1;49(4):895-931.
- Gitman, L.J., & Zutter, C. J. (2013). *Principle of Managerial Finance* (13<sup>th</sup> edition). San Diego: Pearson.
- Halim, M.R. 2015. *Optimal Capital Structure and financial Performance Analysis for PT. Matahari Department Store Tbk*. Bandung: SBM ITB Journal
- Hassanein, A.A. and Khalifa, R.A., 2006. *Financial and operational performance assessment: water/wastewater Egyptian utilities*. Building Services Engineering Research and Technology, 27(4), pp.285-295.
- Moavanzadeh, Fred. 1976. *The Construction Industry in Developing Countries*. Massachusetts: usaid.gov
- Munir, S., Ramzan, M., Ahmad, M. and Raza, A., 2012. *Financial Performance Assessment of Banks: A Case of Pakistani Public Sector Banks*. International Journal of Business and Social Science, 3(14).
- Ofori, G., 1980. *The construction industries of developing countries: the applicability of existing theories and strategies for their improvement and lessons for the future; the case of Ghana* (Doctoral dissertation, University of London).
- Raeputranto, N.Y. 2015. *Financial Performance Analysis of PT. Bio Farma (Persero) Compared with Developing and Leading Pharmaceutical Manufacturers*. Bandung: SBM ITB Journal
- Sudarto. 2007. *Identifikasi Permasalahan Pada Faktor Internal yang Mempengaruhi Kinerja Perusahaan Jasa Konstruksi di Indonesia*. Depok: Jurnal Teknologi
- World Bank. 1984. *The Construction Industry: Issues and Strategies in Developing Countries*. Washington DC: The World Bank
- ASEAN Free Trade Area (AFTA Council). <http://www.asean.org/communities/asean-economic-community/category/asean-free-trade-area-afta-council>
- Company Profile of PT Adhi Karya (Persero). <http://www.adhi.co.id/en/about-adhi/company-profile>
- Keputusan Menteri Badan Usaha Milik Negara. nomor:KEP-100/MBU/2002 Tentang Penilaian Tingkat Kesehatan Badan Usaha Milik Negara.
- <http://cpaconstruction.com/wp-content/uploads/2012/07/Construction-Industry-Ratios.pdf>.
- Accessed in Monday, December 14<sup>th</sup> 2015, 2.30 am
- Annual Report PT. Adhi Karya (Persero) Tbk for the Period 2010 - 2014. <http://www.adhi.co.id/investor-relations/annual-reports>
- Annual Report PT. Wijaya Karya (Persero) Tbk for the Period 2010 - 2014. <http://www.wika.co.id/file/annual-reports>
- Annual Report PT. Waskita Karya (Persero) Tbk for the Period 2010 - 2014. <http://www.waskita.co.id/en/index.php/investor-relations/annual-report>
- Annual Report PT. PP (Persero) Tbk for the Period 2010 - 2014. <http://www.pt-pp.com/?m=annual>
- Annual Report Yongnam Holdings Limited for the period 2010 - 2014. <http://www.yongnam.com.sg/investor.html>

Annual Report IJM Corporation Berhad for period 2010 - 2014.  
<http://www.ijm.com/web/investor/annualReports.aspx>  
Financial Report Toyo-Thai Company Limited for Period 2010 - 2014.  
<http://investor.ttcl.com/financials.html>