

MEASURING AND COMPARING THE FINANCIAL PERFORMANCE OF CONSTRUCTION INDUSTRY: AN INDONESIA EXPERIENCE

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ABSTRACT

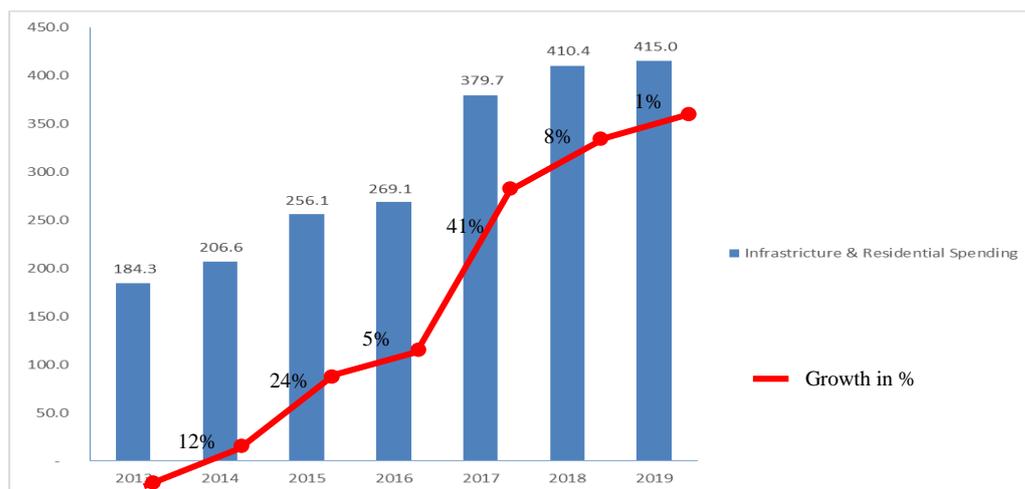
Infrastructure development is currently one of the main concerns of the Indonesian government. Indonesia's government planned to spend US \$450 billion of infrastructure between 2016 and 2020, with over US\$22 billion of confirmed spending for 2016. State Owned Enterprise (SOE) has been competing with the private sector to catch the projects from the government. This study aims to analyze and compare the financial health conditions of two SOEs construction industries for periods of 2011 – 2015. The data were collected from their publicly audited financial reports. The Decree No.KEP-100/MBU/2002 issued by Indonesia Ministry of State-Owned Enterprises (SOEs) in June 2002 provides the mandatory of measuring and rating of the SOEs financial health condition. The results of eight financial ratios investigating; 1) return on equity, 2) return on investment, 3) cash ratio, 4) current ratio, 5) collection period, 6) inventory turnover, 7) total asset turnover, 8) total equity to total asset, then be validated by the said Ministry of SOEs Decree to conclude the yearly financial health conditions of each SOEs. The result shows that from 2011 - 2015, the both SOEs has achieved financial healthy condition levels and rating as follows; PT. Adhi Karya (AA, A, AA, A, A, A); and PT. Wijaya Karya (AA, AA, AA, AA, A). This study has added the knowledge in the financial literature. It also gives a strong insight for managers in construction industry about the financial performance. Therefore, the managers could make decisions to increase the market share and the profitability.

Keywords: Financial Health, Decree of Ministry of State Owned Company, Financial Performance, SOEs, Inventory Management

INTRODUCTION

The Government of Indonesia (GOI) under the leadership of Mr. Joko Widodo is eager to invest heavily in the country's infrastructure development. Based on the national long-term plan of State Ministry for Development Planning 2005-2025, in the Revised 2015 State Budget, the central government set aside IDR 290.3 trillion, or USD \$22.3 billion to support it (Bappenas, 2015). The GOI had taken many aggressive actions in developing Indonesia into a leading country in ASEAN region. This action can be seen in an increasing number of the GOI spending, especially in Indonesia infrastructure development and low-income citizen housing projects.

Figure 1. The GOI Infrastructure and Residential Spending 2013-2019 (in IDR Trillion)



Source: Indonesian Ministry of Finance APBN Data 2019

Figure 1 shows the increase of the Indonesian infrastructure and residential spending for 2013-2019. In 2013, the spending was IDR 184.3 Trillion (T), and in 2014 was IDR 206.6 T, or increased by 12 percent. It was followed by IDR 256.1 T; IDR 269.1 T; IDR 379.7 T; IDR 410.4 T; and IDR 415 T, respectively from 2013 to 2019.

The GOI decides mandatory to the company under the Ministry of Stated Owned Enterprises (SOEs) that they should implement financial ratio analysis to measure the level of financial health condition. The previous research about financial

performance has been discussed in many sectors such as hospital, bank, and small business. Edmister (1972) stated that financial ratio is really useful to measure the performance of small business and it can be used to predict the failure. The finding shows that debt and profitability ratios are important indicators to analyze their financial performances. Washington (2001) stated that research on the ability of financial models to provide an early warning of corporate failure is favorable. The users of business information are often stakeholders who rely heavily on financial reports. Lan (2012) stated that ratio analysis is one of the most widely used fundamental analysis techniques. Ratio analysis is a tool that was developed to perform quantitative analysis on numbers found on financial statements. Ratios help link the three financial statements together and offer figures that are comparable between companies and across industries and sectors. The two state owned construction companies that actively running infrastructure and housing development are PT Adhi Karya, or Adhika, and PT Wijaya Karya, or Wika. Adhika deals with property projects such as apartments. Wika handles infrastructure projects.

Therefore, this study investigates the association between financial performances of the both SOEs, for the periods of 2011-2015, which then the results be validated by the decree of the Ministry of SOEs No. KEP-100/MBU/2002. In view of this, the research questions are 1) How healthy was the financial performance of the two construction industry based on the decree of Ministry of SOEs No. KEP-100/MBU/2002), and 2) what was the difference of financial performance between both construction SOEs. This study is beneficial for academicians because it extends the knowledge of financial ratio in the real practice. Besides that, it could help students and lecturers to understand financial ratio more effectively. In addition, this study is also important for manager because it can help them to analyze the company's situation and guide them to make decisions.

LITERATURE REVIEW

A. Development of The Construction Industry in Indonesia

Looking at historical trend of the growth of Indonesia's construction sector, as depicted in figure 2, it had consistently grown faster than Indonesia's overall GDP. Construction sector was able to grow and achieve 6.97% in 2014 faster than growth of national GDP that booked 5.2%. It means that construction industry provides a very important contribution to the national and local economy. These increases indicated major strategic of construction sector as a positive catalyst for national economic development. Moreover, according to National Planning Agency plan for 2014-2019, the current President Jokowi administration has set an ambitious target of infrastructure expansion. It is predicted that the total infrastructure improvement could cost Rp957 trillion over the next five years (Trimegah Securities, 2015). Therefore, Indonesian construction sector is still in a nascent stage that made government's move to improve infrastructure in the coming period is inevitable.



Source: Trimegah Securities (2015)

The potential to gain profits in the construction industry was high. The limited market will generate unhealthy competition between them. The support from the government was really needed in this situation to improve the middle class firm to compete in the market, as the domestic market now was dominated by a large construction companies which only 1% of the total construction company. According to Soenarno (2003), there are three major problems that being experienced by construction industry in Indonesia; 1) productivity; 2) financial; and 3) technology.

PT Adhi Karya Tbk

PT Adhi Karya (Persero) Tbk was established under on June 1, 1974. The Company's scope of business comprises of Construction, Management consultation and Industrial engineering (Engineering Procurement and Construction/EPC), Implementation of railway infrastructure, Investment, general trading, procurement services, manufacturing (precast), services in information technology, real estate and agro industry, property, hotel and real estate.

PT Wijaya Karya (Persero) Tbk (WIKA)

The State Owned Company Widjaja Karja was established on March 29, 1961 and according to Government Regulation year No. 40 year 1971. Furthermore, the Company's name was changed to PT Wijaya Karya (Persero). The Company's scope of business comprises of construction industry, industrial manufacturing, rental services, agency services, investment, agro industry, energy industry, renewable energy and energy conversion, services railway, organizing harbor, holding airport services, logistics, trade, engineering procurement, construction. Development and management area, service upgrades in construction services, information technology of engineering services, planning and optimizing the utilization of resources to produce goods and or services.

B. Previous Research on Financial Ratio Analysis

There are two methods to measure the financial performances which are accounting and market measurement. Many researchers who prefer to use accounting measurement (Waddock and Graves 1997; Cochran and Wood 1984), rather than market measurement (Alexander and Buchholz, 1978; Vance, S. C., 1975), and some of them adopt both methods (McGuire, J. B., Sundgren, A., Schneeweis, T., 1988). There are few differences between accounting and market measurement method. In accounting, company use the historical aspects to measure their financial performance (McGuire, Schneeweis, & Hill, 1986) and it contain a bias which lead to managerial manipulation. On the other hand, market measurement method is straight forward, focus on performance and represent the ability of a company to generate future income (McGuire, J. B., A. Sundgren, and T. Schneeweis, 1988). There have been a large number of empirical studies on financial ratio on different industries around the world. According to Megaladevi (2015), financial ratio is a good evaluation method to measure the company performances. Company usually uses this method to compare their performance with other competitors. However, there are limited resources which evaluate the financial performance of Oil and Gas Company in Indonesia.

According to Tarawneh (2006), the financial ratio analysis (FRA) has been applied in Banking industry to examine, evaluate, and ranked based on their performance. Based on the study in Oman Commercial Banks, financial performance has relationship with asset management, size and operational efficiency. Iskakov and Yilmaz (2015) investigated the financial performance in four major Oil and Gas Company and found that three of them have a high level of satisfactory and Exxon Mobil was the outstanding one. Wibisana, Y.N.; Damayanti, S.M. (2016) measured the financial performances for PT Adhi Karya in order to improve its financial health to be ready in competing in ASEAN Construction Industry (AEC). Based on the measurement results, especially for the SOE's scoring, PT Adhi Karya had the lowest overall score at the national competition. However, oppositely it gained higher score compared with other ASEAN competitors. In this competition, PT Wijaya Karya lead the competition with total score of 68, leaving PT Adhi Karya 15.5 behind. According to this journal, there are some recommendations to improve the financial performances of PT Adhi Karya such as more effective in utilizing their assets, push down the cost of the projects, and considering the collection period because the receivables collection took much time. The financial performance of Pertamina for 2011-2015 were good, although there was a decline in the production which forced the government to import more oil (Daryanto, Nurfadilah 2018). Wibisana, N.Y., and Damayanti, S.M. (2016) measured the financial performances for Adhika in order to improve its financial health in competing in ASEAN Construction Industry (AEC).

C. The Decree of Ministry of State Owned Enterprises

According to the Decree of Ministry of State Owned Enterprises (SOEs) No. KEP-100/MBU/2002 about financial health assessment of State Owned Enterprises, the growth of business should be supported by good infrastructure and evaluation system to measure the efficiency and level of competition among SOEs. This financial evaluation applies to all state-owned enterprises in the financial and non-financial industry. In non-financial industry, the companies are divided into infrastructure and non-infrastructure. This evaluation method consists of three aspects which are financial, operational, and administration. In a financial aspect, total weight score for infrastructure is 50 and non-infrastructure are 70. There are eight indicators to measure the financial health such as return on investment, return on equity, cash ratio, current ratio, collections period, inventory turnover, total asset turnover, and total equity to the total asset.

METHODOLOGY

The descriptive financial ratio was used to measure, describe and analyze the performance of two enterprises under Ministry of General Works. PT Adhi Karya and PT. Wijaya Karya were selected because those companies are state-owned enterprises in non-financial services which qualified in this decree. Data were collected from Annual Report (audited) between 2011 and 2015. All variables used are ratio measurement scales were taken from the decree of Ministry of State Owned Enterprises No. KEP-100/MBU/2002 about the financial health assessments of the State Owned Enterprises. Additionally, this decree used to validate the performance of those enterprises whether in the healthy level or less healthy, or unhealthy position.

The level of financial assessment is divided into healthy (the highest level of financial literacy), less healthy (the middle level of financial literacy), and unhealthy (the lowest level of financial literacy). In highest category, there are three types of levels such as AAA (if the total score is more than 95 points), AA (if the total score is more than 80 and less than 95), An (if the total score is more than 65 and less than 80). In the middle category, there are three types of levels such as BBB (if it is more than 50 and less than 65), BB (if it is more than 40 and less than 50), and B (if it is more than 30 and less than 40).

In the lowest category, there are three types of levels such as CCC (if it is more than 20 and less than 30), CC (if it is more than 10 and less than 20), and C (if it is less than 10).

The selection of the FRA method for this study is motivated the researchers' knowledge due to the limited literature review on coal mining and natural gas industry in Indonesia. In addition, financial ratios can be used to identify a company's specific strengths and weaknesses as well as providing detailed information about company profitability, liquidity, activity, and solvency (Hempel *et al.*, 1994; Dietrich, 1996). Although accounting data in financial statements is subject to manipulation and financial statements are backward looking, they are the only detailed information available on the company's overall activities (Sinkey, 2002). Furthermore, they are the only source of information for evaluating management's potential to generate satisfactory returns in future (Kumbirai, M., Webb, R. 2010).

A. The Variables and Weight Score

Table 1. List of assessment score

INDICATORS	WEIGHT SCORE
ROE	20
ROI	15
Cash Ratio	5
Current Ratio	5
Collection Period	5
Inventory Turnover	5
Total Asset Turnover	5
Total Equity to Total Asset	10
Total weight score	70

Source: The Decree of Ministry of State Owned Enterprises (SEOs) No. KEP 100/MBU/2002

Profitability Performance

The profitability is the most common measure for company's financial performance. Profitability is measured using the following criteria:

$$\text{Return on Equity} = (\text{Net Income} / \text{Shareholders' Equity}) \times 100 \%$$

Return on equity (ROE) is an important ratio for investors to consider its profits. ROE measures how efficiently a company can use the money from shareholders to generate profits and grow the company. ROE indicates the company's profitability and growth potential.

Table 2. List of ROE assessment score

ROE (%)	Score
15 < ROE	20
13 < ROE ≤ 15	18
11 < ROE ≤ 13	16
9 < ROE ≤ 11	14
7,9 < ROE ≤ 9	12
6,6 < ROE ≤ 7,9	10
5,3 < ROE ≤ 6,6	8.5

4 <ROE <= 5,3	7
2,5 <ROE <= 4	5.5
1 <ROE <= 2,5	4
0 <ROE <= 1	2
ROE < 0	0

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002

ROI shows the ability of the company to measure the income generated on investment relative to the amount of money invested (Anthony et. al, 2011).

$$\text{Return on Investment} = (\text{EBIT} + \text{Depreciation} / \text{Capital Employed}) \times 100$$

Table 3. List of ROI assessment score

ROI (%)	Score
18 < ROI	15
15 < ROI <= 18	13.5
13 < ROI <= 15	12
12 < ROI <= 13	10.5
10,5 < ROI <= 12	9
9 < ROI <= 10,5	7.5
7 < ROI <= 9	6
5 < ROI <= 7	5
3 < ROI <= 5	4
1 < ROI <= 3	3
0 < ROI <= 1	2
ROI < 0	1

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002

Liquidity Performance

According to Gitman and Zutter (2012), liquidity ratio can be used to measure the company's ability to pay their short-term liabilities. This type of liquidity is different with the investor's fund which company saves in the highly liquid account because it can't generate a return.

$$\text{Cash Ratio} = (\text{Cash} + \text{cash equivalents} / \text{Current Liabilities}) \times 100 \%$$

Cash ratio measures the liquidity of the company to pay the current liabilities with only cash and cash equivalents. If the company has cash ratio equal to one, it indicates that company has the same amount of cash and its debt. If the value of cash

ratio is more than one, it indicates that company has more cash to pay its debt. However, if the value is less than one, it indicates that company has less cash to pay its debt.

Table 4. List of cash ratio assessment score

Cash Ratio = x (%)	Score
$x > = 35$	5
$25 < = x < 35$	4
$15 < = x < 25$	3
$10 < = x < 15$	2
$5 < = x < 10$	1
$0 < = x < 5$	0

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002

The current ratio measures the company ability to pay its short-term liabilities using their short-term assets, or current asset. If the company has a current ratio below one, it indicates that company has a problem with its short-term debt. If the company has a too high current ratio, it indicates that company has a problem in managing their current asset.

$$\text{Current ratio} = (\text{Current Asset}/\text{Current Liabilities}) \times 100 \%$$

Table 5. List of current ratio assessment score

Cash Ratio = x (%)	Score
$125 < = x$	5
$110 < = x < 125$	4
$100 < = x < 110$	3
$95 < = x < 100$	2
$90 < = x < 95$	1
$x < 90$	0

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002

The collection period is an important indicator for the company to monitor their cash flow. Collection period is used as an indicator to measure the problem to collect debt from customers. If the collection period is high, then the company should communicate it with the customers.

$$\text{Collection Period} = (\text{Average Accounts Receivables}/\text{Sales Revenue}) \times 365 \text{ days}$$

Table 6. List of collection period assessment score

Collection Period = x (days)	Adjustment (days)	Score
$x \leq 60$	$30 < x$	5
$60 < x \leq 90$	$30 < x \leq 35$	4.5
$90 < x \leq 120$	$25 < x \leq 30$	4
$120 < x \leq 150$	$20 < x \leq 25$	3.5
$150 < x \leq 180$	$15 < x \leq 20$	3
$180 < x \leq 210$	$10 < x \leq 15$	2.4
$210 < x \leq 240$	$6 < x \leq 10$	1.8
$240 < x \leq 270$	$3 < x \leq 6$	1.2
$270 < x \leq 300$	$1 < x \leq 3$	0.6
$300 < x$	$0 < x \leq 1$	0

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002.

Activity Ratio

Inventory turnover describes how many times the inventory is sold or replaced by the company. If the ratio is high, it indicates that the inventory level is inadequate. If the ratio is low, it indicates that the company is overstocking and deficiencies in the marketing effort.

$$\text{Inventory Turnover} = \text{Cost of goods sold} / \text{Average Inventory}$$

Table 7. List of inventory turnover assessment score

Inventory Turnover = x (days)	Adjustment (days)	Score
$x \leq 60$	$30 < x$	5
$60 < x \leq 90$	$30 < x \leq 35$	4.5
$90 < x \leq 120$	$25 < x \leq 30$	4
$120 < x \leq 150$	$20 < x \leq 25$	3.5
$150 < x \leq 180$	$15 < x \leq 20$	3
$180 < x \leq 210$	$10 < x \leq 15$	2.4
$210 < x \leq 240$	$6 < x \leq 10$	1.8
$240 < x \leq 270$	$3 < x \leq 6$	1.2
$270 < x \leq 300$	$1 < x \leq 3$	0.6
$300 < x$	$0 < x \leq 1$	0

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002

TATO ratio indicates the company ability to generate revenue from deploying its asset. A higher ratio indicates that company using its assets more efficiently and lower ratio indicates that company is using its asset deficiently. This ratio measures the company ability to measure the efficiency to use its asset to generate sales.

$$\text{Total Asset Turn Over} = (\text{Revenue}/\text{Capital Employed}) \times 100 \%$$

Table 8. List of total asset turnover assessment score

TATO = x (%)	Adjustment = x (%)	Score
120 < x	20 < x	5
105 < x ≤ 120	15 < x ≤ 20	4.5
90 < x ≤ 105	10 < x ≤ 15	4
75 < x ≤ 90	5 < x ≤ 10	3.5
60 < x ≤ 75	0 < x ≤ 5	3
40 < x ≤ 60	x ≤ 0	2.5
20 < x ≤ 40	x < 0	2
x ≤ 20	x < 0	1.5

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002.

Solvency Ratio

It is a good indicator to measure the financial health of the company. Equity to asset ratio measures the percentage of company's asset owned by investors and the leverage level of the company with its debt. This ratio is similar to debt to equity ratio. If the company has less value, it indicates that company funding its asset inefficiently. In the other words, the company has very low net value for the investor (Anthony, et.al.,2011)

$$\text{Total equity to total asset} = (\text{Total equity}/\text{Total asset}) \times 100 \%$$

Table 9. List of solvency assessment score

Total Equity to Total Asset (%) = x	Score
x < 0	0
0 ≤ x < 10	4
10 ≤ x < 20	6
20 ≤ x < 30	7.25
30 ≤ x < 40	10
40 ≤ x < 50	9
50 ≤ x < 60	8.5
60 ≤ x < 70	8
70 ≤ x < 80	7.5
80 ≤ x < 90	7
90 ≤ x < 100	6.5

Source: The decree of Ministry of State Owned Enterprises (SEOs) No. KEP-100/MBU/2002.

RESULTS AND DISCUSSION

A. Profitability Performance

Figure 3. Profitability Trend in PT ADHI KARYA

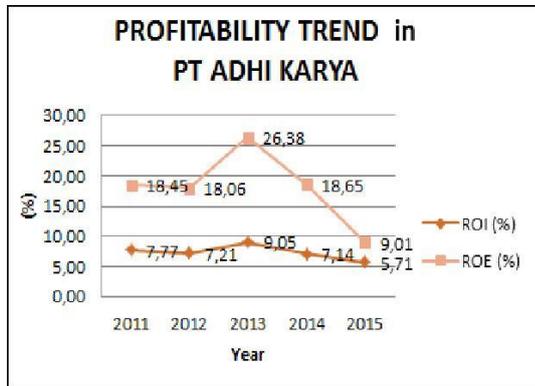


Figure 4. Profitability Trend in PT WIKA

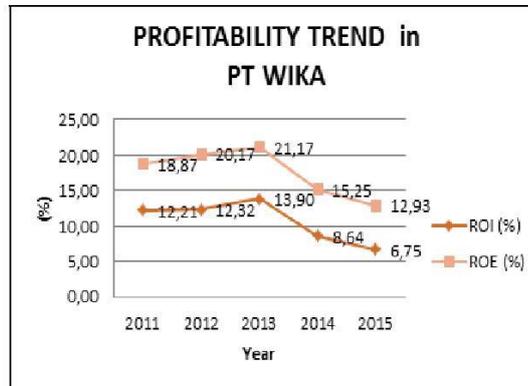


Figure 3 depicts the percentage of ROI and ROE of PT Adhi Karya, which overall has lower percentage of those ratio compared with PT Wijaya Karya shown in figure 4. The peak ratios were depicted in the figures which shows for both companies in 2013, then fell down slightly in 2014 and 2015. The decreasing could be caused by the event of the president election in 2014.

Figures above show each profitability ratios of PT Adhi Karya and PT Wijaya Karya. The pattern of both companies decline. The ROE of PT Adhi Karya starts from percentage of 18.45% which almost the same with PT Wijaya Karya which started with 18.87%. The highest ROE showed in 2013: 26.38% and 21.17% but in 2014 and 2015 the graphics shows decline for both companies. The declining of ROE trend for both companies occurred, because its net income growth slower insignificantly compared with its equity which grew faster, especially for PT Adhi Karya which grew up from approximately IDR 1.7 trillion in 2014 into IDR 5.1 trillion in 2015. ROI of PT Adhi Karya shows more stable line than PT Wijaya Karya. Trend of PT Adhi Karya shows percentage of approximately 7% while PT Wijaya Karya shows fluctuating line with the highest percentage in 2013 (13.90%) and the lowest one in 2015 (6.75%).

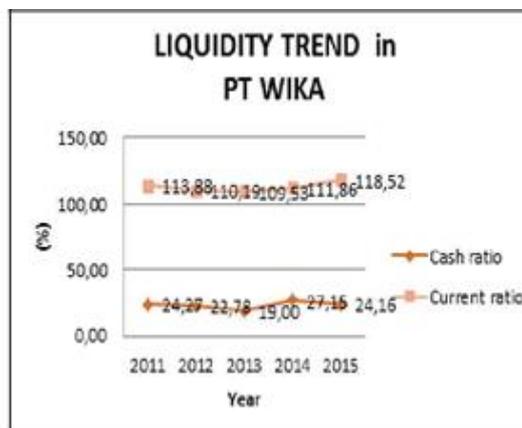
B. Liquidity Performance

Figure 5 and 6 give information about the liquidity performances of PT Adhi Karya and PT Wijaya Karya for 2011 to 2015. Cash ratio of PT Adhi Karya was fluctuated and has the lowest percentage of 11.48 % in 2014. Meanwhile, PT Wijaya Karya cash ratio remained stable. Current ratio of PT Adhi Karya had been increased year by year until 156.05 % in 2015. While the graph of current ratio of PT Wijaya Karya was almost flat from 2011 to 2015. Both companies have percentages of current ratio more than 100 %, while cash ratio is less than 100 %. It means that the liabilities of those companies was not able be paid by cash, but by other assets.

Figure 5. Liquidity ratio of PT. Adhi Karya



Figure 6. Liquidity Ratio of PT WIjaya Karya



Liquidity Ratio of both companies shows different pattern. Cash Ratio of PT Adhi Karya shows increasing trend from 2011 until 2015 although there was a bit decline in 2014 (from 139.10% into 134.15%). Since the beginning of 110.30% in 2011, and the ending cash ratio for 2015 was 156.05% which means there were 46.75% addition during five years. The different

pattern was shown by PT Wijaya Karya. This company had more stable cash ratio which showing percentage in the level of 109.53% (the lowest in 2013) and 118.52% (the highest in 2015). In the current ratio, PT Adhi Karya shows more fluctuating pattern. It started with 11.33% in 2011 and grew up to 20.66% in 2013, but then it declined into percentage of 11.48% in 2014. However, in 2015 the percentage has a peak number of 45.86%. Oppositely, the different pattern had been shown by PT Wijaya Karya which more stable lines. Both Cash and Current Ratio of PT Wijaya Karya shows stable lines because their cash and cash equivalents and their current assets increased stably compared with PT Adhi Karya, which their cash + cash equivalents and current assets had been increasing significantly year by year. Its current liabilities increased approximately IDR 1 trillion respectively.

Figure 7. Collection Period of PT Adhi Karya and PT Wijaya Karya

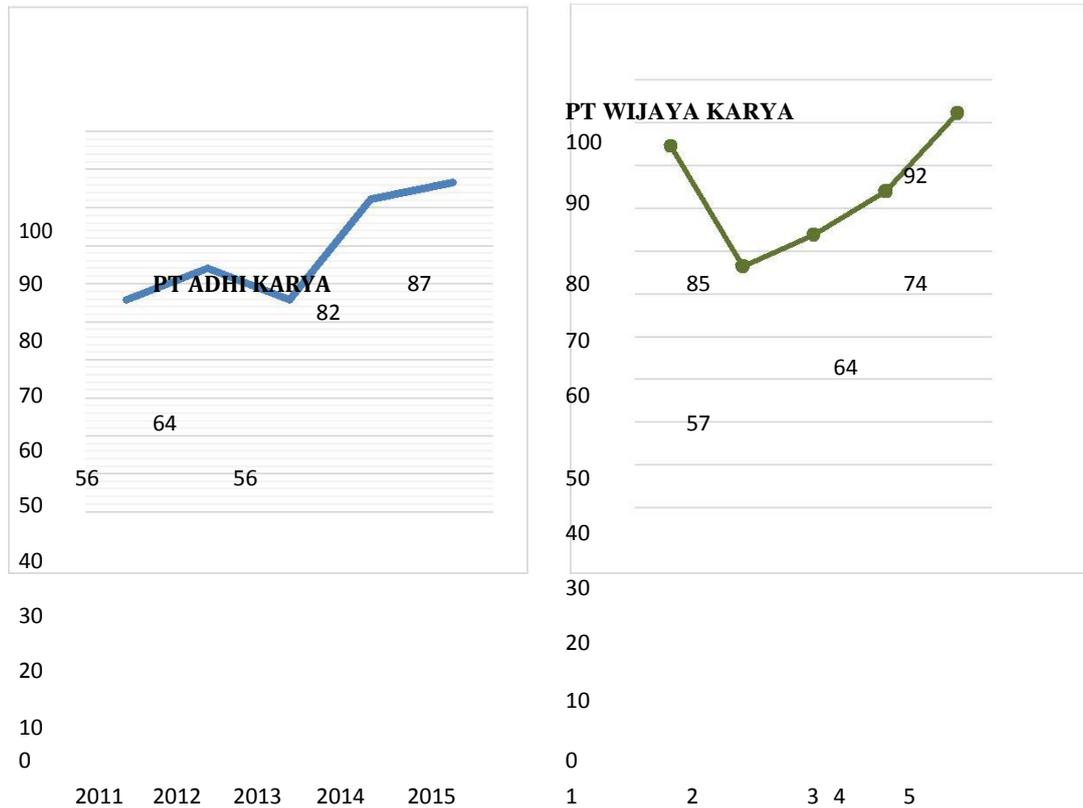


Figure 7 shows collection period of both companies for 2011 - 2015. Collection period of PT Adhi Karya shows fluctuating percentage which started growing in 2012, declining in 2013, but significantly increasing in 2014 until 2015. In 2011 until 2013, the company actually had better conditions compared to 2014 and 2015. The increasing collection period does not always means good for the company. The higher the collection period means the company needs more time to collect all receivables. Different condition occurred in PT Wijaya Karya. They started with high collection period. In 2012 it declined into 57 days and increasing yearly until the highest of 92 days in 2015.

C. Activity Performance

Figure 8. Inventory Turnover Trend



Figure 9. TATO Trend

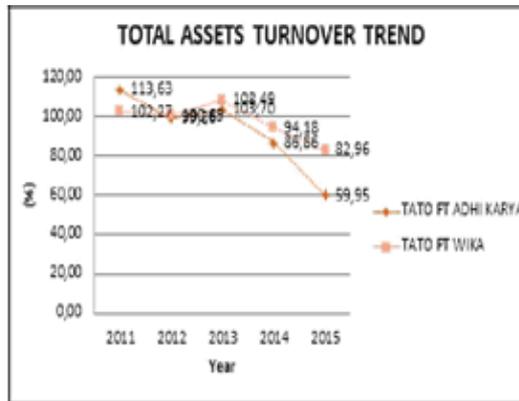


Figure 8 shows the difference between ITO of PT Adhi Karya and ITO of PT Wijaya Karya. Both showed good Inventory Turnover (below 60 days). However, ITO of PT Adhi Karya showed faster inventory turnover which started with approximately 4 to 6 days compared with ITO of PT Wijaya Karya which started with 41 days in 2011 and became 42 days in 2012, and declined in 2013 – 2015. Lower day inventory turnover means the company has good ability to sell their product faster, so it could minimize their inventory which cause less cost to keep their finished products. Oppositely, higher day inventory turnover means the company has less ability to sell their product faster so it could increasing the inventory and causing more cost to keep their finished products. The Total Asset Turnover (TATO) as depicted in figure 9 shows the ability of company to use their assets efficiently to generate sales revenue.

The higher Total Asset Turnover means that the company uses their assets efficiently to generate sales. Both PT Adhi Karya and PT Wijaya Karya shows almost the same pattern in their Total Asset Turnover. PT Adhi Karya started with 113.63% in 2011 which means they already had good TATO, but then it declined year by year until 59.95% in 2015. For instance in 2013, their revenue was IDR 9.79 trillion and their capital employed was approximately IDR 9.5 trillion. It resulted to their TATO into 103.7 %, which means they could use their assets to generate revenues of a near numbers with their assets. However, different situation shown in 2015, they generated IDR 9.38 trillion revenue by using their assets of IDR 16.76 trillion, which means that their capital employed for the year was too much, or their revenue was too low which caused by inefficient effort to generate the revenue. Descriptively, PT Adhi Karya used their assets of IDR 16.7 trillion in 2015, but could only generated revenue of IDR 9.3 trillion. The better result had been shown by PT Wijaya Karya, which has more percentages of TATO, except for year 2011. It started with 102.27% in 2011 and ended with 82.96% in 2015. It might has the same pattern with PT Adhi Karya, but the result showed more efficient effort of PT Wijaya Karya in generating their revenue.

D. Solvency Performance

Figure 10. Solvency Trend PT Adhi Karya and PT Wijaya Karya

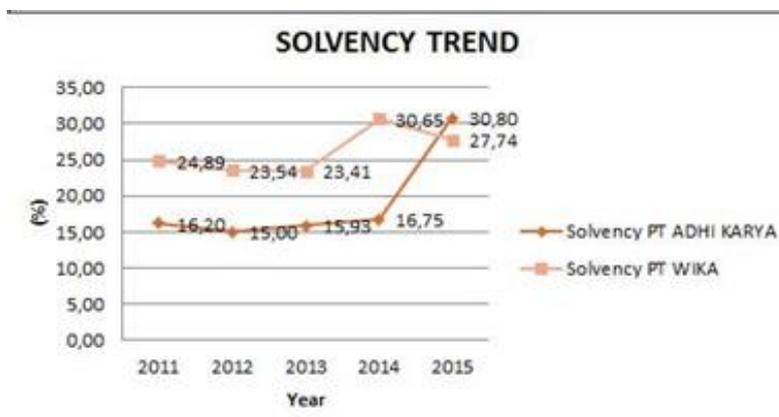


Figure 10 shows the Total Equity-to-Asset Ratio (TETA) shows percentage of assets owned by investors, called as equity. For the PT Adhi Karya shows stable percentage from 2011 with percentage of 16.20%, and ending with 16.75% in 2014, but significantly increased up to 30.8% in 2015. It means, these low percentages of equity financed the company, and the rest

were financed by the liabilities. However, a fluctuating pattern shown by PT Wijaya Karya, which had the peak of 30.65% in 2014 but declined down to 27.74% in 2015. The lower percentage of solvency defines that they have high liabilities which company must pay. PT Adhi Karya had much of liabilities in 2011 to 2014. And in 2015 the percentage was doubled increase to 30.80%. It means in 2015, PT Adhi Karya has less than 70% liabilities. Meanwhile the percentage of solvency in PT Wijaya Karya was higher than PT Adhi Karya from 2011 to 2015. The company reached a peak of 30.65% in 2014. Therefore, PT Wijaya Karya has the ability to sustain operations and has less of liabilities than PT Adhi Karya during those years.

E. Test Results

Tables 10 and 11 show the scoring measurements of PT Adhi Karya. Based on the scoring and weight of PT Adhi Karya, it could be learnt that this company could be categorized as a healthy company. The highest score incurred in 2011, which has a total weight of 81.43, and it could be categorized its financial performances are healthy.

Table 10. Test Results for year 2011 until 2015 of PT Adhi Karya

Indicators	2015		2014		2013		2012		2011	
	Ratio	Score								
ROE	18.45%	20	18.06%	20	26.38%	20	18.65%	20	9.01%	20
ROI	7.77%	6	7.21%	6	9.05%	7.5	7.14%	6	5.71%	5
Cash Ratio	11.33%	2	16.21%	3	29.66%	4	11.48%	2	45.86%	5
Current Ratio	110.30%	4	124.44%	4	139.10%	5	134.15%	5	156.05%	5
C. Period	56	5	64	4.5	56	5	82	4.5	87	4.5
ITO	.4	5	6	5	6	5	6	5	6	.5
TATO	114	4.5	99	4	104	4	87	3.5	60	2.5
Equity/Asset Ratio	16.20%	6	15.00%	6	15.93%	6	16.75%	6	30.80%	10

Table 11. Summary Test Results for year 2011 until 2015 of PT Adhi Karya

Year	Total Score	Weight	Total Weight	Value	Level	Category
2011	57	70	81.43	80<TS<95	AA	HEALTHY
2012	52	70	74.29	65<TS<80	A	HEALTHY
2013	56.5	70	80.71	80<TS<95	AA	HEALTHY
2014	52.5	70	75.00	65<TS<80	A	HEALTHY
2015	52.5	70	75.00	65<TS<80	A	HEALTHY

Table 12 and table 13 show the scoring measurements of PT Wijaya Karya. Compared with PT Adhi Karya, this company could also be categorized as a healthy company, but they have quite different in details. PT Adhi Karya started with total weight of 81.43 in 2011 but slowly decreasing down to 75 in 2015. The same situation shown by PT Wijaya Karya, which has total weight over 80 in 2011 until 2014, but significantly decreasing down to 67.50 in 2015. Generally, it still results healthy finance but it should get more attention by the managements, since it might not want to experience this trend again happened in the next year.

Table 12. Test Results of PT Wijaya Karya for the year 2011 until 2015

INDICATORS	2011		2012		2013		2014		2015	
	Ratio	Score	Ratio	Score	Ratio	Score	Ratio	Score	Ratio	Score
ROE	18.87	20.00	20.17	20.00	21.17	20.00	15.25	20.00	12.93	16.00
ROI	12.21	10.50	12.32	10.50	13.90	12.00	8.64	6.00	6.75	5.00
Cash Ratio	24.27	3.00	22.78	3.00	19.00	3.00	27.15	4.00	24.16	3.00
Current Ratio	113.88	4.00	110.19	4.00	109.53	3.00	111.86	4.00	118.5	4.00
Collect. Period	85	4.50	57	5.00	64	4.50	74	4.50	92	4.00
ITO	41	5	42	5	34	5	24	5	28	5.00
TATO	93.02	4.00	90.50	4.00	94.36	4.00	78.31	3.50	69.48	3.00
Equity/Asset Ratio	24.89	7.25	23.54	7.25	23.41	7.25	30.65	10.00	27.74	7.25
		58.25		58.75		58.75		57.00		47.25

Table 13. Summary of Test Results of PT Wijaya Karya for the year 2011 until 2015

Years	Total Score	Weight	Total Weight	Value	Level	Category
2011	58.25	70	83.21	80<TS<=95	AA	Healthy
2012	58.75	70	83.93	80<TS<=95	AA	Healthy
2013	58.75	70	83.93	80<TS<=95	AA	Healthy
2014	57.00	70	81.43	80<TS<=95	AA	Healthy
2015	47.25	70	67.50	65<TS<=80	A	Healthy

LIMITATION

This study has expanded the literature about financial performance in the real working world. In near future, it is suggested to carry out research with many companies from construction industry to get more generalizes result. Since the focus is on one industry, it is worth to explore it on a wider scale and find out if different company yields the same result. In addition, the study only focuses on financial aspects. It is suggested to measure in other aspects such as operational and administration.

CONCLUSION AND RECOMMENDATION

The purpose of this study is to analyze and to measure the financial performance of construction industry by using financial ratio analysis, which is classified into profitability, liquidity, activity, and solvency ratios. The data were collected from audited financial reports of the two construction companies in Indonesia for the periods of 2011 – 2015. From all financial

calculations of PT Adhi Karya it could be concluded that this company has good and healthy financial condition. But, there are some elements that should be considered by PT Adhi Karya in order to increase their financial health condition. PT Adhi Karya should increase their revenue in order to maximize all assets they have. In the other side, this company has good asset condition but slowly decreasing year by year. PT Wijaya Karya could be also categorized as a healthy company because the summary reported good results for this company. However, it should consider in gaining more sales volume and revenue to maximize their assets utilization. Besides, its inventory turnover is such a problem if the management could not manage on it and causing more cost for the company to manage and keep its inventory. The last thing of PT Wijaya Karya and PT Adhi Karya should consider their financial performance, because their 2015 performances showed less perform than the previous years, so the managements should do better in order to prevent the declining trend continuously. This result implied that the construction industry can increase their market share, even though the industry faces major challenges. This study has added the knowledge in the financial literature. It also gives a strong insight for managers in the construction industry about the financial performance. Therefore, the managers can make a better decision with the purpose to increase the market share.

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