Measuring Financial Performance of State-Owned Enterprises under Aviation in Indonesia: Case Study: PT. Angkasa Pura I and PT. Angkasa Pura II

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Keywords: Financial Performance, Financial Ratios, SOEs, VIWI, Aviation.

Abstract: Visit Wonderful Indonesia (VIWI) 2018 is the government program with targets of 17 million tourists and 18 destinations across Indonesia. An excellent performance of State-Owned Enterprises (SOEs) under aviation is mandatory. This study aims to measure the financial health conditions of the two SOEs under aviation i.e PT Angkasa Pura I (AP I) and PT Angkasa Pura II (AP II) in 2011-2015. The Decree No.KEP-100/MBU/2002 of Indonesia Ministry of SOEs on June 2002 provides the mandatory of measuring and rating the financial health condition of SOEs. 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 to be validated by the said Ministry of SOEs Decree to conclude the yearly financial health conditions of each SOEs The result shows that in 2011 - 2015, both SOEs achieved healthy financial condition levels, although AP II was better in performance than AP I as shown in the rating as follows; AP I (BBB, BBB, BBB, A, and A); and AP II (AA, AA, A, A, and A). However, AP I was successfully achieved the highest levels in 2014 and 2015, from B to A levels. This study has added the knowledge in the financial literature. It also gives a strong insight for managers in aviation industry about the financial performance. Therefore, the managers could make decisions to increase both market share and profitability.

1 INTRODUCTION

Arief Yahya as the Indonesia Minister of Tourism, stated that in 2015, tourism sector contributed 10% of GDP, which is the highest nominal in ASEAN, or USD 82.4 B. The number of tourists was 10,406,759, while in Thailand was 29,881,091 with contribution to GDP was only USD 81.6 B (Khumaedy, 2017 available at http://setkab.go.id/penerbangan-menuju-destinasi-pariwisata). The development of tourism sector will significantly affect the growth of air lines business and drive the increase of foreign income of the country, due to the average spending of a foreign tourist about USD 1,100 – 1,200 per visit (Central Bureau of Statistic, 2016). In addition, the area of Indonesia that lies between the Indian Ocean and the Pacific Ocean make Indonesia's position very strategic, and also consists of thousand islands from Sabang to Merauke. In supporting the aviation industry, right now Indonesia has two companies under aviation, 1) PT Angkasa Pura I (Persero), or AP I; and 2) PT Angkasa Pura II (Persero), AP II. AP I and AP II are the State-Owned Enterprises (SOEs) in the Ministry of Transportation environment that are engaged in airport services and airport related services in Eastern and Western parts of Indonesia respectively. The functions of both companies are managing airport businesses and airport related services by optimizing the utilization of their potential resources, especially to support the VIWI 2018. AP I and AP II are the State-Owned Enterprises (SOEs) in the Ministry of Transportation environment that are engaged in airport services and airport related services in Eastern and Western parts of Indonesia respectively.

The Government of Indonesia decides that it is mandatory to the company under the Ministry of SOEs that they should implement financial ratio 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

Daryanto, W.
Measuring Financial Performance of State-Owned Enterprises under Aviation in Indonesia: Case Study: PT. Angkasa Pura I and PT. Angkasa Pura II.
DOI: 10.5220/0008488800990104
In *Proceedings of the 7th International Conference on Entrepreneurship and Business Management (ICEBM Untar 2018)*, pages 99-104
ISBN: 978-989-758-363-6

performance of small business and it can be used to predict the failure. Washington (2001) stated that research on the ability of financial models to provide an early warning of corporate failure is favourable. 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.

However, the literature about financial performance in aviation industry is very limited. Therefore, this study investigates the association between financial performances of both aviation SOEs, AP I and AP II for the periods of 2011-2015, which then the results to be validated by the decree of the Ministry of SOEs No. KEP-100/MBU/2002. This study is beneficial for academician 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 managers because it can help them to analyse the company's situation and guide them to make decisions.

Research Questions

1. How healthy was the financial performance of the two aviation industries based on the decree of the Ministry of SOEs No. KEP-100/MBU/2002)?
2. What was the difference of financial performance between both aviation SOEs, AP I and AP II?

2 LITERATURE REVIEW

2.1 Previous Research on Financial Ratio

Financial ratio is a good evaluation method to measure the company performances (Megaladevi, 2015). Company usually uses this method to compare their performance with other competitors. There have been a large number of empirical studies on financial ratio on different industries around the world (Yeh, 1996; Webb, 2003; Lacewell, 2003; Halkos and Salamouris, 2004; Tarawneh, 2006). However, there are limited resources which evaluate the financial performance of Estate Palm Oil Enterprises 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. There are two methods to measure the financial performances which are accounting and market measurement. There are 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, 1975), and some of them adopt both methods (McGuire et al., 1988). There are few differences between accounting and market measurement methods. In accounting, company uses the historical aspects to measure their financial performance (McGuire et al., 1986) and it contains a bias which lead to managerial manipulation. On the other hand, market measurement method is straight forward, focuses on performance and represents the ability of a company to generate future income (McGuire et al., 1988).

2.2 The Decree of Ministry of SOEs

Based on the Decree of Ministry SOEs No. KEP-100/MBU/2002 about financial health assessment of SOEs, 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, the total weight score for infrastructure is 50 and non-infrastructure is 70. There are eight indicators to measure the financial health such as return on investment (ROI), return on equity (ROE), cash ratio, current ratio (CR), collections period (CP), inventory turnover (ITO), total asset turnover (TATO), and total equity to the total asset (TETA).

3 RESEARCH METHODOLOGY

Descriptive financial ratios were used to measure, describe, analyse, and evaluate the financial health conditions of two state owned cement enterprises under the Ministry of Industrial, AP I and AP II, because those companies are state owned enterprises in non-financial services which qualified in the decree of the Ministry of State Owned Enterprises No.KEP-100/MBU/2002 about financial health assessment of SOEs. All variables used are ratio measurement scales were taken from the decree. The data were collected from their Annual Report (audited) between 2011 and 2015. In addition, this decree was used to validate the financial health condition level of those enterprises whether in the levels of very healthy level (AAA, AA, A), or healthy level (BBB, BB, B), or unhealthy level (CCC, CC, C).

The selection of the Financial Ratio Analysis (FRA) method for this study is motivated the researchers' knowledge due to limited literature review on aviation 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 the future (Kumbirai and Webb, 2010). Oil business requires high capital, high technology, high risks, long-term commitment, but may be high returns (Daryanto, 2018). Dozens of ratios can be computed from a single set of financial statement (Anthony et al., 2011). Analyzing financial statements involves evaluating three characteristics: a company's liquidity, profitability, and solvency (Kieso et al., 2016) The company are encouraged to maintain their profitability by increasing its activity ratios (Daryanto, 2018).

4 ANALYSIS AND DISCUSSIONS

4.1 Profitability Analysis of AP I

Table 1 shows information about the percentage of return on equity (ROE) and return on investment (ROI) of AP I for 2011 – 2015, which was based on its Annual Reports. Basically, the percentage of ROI increased along with the percentage of ROE. The percentage of ROI was slightly increased around 3.34% from 7.04% in 2011 to 10.38% in 2012. Yet, between 2014 and 2015 the percentage of ROI was decreased from 13.66% to 12.77%. Overall, the percentages of ROE of 2011-2015 of AP I were 6.11%, 6.92%, 6.81%, 8.93%, and 7.63%, as shown in Table 1. While the percentages of ROI, 7.04%, 10.38%, 11.11%, 13.66%, and 12.77% respectively.

4.2 Profitability Analysis of AP II

Table 2 gives information about the percentages of return on equity (ROE) and return on investment (ROI) of AP II for 2011-2015, which was based on its Annual Reports. In 2011, ROI of AP II could reach 19%. And in 2015, it decreased to 16%. Overall, it shows the percentages of the ROI of AP II, 18.77%, 18.86%, 13.81%, 13.23%, and 15.75% respectively. Although the percentages ROI of AP II was higher than AP I, both companies were in good profitability conditions, in which the ability of funds invested in assets could generate good profits. The same with the trend of ROE figures, the percentages of ROE of AP II was also higher than of AP I in 2011-2015, as shown in Table 1 and Table 2. In fact, the economy of Western Indonesia is more advance compared with Eastern Indonesia. Overall, the percentages of ROE 2011-2015 of PT AP II, 12.11%, 12.52%, 7.72%, 8.83%, and 10.39%. While the percentages of ROI of AP II, 18.77%, 18.86%, 13.81%, 13.23%, and 15.75% respectively for 2011-2015, as shown in Table 2.

4.3 Liquidity Analysis of AP I

Table 1 shows the percentage of cash ratio and a current ratio of AP I from 2011 to 2015. Overall, there was a sharp decrease in the percentage of cash ratio and current ratio; cash ratios (451.1%; 151.56%; 43.7%; 60.61%; and 72.63%); current ratios (494.22%; 174.6%; 84.08%; 92.77%, and 114.35%). In the horizontal analysis, the average current ratio for the past five years was 192.004% which means that IDR 1,-of current liability were to be guaranteed by IDR 1.92 of a current asset. Between 2011 and 2013, the percentage of current ratio was decline from 494.22% to 84.08% and then it begun slightly increase to 114.35% in 2015. In cash ratio, the percentage decreased sharply from 415.10% in 2011 to 43.70% in 2013. But then it started raise from 60.61% in 2014 to approximately 72.63% in 2015.

4.4 Liquidity Analysis of AP II

Table 2 shows the trend of cash ratio and current ratio of AP II 2011- 2015. In the horizontal analysis, the average current ratio for the past five years was 323.6% which means that IDR 1, - of current liability were to be guaranteed by IDR 3.236 of a current asset. Between 2011 and 2014, the percentage of current ratio was declined from 543% to 147% and then it begun slightly increased to 176% in 2015. In cash ratio, the percentage decreased slightly from 333% in 2012 to 169% in 2013. But then it started to raise from 74% in 2014 to approximately 128% in 2015. Overall, there was a sharp decrease in the percentage of cash ratio and current ratio; cash ratios (390%; 333%; 169%; 74%; and 128%); current ratios (543%; 473%; 279%; 147%, and 176%). As shown in Tables 1 and 2, the liquidity ratios of AP I and AP II have already decreased, not too liquid, still above the standard ratios of minimum 100%. In general, the liquidity ratios of both companies were very good.

4.5 Activity Analysis of AP I and AP II

Table 1 shows in detail of days' receivable of AP I in 2011-2015; 18, 20, 43, 41, and 40 days respectively. Table 2 shows in detail of days' receivable of AP II in 2011-2015; 20, 26, 62, 61and 35 days respectively. Both SOEs experienced increase in the ratios, or inefficient in the collection of receivables. This was due to lack of discipline in the payments of the partners of against the commitments contained in the agreed contract. However, based on the said Decree, it can be concluded that the ratios were in good condition and the management of the receivable ran efficiently. Figure 6 shows the trend of ITO of AP I and AP II in 2011-2015. Table 1 shows in detail of the ITO of AP I; (1.2, 1.5, 1, 1.2, and 2.5) days respectively. While the Table 2 shows in detail of the ITO of AP II; (0.92, 1.25, 1.18, 1.25, and 0.72) days respectively. Both SOEs were very efficient in managing their inventory. In detail, the TATO ratios of AP I were 26.31%, 25.74%, 28.46%, 35.3%, and 37.44%, as shown in Table 1. The ratios were increase slightly from 26.31% in 2011 to 37.44% in 2014. Table 2 shows the TATO ratios of AP II; 60%, 48%, 34%, 35%, and 31% respectively in 2011-2015. The ratios were decrease significantly, 60% in 2011 to 31% in 2015. It shows that the company less efficient in managing the asset employed to generate revenues.

4.6 Solvency Analysis of AP I and AP II

Overall, there were decrease in the ratios of AP I, (87.91%, 79.63%, 72.97%, 65.72%, and 65.95%), as shown by Table 1. While Table 2 presents the percentage of TETA ratios in 2011-2015 of AP II. Overalls, the TETA ratios were stable; 91%, 91%, 87%, 83%, and 80%. Both companies were in solvent conditions, they have no problem in repayment their long- term obligations, because all ratios were above the standard of 50%, or in low risks conditions. It means that, more than 50% of their assets were financed by equity, not liability.

5 VALIDATION TESTING

To examine the level of financial assessment for both SOEs under aviation enterprises whether in healthy or less healthy or unhealthy position for 2011-2015, the decree of Ministry of SOEs No. KEP- 100/MBU/2002 is employed to test the validation. Overall, based on Table 1, there was a slight increase in the total score of AP I. It increased slightly from 29 in 2011 to 31.75 in 2012. Then, decreased to 29.75 in 2013; and increased again to 34.5 in 2014; and decreased slightly to 33.5 in 2015. Next, the total score converted to the total weight with the calculation formula (total score/weight) multiplied by 100. The highest weight score was 69 in 2014 with level A which considered as healthy financial condition. The lowest weight score was 58 in 2011 with level BBB that considered as less healthy financial condition, as shown in Table 3. As data shown in Table 2, there were decreases in the total score in 2011- 2015. It decreased slightly from 41.50 in 2011 to 41 in 2012, and 34 in 2013. Then, it increased to 35.5 in 2014, and 38.5 in 2015. Next, the total score was converted to the total weight with the calculation formula (total score/weight) multiplied by 100. AP II got financial healthy levels of AA, AA, A, A, and A respectively in 2011-2015, as shown in Table 4.

6 LIMITATION

This study has expanded the literature about financial performance in the real working world. 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 the financial performance of SOEs in other aspects such as operational and administration.

7 CONCLUSION & RECOMMENDATION

The study shows the financial performance of aviation industry in 2011-2015, and was based on the decree of the Ministry of SOEs No. KEP-100/MBU/2002 about financial health assessment of SOEs. The study concerns about four classifications of ratio measurement that includes liquidity, solvency, profitability, and activity ratios. The outcome shows that PT. AP I and PT. AP II experienced stable financial performance in the period. This was caused by the effort done by both SOEs to achieve a target of VIWI 2018, which was set up by the government. The result shows that during the five years period, 2011 to 2015, both SOEs have achieved healthy financial condition levels and rating as follows; AP I (BBB, BBB, BBB, A and A); and AP II (AA, AA, A, A, and A). In the last two years, AP I has achieved an excellent level of financial health, although in the first three years were only BBB, or less healthy levels respectively. On the other hand, AP II has achieved excellent A level for the period, although it was decreased slightly during the last two years, from double AA to single A only. It can be concluded that AP II has better performance compared to AP I. However, it was proven that both SOEs supported the government program of developing excellent services in the aviation industry. A similar study has been done by Pratama (2017) for SOE in Telecommunications industry for 2011-2015, with results of financial health levels of A, A, A, A, and BBB. Daryanto (2017) carried out the similar study as well in three SOEs of Palm Oil Agroindustry 2011-2015. This study has added the knowledge in the financial literature. It also gives a strong insight for managers in cement industry about the financial performance. Therefore, the managers can make a better decision with the purpose to increase the market share and the profitability.

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APPENDIX

Tabel 1: Test Results for PT. Angkasa Pura I.

INDICATORS	2011		2012		2013		2014		2015	
	RATIO	SCORE	RATIO	SCORE	RATIO	SCORE	RATIO	SCORE	RATIO	SCORE
ROE (%)	6.11%	6	6.92%	7.50	6.81%	7.50	8.93%	9.00	7.63%	7.50
ROI (%)	7.04%	4	10.38%	5	11.11%	6	13.66%	8	12.77%	7
CASH RATIO (%)	451.1%	3	151.56%	3	43.7%	3	60.61%	3	72.63%	3
CURRENT RATIO (%)	494.22%	3	174.6%	3	84.08%	0	92.77%	1	114.35%	2.5
COLLECTION PERIOD (DAYS)	18	4	20	4	43	4	41	4	40	4
INV. TURN OVER (DAYS)	1.2	4	1.5	4	1	4	1.2	4	2.5	4
TATO (%)	26.31%	1	25.74%	1	28.46%	1	35.3%	1	37.44%	1
SOLVENCY (%)	87.91%	4	79.63%	4.25	72.97%	4.25	65.72%	4.5	65.95%	4.5
TOTAL		**29**		**31.75**		**29.75**		**34.5**		**33.5**

Tabel 2: Test Results for PT. Angkasa Pura II.

INDICATORS	2011		2012		2013		2014		2015	
	RATIO	SCORE	RATIO	SCORE	RATIO	SCORE	RATIO	SCORE	RATIO	SCORE
ROE (%)	12.11 %	12	12.52 %	12	7.72%	7.5	8.83%	9	10.39 %	10.5
ROI (%)	18.77 %	10	18.86 %	10	13.81 %	8	13.23 %	8	15.75 %	9
CASH RATIO (%)	390%	3	333%	3	169%	3	74%	3	128%	3
CURRENT RATIO (%)	543%	3	473%	3	279%	3	147%	3	176%	3
COLLECTION PERIOD (DAYS)	20	4	26	4	62	3.5	61	3.5	35	4
INV. TURN OVER (DAYS)	0.92	4	1.25	4	1.18	4	1.25	4	0.72	4
TATO (%)	60%	2	48%	1.5	34%	1	35%	1	31%	1
SOLVENCY (%)	91%	3.5	91%	3.5	87%	4	83%	4	80%	4
TOTAL		**41.5**		**41**		**34**		**35.5**		**38.5**

Tabel 3: Summary of Test Results of PT. Angkasa Pura I.

YEAR	TOTAL SCORE	TOTAL WEIGHT	WEIGHT	PERFORMANCE	CATEGORY
2011	29	50	58	BBB	Less Healthy
2012	31.75	50	63.5	BBB	Less Healthy
2013	29.75	50	59.5	BBB	Less Healthy
2014	34.5	50	69	A	Healthy
2015	33.5	50	67	A	Healthy

Tabel 4: Summary of Test Results of PT. Angkasa Pura II.

Year	Total Score	Total Weight	Weight	Performance	Category
2011	41.5	50	83%	AA	Healthy
2012	41	50	82%	AA	Healthy
2013	34	50	68%	A	Healthy
2014	35.5	50	71%	A	Healthy
2015	38.5	50	71%	A	Healthy