

FINANCIAL PERFORMANCE MEASUREMENT OF STATE-OWNED ENTERPRISES UNDER AVIATION TO SUPPORT VISIT WONDERFUL 2018 IN INDONESIA

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ABSTRACT

Visit Wonderful Indonesia (VIWI) 2018 is currently one of the main concerns of the government, with a target of 17 million of foreign tourists by 2018 to 18 destinations across Indonesia. This situation requires an excellent performance of State-Owned Enterprises (SOEs) under aviation, which is ruled by the Ministry of Transportation. This study aims to analyze and 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 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 financial healthy condition levels, although AP II was better 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 achieve 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.

Keywords: financial performance, financial ratios, SOEs, VIWI, aviation

I. INTRODUCTION

After the global financial crisis that turned into turmoil in the closing months of 2008, the world economic growth trend began recovering throughout 2009. In spite of slow economic recoveries in the United States and some European countries, significant growth emerged in China, India and several ASEAN countries. The global economy recovery contributed to the growth of the aviation industry. In April 2010, International Air Transport Association (IATA) recorded an increasing demand of 4.5% to 5% for new commercial aircraft during the year as a direct result of the increasing number of aircraft passengers. In 2010, global revenue passenger-kilometers (RPK) increased by 5.8% year to-date (Angkasa Pura I- Annual Report, 2015).

According to Khumaedy (2017), the contribution of tourism sector towards the economy of Indonesia is four percent, and it was targeted doubled in 2019. The development of tourism sector will significantly affect the growth of air lines business and drives 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 (BPS, 2016). In addition, the area of Indonesia that lies between the Indian Ocean and the Pacific Ocean, where geographically, Indonesia's position is very strategic. Therefore, as a developing country with 261 million, 1,340 tribes, 724 languages and consists of 17,804 islands that stretches from cities of Sabang to Merauke, and widespread public enthusiasm for progress, Indonesia has two SOEs under aviation, 1) PT Angkasa Pura I (Persero), or AP I; and 2) PT Angkasa Pura II (Persero), AP II (Statistical Book of Indonesia, 2017). Whereas AP I manages the airports within the central and eastern parts of Indonesia, while those in western parts of Indonesia are managed by AP II.

Indonesia is a country that is potentially going forward in the development of air transport services, especially to reach remote areas as well, and it can also save a lot of time rather than other transportation means such as land and sea. However, in some areas the airport has long been unable to accommodate the passengers back and forth because the capacity is not proportional to the number of passengers. Syamsudin Noor Airport in Banjarmasin, South Kalimantan, recently is not in normal capacity, it serves 3.7 million passengers annually, while its capacity is only 1.3 million passengers (Liputan6.com, 2015). And also some airports within AP I would be renovated and developed, such as airports of Semarang, Banjarmasin, New Yogyakarta, Surabaya, and Makassar. And also some airports within AP II, such as airports of Pekanbaru, Medan, Pontianak, Padang, Ketapang and Palembang (Venuemagz, 2016). Construction and development of the airport are also intended to keep pace with the growth of air passengers that will drive operational performance improvement and financial companies (Dream, 2016). This is also to support the target of VIWI 2018 to achieve about 17 millions of tourists from foreign countries by 2018, and to visit 18 destinations across Indonesia.

The Government of Indonesia decides mandatory to the company under the Ministry of 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 to 20 million passengers per year (Venuemagz, 2016). 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.

However, the literature about financial performance in aviation industry is very limited. Therefore, this study investigates the association between financial performances of the two aviation industries SOEs, 1) PT. Angkasa Pura I (PT. AP I) and 2) PT. Angkasa Pura II (PT. AP II) 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 aviation industries based on the decree of Ministry of SOEs No. KEP-100/MBU/2002?, and 2) What was the difference of financial performance between both aviation 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.

This study is organized into nine sections. Section one captures the introduction, section two highlights the performance of Indonesia's aviation industry, section three highlights the literature review about previous researchers, section four explains the Decree of Ministry of SOEs No. KEP-100/MBU/2002 about financial health assessment of SOEs, section five discusses the methodology, section six discusses the finding and analysis, section seven discusses the validation testing, section eight highlights the limitation and implication, and section nine captures the conclusion.

II. AVIATION INDUSTRIAL DEVELOPMENT IN INDONESIA

The growth of the airport industry is closely correlated with the growth of the tourism industry. Based on the Central Bureau of Statistics Report, or Biro Pusat Statistik (BPS, 2014), the number of foreign visitors to Indonesia increased by 7.20% to reach 9.43 million people. This result is much better than the overall growth rate of tourism in the Asia Pacific region that was recorded at 5.00%, even surpassing the world tourism growth rate reported by the United Nations World Trade Organization that was 4.70% or 1.136 billion tourists (Statistics Summary on Air Traffic, 2014). Observing the growth trend of the national tourism as well as the improving global tourism trend, the target of 20 million foreign visitors to Indonesia in 2019 is likely to be achieved.

PT Angkasa Pura I (Persero) (AP I) and PT Angkasa Pura II (Persero) (AP II) are the State-Owned Enterprises (SOE) in the Ministry of Transportation environment engaged in airport services and airport related services in Eastern and Western parts of Indonesia respectively. The functions of both companies are managing business airports and airport related services by optimizing the utilization of companies' potential resources. AP I has operated 13 airports, namely 1) I Gusti Ngurah Rai, Bali, 2) Adi Soemarmo, Solo, 3) Adi Soetjipto, Yogyakarta, 4) Achmad Yani, Semarang, 5) El Tari, Kupang, 6) Frans Kaisepo, Biak, 7) Sultan Hasanuddin, Makassar, 8) Juanda, Surabaya, 9) Lombok Praya, Lombok, 10) Pattimura, Ambon, 11) Sam Ratulangi, Manado, 12) Sultan Aji Muhammad Sulaiman, 13) Syamsuddin Noor, Banjarmasin. AP II has operated 14 airports, namely 1) Soekarno-Hatta Airport, Jakarta, 2) Halim Perdanakusuma, Jakarta, 3) Husein Sastranegara, Bandung, 4) Kuala Namu, Medan, 5) Sultan Mahmud Badaruddin II, Palembang, 6) Sultan Syarif Kasim II, Pekanbaru, 7) Minangkabau Padang, 8) Supadio, Pontianak, 9) Raja Haji Fisabilillah, Tanjung Pinang, 10) Sultan Thaha, Jambi, 11) Radin Inten II, Bandar Lampung, 12) Depati Amir, Pangkal Pinang, 13) Sultan Iskandar Muda, Aceh, 14) Silangit, Tapanuli Utara. Table 1 and Table 2 show Aircraft, Passengers, and Cargo Movements of AP I and AP II.

Table 1. Aircraft, Passengers, and Cargo Movements of PT. Angkasa Pura I

Description	Unit	2015	2014	Change
Aircraft	Route	698,118	685,913	1.78%
Passenger	Pax	73,935,940	73,228,093	0.97%
Cargo	Kg	324,839,503	348,360,957	(6.75%)

Source: Angkasa Pura I Annual Report (2015).

Table 2: Aircraft, Passengers, and Cargo Movements of PT. Angkasa Pura II

Description	Unit	2015	2014	Change
Aircraft	Route	632,418	630,584	0.29 %
Passenger	Pax	84,291,588	85,131,033	(0.99%)
Cargo	Kg	726,808,953	763,507,000	(4.81%)

Source: Angkasa Pura II Annual Report (2015).

Under AP I, in 2015 the movement of air freight traffic for the number of aircraft and passengers have increased compared to 2014; 1.78% and 0.97% respectively. However, the number of cargo movements decreased 6.75%. On the other hand, AP II aircraft movement in 2015 had also a slight increase compared to 2014. The number of passenger movement that uses flight services in the airports of AP II reached 84,291,588 pax. While in 2015, cargo movement amounted to 726,808,953 kg. In 2015, a decrease was experienced by the passenger and cargo movements when compared to 2014. However, in general, within the last five years, it showed positive trends of aircraft and passenger movements, based on Tables 3 and 4. Table 5 shows that domestic passenger movement is 82%, and the rest 18% is international passenger. And according to the Airport Council Indonesia (2015), several airports were considered as the twenty busiest airport in the world, i.e Soekarno-Hatta, Indonesia, 12th rank; Schiphol, Amsterdam, 14th rank; Changi, Singapore, 16th rank; John F. Kennedy, USA, 18th rank.

Table 3. Aircraft Movement in Western Indonesia in 2011-2015 (in routes)

No.	Airports	2011	2012	2013	2014	2015	Growth 2014-15
1	CGK-Jakarta	345,508	381,120	399,430	390,984	386,615	-1,12%
2	KNO- Medan	61,753	65,970	70,461	63,937	63,607	-0,52%
3	PKU- Pekanbaru	23,460	25,244	30,022	25,439	19,268	-24,26%
4	PNK-Pontianak	20,039	21,198	22,779	23,626	25,184	6,59%
5	PLM-Palembang	20,104	20,797	22,293	23,335	26,617	14,06%
6	PDG - Padang	14,732	16,476	18,675	18,643	21,945	17,71%
7	BDO- Bandung	10,469	21,294	20,220	22,354	25,902	15,87%
8	HLP-Jakarta	30,952	30,110	33,306	32,237	30,255	-6,15%
9	DJB-Jambi	7,857	7,425	7,653	9,706	9,486	-2,27%
10	PGK-Pangkal Pinang	14,480	12,471	11,862	10,717	13,988	30,52%
11	TNJ – Tanjung Pinang	3,009	3,850	3,236	2,670	2,544	-4,72%
12	BTJ-Banda Aceh	5,984	5,975	7,406	5,654	6,052	7,04%
13	DTB-Silangit	836	920	1,218	1,282	955	-25,51%
	Total	559,183	612,850	648,561	630,584	632,418	0,29%

Source: Annual Report 2015 Angkasa Pura II (2016)

Table 4. Passenger Movement in Western Indonesia in 2011-2015 (in pax)

No	Airports	2011	2012	2013	2014	2015	Growth 2014-15
1	CGK-Jakarta	51,178,188	57,772,864	60,137,347	57,221,169	54,291,366	-5,12
2	KNO- Medan	7,170,107	7,991,914	8,358,705	8,059,796	8,004,791	-0,68
3	PKU- Pekanbaru	2,541,431	2,772,254	3,257,547	2,993,872	2,670,046	-10,82
4	PNK-Pontianak	2,133,545	2,291,470	2,307,322	2,502,957	2,713,259	8,40
5	PLM-Palembang	2,598,274	2,902,129	3,032,629	3,258,834	3,384,464	3,86
6	PDG - Padang	2,270,354	2,643,719	2,789,597	2,791,411	3,169,122	13,53
7	BDO- Bandung	937,849	1,872,985	2,533,887	2,973,304	3,146,807	7,50
8	HLP-Jakarta	201,348	199,425	210,814	1,646,864	3,059,153	85,76
9	DJB-Jambi	1,014,963	1,117,909	1,282,244	1,316,379	1,168,219	-11,26
10	PGK-Pangkal Pinang	1,325,522	1,484,357	1,467,118	1,401,308	1,658,920	18,38
11	TNJ – Tanjung Pinang	231,386	291,384	252,501	265,407	258,936	-2,44
12	BTJ-Banda Aceh	705,719	672,695	711,796	721,727	748,721	3,74
13	DTB-Silangit	6,434	7,486	12,556	24,005	17,784	-25,92
	Total	72,315,120	82,020,591	86,354,063	85,131,033	84,291,588	-0,99

Source: Annual Report 2015 Angkasa Pura II (2016)

Table 5. The Proportion of Domestic and International Passenger Movements in Western Indonesia in 2011-2015 (in pax and %)

No.	Airport	Domestic (in pax)	Domestic (in %)	Int'l (in pax)	Int'l (in %)	Total (100%)
1	CGK-Jakarta	41,889,868	77	12,401,498	23	54,291,366
2	KNO- Medan	6,374,897	80	1,629,894	20	8,004,791
3	PKU- Pekanbaru	2,504,666	94	165,380	6	2,670,046
4	PNK-Pontianak	2,639,563	97	73,696	3	2,713,259
5	PLM-Palembang	3,275,592	97	108,872	3	3,384,464
6	PDG - Padang	2,937,690	93	231,432	7	3,169,122
7	BDO- Bandung	2,493,761	79	653,046	21	3,146,807
8	HLP-Jakarta	2,955,351	97	103,802	3	3,059,153
9	DJB-Jambi	1,168,219	100	-	0	1,168,219
10	PGK-Pangkal Pinang	1,658,920	100	-	0	1,658,920
11	TNJ – Tanjung Pinang	258,936	100	-	0	258,936
12	BTJ-Banda Aceh	614,089	82	134,632	18	748,721
13	DTB-Silangit	17,784	100	-	0	17,784
	Total	68,789,336	82	15,502,252	18	84,291,588

Source: Annual Report 2015 Angkasa Pura II

III. PREVIOUS RESEARCH ON FINANCIAL PERFORMANCE

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; Daryanto, 2018). 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. However, there are limited resources which evaluate the financial performance of Estate Palm Oil Enterprises in Indonesia (Daryanto, 2017). 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, 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). 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. Oil business requires high capital, high technology, high risks, long-term commitment, but may be high returns (Daryanto, 2018). The company are encouraged to maintain their profitability by increasing its activity ratios (Daryanto, 2018).

IV. THE DECREE OF MINISTRY OF STATE OWNED ENTERPRISES (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 SOEs 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 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).

V. METHODOLOGY

The descriptive financial ratios were used to measure, describe, analyze, and evaluate the financial health conditions of two SOEs under the Ministry of Transportation, AP I and AP II. Those companies are state owned enterprises in non-financial services which qualified in the decree of the Ministry of SOE No.KEP-100/MBU/2002 about financial health assessment of SOEs. All variables used are ratio measurement scales were taken from the decree. Table 6 shows the indicator and weight score of each ratio. 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).

Table 6. The Indicators and Weight Score

INDICATORS	WEIGHT SCORE
1. ROE	20
2. ROI	15
3. Cash Ratio	5
4. Current Ratio	5
5. Collection Period	5
6. Inventory Turnover	5
7. Total Asset Turnover	5
8. Total Equity to Total Asset	10
Total weight score	70

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

The level of financial assessment are divided into very healthy (the highest level of financial literacy), healthy (the middle level of financial literacy), and unhealthy (the lowest level of financial literacy). In the 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), and A (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 Financial Ratio Analysis (FRA) method for this study is motivated the researchers' knowledge due to limited literature review on cement industry in Indonesia. In addition, financial ratios can be used to identify a company's specific strenghts 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 (Mabwe Kumbirai, Robert Webb, 2010).

A. Profitability Performance

Return on equity 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 (Anthony, 2011). Table 7 shows the ROE and ROI Assessment Score. Return on investment is a profitability ratio that calculates the profits of an investment as a percentage of the original cost. The profitability is the most common measure for company's financial performance. Profitability is measured using the following criteria:

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

Table 7. List of ROE and ROI Assessment Score

ROE (%)	Score	ROI (%)	Score
15 < ROE	20	18 < ROI	15
13 < ROE ≤ 15	18	15 < ROI ≤ 18	13,5
11 < ROE ≤ 13	16	13 < ROI ≤ 15	12
9,0 < ROE ≤ 11	14	12 < ROI ≤ 13	10,5
7,9 < ROE ≤ 9	12	10,5 < ROI ≤ 12	9
6,6 < ROE ≤ 7,9	10	9 < ROI ≤ 10,5	7,5
5,3 < ROE ≤ 6,6	8,5	7 < ROI ≤ 9	6
4,0 < ROE ≤ 5,3	7	5 < ROI ≤ 7	5
2,5 < ROE ≤ 4	5,5	3 < ROI ≤ 5	4
1,0 < ROE ≤ 2,5	4	1 < ROI ≤ 3	3
0 < ROE ≤ 1	2	0 < ROI ≤ 1	2
ROE < 0	0	ROI < 0	1

Source: The decree of Ministry of SOE No. KEP-100/MBU/2002.

B. Liquidity Performance

B1) Cash Ratio

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

It measures the company ability to pay its short-term debt. If the company has cash ratio equal to one, it indicate that company has the same amount of cash and its debt. If the value of cash ratio is more than 1, it indicates that company has more cash to pay its debt. However, if the value is less than 1, it indicates that company has less cash to pay its debt. It measures the company ability to repay its current liability with current asset. If the company has current ratio below 1, it indicates that company has problem with its short-term debt. If the company has too high current ratio, it indicates that company has problem in managing their current asset. Table 8 shows the Cash Ratio and Current Ratio Assessment Score.

B2) Current Ratio

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

Table 8. List of Cash Ratio and Current Ratio Assessment Score

Cash Ratio (%)	Score	Current Ratio (%)	Score
Cash Ratio ≥ 35	5	125 ≤ Current Ratio	5
25 ≤ Cash Ratio < 35	4	110 ≤ Current Ratio < 125	4
15 ≤ Cash Ratio < 25	3	100 ≤ Current Ratio < 110	3
10 ≤ Cash Ratio < 15	2	95 ≤ Current Ratio < 100	2
5 ≤ Cash Ratio < 10	1	90 ≤ Current Ratio < 95	1
0 ≤ Cash Ratio < 5	0	Current Ratio < 90	0

Source: The decree of Ministry of SOE No. KEP-100/MBU/2002.

C. Activity Performance

C.1) Collection Period

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

This ratio is an important indicator for company to monitor their cash flow and the company ability to pay its debt in due date.

C.2) Inventory Turnover

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

This ratio measures how many times the inventory is being sold of a certain period of time. Table 9 shows the Collection Period and Inventory Assessment Score.

Table 9. List of Collection Period and Inventory Turnover Assessment Score

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

Source: The decree of Ministry of SOE No. KEP-100/MBU/2002

C.3) Total Asset Turn Over (TATO)

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

This ratio measures the company ability to measure the efficiency to use its asset to generate sales. Table 10 shows the Total Asset Turnover Assessment Score.

Table 10. List of Total Asset Turn-over Assessment Score

TATO (%)	Adjustment (%)	Score
$TATO > 120$	$TATO > 20$	5
$105 < TATO \leq 120$	$15 < TATO \leq 20$	4,5
$90 < TATO \leq 105$	$10 < TATO \leq 15$	4
$75 < TATO \leq 90$	$5 < TATO \leq 10$	3,5
$60 < TATO \leq 75$	$0 < TATO \leq 5$	3
$40 < TATO \leq 60$	$TATO \leq 10$	2,5
$20 < TATO \leq 40$		2
$TATO \leq 20$		1,2

Source: The decree of Ministry of SOE No. KEP-100/MBU/2002.

D. Solvency Performance

$$\text{Total Equity to Total Asset} = (\text{Total Equity/Total Asset}) \times 100 \%$$

This ratio is similar with debt to equity ratio. If the company has less value, it indicates that company funding its asset inefficiently. In the other words, company has very low net value for investor. Table 11 shows the list of Solvency Assessment Score.

Table 11. List of Solvency Assessment Score

Total Equity to Total Asset (%)	Score
$TETA < 0$	0
$0 \leq TETA < 10$	4

$10 \leq \text{TETA} < 20$	6
$20 \leq \text{TETA} < 30$	7,25
$30 \leq \text{TETA} < 40$	10
$40 \leq \text{TETA} < 50$	9
$50 \leq \text{TETA} < 60$	8,5
$60 \leq \text{TETA} < 70$	8
$70 \leq \text{TETA} < 80$	7,5
$80 \leq \text{TETA} < 90$	7
$90 \leq \text{TETA} < 100$	6,5

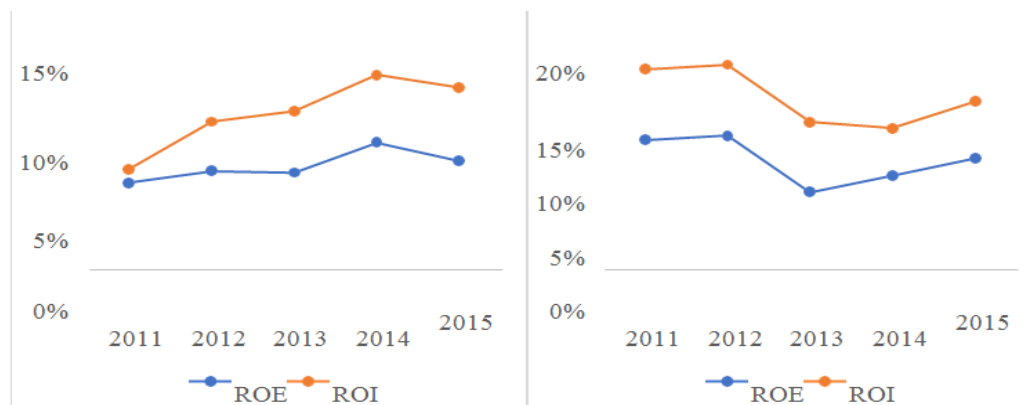
Source: The decree of Ministry of SOE No. KEP-100/MBU/2002

VI. RESULTS AND DISCUSSION

A. PROFITABILITY ANALYSIS

Figure 1 gives information about the percentage of return on equity (ROE) and return on investment (ROI) of AP I for 2011 - 2015. Basically, the percentage of ROI increased along with the percentage of ROE. As shown in Table 12, 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 12. While the percentages of ROI, 7.04%, 10.38%, 11.11%, 13.66%, and 12.77% respectively. Figure 2 gives information about the percentages of return on equity (ROE) and return on investment (ROI) of AP II for 2011-2015. In 2011, ROI of AP II could reach 19%. And in 2015, it decreased to 16%. Overall, Table 14 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 12 and Table 14. 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 14.

Figure 1. Profitability Ratios of AP I Figure 2. Profitability Ratios of AP II



B. LIQUIDITY ANALYSIS

Figure 3 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. In Figure 4 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 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 12 and 14, 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 was very good.

Figure 3. Liquidity Ratios of AP I

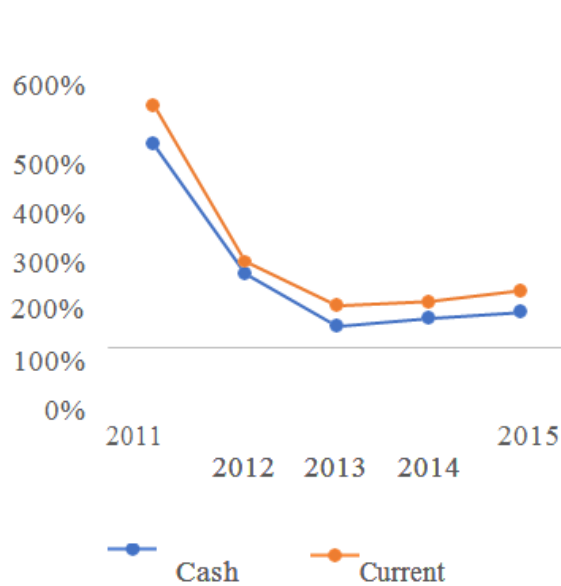
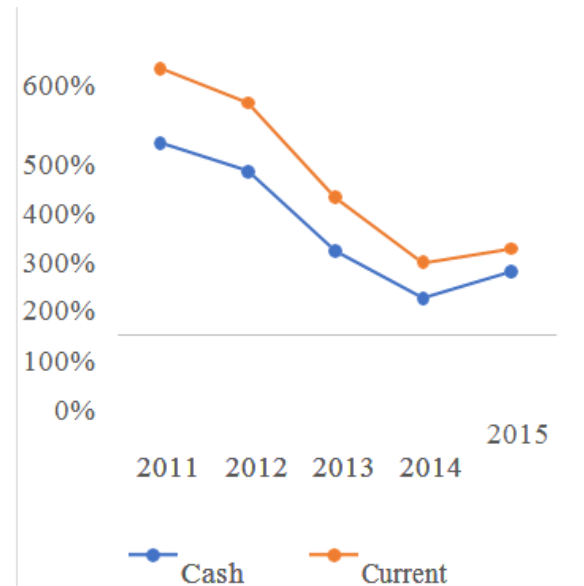


Figure 4. Liquidity Ratios of AP II



C. ACTIVITY ANALYSIS

Figure 5 gives information of the trend collection period of AP I and AP II in 2011-2015. Table 12 shows in detail of days' receivable of AP I; 18, 20, 43, 41, and 40 days respectively. Table 14 shows in detail of days' receivable of AP II; 20, 26, 62, 61 and 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 payments of the partners of AP I and AP II 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 12 shows in detail of the ITO of AP I; (1.2, 1.5, 1, 1.2, and 2.5) days respectively. While the Table 14 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. Figure 7 presents the trend of TATO of AP I and AP II. In detail, the TATO ratios of AP I were 26.31%, 25.74%, 28.46%, 35.3%, and 37.44%, as shown in Table 12. The ratios were increase slightly from 26.31% in 2011 to 37.44% in 2014. Table 14 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.

Figure 5. Collection Period Trend of AP I and AP II 2011-2015

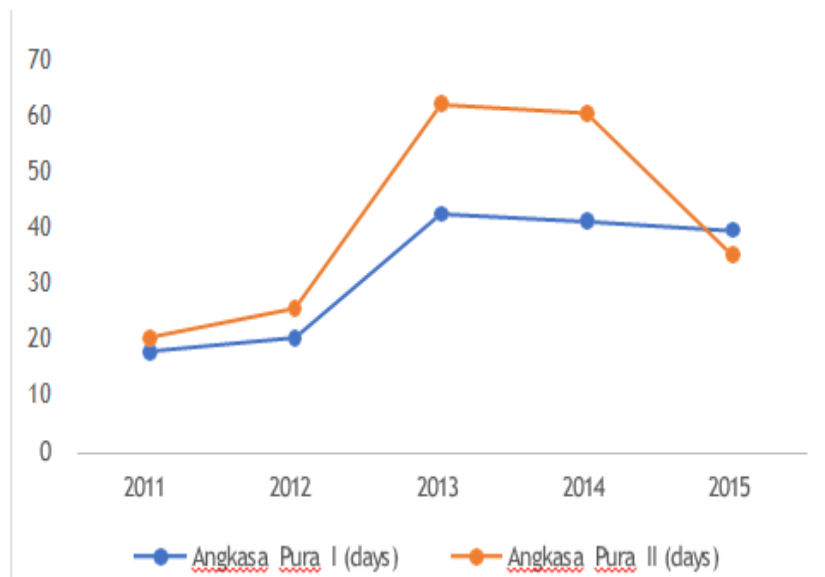


Figure 6. Inventory Turnover (ITO) Trend of AP I and AP II 2011-2015

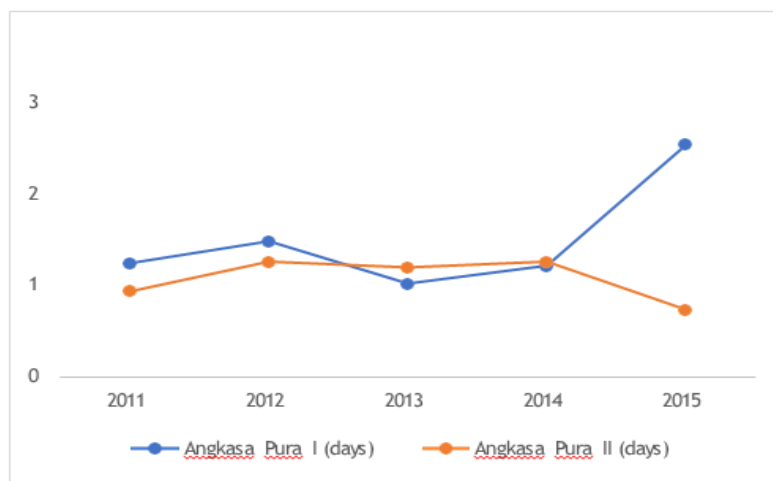
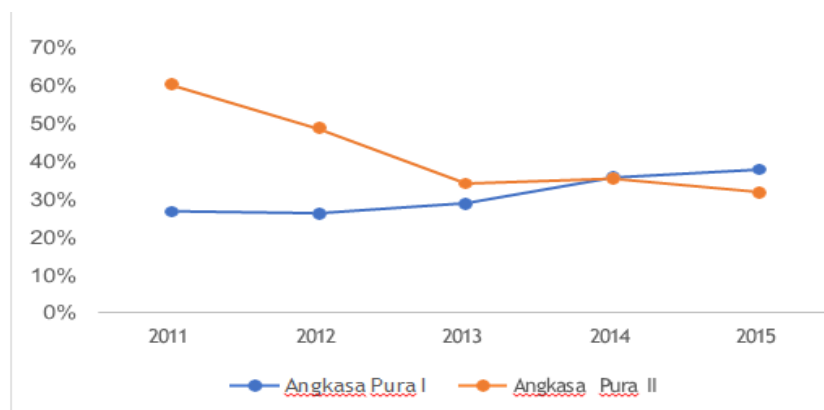


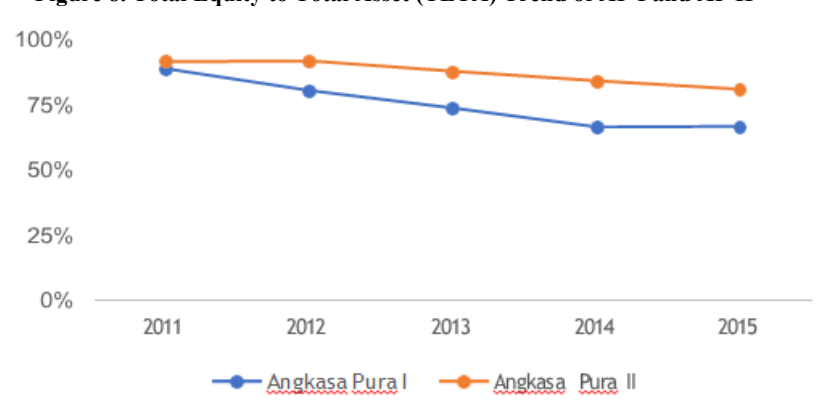
Figure 7. Total Asset Turnover (TATO) Trend of AP I and AP II 2011-2015



D. SOLVENCY ANALYSIS

Figure 8 shows the trend of TETA) ratio in 2011-2015 of AP I and AP II. Overall, there were decreases in the ratios AP I, (87.91%, 79.63%, 72.97%, 65.72%, and 65.95%), as shown by Table 12. While Table 14 presents the percentage of TETA ratios in 2011-2015 of AP II. Overall, 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.

Figure 8. Total Equity to Total Asset (TETA) Trend of AP I and AP II



VII. 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 12, there was a slight increase in the total score of AP I. It increased slightly from 29 in 2011 to 31.75 in 2012. 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 consider as healthy financial condition. The lowest weight score was 58 in 2011 with level BBB that consider as less healthy financial condition, as shown in Table 13. As data shown on Tables 14 and 15, 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.

VIII. 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.

Tabel 12. 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

Table 13. Summary of Test Results of PT. Angkasa Pura I

YE A R	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

Table 15. 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

Tabel 14. 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

IX. CONCLUSION AND 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 profitability, liquidity, solvency, and activity ratios. The outcome shows that AP I and 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 year 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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