Commercial aviation is a part of aviation industry which specializes in operating aircraft for passengers and cargo. In Indonesia, there is one flag carrier that has a worldwide reputation in aviation industry which is Garuda Indonesia. PT. Garuda Indonesia is an Indonesia-based company primarily engaged in commercial airline business. This research aims to investigate the financial performance of PT. Garuda Indonesia for the period 2011-2015 by using DuPont analysis. This research uses descriptive type of research. The data required in this research is collected based on secondary data. The result suggests that the financial performance of PT. Garuda Indonesia for the last 5 years can generally considered bad. The financial ratio based on the return on equity ratio shows the ability of PT. Garuda Indonesia to increase its ROE (return on equity). Average of total ROE of PT. Garuda Indonesia for the last 5 years is -0.6% it means that PT. Garuda Indonesia’s financial performance are bad. In the period of 2011 – 2015, the best financial performance of PT. Garuda Indonesia was in 2012 when the number of ROE reached the highest number at 16.0%. In the last 5 years PT. Garuda Indonesia experience once significant performance degradation in 2014, where the number of total operating expenses were higher than the total operating revenues. This means the net income was not able to cover its expenses at that time. The increasing in the number of passengers, the production capacity and the amount of cargo affect biggest part of financial performance of PT. Garuda Indonesia. Therefore PT. Garuda Indonesia should focus on increasing the frequency of flights on both domestic and international as well as maintaining the level of accuracy of the flight (on time performance / OTP) to improve the financial performance of PT. Garuda Indonesia. Since there were some unfavorable events such as declining of the financial performance of PT. Garuda Indonesia caused by the rising of the fuel prices, the depreciation of Rupiah exchange rate against US Dollar and the slow development of the national air transport infrastructure, it is better for the firm to set the new strategy to avoid any significant changes toward those factors.

Keywords: Financial Performance, Garuda Indonesia, DuPont Analysis
1. INTRODUCTION

Research Background

The aviation industry is one of global industries which play a major role in this world and continues to grow rapidly. The industry becomes a large and growing industry which facilitates the growth of economy, international investment, world trade, as well as tourism. As time passes, aviation industry not only used for the government, but also used as a type of business which known as commercial aviation. Commercial aviation is a part of aviation industry which specialized in operating aircraft for passengers and cargo. In Indonesia, there is one flag carrier that has a worldwide reputation in aviation industry which is Garuda Indonesia. It is the pioneer of airline company which was previously ruled by the government of Indonesia but now it has become a public company. Commonly recognized as PT. Garuda Indonesia (Persero), Tbk. It is the official flag carrier of Indonesia and serves as a full service airline. It is the largest airline in Southeast Asia.

PT. Garuda Indonesia (Persero) Tbk is an Indonesia-based company primarily engaged in commercial airline business. Its business is classified into three segments: flight operation, aircraft maintenance services and other operations. It operates a full-service carrier under the brand name Garuda Indonesia while its subsidiary, PT. Citilink Indonesia operates a low-cost carrier under the brand name Citilink. Its aircraft maintenance services business is carried out by its subsidiary, PT Garuda Maintenance Facility Aero Asia. Its other operations business is operated by its other subsidiaries, such as PT. Aero Wisata, which is engaged in hospitality and tourism industry; PT. Abacus Distribution Systems Indonesia, which is engaged in provisioning information technology services in computerized reservation systems, and PT. Aero Systems Indonesia, which provides information technology systems consultation, engineering and maintenance services for airlines and other industries.

2011 is the first year in Garuda Indonesia’s Long-Term Corporate Plan through its Quantum Leap 2011-2015 strategy. On that year also, Garuda Indonesia became a publicly-listed company following a successful Initial Public Offering (IPO) process. Garuda Indonesia undertook a number of initiatives over the course of 2011 as part of a strategic and systematic approach towards strengthening the Company’s business fundamentals for the long term. In 2011, Garuda Indonesia was able to show a marked improvement in its performance, in areas of operations, service to customers, and financial. It is a good start for the Company in its journey towards the objectives of Quantum Leap 2015, and the company intends to maintain and build on this momentum. Garuda Indonesia became a publicly-listed company on 11 February 2011, listing a total of 6,335,736,000 shares on the Indonesia Stock Exchange under ticker code GIAA. The listing represents a milestone in the Company’s journey after completing a successful business transformation supported by the dedicated hard work of various parties. Garuda Indonesia closed the year of 2011 with revenue of Rp. 27.2 trillion. This number increased by 39.1%. Garuda Indonesia also managed to achieve an operating profit of Rp. 1.01 trillion, and earned a net profit of Rp. 808.7 billion and comprehensive income of Rp. 858.8 billion. The increase in income and comprehensive income have been achieved through the expansion of the company's operations through the "Quantum Leap" and through the company's efficiency as well as through improved resource utilization / air. In 2011, Garuda Indonesia successfully carry as many as 17.1 million passengers. The details consist of 13.9 million domestic passengers and 3.2 million international passengers. This figure increased by 36.2 percent compared to 2010 at 12.5 million passengers. In the period of 2011, Garuda Indonesia also managed to increase its market share in the domestic market to 28.6 percent, an increase compared to the period 2010 and which amounted to 24.5 percent. Domestic air passenger market in 2011 grew by 16.2 percent, but Garuda Indonesia passenger market increased significantly by 37.9 percent, higher than the average increase in other airlines - average of 9.4 percent. Meanwhile, international passengers grew by 12.4 percent, which
the market Garuda Indonesia managed to grow by 29.2 percent, or floating above other airlines growth of 8.2 percent.

In 2012, Garuda Indonesia succeeded in achieving significant growth, in line with consistent business expansion towards the objectives of “Quantum Leap 2011-2015”. Efforts in business expansion through the opening of new flight routes and additional flight frequencies, the operation of new aircraft, implementation of cost efficiency measures and improved asset utilization, have resulted in significant performance improvement in terms of financial as well as operations. Along with continuous enhancement in “Garuda Indonesia Experience” service concept, our many achievements in 2012 have brought Garuda Indonesia - the flag carrier of Indonesia - even closer to its aspiration of becoming a “Global Player” with world-class processes, technology and human capital. During 2012 PT. Garuda Indonesia (Persero) Tbk (GIAA) transported 20.4 million passengers, an increase of 19.6% compared to 2011 of 17.1 million passengers. PT. Garuda Indonesia (Persero) Tbk. earned income (revenue) amounted to USD 717.45 million in the first quarter of 2012 and posted a "comprehensive income for the current period" (comprehensive income) amounted to USD 4.9 million and recorded a net profit in the third quarter of 2012 amounted to 56.4 million US dollars, up 51.6 percent over the same period in 2011 amounted to 37.24 million US dollars. The increase is supported by the operating company.

2013 is the year of ‘Network Expansion’ in the ‘Quantum Leap 2011-2015’ strategy road map. In that year, Garuda Indonesia invested in additional numbers and type of aircraft, and in opening new destinations and flight routes. By the end of 2013, Garuda Indonesia has also completed the final preparations needed to join the SkyTeam global alliance early in 2014. PT Garuda Indonesia (Persero) Tbk recorded operating revenue (Operating Revenue) for US $ 3.72 billion in 2013. This amount increased by 7% compared to the achievement in 2012 of US $ 3.47 billion and then recorded a bad performance on the financial statements of the 2014 period the state-owned airlines posted a net loss for the year of US $ 371.97 million or equivalent to Rp 4.8 trillion (exchange rate: US $ 13 115 per US $). The performance is reversing gains in the previous year, worth US $ 13.65 million.

After a less favorable performance in 2014, Garuda Indonesia managed to reverse the condition and made several positive accomplishments. For Garuda Indonesia, year 2015 has been a year of accomplishments. Growth acceleration strategy through service excellence once again allowed Garuda Indonesia to march forward in challenging times. In 2015, Garuda Indonesia register a net profit of US $ 77.97 million or Rp 1.03 trillion (estimated rate: 13 232 per US dollar) in 2015. This figure increased compared by 121.1 percent compared to the 2014 experience loss of US $ 368.9 million.

Research Objective

The objective of this research is to evaluate the financial performance of PT.Garuda Indonesia (Persero),Tbk. By using DuPont analysis.

Theoretical Framework

Financial Management

Financial management deals with the maintenance and creation of economics value or wealth by focusing on decision making with an eye toward creating wealth (Keown, 2005)

Financial Performance
Financial performance is informed by its financial statement. A financial statement is intended to provide information on the resources available to management, how these resources were financed, and what the firm accomplished with them (Brown and Reilly, 2009).

Financial Ratio Analysis

Financial ratio or accounting ratio is a relative magnitude of two selected numerical values taken from an enterprise's financial statements (Groppelli & Nikbakht, 2000).

DuPont Analysis

DuPont Analysis (also known as the DuPont identity, DuPont equation, DuPont Model or the DuPont method) is an expression which breaks ROE (return on equity) into three parts (Matt Phillips, 2015). DuPont system is a financial statement analysis technique that is useful because it is assisting managers in evaluating company financial condition (Keown et al, 2005:86).

DuPont Analysis Computation

DuPont Analysis is an expression which breaks ROE (return on equity) into three parts. Those are Profitability (measured by profit margin), Asset use efficiency (measured by asset turnover), and Financial leverage (measured by equity multiplier). The formula is as follow:

\[
ROE = \text{Profit Margin} \times \text{Asset Turnover} \times \text{Equity Multiplier}
\]

Previous Research

Christina Sheela and K. Karthikeyan (2012) found that DuPont analysis (ROI and ROE) is an important tool for judging the operating financial performance, it is an indication of the earning power of the firm. Madiha Latifa, Muhammad Hasan, Abdul Latif, Imran Rasheed and Usman Yousaf (2014) clearly defined the reasons regarded low ROE and ROA and provides knowledge and experience about how to understand the short term and long term performance of firm. Frederick Nsiah and Prince Aidoo (2015) found that measurement of profitability, proxy by ROE and ROA, shows that Aryton generates more returns on its asset and on equity than Starwin Ltd.

2. RESEARCH METHOD

Type of Research

This research uses descriptive type of research that designed to provide a picture of a situation as it naturally happens. For the purpose of this study, descriptive research will use to obtain a picture of financial performance of PT. Garuda Indonesia by using DuPont analysis.

Place and Time of Research

This research takes place at PT. Garuda Indonesia and this research is started from April 2016. The object of this research is a PT. Garuda Indonesia.

Population and Sample

The data of this researched based on secondary data. The information required collected through the annual report of PT. Garuda Indonesia. And this research used purposive sampling method.
Purposive sampling is virtually synonymous with qualitative research. The characteristics of this purposive sampling is the last 5 years data and can be accessed through the website. The sample of this research is the annual report of PT. Garuda Indonesia period 2011 -2015.

**Data Collection Method**

The data under study collected based on secondary data. The information required collected through the annual report. Annual Report of PT.Garuda Indonesia (Persero) Tbk. collected from the company’s website, the researcher collected the other additional data through various books, some related journals and internet for obtaining the information.

**Operational Definition and Measurement of Research Variable**

Financial performance is the ability of the company to generate their revenues using assets from its primary mode of business. This research variable will be measured by using DuPont analysis. DuPont measurement analysis directly related to the use of financial ratios such as profit margin, total asset turnover and equity multiplier in order to calculate the return on equity.

**Data Analysis Method**

**DuPont Analysis**

The DuPont Analysis is important determines what is driving PT.Garuda Indonesia’s ROE; Profit margin shows the operating efficiency, asset turnover shows the asset use efficiency, and leverage factor shows how much leverage is being used. The method goes beyond profit margin to understand how efficiently PT.Garuda Indonesia assets generate sales or cash and how well PT.Garuda Indonesia uses debt to produce incremental returns. Using these three factors, a DuPont analysis allows analysts to dissect PT.Garuda Indonesia, efficiently determine where PT.Garuda Indonesia is weak and strong and quickly know what areas of the business to look at (i.e., inventory management, debt structure, margins) for more answers. The measure is still broad, however, and is not a substitute for detailed analysis. The DuPont analysis looks uses both the income statement as well as the balance sheet perform the examination. As a result, major asset purchases, acquisitions, or other significant changes can distort the ROE calculation. Many analysts use average assets and shareholders’ equity to mitigate this distortion, although that approach assumes the balance sheet changes occurred steadily over the course of the year, which may not be accurate either.

### 3. RESULT AND DISCUSSION

**Result**

**Return on Asset**

The return on assets ratio is a profitability ratio that measures the net income produced by total assets of PT. Garuda Indonesia during a period by comparing its net income to its total assets. The return on assets ratio or ROA measures how efficiently PT. Garuda Indonesia can manage its assets to produce profits during a period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Income</th>
<th>Total Operating Revenues</th>
<th>NPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>64,225,536</td>
<td>3,096,328,405</td>
<td>2.07%</td>
</tr>
<tr>
<td>2012</td>
<td>110,842,573</td>
<td>3,472,468,962</td>
<td>3.19%</td>
</tr>
</tbody>
</table>

### Table 2. Total Assets Turnover of PT. Garuda Indonesia (2011-2015)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Operating Revenues</th>
<th>Total Assets</th>
<th>TAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3,096,328,405</td>
<td>2,127,970,194</td>
<td>1.455</td>
</tr>
<tr>
<td>2012</td>
<td>3,472,468,962</td>
<td>2,517,997,766</td>
<td>1.379</td>
</tr>
<tr>
<td>2013</td>
<td>3,759,450,237</td>
<td>2,997,638,556</td>
<td>1.254</td>
</tr>
<tr>
<td>2014</td>
<td>3,933,530,272</td>
<td>3,113,079,315</td>
<td>1.264</td>
</tr>
<tr>
<td>2015</td>
<td>3,814,989,745</td>
<td>3,310,010,986</td>
<td>1.153</td>
</tr>
</tbody>
</table>

Total Asset Turnover ratio is an efficiency ratio that measures PT. Garuda Indonesia’s ability to generate sales from its assets by comparing the total operating revenues with its total assets. Total assets turnover is calculated in order to calculate ROA. The total assets of PT. Garuda Indonesia steadily growing for this last 5 years. Its total assets increased US$390,027,572 from US$2,127,970,194 in 2011 to US$2,517,997,766 in 2012 and increased US$479,640,790 in 2013 to US$2,997,638,556, it is the highest increased compared to the others for the total assets in the last five years. In 2014 increased US$115,440,759 to 3,113,079,315 and then increased US$196,931,671 to US$3,310,010,986 in 2015.

### Table 3. ROA calculation

<table>
<thead>
<tr>
<th>Year</th>
<th>NPM</th>
<th>TAT</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3.7%</td>
<td>1.455</td>
<td>5.3%</td>
</tr>
<tr>
<td>2012</td>
<td>5.1%</td>
<td>1.379</td>
<td>7.1%</td>
</tr>
<tr>
<td>2013</td>
<td>0.4%</td>
<td>1.254</td>
<td>0.5%</td>
</tr>
<tr>
<td>2014</td>
<td>-9.1%</td>
<td>1.265</td>
<td>-11.5%</td>
</tr>
<tr>
<td>2015</td>
<td>2.2%</td>
<td>1.152</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
ROA trend risen by 1.8% in 2011 to 2012 then fell 6.6% in 2013, and extremely fell 12% in 2014. The biggest raised was 14% in 2015.

**Equity Multiplier**

The Equity Multiplier is a financial leverage ratio that measures the amount of PT.Garuda Indonesia’s assets that are financed by its shareholders by comparing the total assets of PT.Garuda Indonesia with its total shareholder's equity.

**Table 4. Equity Multiplier of PT. Garuda Indonesia (2011-2015)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Assets</th>
<th>Total Equity</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,127,970,194</td>
<td>967,761,161</td>
<td>2.199</td>
</tr>
<tr>
<td>2012</td>
<td>2,517,997,766</td>
<td>1,114,960,078</td>
<td>2.258</td>
</tr>
<tr>
<td>2013</td>
<td>2,997,638,556</td>
<td>1,094,133,594</td>
<td>2.740</td>
</tr>
<tr>
<td>2014</td>
<td>3,113,079,315</td>
<td>879,467,591</td>
<td>3.540</td>
</tr>
<tr>
<td>2015</td>
<td>3,310,010,986</td>
<td>950,723,185</td>
<td>3.482</td>
</tr>
</tbody>
</table>
The total equity of PT. Garuda Indonesia in 2012 increased US$147,198,917 from US$967,761,161 in 2011 to US$1,114,960,078 in 2012 then decreased US$20,826,484 in 2013 to US$1,094,133,594. In 2014 decreased US$214,666,003 to US$879,467,591, it is the biggest decreased for this last 5 years and then increased US$71,255,594 to US$950,723,185 in 2015. The trend equity multiplier of PT. Garuda Indonesia between 2011 and 2012 raised 0.059 then raised 0.482 in 2013, and the biggest raised of the equity multiplier for the last five years was 0.8 in 2014. And then fell 0.058 in 2015.

**Return on Equity**

The number of PT.Garuda Indonesia’s ROE is more than a measure of its profit, it's a measure of its efficiency. A rising ROE suggests that PT.Garuda Indonesia is increasing its ability to generate profit without needing as much capital. It also indicates how well PT.Garuda Indonesia's management is deploying the shareholders' capital. However, it is important to note that if the value of the shareholders’ equity of PT.Garuda Indonesia goes down, its ROE goes up. A high level of debt can artificially boost ROE, the more debt PT.Garuda Indonesia has, the less shareholders’ equity it has (as a percentage of total assets), and the higher its ROE is.

**Table 5. ROE calculation**

<table>
<thead>
<tr>
<th>Year</th>
<th>ROA</th>
<th>EM</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>5.3%</td>
<td>2.199</td>
<td>11.7%</td>
</tr>
<tr>
<td>2012</td>
<td>7.1%</td>
<td>2.258</td>
<td>16.0%</td>
</tr>
<tr>
<td>2013</td>
<td>0.5%</td>
<td>2.74</td>
<td>1.3%</td>
</tr>
<tr>
<td>2014</td>
<td>-11.5%</td>
<td>3.54</td>
<td>-40.8%</td>
</tr>
<tr>
<td>2015</td>
<td>2.5%</td>
<td>3.482</td>
<td>8.8%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>0.78%</td>
<td>2.8438</td>
<td>-0.60%</td>
</tr>
</tbody>
</table>
In DuPont Analysis system, ROE is the result of ROA multiplied by equity multiplier. The trend of ROE looks the same as ROA trend, where during the last 5 years the trend going up first and then going down two years in a row and go up significantly in the last year. In 2012 the number of ROE risen by 4.3% from 11.7 in 2011 to 16.0% in 2012 then fell 14.7% in 2013 and fell significantly 42.1% in 2014 and then the biggest raised was 49.6% in 2015.

Discussion

The Dupont analysis is a financial ratio based on the return on equity ratio that is used to analyze PT. Garuda Indonesia’s ability to increase its ROE (return on equity). The Dupont analysis looks at three main components of the ROE ratio, which is profit margin, total assets turnover and financial leverage. Based on these three performances measures the model concludes that PT. Garuda Indonesia can raise its ROE by maintaining a high profit margin, increasing asset turnover, or leveraging assets more effectively.

In the last 5 years, the highest number of PT.Garuda Indonesia’s ROE was in 2012 that is 16.0% which affected by both ROA and Equity multiplier in that year. The number of PT. Garuda Indonesia’s ROA reached 7.1%, which is the highest number of ROA during the last five years, and it greatly affect its number of ROE at that time, and the number of equity multiplier in that year was around 2,258 which is counted as the second lowest number from the equity multiplier for a period of 5 last years. The value of the shareholders’ equity of PT.Garuda Indonesia in 2012 goes down, that is why its ROE goes up, because the high level of debt can artificially boost ROE, the more debt PT.Garuda Indonesia has, the less shareholders' equity it has (as a percentage of total assets), and the higher its ROE is. The high rate of ROA is strongly influenced by the high percentage of net profit margin PT. Garuda Indonesia in 2012. The increase in net profit margin PT. Garuda Indonesia is due to an increase in the number of passengers and cargo in that year.

PT. Garuda Indonesia transported 20.4 million passengers during 2012, an increase of 19.6% compared to 2011 of 17.1 million passengers. Production capacity (availability seat kilometers /ASK) in 2012 also increased to 36 billion. Garuda Indonesia also managed to increase the amount of cargo transportation in 2012 amounted to 280,285 tones increased by 22.2% from last year. During the year 2012 the frequency of flights Garuda Indonesia (domestic and international) also increased by 17.9% to 153,266 low frequency, compared to the period 2011 that as many as 130,043 flight frequencies and the level of accuracy of the flight (on time performance / OTP) in 2012 reached 84.9%. During 2012, Garuda Indonesia also managed to increase its market share...
in the international market to 24.1%, from the previous 23.5%. While domestic passenger market share in 2012 was 28.2%, or the same as last year.

The lowest number of PT. Garuda Indonesia’s ROE for the last 5 years was in 2014 that reached number -40.8%. This low number of ROE at that time affected by the low number of ROA in 2014 that reached -11.5% which is the lowest number of ROA for the last five years and also affected by the higher equity multiplier at that time that reached number 3.54 which is the second highest number for the equity multiplier in this last five years. The low number of ROA is strongly influenced by the decreases in net income of PT. Garuda Indonesia caused by the high number of operating expense that can not be covered by its operating revenue in 2014. The high number of operating expenses in PT. Garuda Indonesia in 2014 caused by the fall of the Rupiah exchange rate against the US dollar. The rising of fuel prices also become the reason of the increases in operational expenses of PT. Garuda Indonesia. Spec regulations that are less conducive to the aviation industry also have a large impact on the financial performance of the company, the slow development of the national air transport infrastructure affects the flight operational inefficiencies. On the other hand depressed the performance of PT. Garuda Indonesia also affected by the investment and fleet development.

4. CONCLUSION AND RECOMMENDATION

Conclusion

Based on the result and discussion that have been explained in chapter 5, the conclusions of this research are:

1. In the period of 2011 – 2015, PT. Garuda Indonesia’s best financial performance was in 2012 when the number of ROE (return on equity) reached the highest number at 16.0% which mean PT. Garuda Indonesia has the highest number of assets and the low level of debt in that year.
2. In the last 5 years PT. Garuda Indonesia experience once significant performance degradation in 2014, where the number of total operating expenses higher than the total operating revenues, which means the net income not able to cover its expenses at that time, it causes the declining of PT. Garuda Indonesia’s financial performance, because the number of net income affect the most in PT. Garuda Indonesia’s ROE.
3. Financial performance of PT. Garuda Indonesia for the last 5 years can not stated as a good performance. The financial ratio based on the return on equity ratio shows us the ability of PT. Garuda Indonesia to increase its ROE (return on equity), and the low number of ROE considered as a bad performance. ROEs 15-20% are generally considered good. And the average of PT. Garuda Indonesia’s ROE period of 2011 -2015 is -0.6% it means that the financial performance of PT. Garuda Indonesia for the last 5 years are bad performance.

Recommendation

Based on the conclusion, the researcher has made two recommendations to improve the financial performance of PT. Garuda Indonesia:

1. The increasing in the number of passengers, the production capacity and the amount of cargo affect biggest part of net income that increase the number of profitability ratio that influence the financial performance of PT. Garuda Indonesia, therefore PT. Garuda Indonesia should focus on increasing the frequency of flights on both domestic and international as well as maintaining the level of accuracy of the flight (on time performance / OTP) to improve the financial performance of PT. Garuda Indonesia.
2. Since there were some unfavorable events such as declining of the financial performance of PT. Garuda Indonesia caused by the rising of the fuel prices, the depreciation of Rupiah exchange rate against US Dollar and the slow development of the national air transport infrastructure also have a large impact on the financial performance of the company.
infrastructure that decreased the number of total equity and affect PT. Garuda Indonesia’s financial leverage, it is better for the firm to set the new strategy to avoid any significant changes toward those factors.

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