Du Pont System: Comparative Study Of Financial Performance
PT. Indosat Tbk and PT. XL Axiata Tbk

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Abstract

The development of telecommunications services in Indonesia which is developing quite rapidly affects the level of competition among telecommunications service providers that are also getting tougher. This research will compare the financial performance of two telecommunications service providers in Indonesia, namely PT XL Axiata Tbk and PT Indosat Tbk by using DuPont System analysis techniques, so it is expected to know which companies have better financial performance and which variables influence it. The research method used is a quantitative method with a descriptive approach. This study uses secondary data types obtained from the Indonesia Stock Exchange. Researchers used the DuPont System analysis technique in conducting data analysis. By using the DuPont System analysis technique, it is known that the Return On Equity (ROE) in the 2017 and 2019 periods of PT XL Axiata Tbk experienced a greater increase in the ratio from 1.69 to 3.7 than the increase that occurred at PT Indosat Tbk. This reflected that the management of PT XL Axiata can provide better gains for shareholders.

Keywords:
DuPont System, Comparative Study, Financial Performance

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Abstrak


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INTRODUCTION

All aspects of the world today can be accessed easily using a smartphone, there are several reasons behind it, ranging from the development of the times, needs, pride, and now, making the most of the world's people now use it. Likewise in Indonesia, quoted from Supriyadi, (2018) revealed that Indonesia depends on the six countries with the most cell phone users in the world. This proves that the Indonesian people have begun to consider smartphones important. Based on this fact, of course, the smartphone business will grow rapidly, and of course, with the development of smartphones will increase in the business development of telecommunications service providers which is one of the main components to be accessed inter-internet on smart-phones. As Amarullah has launched, (2012) that the development of tele-communications is increasing with the presence of various smartphone brands that facilitate internet access from the telephone, until the end of 2011, according to ATSI (Indonesian Cellular Telephone Association) data, Indonesian cellular service users have reached more than 240 million.

There are several telecommunications service providers in Indonesia such as PT Cellular Telecommunications (Telkomsel), PT Indosat Tbk, PT XL Axiata Tbk, PT Hutchison 3 Indonesia, and PT Smartfren Telecom Tbk. PT Indosat Tbk and PT XL Axiata Tbk are telecommunications service providers in Indonesia which will be used by the authors as research objects. The selection of PT XL Axiata Tbk and PT Indosat Tbk is quite interesting, namely because PT XL Axiata is the first private company to provide cellular telephone services in Indonesia and became the first telecommunications operator in Indonesia to launch 4.5 G, and Indosat which is a service company the second largest telecommunications in Indonesia, for this reason, the authors chose the two companies.

The growing development of telecommunications services in Indonesia will be interesting when viewed from the financial point of view of telecommunications service providers, the author will examine the financial aspects of PT XL Axiata Tbk and PT Indosat Tbk. The development of telecommunications services in Indonesia which is developing quite rapidly will affect the level of competition between telecommunications service providers.

Companies will also be more stringent. Where each company has the same goal which is to get the maximum profit. One of the benchmarks that can be used as a reference by a company to achieve these goals is net income, which will be one component to find out and measure the company's financial condition through the company's financial performance (Lestari et al, 2018).

Many ways that can be used to measure the company's financial performance, one of which can be used is to use the DuPont System analysis technique. This DuPont Systems analysis technique will show and determine the level of profitability of the company's assets through the analysis of activity ratios and profit margins (Wardoyo and Purnomo, 2018). DuPont System is a process of activity ratio with sales profit ratio so that it will show and determine the amount of Return on Investment (ROI), through Return on Investment (ROI) will show how the company's ability to generate profits from assets that have been used (Sartono, 2011). The level of sales and net profits generated by the company will affect the profit margin, this means that the profit margin also includes all costs incurred by the company. We can conclude that the DuPont System analysis technique focuses not only on the profits generated by the company but also on the level of investment used to generate profits (Elvina et al, 2017).

This research will compare the financial performance of two telecommunications communication service providers in Indonesia, namely PT XL Axiata Tbk and PT Indosat Tbk using the DuPont System analysis technique, so it is expected to find out which companies have better financial performance and which variables influence it.

Previous research conducted by Yunita, (2013). The study compared the
financial performance of PT XL Axiata Tbk and PT Indosat Tbk in 2008-2011 by using the Independent sample t-test, showing that there were no significant differences based on 11 existing variables namely Current Ratio, Quick Ratio, Total Debt to Total Asset Ratio, Debt to Equity Ratio, Inventory Turnover, Receivable Turnover, Fixed Asset Turnover, Profit Margin, Return on Assets, and Earning Per Share between PT XL Axiata Tbk and PT Indosat Tbk. Wardoyo & Purnomo Research, (2018) analyzing the financial performance of PT Indosat Tbk, PT Smartfren Telcom Tbk, PT Telekomunikasi Indonesia, and PT XL Axiata Tbk in 2014-2016 using DuPont System analysis techniques, showing that PT Telekomunikasi Indonesia has better financial performance and PT XL Axiata Tbk has the worst financial performance seen from Net Profit Margin, Total Assets Turnover, Return on Investment, Return On Investment, and Return on Equity. Research by Lestari et al. (2018) based on DuPont System analysis of cosmetics and household goods companies listed on the Indonesia Stock Exchange in the 2011-2016 period shows that from six companies only one company showed good financial performance, namely PT Unilever Indonesia Tbk because it has the value of return on equity above the industry average of similar companies, while the company that has the lowest return on equity is PT Mustika Ratu Tbk due to net profit margins, asset turnover, return on assets and the lowest equity multiplier among other companies.

Based on this background, researchers are interested in researching the title "DuPont System: Comparative Study of Financial Performance of PT Indosat Tbk and PT XL Axiata Tbk", in which this research will compare the financial performance of the two companies based on 2017-2019 company's financial statements using DuPont System analysis so that it can be known which company performance is better in that year and what variables influence it.

RESEARCH METHOD

Data Types and Sources

This research uses quantitative research methods with a descriptive approach. According to Sugiyono (2013: 13) quantitative methods are research with systematic, planned, and well structured and clear specifications. Descriptive method is a method that describes and gives a description of the object under study through the data that has been collected, as according (Sugiyono, 2012: 29).

This research uses secondary data types, according to Hasan (2002: 58) secondary data is obtained or collected in researching sources that already exist, researchers use secondary data in the form of financial statements in the form of balance sheets and income statements and reports annual PT Indosat Tbk and PT XL Axiata Tbk 2017-2019 period obtained from the Indonesia Stock Exchange.

Technical Data Analysis

Researchers used the DuPont System analysis technique in conducting data analysis. DuPont System is an analytical framework that connects various kinds of financial ratios, namely connecting Net Profit Margin (the level of profitability of the company) with Asset Turnover (the level of efficiency of the company is using assets) as revealed by Sugiono & Untung (2016: 77). Following are the steps that will be used in the DuPont System analysis figure 1.

Net Profit Margin (NPM)

Net Profit Margin is a ratio used to determine the company's ability to generate a company's net profit, i.e. profit from sales after taking into account all costs and income taxes (Wachowicz, 2009), which can be determined by the following formula: Net Profit Margin is a ratio used to determine the company's ability to generate a company's net profit, i.e. profit from sales after taking into account all costs and income taxes (Wachowicz, 2009), which can be determined by the following formula:

\[
NPM = \frac{EAT}{Sales}
\]

Total Assets Turnover (TATO)

Total Assets Turnover is a ratio that illustrates the relative efficiency of using company assets to generate sales or calculate asset turnover based on sales volume. The greater the ratio, the better (Wachowicz, 2009), which can be determined through the following formula:

\[
TATO = \frac{Sales}{Total Asset}
\]
Return On Investment (ROI)

Return On Investment is a profitability ratio that analyzes the rate of return on assets that connects profit with investment (Wachowicz, 2009) which can be known through the following formula:

\[ \text{ROI} = \frac{\text{EAT}}{\text{Total Asset}} \]

\[ \text{ROI DuPont} = \text{NPM} \times \text{TATO} \]

Equity Multiplier (EM)

Represents the ratio of total assets in each of its equity. The greater the Equity Multiplier (EM), the smaller the portion of assets funded by shareholders and that means that the funding of assets is mostly from external funding or debt (Wardoyo & Purnomo, 2010).

\[ \text{EM} = \frac{\text{Total Asset}}{\text{Total Equity}} \]

Return On Equity (ROE)

Return On Equity (ROE) is the ratio of a company’s ability to generate profits based on the management of its capital. The higher the results of this ratio, the higher the profits obtained by investors (Wachowicz, 2009), which can be known through the following formula:

\[ \text{ROE DuPont} = \text{ROI DuPont} \times \text{EM} \]

![Model DuPont System](image)

Source: Brigham (2010:153)

RESULT AND DISCUSSION


<table>
<thead>
<tr>
<th>Data</th>
<th>Year</th>
<th>PT. Indosat.</th>
<th>PT. XL Axiata Tbk.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Aktiva</td>
<td>2017</td>
<td>50661040</td>
<td>56321441</td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>53139587</td>
<td>57613954</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>62813000</td>
<td>62725242</td>
</tr>
<tr>
<td>Non-current Assets</td>
<td>2017</td>
<td>41181769</td>
<td>49140699</td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>45233062</td>
<td>50555302</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>50368205</td>
<td>55579594</td>
</tr>
<tr>
<td>Aset Lancar</td>
<td>2017</td>
<td>9479271</td>
<td>7180742</td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>7906525</td>
<td>708652</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>12444795</td>
<td>7145648</td>
</tr>
<tr>
<td>Total</td>
<td>2017</td>
<td>14815534</td>
<td>21630850</td>
</tr>
<tr>
<td>Ekuitas</td>
<td>2018</td>
<td>12136247</td>
<td>18343098</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>13707193</td>
<td>19121966</td>
</tr>
<tr>
<td>Total Sales</td>
<td>2017</td>
<td>29926098</td>
<td>22875662</td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>23139551</td>
<td>22938812</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>26117533</td>
<td>25132628</td>
</tr>
</tbody>
</table>

Analysis Ratio Financial

Net Profit Margin (NPM)

\[ \text{NPM} = \frac{\text{Earning after tax}}{\text{Sales}} \times 100\% \]

Based on the calculation of the financial ratios of PT Indosat Tbk and PT XL Axiata Tbk in 2017 both have positive Net Profit Margins (NPM) of 4.35% and 1.64%. Whereas in 2018 both experienced Net Profit Margin (NPM) losses of -90.1% and -14.37%. Indicates there have been losses to the two telecommunications companies. And in 2019 both were...
able to print Net Profit Margin (NPM) of 6.24% and 2.83%. PT Indosat Tbk can print a positive Net Profit Margin (NPM) better in 2017 and 2019. An increase in positive Net Profit Margin (NPM) indicates the company's ability to generate profits will be better (Wuryaningsih & Dziqron, 2015)

**Tabel 2:** Net Profit Margin (NPM)

<table>
<thead>
<tr>
<th>Year</th>
<th>PT Indosat Tbk</th>
<th>PT. XL Axiata Tbk</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>4,35%</td>
<td>1,64%</td>
</tr>
<tr>
<td>2018</td>
<td>-90,1%</td>
<td>-14,37%</td>
</tr>
<tr>
<td>2019</td>
<td>6,24 %</td>
<td>2,83%</td>
</tr>
</tbody>
</table>


**Total Asset Turnover (TATO)**

\[ \text{TATO} = \frac{\text{Total Sales}}{\text{Total Asset}} \]

**Tabel 3:** Total Asset Turnover (TATO)

<table>
<thead>
<tr>
<th>Year</th>
<th>PT Indosat Tbk</th>
<th>PT. XL Axiata Tbk</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>0,59</td>
<td>0,4</td>
</tr>
<tr>
<td>2018</td>
<td>0,43</td>
<td>0,39</td>
</tr>
<tr>
<td>2019</td>
<td>0,41</td>
<td>0,4</td>
</tr>
</tbody>
</table>


Based on the calculation of the financial ratios of PT Indosat Tbk and PT XL Axiata Tbk in 2017 both have positive Return on Investment (ROI) of 2.56% and 0.65%. Whereas in 2018 both experienced Return on Investment (ROI) losses of -38.74% and -5.6%. And in 2019 of 2.55% and 1.13%. From the comparison of the two, PT Indosat Tbk has better management capabilities in managing assets in 2019 and 2017. Indications of the performance of PT Indosat Tbk are better following Sur and Chakraborty's (2006) research that Return on Investment (ROI) is a comprehensive measure in assessing the profitability of a company's performance because the ratio considers operating, investment, financial and tax-related decisions.

**Return on Investment (ROI)**

\[ \text{ROI}_{\text{DuPont}} = \text{NPM} \times \text{TATO} \]

**Tabel 4:** Return on Investment (ROI)

<table>
<thead>
<tr>
<th>Year</th>
<th>PT Indosat Tbk</th>
<th>PT. XL Axiata Tbk</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2,56 %</td>
<td>0,65%</td>
</tr>
<tr>
<td>2018</td>
<td>-38,74 %</td>
<td>-5,6%</td>
</tr>
<tr>
<td>2019</td>
<td>2,55%</td>
<td>1,13%</td>
</tr>
</tbody>
</table>


**Equity Multiplier (EM)**

\[ \text{EM} = \frac{\text{Total Asset}}{\text{Total Equity}} \]

**Tabel 5:** Equity Multiplier

<table>
<thead>
<tr>
<th>Year</th>
<th>PT Indosat Tbk</th>
<th>PT. XL Axiata Tbk</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>3,41</td>
<td>2,6</td>
</tr>
<tr>
<td>2018</td>
<td>4,37</td>
<td>3,14</td>
</tr>
<tr>
<td>2019</td>
<td>4,58</td>
<td>3,28</td>
</tr>
</tbody>
</table>


Based on the calculation of the financial ratios of PT Indosat Tbk and PT XL Axiata Tbk, it illustrates that the Equity Multiplier (EM) of PT Indosat Tbk gives an Equity Multiplier (EM) value greater than 3 in the current year which indicates the smaller funding by the shareholders, which means based on the ratio from Equity Multiplier (EM), PT XL Axiata is better than PT Indosat Tbk because this means that PT Indosat Tbk mostly gets funding from debt. So the company's performance criterion is that the smaller this ratio means the portion of shareholders will be even greater. So that the performance will be better because the percentage for interest payments will be smaller (Kasmir, 2011).

**Return On Equity (ROE)**

\[ \text{ROE} = \text{ROI}_{\text{DuPont}} \times \text{EM} \]

**Tabel 6:** Return On Equity (ROE)

<table>
<thead>
<tr>
<th>Year</th>
<th>PT Indosat Tbk</th>
<th>PT. XL Axiata Tbk</th>
</tr>
</thead>
</table>

Based on the calculation of the financial
Based on the calculation of DuPont’s Return On Equity (ROE) financial ratio, PT Indosat Tbk, and PT XL Axiata Tbk. During the 2018 period, there were significant losses seen from the Return on Equity (ROE) of -169.2 at PT Indosat Tbk, and PT XL Axiata Tbk at -17.58. But in 2017 and 2019 performance, PT Indosat had a better Return on Equity (ROE) performance than PT XL Axiata Tbk. Return on Equity (ROE) indicates that the level of net income obtained by the owner of the company for the capital invested in the company decreases. This relates to the telecommunications regulation following the Circular of the Minister of Communication and Infor-mation Minister Number 01 of 2018 concerning restrictions on cellular card ownership so that it erodes net income in 2018 (Sudarmadi, 2018).

CONCLUSION AND SUGGESTION

Conclusion

Based on the DuPont System analysis technique, Return on Investment (ROI) in the 2017 and 2019 periods of PT Indosat Tbk and PT XL Axiata Tbk has a positive value but seen from a comparison every year, then in 2019 PT Indosat Tbk experienced a decline in Return on Investment (ROI) 2017. This indicates that the level of net income earned by the company owner for the capital invested in the company has decreased. In 2018 both companies experienced a decline in performance due to the promulgation of SE Ministry of Communication and Information Regulation No. 1 2018 which impacted on the sale of starter packs.

Furthermore, DuPont System analysis techniques show Return On Equity (ROE) in the 2017 and 2019 periods of PT Indosat Tbk experiencing an increase in the ratio from 8.72 to 11.67, this is better than the increase that occurred at PT XL Axiata Tbk. This indicates that the management of PT Indosat Tbk can provide better gains for shareholders that year.

Dupont System is one comprehensive measure in assessing the profitability of a company and also serves as a guide for stakeholders in assessing the condition of the company from the financial statements.

Suggestion

The DuPont System that uses the Return on Investment (ROI) and Return On Equity (ROE) ratios shows that the situation is increasing. The influencing elements are Net Profit Margin (NPM) and Total Asset Turnover (TATO). To overcome the problem of instability of Net Profit Margin (NPM) and Total Asset Turnover (TATO), companies need to make efficiency of their basic costs by optimizing the company's resources both labor, raw materials, and maintaining customer loyalty by maintaining the quality of telecommunications broadband.

REFERENCES


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