The Influence of Capital Structure Towards Profitability  
(Study on Hotel and Tourism Companies that listed in Indonesia Stock Exchange)

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Abstract

Hotel and tourism companies are one of the company that make a growth of the country nowadays. In the year 2013 the increasing of local tourism has been growth till 245 million of journeys, and will be twice increase in the year 2022 that will be 400 million of journeys. With the increasing of the journeys mean the company need to consider their capital structure perfectly to get maximum profit. This research is aimed to see the influences of Capital Structure toward Profitability and understanding the factor of capital structure which one is the most affected factor toward the profitability in the hotel and tourism companies. There are Long Term Debt to equity and Time Interest Earned as the independent variable and Return On Equity as the dependent variable. This research is explanatory research, which is mean to explain the influences of LTD and TIE toward ROE. This study identifies which variable from capital structure that can be a strong impact toward the profitability. Is the Long Term Debt to equity or Time Interest Earned have the strongest impact toward Return On Equity, and also identifies both LTD and TIE influences toward ROE. The population of the sampling is 21 hotel and tourism companies that listed in Indonesia Stock Exchange, and only 6 companies that have the criteria for the research. The research instruments are tested by classic assumption test, which is consist of data normality, multicollinearity, heteroscedastisity, and autocorrelation test. The result is Long Term Debt to equity and Time Interest Earned have simultaneous significantly influences toward Return On Equity. Long Term Debt to equity has the strongest impact toward the Return On Equity. The contribution of each variable is LTD have a negative impact toward ROE and TIE have a positive impact toward ROE. Which is mean that if LTD increasing then ROE will be decreasing, and if TIE increasing ROE will be increasing. The company needs to consider about debt that used, because it can increase the risk of the capital.

Keywords : Long Term Debt to equity, Time Interest Earned, Return On Equity

Background of the study

In the year 2013 the growth of local tourism has been growth till 245 million of journeys, and will be twice increase in the year 2022 that will be 400 million of journeys. According to minister of creative economy and tourism Mari Elka Pangestu, “with an increase of it, it will be needed to increase hotel facility by 800 and make 200 thousand job opportunity in the tourism
sectors”. The finance function is one of the important functions in the activities the company. In managing the functions of finance, one of the elements that need to be of note is how big the company is able to meet the needs of funds which is used to operate and develop its business. For the fulfillment of the needs of these funds can be obtained from within the company (capital ownership) or from outside the company (foreign capital). Financial managers need to know the relationship between capital structure and The value of the company. Where the both elements, which forms the capital structure is The structure of wealth and financial structure.

From the capital structure there is a debt to equity ratio, and time interest earned. According to (Charles H. Gibson 2008:260), Debt equity ratio is another computation that's determined the entity’s long-term debt-paying ability. Not only capital structure but also profitability of the company needs to be considered. Profitability has its types of ratio, one of the profitability ratio type is return on equity,a return on equity is a comparison between the net profit after tax and total equity. Return on equity is a measure of the earnings (income) that are available to the owners of the company (whether ordinary shareholders and holders of preferred stock) over the capital that they invested in the company (Harahap, 2008: 305).

**Literature Review**

**Financial Structure**
Each company in the conduct of his business would need the funds which can be obtained from the owner of the company or of the debt. Thus, then for any company doing business always require the good assets or intangible form. The function of the use of funds must be done efficiently, which means that every rupiah funds embedded in assets must be used efficiently for it can be generated an optimum level of investment gains. According to the sawir stated that:

The financial structure is how the company funded its assets. Company assets are funded by short-term debt, long-term debt and shareholders’ capital so that the entire right side of the balance sheet (liability) shows the financial structure. (Sawir, 2005: 10).

**Capital Definition**
The capital is right or part owned by the owner of the company shown in the heading of capital (share capital), surplus and earnings on hold, or the excess value of assets owned by the company of their entire debt. (Munawir, 2004: 19). According to Bringham and Gapenski capital is for purchases from outside the company, which are grouped into two types, namely debt (foreign capital) and equity (capital).

**Capital Structure Definition**
The goal of financial management is to maximize the value of the company that depend on the flow of funds in the coming and the income level for capitalizing the fund flows, so that the company expected to increase the welfare of the owners of the company. To be able to achieve those goals financial policies is required, one of which is the structure and capitalization.
Sutrisno (2003: 289) States that "the capital structure is the balance between foreign capital or debt in its own capital (debt to equity ratio) ". Weston and Copeland in Dennis (2009: 15) States that "Capital structure was a reflection of the way a company to finance its assets which is the composition of the capital sources of debt short term, long term debt and capital shareholders ". From the sense of the above definitions, it can be concluded that the capital structure was Equalization or the comparison between debt (Debt) and private equity (Equity) used the company to finance its assets. Debt and private equity have a different financial consequences.

Therefore, the management should understand well. The debate over Capital Structure implicit assumes that (Ubud Salim 2011: 69) :

1. There is a definition of something which can be labeled "cost of capital"
2. Allows to calculate the cost of the capital and filled the meaning
3. The cost of equity capital stock is the factor that is used (either explicitly or implicitly) by an investor in common shares in the investment decision.
4. The classes of risks that are different from each of the companies have a different capital cost.
5. We could take the cost of capital and use it in making investment decisions. NPV can be used in accepting or declining investment. a comparison of financial statements can be used if the company using the IRR to evaluate investments.

The Factors that affecting the capital structure
The capital structure of the company is affected by many factors, according to (Irawati 2006 : 203) influenced by many factors including:

The Interest Rate
Interest rates affect the selection of the type of capital that will be drawn, due to the withdrawal of bonds (loans) is only justified if the level interest rates are lower than economic rentability of its addition capital.

Income Stability
A company that has a stable earning will always be meet the financial obligations as a result of the use of foreign capital in the form of loans, on the other hand the company that hasn’t stable earning will bear the risk can’t be paying interest charges and loan principal when the economic situation is bad.

Composition of Assets
It's connected with a horizontal conservative financial structure stating that the amount of private equity at least can cover the number of fixed assets plus other assets that's permanent.

Level of Risk Assets
If there are risk sensitive assets, then the company must consider about the cost. The cost should be with its own capital, a capital that no risk and if can don’t take cost from foreign capital.
Amount of Capital Required
If the amount of the capital required is large, the company needs to be issued some of the securities together.

State of the Stock Market
The company in issuing or selling securities must be adapted to the circumstances of the capital markets.

Characteristic of the Manager
A manager that dares to take a risk would have a courage to financing their growth of its business by using funds from the loan than a manager that is pessimistic.

The size of The Company
A large company that already have spread many of their stocks will be having more courage to open a new stock to fulfill their needs and funding its growth than a small company.

Measurement of Capital Structure
The ratio in the measurement of capital structure is used to measure how many funds that supplied by the owner of the company in its proportions with funds obtained from the company’s creditors.

This ratio is groups complement each other and generally analysts using both. This analysis consists of a debt to equity ratio, and times interest earned.

Long Term Debt to equity
The ratio of debt to equity which describes in funding for the company and demonstrates the ability of private equity in the company is to meet its obligations. Long Term Debt to equity leverage ratio is one that aims to measure the ability of private equity, which provided security for the overall the debts of the company. Long Term Debt to equity also measures the funds provided by creditors versus the funds provided by owners. (Thomas 2008: 318). As for the formula is:

\[
\text{Long Term Debt to equity} = \frac{\text{Total Longterm Debt}}{\text{Total Equity}}
\]

Time Interest Earned
The Times Interest Earned ratio as the name suggest, this ratio measures how well a company has its interest obligations covered, and it’s often called the interest coverage ratio (Dess 2006:108). It’s determined by dividing earnings before interest and taxes with interest charges. This ratio measures the extent to which the company’s revenue can be dropped without affecting the ability the company meets the obligations of interest or interest expenses that must be closed at the end of the year. Formula for this Ratio:
Theories Regarding Capital Structure

The Theory of Traditional Approaches

The traditional approach argues for capital structure optimal. That means a capital structure has an impact on the value of The company, where the capital structure can vary to be retrieved the optimal value of the company. (James 2007 : 257)

Theory approach of Modigliani and Miller

In this theory argues that capital structure does not affect the Company. In this case the tax factor has been included. So the value of the company with a debt higher than the value of the company without debt, the increase is due to the existence of tax savings. (James 2007 : 257)

The trade-off theory of capital structure

The Trade-off theory explains that the optimal capital structure found by balancing the tax advantages and costs (the cost of financial distress of financial distress) of the addition of debt, so that the costs and benefits from the addition of a debt in the trade-off (mutual exchange) with each other (Bringham and Gapenski, 1993: 431).

Agency Theory

According to Agus Surtono (2001: 25) Agency problems usually occur between managers with shareholders or between stakeholders with debt holders. Conflicts are common in big companies is between stakeholders with the debtholders. The lender has a right to a portion of profits acquired by the companies and some of the company assets especially in the bankruptcy case.

Pecking Order Theory

The pecking order theory rationale is based on the following description:

a. The managers find out more about the company than on the outside investors, however they refused to issue shares when believe their shares are undervalued.
b. Investors understand that managers know more and they tried to publish the exact time
c. Managers clarify the decision to publish equity as bad news, and the company may publish the equity only at a price discount.
d. Companies working on the philosophy of pecking order theory and require external equity may not have a good investment opportunity. Because the share can’t be sold on a fair price. According to Myers, the company preferred funding with internal
capital. The order of using fund referring to the pecking order theory is internal fund, debt, and equity.

**Free Cash Flow Theory**

Theory of Free Cash Flow "describe that cash flow is derived from operations and its use is under the control of the management of the company, the Manager uses free cash flow to fund the project, paying dividends to shareholders or hold it as cash balance.

**The Profitability of The Company**

Profitability is the ability of the company gained profit in anything to do with sales, total assets, as well as own capital (Tsing, 1998: 130). The amount of the net profit is often compared to the size of the activity or condition like other financial sales, assets, equity shareholders assess performance as a percentage of the level of activity or investment This comparison is called the ratio of profitability (profitability ratio). The following are a ratio used to measure profitability is as follows:

**Gross Profit Margin**

The ratio of gross profit margin or gross profit margin is useful for knowing the gross profit of the company of any goods sold. Gross profit the margin was strongly influenced by the cost of goods sold. If the cost of goods sales increased and gross profit margin will decrease, so does the otherwise. In other words, the total margin available to cover other expenses beyond cost of goods sold and still yield a profit. (Thomas 2008:317) The formula of Gross Profit Margin is:

\[
GPM = \frac{Sales - Cost of Goods Sold}{Sales} \times 100\%
\]

**Net Profit Margin**

Net Profit Margin (NPM) describes the magnitude of net profits earned company on any sales made. In other words, it shows how much after-tax profits are generated by each dollar of sales. (Thomas 2008:317)

The Formula is:

\[
NPM = \frac{Profit after Tax}{Sales} \times 100\%
\]

**Return On Investment**

Return on Investment or return on assets showed the ability the company generates profits from assets used. By knowing the This ratio, it will be known whether the company is efficient in utilizing its assets in the company's operational activities. This ratio also gives size better corporate profitability because it shows the effectiveness of management in the use of assets to
earn income. Analysis Return On Investment (ROI) in financial analysis means very important as one of the techniques of financial analysis that is thorough/comprehensive. Thus Return On Investment (ROI) connect the advantages gained from company operations (Net Operating The amount of investment Income) or assets used to generate the operating profit (Net Operating Assets). Another term for ROI is "Net Operating profit Rate Of Return" or "Operating Earning Power" (Munawir, 1995: 89).

The Formula for ROI is:

\[
ROI = \frac{Earning \ After \ Tax}{Total \ Assets} \times 100\
\]

Return On Equity

Return on equity is a measure of how the stockholders fared during the year. Since benefiting shareholders is our goal, ROE is , in an accounting sense, the true bottom line measure of performance (Dess 2006:110). This ratio is affected by a large or small company, debt. When the proportion of debt is greater then the ratio will also be greater.

The Formula is:

\[
ROE = \frac{Earning \ After \ tax}{Equity} \times 100\
\]

Hypothesis

Based on the literature and previous research, the hypotheses in this study are as follows:

1. That there is a simultaneous significantly influence on Capital Structure that consist of Long Term Debt to equity, and Time Interest Earned towards Profitability (ROE) of Hotel and Tourism companies were listed on the Indonesia stock exchange.

2. That there is a Partial significantly influence on Capital Structure that consist of Long Term Debt to equity, and Time Interest Earned towards Profitability (ROE) of Hotel and Tourism companies were listed on the Indonesia stock exchange.

3. That there is a Dominant influence on Capital Structure especially on Long Term Debt to Equity towards Profitability (ROE) of Hotel and Tourism companies were listed on the Indonesia stock exchange.

Research Methodology

Research Types

The types of this research are explanatory search that's mean the researcher explain the casual relationships between variables through testing hypothesis, this research no longer called descriptive research but called as hypothesis testing research or explanatory research (Singarimbun and Effendi, 1995:5).
Types of Data
Based on how to obtain it, this study uses two kinds of data sources, which include:

Secondary data

Secondary data is data obtained from these two sources of data required by the researcher (Bungin, 2009:122). These data include an overview of the study sites. It is usually obtained from the library or previous research reports. Secondary data sources can be books, journals, articles from the internet, and a thesis.

Quantitative data

The data that used in this research is quantitative data that's mean the data is in numbers. In this research is in the form of the financial report of the hotel and tourism companies that listed in IDX

Population and Sample

Population

Sugiyono (2008:80) states that the population is the generalization region comprising a subject that has certain qualities and characteristics which are determined by the researchers to learn and then draw conclusions. In this case the population that chooses are 21 hotel and tourism companies that listed in IDX.

Sample

The Sample is a part of the population. The sample consists of selected members of the population. The sampling technique that used in this research is purposive sampling. Purposive sampling is a sampling that based on certain criteria so that a relevant sample can be gathered. The criteria for the sample is:
1. A hotel and tourism company that listed in IDX period 2008 to 2012
2. A hotel and tourism company that not loss in the financial report from 2008 to 2012

Based on several criteria the sample that can be taken is 6 companies from the 21 companies that listed.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name of The Company</th>
<th>Meet The Criteria of the Sample</th>
<th>Not meet The Criteria of the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT. Bayu Buana Tbk</td>
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<td>√</td>
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<tr>
<td>2</td>
<td>PT. Bukit Uluwatu Villa Tbk</td>
<td></td>
<td>√</td>
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<tr>
<td>3</td>
<td>PT. Grahamas Citrawisata Tbk</td>
<td></td>
<td>√</td>
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<tr>
<td>4</td>
<td>PT. Hotel Mandarin Regency Tbk</td>
<td></td>
<td>√</td>
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<tr>
<td>5</td>
<td>PT. Saraswati Griya Lestari Tbk</td>
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<td>√</td>
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<tr>
<td>6</td>
<td>PT. Island Concepts Indonesia Tbk</td>
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<tr>
<td>7</td>
<td>PT. Indonesian Paradise Property Tbk</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>8</td>
<td>PT. Jakarta Setiabudi International Tbk</td>
<td></td>
<td>√</td>
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<tr>
<td>9</td>
<td>PT. Mas Murni Indonesia Tbk</td>
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<tr>
<td>10</td>
<td>PT. Panorama Sentrawisata Tbk</td>
<td>√</td>
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<tr>
<td>11</td>
<td>PT. Destinasi Sentra Nusantara Tbk</td>
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<td>√</td>
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<td>12</td>
<td>PT. Pembangunan Graha Lestari Indah Tbk</td>
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<td>PT. Pembangunan Jaya Ancol Tbk</td>
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<tr>
<td>14</td>
<td>PT. Plaza Indonesia Realty Tbk</td>
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<td>√</td>
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<tr>
<td>15</td>
<td>PT. Pudjiadi and sons Tbk</td>
<td></td>
<td>√</td>
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<tr>
<td>16</td>
<td>PT. Pelita Sejahtera Abadi Tbk</td>
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<td>√</td>
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<tr>
<td>17</td>
<td>PT. Pusako Tarinka Tbk</td>
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<td>√</td>
</tr>
<tr>
<td>18</td>
<td>PT. Pioneerindo Gourmet International Tbk</td>
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<td>19</td>
<td>PT. Pudjiadi Prestige Tbk</td>
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<tr>
<td>20</td>
<td>PT. Hotel Sahid Jaya International Tbk</td>
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<td>√</td>
</tr>
<tr>
<td>21</td>
<td>PT. Golden Eagle Energy Tbk</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

Sources: Indonesia Stock Exchange
Operational Definitions and Variable Measurement

Independent variable (X)

In this case, the independent variable is the Capital Structure. Its, divided into 2 variables which are:

**Long Term Debt to equity (X₁)**

The ratio of debt to equity which describes in funding for the company and demonstrates the ability of private equity in the company is to meet its obligations. Long Term Debt to Equity leverage ratio is one that aims to measure the ability of private equity, which provided security for the overall debts of the company.

**Time Interest Earned(X₂)**

The Times Interest Earned ratio is determined by dividing earnings before interest and taxes with interest charges. This ratio measures the extent to which the company's revenue can be dropped without affecting the ability the company meets the obligations of interest or interest expenses that must be closed at the end of the year.

Dependent variable (Y)

**Return on equity** or return on net worth measures the company's ability earn income available to shareholders of the company or to knowing the magnitude of the change is given by the company to any amount capital of the owners. This ratio is affected by a large or small company, debt. When the proportion of debt is greater then the ratio will also be greater.

Data Analysis Method

Data analysis is separating or breaking up of any whole into its part especially with an examination of this part to find out their nature, proportion, function, interrelationship, etc. (Webster dictionary in Uma Sekaran, 2006)

1. **A Classic Assumption Test**

Before doing a Multi linear regression test of the hypothesis, the first thing do is to do a classical assumption test.
Normality test

Normality test was to determine whether the observed residuals are normally distributed or not. The method used to test for normality is to use the Kolmogorov-Smirnov test. If the significance of the results of the Kolmogorov-Smirnov is ≥ 0.05, it is normally distributed and otherwise is not normally distributed. As for how the analysis was performed using the normal graph plot. Normal distribution forms a straight diagonal line, and the residual plot of data will be compared with the diagonal line. If a normal data distribution, the line describing the actual data will follow the normality lines.

Multicollinearity Test

Multicollinearity is an often encountered statistical phenomenon in which two or more independent variables in a multiple regression model are highly correlated (Sekaran, 2009:352). Consequences of multicollinearity are a regression model containing the standard error of the estimate that will tend to increase with the increase in the independent variable. The simplest and most obvious way to detect multicollinearity is to check the correlation matrix for the independent variables. The presence of high correlation (most people consider correlation of 0.70 and above high) is a first sign of sizeable multicollinearity. The most common measures for identifying multicollinearity are therefore the tolerance value and the variance inflation factor (VIF – the inverse of the tolerance value). These measures indicate the degree to which one independent variable is explained by the other independent variables. A common cutoff value is a tolerance value of 0.10, which correspond to a VIF of 10.

Heteroscedasticity Test

According to Ghazali (2006), this test has the objective to test whether the regression model of the residual variance inequality occurs one observation to another observation. If there are differences in variance, then heteroscedasticity symptoms are found the detection of the presence or absence of symptoms heteroscedasticity is to see whether or not a particular pattern in the scatter plot graph around the X and Y if there is a certain pattern, then there has been a heteroscedasticity symptom. One way to detect heteroscedasticity is to look at the graph scatter plot between the predicted value of the dependent variable (ZPRED) and the residual value (SRESID). If the points form a regular pattern like a big wave widened and narrowed that happened heteroscedasticity. If the points spread above and below the 0 on the Y axis without forming a specific pattern, then it does not occur heteroscedasticity.
Autocorrelation Test

The Autocorrelation test purpose is to test whether a correlation between failed using at period and a failed using of t-1 period in a linear regression model. The test using Durbin-Watson test with the criteria are:
- Number of D-W below -2 so it's have positive autocorrelation.
- Number of D-W between -2 until +2 so there is no autocorrelation.
- Number D-W upper than +2 so it's have negative autocorrelation.

Hypothesis Test

The hypothesis will be tested by using 3 test, the first one is The Simultaneous hypothesis test. It is used to determine the relationship between independent variables and the dependent variable, whether direct evidence of Long Term Debt to equity (X1), and Time Interest Earned (X2) really have a simultaneous effect on the dependent variable Y (Return On Equity).

The test steps are as follows:
1. Determining Hypothesis Formulation
   - H0: β1 = β2 = 0, meaning that the variables X1, and X2 do not have a significantly simultaneous effect on variable Y.
   - H1: β1 = β2 ≠ 0, which means that the variables X1, and X2 have a significantly simultaneous effect on variable Y.
2. Determining the 95% confidence level (α = 0.05)
3. Determine the significance
   - The value of significance (P value) < 0.05 then H0 is rejected and Ha accepted.
   - The value of significance (P value) > 0.05 then H0 accepted and Ha rejected.
4. Make conclusions
   - If (P value) < 0.05 then H0 is rejected and Ha accepted. This means that independent variables simultaneously (jointly) affect the dependent variable.
   - If (P Value) > 0.05 then H0 accepted and Ha rejected. This means that independent variables simultaneously (together) do not affect the dependent variable.

The Second one is using The partially Hypothesis Testing (T test) it is used to determine the relationship between independent variables and the dependent variable, whether direct evidence of Long Term Debt to equity (X1), and Time Interest Earned (X2), really have a partial effect on the dependent variable Y (Return On Equity).
The test steps are as follows:

a. Determining Hypothesis Formulation
   • $H_0: \beta = 0$, meaning that the variables $X_1$, and $X_2$ does not have a significant effect partially to variable $Y$.
   • $H_0: \beta = 0$, meaning that the variables $X_1$, and $X_2$ have a significant effect partially to variable $Y$.

b. Determining the 95% confidence level ($\alpha = 0.05$)

c. Determining the significance
   • The value of significance (P value) $< 0.05$ then $H_0$ is rejected and $H_a$ accepted.
   • The value of significance (P value) $> 0.05$ then $H_0$ accepted and $H_a$ rejected.

d. Drawing conclusions
   • If (P value) $< 0.05$ then $H_0$ is rejected and $H_a$ accepted. This means that independent variables partially influence the dependent variable.
   • If (P Value) $> 0.05$ then $H_0$ is accepted and $H_a$ rejected. This means that independent variables do not affect the partial dependent variable.

Multiple Linear Regression Analysis

Multiple Linear Regression Analysis was used to analyze the influence of Independent variables consisting of Long Term Debt to equity ($X_1$), and Time Interest Earned ($X_2$), and the dependent variable is Return On Equity ($Y$). This analysis to find out the direction of the relationship between the dependent variable and independent variable are each independent variable associated positive or negative and to predict the value of the dependent variable when the independent variable value increase or decrease. The Data used is usually the scale interval or ratio.

Regression equation used in this study is as follows:

$$ Y = \alpha + \beta X_1 + \beta X_2 + e $$

Description :

$Y =$ Return On Equity

$\alpha =$ Constantha

$\beta X_1 =$ Long Term Debt to equity

$\beta X_2 =$ Time Interest Earned

$e =$ error
Findings and discussion

Description of Research Object

The population and the subject of this research is 21 of The Hotel and tourism companies that listed on the Indonesian Stock Exchange. The object that approved with the criteria is only 6 companies from the total 21 population of the Hotel and tourism companies on IDX. From the 6 companies, the research takes the object of the research from the period 2008-2012, and the total is 6 company times 5 years and it's become 30 as the object of the research.

Data Analysis

The Classic Assumption Test

Data analysis performed multiple linear regression analysis, using the help of a computer program SPSS for windows. To get the best estimate, in advance of such secondary data first to do is do a classic assumption test, that consists of : data normality test, multicollinearity test, Heteroscedastisity test and autocorrelation test.

Data Normality Test

Data normality test aimed at testing whether a regression model, the variable residual has a normal distribution or not. The good regression model is when any of the residual data spread near the horizontal straight line, then it will be said as the normal distribution residual.

Multicollinearity test

The occurrence of symptoms of multicollinearity data in research can be identified by observing the Variance Inflation Factor (VIF), tolerance, eigenvalue, condition index and correlations between an independent variable in the study resulting from estimating the multiple regression equation. The data can be independently from symptoms of multicollinearity if the VIF value should be > 10.

Heteroscedastisity test

Important Assumption in classical linear regression is that the disorders that appear in the model regression correlation is homocedasticity, all disorders have the same variation. In the regression may be encountered symptoms heteroscedastisity.
**Autocorrelation test**

Autocorrelation test aimed at testing whether a linear regression model in there has a correlation between the error of a failure in the period t to period t-1 error (before). If there is a correlation then called the autocorrelation problem. The Best regression Model is a model that has independent autocorrelation. Testing for the absence of the residual autocorrelation problem can be seen from the statistics of the Durbin-Watson (On the Model Summary table) where the value of the Durbin-Watson must be greater than the value of table Durbin-Watson upper limit.

**Formulation Of The Model Equation Of Regression**

The classic assumption test has been done, this regression model has been independent from the data normality, there is no multicolinearity, heterocedastisity, and autocorrelation. So can be concluded that the regression model of the research is valid to use

**Hypothesis test and Discussion**

**The coefficient of Determination**

The power of independent variables towards variation of the dependent variables are known from the determinant of the coefficient (R$^2$), which is between zero and one. If the value of R$^2$ getting closer to one, meaning the dependent variables providing nearly all the information required by dependent variables.

**The Simultant Test (f-test)**

This test conducted to testing both LTD and TIE influence values towards ROE value.

Result of F-Statistic Test

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<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<td>Regression</td>
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<td>2</td>
<td>0,331</td>
<td>20,538</td>
<td>0,000</td>
</tr>
<tr>
<td>Residual</td>
<td>0,435</td>
<td>27</td>
<td>0,016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,098</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source : Processed data, 2013
F-Test, tested to show if all of the independent variables have influences towards dependent variable. From table 3.b showed the F value 20,538 with the significant 0,000. Significant value is less than the degree of the failure 5% (0,05) so $h_0$ not accepted and $h_1$ is accepted, means there is simultaneous significantly influences from the independent variable towards dependent variable. So can be concluded that LTD and TIE have simultaneous significantly influences towards ROE value.

**Partial Test (t-test)**

The partial influences value of LTD and TIE towards ROE tested with T-test, which is aim to test the influences each independent variable towards dependent variable. The result with the SPSS program showed in the table 3.c below:

Table 3.c Result of T-test

<table>
<thead>
<tr>
<th>Variable Independent</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTD</td>
<td>6,388</td>
<td>0,000</td>
</tr>
<tr>
<td>TIE</td>
<td>1,898</td>
<td>0,068</td>
</tr>
</tbody>
</table>

**Source**: Processed data, 2013

From the table 3.c can be explained that:

1. LTD variable has t value (6,388) and the significant value is 0,00 that means less than the degree of failure which is 0,05 so $h_0$ not accepted and $h_1$ is accepted, means there is partially significantly influences from the independent variable (LTD) towards its dependent variable (ROE).

2. TIE variable has t value (1,898) and the significant value is 0,068 that means more than the degree of failure which is 0,05 so $h_0$ is accepted and $h_1$ is not accepted, means there is no partially significantly influences from the independent variable (TIE) towards its dependent variable (ROE).

**Discussion**

From the hypothesis test and data analysis we can get that 60,3% ROE prediction value can be explained by two independent variable which is LTD and TIE. And the rest 39,7% influenced by the factors outside of the researches (e), from that also can be explained:

1. The simultaneous significance test from LTD and TIE is 0,000 and less than the degree of failure which is 0,05 (5%), and that means both LTD and TIE variable has a simultaneous significantly influences towards their dependent
variable which is ROE. In other words, Long Term Debt to Equity which is a ratio to define a company has a greater debt or greater equity is to measure the use of debt and equity in a company and Time Interest Earned is a ratio to define a company's ability to pay their interest charges based on pretax, has a correlation to Return On Equity which is a company's ability to show the profitability of a company from the shareholders' equity that has been invested. The bigger LTD percentage of the company the bigger debt that needed to pay and the less of using their own company equity to financing their company, which is meant the debt that used is bigger than the equity used and can decrease the profitability and ROE percentage. And for TIE, the bigger percentage of TIE ratio, the better ROE percentage will be getting because TIE shows the company can pay its interest charges and have more income to pay other liabilities and taxes. And if the EBIT is twice bigger than interest charges that's mean the company still have income to pay taxes, liabilities, and also have profit to shareholders and company itself.

2. The partially significance test from LTD and TIE, for LTD got t value 6,388 and the significance is 0,00 and the degree of failure is 0,05, which is means that LTD has partially significantly influence towards its dependent variable or ROE, and for TIE got t value 1,898 and the significance is 0,068 and the degree of the failure is 0,05, which is means that TIE is a failure and doesn’t have partially influences towards ROE.

LTD has a big significance impact to ROE because LTD shows if the company use more debt than their own equity the return on equity that the company get also will decrease. This happen because of profit from the company will be used to pay the debt, if the debt is too much how can the company pay their debt with the debt is twice bigger than equity, their equity will be decreased and can lead the company to bankruptcy and leave nothing to the shareholders.

3. Because of T-test for LTD and TIE the t value of the LTD is 6,388 and the t value for TIE is 1,898, and also TIE is not accepted so the dominant variable that influences ROE is LTD. It is because LTD is important to a company, a company need to consider the use of their debt over their equity.

4. Based on the fact that the hotel and tourism companies in the year of 2013 is increasing and will be increasing till the year of 2022, the uses of longterm debt will be developing the company to the next level and the debt can be payed later in the future.

**Conclusion**

Based on the result of research analysis it can be drawn that:

1. The Long Term Debt to equity and Time Interest Earned has simultaneous significantly influences towards Return On Equity on Hotel and tourism companies that listed in IDX.
2. The Long Term Debt to equity has a partially significantly influences towards Return On Equity, but Time Interest Earned didn’t have a partially significantly influences towards Return On Equity on Hotel and tourism companies that listed in IDX.

3. The Most dominant significantly value between Long Term Debt to equity and Time Interest Earned is Long Term Debt to equity towards ROE on Hotel and tourism companies that listed in IDX.

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