Capital Structure, Profitability, And Firm Value.

Whats New?

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Abstract

The use of debt by the company should be used to enhance the company's operations, expansion, and increase sales, so that the company's profitability can be increased. Firm’s Value is investor perception of the company, which is often associated with stock prices. High stock prices could enhance shareholder value. The Firm's value can be estimated with Tobin's Q, which is the replacement cost required to obtain the same assets with the assets of the company. The purpose of this study was conducted to examine the relationship between capital structure (DER), the company's performance (ROE) and Firm value (Tobin's Q) of companies listed on the Indonesian Stock Exchange. The research data consisted of 130 manufacturing companies from 2011 to 2014. The analysis tool used is regression analysis. Results showed that the financial performance be a better mediator to firm value than the capital structure. There is a negative influence between capital structure and profitability, the positive effects of capital structure and profitability of the Firm's value.

Keywords: Capital Structure, Profitability, Firm Value

Introduction

In a highly competitive environment, in order to survive and thrive, companies are trying to implement the investment plan efficiently in order to maximize Firm value and shareholder wealth (Chen and Chen, 2011). The main goal of companies that have gone public are increasing the prosperity of the owner or shareholders through increased Firm value (Salvatore, 2005). The value of the firm is very important because it reflects the performance of the company that could affect investors' perception of the company. The Firm's value is the market value of a company's equity plus the market value of the debt. The value of the firm can describe the state of the company. With the good value of the Firm, the company will be viewed favorably by potential investors, and vice versa. Some factors that may affect the value of the firm is profitability and capital structure. Profitability is the company's ability to obtain profit in relation to sales, total assets and Equity (Sartono, 2001). Companies with high profits tend to use more loans to obtain tax benefits. Profitability is the ratio of the effectiveness of management based on the returns generated from sales and investment. In this study the ratio of profitability measured by return on equity (ROE). ROE is a ratio which indicates the company's ability to generate net income on return on shareholder equity. ROE increased indicates that the increased management performance in managing the funding source of operational funding to produce a net profit. ROE shows the benefits of shareholders. ROE shows the growth prospects of the company, because it means there is potential for increased profits from the company. This is captured by investors as a positive signal of the company thereby increasing investor confidence. If there is an increase demand for shares of a company, then it will indirectly raise the price of such shares on the capital market. With the good performance of the company will increase The value of the firm (Suharli, 2006). The effect of profitability as an indicator of the company performance are positive (Santika and Kusuma, 2002). Due to the increased performance of the company will increase the ROA and ROE which are example of proxy of the profitability ratios. Capital structure is the proportion of company debt financing, namely the leverage ratio (leverage) of the company. Thus, debt is an element of the company's capital structure. Capital structure is the key to improving productivity and company performance. Capital structure theory explains that the funding policy (financial policy) in determining the company's capital structure (mix between debt and equity) aimed at optimizing the firm’s value. The optimal capital structure of a company is a combination of debt and equity (external sources) that maximize the company's stock price. At a certain moment, the company management establishes a targeted capital structure, which may be an optimal structure, even though the target may be changed from time to time. Based on the theory of capital structure, if the structure of capital exceeds the optimal level then any additional debt would reduce The value of the firm. Decision depends on the capital structure of the company's management. The capital structure is key to improving the efficiency and performance of the company. Capital structure theory asserts that the policy of financing the capital structure aims to optimize the value of the Firm. Optimal capital structure that will maximize the stock price. Several factors affect the determination of the stability of the capital structure include sales, asset structure, leverage, growth opportunities, profitability, income taxes, and policy management. Other determinants include the size of the company, the larger the size of the company it is relatively easy to obtain debt than small firms. Debt allows large companies to grow better (Mai 2006). Based on the trade-off theory, debt management can cause the ratio of debt to maximize the firm’s value. Fama (1978) believes that the
company will be reflected in the company's stock price. Jensen (2001) explains that in order to maximize the value of the firm, management must consider not only equity, but also other sources of financing including debt, warrants and preferred stock. The goal of this research is to empirically examine the relationship between profitability, capital structure and corporate value. Furthermore, profitability will be tested role in bridging the influence of capital structure to the firm’s value, and examine the role of the capital structure in bridging effect on the value of the firm's profitability.

**Literature Review**

**Firm Value**

Hunt (2009) states that the firm value is the value of the total market capitalization of the company, which is equity plus net debt, known as market value. The value of the firm, or the aggregate value. The value of the firm is very important because of the high value of the company which will be followed by high prosperity shareholders (Brigham and Houston, 2006), the higher the stock price the higher The value of the firm. The company's high value shows the prosperity of shareholders is also high. The goal of any company is to maximize the firm’s value. When company went public, seen enterprise value of the share price. Therefore, the company went public has a goal to maximize shareholder wealth presented the company's stock price. The shareholder and the company represented by the market price of the shares is a reflection of the investment decision, financing, and asset management. The market price of shares of the company formed between the buyer and the seller when the transaction is called the value of the enterprise market, because the market price of the stock is considered a reflection of the true value of the company's assets. The value of the firm formed through the stock market value of the indicator is strongly influenced by investment opportunities. The existence of investment opportunities can give a positive signal about the company's growth in the future, so as to increase the firm’s value. The firm’s value can be estimated by Tobin Q (the replacement cost required to obtain the same assets with the assets of the company). This ratio is named after the initiator James Tobin in 1969. When Tobin's Q is lower than 1, the company will become an attractive acquisition target, either to be combined with other companies or to liquidation. The buyer will get the company's assets at a cheaper price than if the assets are sold, otherwise if Tobin Q high value is an indication that the company has a high growth potential, namely The value of the firm is more than the value of its assets (Widjaja and Maghvoiroh, 2011).

**Profitability**

The company's performance shows the company's ability to benefit from the assets, equity, and debt. The company's performance is the performance of the company. One measure of corporate performance is Return on Equity (ROE). ROE is a measure of a company's profitability, it is important that measures the return to shareholders (Jones et al, 2009). Profitability is the company's ability to generate profits and measure the operational efficiency and the efficiency of its own properties (Chen, 2004). The same sense conveyed by Husnan (2001), profitability is the ability of a company to generate profit at the level of sales, assets, and certain capital. Profitability is a picture of the performance of management in controlling the company (Petronila and Mukhlasin, 2003). The company's ability to generate profits will be able to attract investors to invest funds that can be used by the company to expand its business, otherwise the low level of profitability that will cause investors to withdraw their funds. As for the profitability of the company itself can be used as an evaluation of the effectiveness of the management of these enterprises. Analysis tools in question are financial ratios. Profitability has an important meaning in an attempt to survive in the long term, because it can show the profitability of the company has good prospects in the future or not. Profitability and the profitability ratio shows the success of the company to benefit Ang (1997). Another proxy used is the Gross Profit Margin, Net Profit Margin, Return on Investment (ROI), Return on Equity and Earning Power, (Brigham and Houston, 2006).

**Capital Structure**

The capital structure is a proportional relationship between debt and equity. Capital structure can be measured by debt-to-equity ratio (DER) is the ratio used to measure the level of leverage (use of debt) to total shareholder's equity of the company. This ratio shows the composition of total loans (debt) to total capital of the company. The higher the DER shows the composition of total debt greater than the total capital itself, so that the burden of the company towards the creditors are also getting bigger. Decisions of a company's capital structure affects the rate of return and the risk that shareholders may ultimately affect its market value. In the theory of capital structure, the most important decisions of the company with regard to the determination of the proportion of debt and equity to optimize value and minimize the cost of capital (De Jong, Kabir, and Nguyen (2008), Margaritis and Psillaki (2010), Agliardi and Kousisi (2013 ), Gersbach (2013). Besides theories have been put forward by Modigliani and Miller (1958), there is the theory of capital structure that addresses the relationship between The
value of the firm's and capital structure. The model assumes that the trade-off of the company's capital structure is the result of a trade-off of using the tax advantages of debt at a cost that will be incurred as a result of the use of debt (Myers and Majluf, 1984). The essence of trade-off theory is to balance the benefits and sacrifices that arise as a result of the use of debt. If the benefit is greater, additional debt is allowed. If the sacrifice for a greater use of debt, then the additional debt is not allowed anymore. The trade-off theory has been considering various factors such as corporate tax, the cost of bankruptcy, and personal tax, in explaining why some companies choose a particular capital structure (Husnan, 2001). The use of debt can increase The value of the firm but only on up to a certain point. After that point, the use of debt actually reduce The value of the firm. Although the model trade-off theory can not determine precisely the optimal capital structure, but the model provides an important contribution is that the company with total assets of high, you should use less debt and companies that pay high taxes should be more use of debt than companies that pay low taxes. Pecking Order Theory assume that when a company requires capital, which will be the first consideration is the retained earnings, then debt, and the last option is to issue new shares. Myers (1984) showed that the presence of asymmetric information the issuance of new shares will lead to a decline in stock prices, which will cause the agency costs of equity, and thus the issuance of new shares is the last option in this situation. In addition, companies that have high profitability will not depend excessively on external financing for development, because it has a negative effect on the profitability leverage.

Model and Hypothesis
The research model developed in this article are:

\[ \text{H}_1: \text{Capital structure has negative effect on profitability.} \]

\[ \text{H}_2: \text{Profitability has negative effect on capital structure.} \]

\[ \text{H}_3: \text{The influence of capital structure on profitability.} \]

\[ \text{H}_4: \text{Profitability on capital structure.} \]

\[ \text{H}_5: \text{The trade-off hypothesis in this study is:} \]

\[ \text{H}_6: \text{The influence of capital structure is negative effect on profitability.} \]

The influence of capital structure On profitability
Capital structure with regard to the composition of its financing. The use of debt by the company intended to expand, improve the results of its operations, so that the company can increase profits. Thus the increased use of debt followed by rising corporate earnings. But at a certain point, interest charges on the use of debt will weigh on corporate earnings. The greater the debt tigkat the profitability will decrease. Research conducted by Pratheepkanth (2011) shows the capital structure (DER) has a negative effect on the performance of the company (GPM, NPM, ROI, ROA and ROE). Similar results were shown by the results of the research of Umar, et al (2012), Hasan, et al (2014), Pouraghajan, et al (2012), Chukwunweike and Osiegbu (2014). Based on The argument, the hypothesis in this study is:

H1: Capital structure has negative effect on profitability.

Influence Profitability on capital structure
Profitability describes the ability of businesses to generate profits using all capital owned. Will affect the profitability of a company policy of the investors on the investment made. Companies that have a high level of profitability, it is definitely going to reduce lending. This means that the loan interest burden will also be reduced. The first option is a fund financing the company's operations in retained earnings, the greater the retained earnings, the smaller the loan amount. Trade off theory provides an explanation of the benefits of the use of debt and the dangers of the use of excessive debt. According to the trade-off theory, companies should be able to balance the benefits of the protection of the interest tax on the cost of financial difficulties. Evidence of empirically testing the profitability of a negative effect on the capital structure (Booth, et al (2001), Bevan and Danbolt (2002), Mazur (2007), Daskalakis and Psillaki (2007), Ezeoha, (2008), Al-Najjar and Hussainey ( 2011), De Jong et al (2008), Delcoure (2007), Dragotă (2008), Dessi and Robertson (2003), Fama and French (2002), Gleason, et al (2000), Supavanij (2006), Sheel ( 1994), Tong and Green (2005), Jiraporn and Liu (2008)), because the company will use the financing sources of the company Myers and Majluf (1984). Based on The argument, the hypothesis in this study is:

H2: Profitability has negative effect on capital structure.
Influence Capital Structure on Firm Value

Modigliani and Miller (1958) holds that there is no relationship between leverage and firm value. Modigliani and Miller (1963), after considering the tax effect on The value of the firm, stated that the debt can help increase The value of the firm. DeAngelo and Masulis (1980) consider the cost of financial difficulties, stating that the balance of benefits and costs will lead to an optimal leverage. Benefits include issuing debt tax shield effect and non-tax shield. Benefits tax savings from interest debt, while the second is the reduction of taxes derived from the elements Non-debt related, such as depreciation and investment tax credits. The model assumes that the trade-off of the company's capital structure is the result of a trade-off of using the tax advantages of debt at a cost that will be incurred as a result of the use of debt (Myers and Majlufs, 1984). The essence of trade-off theory is to balance the benefits and sacrifices that arise as a result of the use of debt. If the benefit is greater, additional debt is allowed. Use debt in the capital structure to control the use of free cash flow in excess so that the management is not involved in investment projects unprofitable company (Jensen, 1986). The use of debt will lead to the supervision of the lenders so that management can work to improve the company's interests. This condition responded positively by pomeng stock that is reflected by an increase in stock prices (Garcia and Ocana, 1999).

Based on The argument, the hypothesis in this study is:

H3: positive effect on the capital structure of the Firm’s value.

Influence Profitability on Firm Value

Good corporate profitability growth signifies the future prospects of the company assessed the better too, it will be better the firm’s value in the eyes of investors. If the company's ability to generate income increases, the share price will also increase (Husnan, 2001). Stock price increases reflect the company's good value for investors. Shareholder value will increase if The value of the firm increases are characterized by a high rate of return on investment to shareholders. The return on investment to shareholders depend on the profits produced by the company. Haugen and Baker (1996) proved that the higher profitability of the company, the more profit that can be distributed to the shareholders, it will increase The value of the firm. Companies that can generate stable earnings and increases will be seen as a positive signal for investors, it can also increase The value of the firm (Chen and Steiner, 2000; Iturriaga and Sanz, 2001).

Based on The argument, the hypothesis in this study is:

H4: Profitability has positive effect on Firm Value.

Relationship Capital Structure, Profitability and Firm Value

Capital structure theory asserts that financing policy aims to optimize the capital structure of the firm’s value. Optimal capital structure that will maximize the stock price. Several factors affect the determination of capital structure includes asset structure, leverage, growth, profitability, income taxes, and policy management. Also affect the size of the company, the larger the size of the company, are relatively easy to obtain debt than small firms. Debt allows companies to grow better. Based on the trade-off theory, debt management can affect the ratio of debt to maximize the firm’s value. Fama (1978) believes that the company will be reflected in the company's stock price. Jensen (1986) explains that in order to maximize The value of the firm, management must consider not only equity, but also other sources of financing including debt, warrants and preferred stock. Fama and French (1998) found optimize The value of the firm can be reached with financial management. The trade-off theory predicts a positive relationship between capital structure with The value of the firm assuming the tax benefit is greater than the cost of financial and agency costs. Trade-off Theory also predicts a positive relationship between capital structure with the level of profitability. Debt interest deduction in calculating taxable income will reduce the proportion of the tax burden, so the proportion of net profit (net income) after tax greater, or higher levels of profitability.

Based on The argument, the hypothesis in this study is:

H5: Profitability can amplify the effect of capital structure on firm value.
H6: The capital structure can amplify the effect of profitability on firm value.

Research Methodology

Measurement of variables

The variables used in this study, namely the profitability and capital structure (independent variable) and The value of the firm (the dependent variable). A proxy for the profitability of ROE (net profit after tax divided by equity), capital structure: Debt to Equity Ratio (total debt divided by total equity), and the value of a company is measured by Tobin's Q (the ratio of stock market companies to book value of equity). Determination of Tobin's Q is done by determining the book value of total liabilities (D) and the market value of equity (EMV: share price multiplied by number of outstanding shares) at the book value of equity (EBV: the difference between total assets and total liabilities) and the book value of the total liabilities (D), as follows:
\[ Q = \frac{(EMV + D)}{(EMB + D)} \]

Testing the significance of profitability and capital structure as mediation conducted by Sobel test the following:

\[ Sp2p3 = \sqrt{p3^2Sp2^2 + p2^2Sp3^2 + Sp2^2Sp3^2} \]

**Research Design**

This study used all companies listed on the Stock Exchange as many as 130 companies, with the data in the period 2011-2014, with the monthly data. Research with path analysis by testing using OLS method.

**Analysis and Discussion**

Table 1: Capital Structure Influence On Profitability

<table>
<thead>
<tr>
<th>Koefisien</th>
<th>t-statistic</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.117</td>
<td>10.897</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>-0.039</td>
<td>-3.649</td>
</tr>
</tbody>
</table>

Testing capital structure and profitability shown in Table 1. The results show a negative effect capital structure, which shows the first hypothesis is accepted. An increase in the debt unit may reduce corporate profits by 3.9 percent. At manufacturing companies in Indonesia, the capital structure can give an explanation on changes in the company's profit by 4 percent. The negative influence of capital structure to profitability according to research Pratheepkanth (2011), Omar et al (2012), Hasan et al (2014), Pouraghajan et al (2012), Chukwunweike and Osiegbu (2014). This study supports Myers (2001) on the trade-off theory that the higher the level of use of debt will increase the cost of the company's bankruptcy and degrading its performance.

Table 2: Profitability Influence On Capital Structure

<table>
<thead>
<tr>
<th>Koefisien</th>
<th>t-statistic</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.957</td>
<td>24.448</td>
</tr>
<tr>
<td>Profitability</td>
<td>-1.109</td>
<td>-3.649</td>
</tr>
</tbody>
</table>

Testing the effect of profitability on the capital structure shown in Table 2. The results show a negative effect of profitability, showing the second hypothesis is accepted. The increase in profitability will be followed by a greater reduction in corporate debt (1,109). Profitability has the ability to predict changes in the company's capital structure manufacturing by 4 percent. The results support the pecking order theory which states that companies that have a high income prefer to use internal funds to finance their investments. The results also support research and Hussainey Al-Najjar (2011), De Jong et al. (2008), Delcoure (2007), Dragona (2008), Dessi and Robertson (2003), Fama and French (2002), Gleason, et al (2000), Supanvanij (2006), Sheel (1994), Tong and Green (2005), Jiraporn and Liu (2008). Myers and Majluf (1984) found a profitable company and generate high revenue, will use less debt than companies that do not generate high profits. These results also support the research of capital structure (Booth, et al (2001), Bevan and Danbolt (2002), Mazur (2007), Daskalakis and Psillaki (2007), Ezeoha (2008).

Table 3: Capital Structure And Profitability Influence On Firm Value

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Koefisien</th>
<th>t-statistic</th>
<th>R-statistic</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.810</td>
<td>13.952</td>
<td>48.446</td>
<td>0.241</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>0.105</td>
<td>2.111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>2.615</td>
<td>9.843</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effect of capital structure and profitability of the Firm values shown in Table 3. The ability of capital structure and profitability in providing an explanation of The value of the firm has a better ability (24.1 percent) compared with testing only involves capital structure and profitability (4 percent). Capital structure and profitability can predict changes in The value of the firm with a positive direction. Profitability has a greater role (2,615) compared with the capital structure (0105). The increase in the capital structure can increase The value of the firm, supports the third hypothesis, but the increase is relatively small. The increase in profitability will increase more than twice The value of the firm. These results strengthen the research Koralun and Bereznicka (2013).

**Effects Testing Mediation**

Testing the path analysis showed that the capital structure directly affects The value of the firm, and may also indirectly affect The value of the firm is to profitability as a mediating variable. The magnitude of the direct effect that is 0105, while the indirect effect that is 0102, so the total effect of capital structure on firm value that is equal to 0207. Profitability impact directly to The value of the firm and can also be indirect effect on The
value of the firm to be mediated by capital structure. The direct effect on the profitability of the firm’s value that is equal to 2.615, and the indirect effect on the value of the firm is 0.116. The total effect on the profitability of the firm’s value that is equal to 2.731. Based on these results it can be concluded that the hypothesis while the fifth and sixth unacceptable. Testing the significance of the mediating effect of profitability and capital structure can be seen in Table 4.

Table 4: Mediation effects of Profitability and Capital Structure

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sp2p3</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>0.0307</td>
<td>-3.3220</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>0.0658</td>
<td>-1.7697</td>
</tr>
</tbody>
</table>

Profitability ability in mediating the effects of capital structure to the Firm’s value statistically significant. The ability of the capital structure in mediating the effect of profitability to the firm value is not statistically significant. Based on both models tested, the profitability is the liaison influence of capital structure on firm value. Capital structure (debt) on companies listed in the Indonesia Stock Exchange that increase will have an impact on profitability and ultimately will affect the Firm Value.

Conclusion, Limitation and Recommendation

Conclusion

Testing linkages capital structure, profitability, and value of the company on the companies listed in the Indonesia Stock Exchange, strengthening the research that has been tested by a number of previous researchers. Capital structure significant negative effect on profitability, and vice versa. The negative effect of capital structure in accordance with the trade-off theory states that the use of debt to fund a certain level will cause the cost of bankruptcy, the high capital costs are not offset by higher revenues. The next test shows that the capital structure and profitability of significant positive effect on the value of the firm. The use of debt and increased profitability will increase the firm’s value, with a larger share in profitability. Finally, the capital structure can be influenced either directly or indirectly on the value of the firm, in which the indirect effect mediated by profitability.

Limitation and Recommendation

Limitations of this study is the number of indicators used to measure each of the variables and the time period of observation. For further research, it can use more indicators to measure each variable, and add a time period longer study.

References


