THE ROLE OF SALES GROWTH TO INCREASE FIRM PERFORMANCE IN INDONESIA

Imam Ghozali
Doctoral Program of Economics, Economics and Business Faculty,
Diponegoro University, Central Java, Indonesia

Eka Handriani
Management Department, Economics and Business Faculty,
Darul Ulum Islamic Centre Sudirman University, Central Java, Indonesia

Hersugondo
Management Department, Economics and Business Faculty,
Diponegoro University, Central Java, Indonesia

ABSTRACT

This study aims to fill the big gap by testing the role of investment, growth rate of sales, company size on company performance. This study offers a solution, by developing a synthesis of Growth rate of sales variables influences investment and firm performance by using a sample of 194 manufacturing companies listed on the Indonesia Stock Exchange in 2010-2016. The results of the trial found that Growth rate of sales is able to mediate Influence of investment and firm performance.

Keywords: Investment; Sales Growth, Firm performance, Firm Size


http://www.iaeme.com/IJCIET/issues.asp?JType=IJCIET&VType=9&IType=7

1. INTRODUCTION

Both the size firm and the growth rate of sales play an important role in an innovative company performance. The research that have been done regarding to this issue are Gaur, V., & Kesavan, S. 2015; Kim, D. H., et al, 2016; Feng, H., et al, 2017 [1],[2],[3]. Then seeing on unpredictable global market conditions, it thus makes the competition at each companies increase fiercely. The influence of this competitive market has evolved to make the product of life cycle and technology shorter. Under the influence of these forces, hence companies must adopt an innovative strategy. The strategy could be like applying investment, with the aim to improve company performance. In some literatures, investment is discussed as a combined process to produce product innovation. This investment activity is an important part of this research. Since 1980, investment studies have investigated and emphasized that investment...
The Role of Sales Growth to Increase Firm Performance in Indonesia

provided many benefits for companies in competitive markets (Bellavitis, C., et al., 2017; Palmer, M., & Truong, Y. 2017; Gërguri-Rashiti, S., et al, 2017; Klueter, T., & Monteiro, F. 2017.) [(4),(5),(6),(7)].

This study provides a strong theoretical foundation of investment, growth rate of sales against firm performance. Although this study also provides reviews on various aspects of investment, firm size, and growth rate of sales. This study mainly focuses on whether the company's investment and growth rate of sales affect firm performance. In the context of shorter product life cycles and technological investments created by one company, it is considered that the activity of competition between companies in one industry is fairness. In a purely competitive market model, an industry consists of a large number of companies. The larger the number of companies, it tends to trigger a high competition among companies and potentially lowers the concentration ratio. While the lower the concentration ratio, the lower the profit rate of a company gets. Similarly with the condition of the market share of an industry. A global competition encourages many organizations to hold long-term alliances as collusive arrangements with distributors, suppliers, retailers, and other organizations either from downstream or upstream buyer perspectives.

The purpose of this alliance is the offering of cheaper products with good quality aiming to increase customer satisfaction. Apparently, the study on the relationship between factors such as firm size and firm performance is less interesting to the researchers, thus it has not found yet the consistent findings by using data at 194 manufacturing companies in Indonesia in the period 2010 to 2016. Here's the complete data of the company's financial condition manufacturing listed on the Indonesia Stock Exchange.

Table 1: Financial Condition of Manufacturing Companies Listed on Indonesia Stock Exchange

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
<th>Current Ratio</th>
<th>Total Assets</th>
<th>Size</th>
<th>Total Equity</th>
<th>Tobin'sq</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>203.62</td>
<td>1.12</td>
<td>332.62</td>
<td>5.81</td>
<td>101.69</td>
<td>130.375</td>
</tr>
<tr>
<td>2011</td>
<td>284.37</td>
<td>0.62</td>
<td>384.67</td>
<td>5.95</td>
<td>62.25</td>
<td>141.087</td>
</tr>
<tr>
<td>2012</td>
<td>403.01</td>
<td>1.21</td>
<td>409.23</td>
<td>6.01</td>
<td>163.94</td>
<td>147.034</td>
</tr>
<tr>
<td>2013</td>
<td>236.54</td>
<td>1.24</td>
<td>457.78</td>
<td>6.13</td>
<td>176.38</td>
<td>102.86</td>
</tr>
<tr>
<td>2014</td>
<td>529.02</td>
<td>1.39</td>
<td>456.91</td>
<td>6.12</td>
<td>198.51</td>
<td>129.534</td>
</tr>
<tr>
<td>2015</td>
<td>823.14</td>
<td>1.53</td>
<td>503.54</td>
<td>6.22</td>
<td>238.06</td>
<td>183.882</td>
</tr>
<tr>
<td>2016</td>
<td>992.47</td>
<td>1.56</td>
<td>585.37</td>
<td>6.37</td>
<td>278.64</td>
<td>165.923</td>
</tr>
</tbody>
</table>

Source: Bloomberg

This research aims to contribute to the emergence of literature that focuses on two factors namely capital structure, and its relationship with firm performance. In addition, this study examines the relationship between investment and company performance, exploring the factors that affect company performance. How relevant the investment is to company performance, size, and growth rate of sales? Quantitatively, this question has not been fully addressed in the business literature. Thus, the purpose of this research is to fill this big gap by testing the role of investment, growth rate of sales, and company size on company performance.

The second part of this paper will examine the theory and the decline of 5 hypotheses tested in this paper, the third section discusses the methodology used and the fourth section describes the estimation and analysis results. On conclusion, it will be enumerated both implications and suggestions.
2. LITERATURE REVIEW

2.1. Capital structure on theory’s context

This research is aimed at explaining and exploring models showing how decisions about optimum capital structure are focused on improving company performance, in order to obtain additional funding to support investment policy which is based on the foundation of agency theory. The main problem in optimizing the decision regarding capital structure is by determining the optimal capital structure, as the basic assumption in deciding how much fund is added to support the investment policy and the company's progression, so that the financial performance of the company can grow smoothly in the world complexity competition full of risks. In order to maximize the performance of the company, the transaction costs incurred are not burdensome and do not hinder the company to run its best performance. In other words, the company must be able to make a choice on a combination of strategies between activities and transaction costs that provide optimal results, such as doing an activity that produces high outcome strategizing and economizing.

In the financial jargon, agency cost represents a loss as an impact of agency conflict that occurs between the principal as a trustee with the agent as an intermediary representing the principal in a company's investment decisions. Here, the owner will always make a conflict with the manager. Managers who want to pursue the target of profit achievement sometimes reduce expenditure items, and this action usually being opposed by the owner. In essence, any policy that will be taken by the manager in respect of the interests of the owner should be discussed with a thorough and comprehensive consideration with the shareholders (Lumbantobing, 2008)[(8)]. In the collision of interests, the manager must prioritize the interests of the owners and must dare to sacrifice the target of achieving the profit if it should happen, but they still pay attention to economic rules with the principle of efficiency, where the transaction costs incurred are not burdensome and do not hinder the entity manager in pursuit the target of profit achievement. The disadvantage at sacrificing the target achieving profit to accommodate the interests of the owner in this agency relationship called the agency cost.

Jensen (1986)[(9)] explains that the conflict of interest among managers with shareholders occurs with the assumption of shareholder and manager wanting high returns on investment projects but with a different interests against risk. The difference to risk is explained by Amihud & Lev (1981)[(10)] that shareholders are more concerned about systematic risks, whereas managers are more concerned about unsystematic risks. Companies with large opportunities of investment indicate that the company has a bright future outlook, so it will have a positive impact on the value of the company. This is as Modigliani and Miller (1958) [(11)] argue that corporate value is determined more by the ability to generate high profitability and opportunities to investment.

3. HYPOTHESIS

3.1. Investment and Firm Performance

Investment owned by the company is very important in determining the company's performance in the future. At the time the company has a number of potential investments that can be run in the future then the company's performance will increase. So the company's performance is not only valued from asset, but by the opportunity it has to produce cash flow in the future. The growth opportunities seen from the investment possessed by the company will affect the company's financing decisions. The investment owned will also affect the company's capital structure. Investments that have a positive NPV will improve company
The Role of Sales Growth to Increase Firm Performance in Indonesia

In general, the results of previous research allow us to draw the conclusion that investment plays an important role in improving firm performance. Based on this result, the first hypothesis can be formulated as follows:

H1. Investment has the positive impact on firm performance.

3.2. Firm Size and Firm Performance

The problem of firm size is an important factor in the perspective of capital structure. The size of a company can be used by corporate as performance indicators. Company size is one of the important factors in capital structure. A commonly used proxy for a firm's size variable is total sales; revenue or sales. Prior empirical research explored the size of the firm and has provided much evidence that firm size has a significant effect on firm performance. Previous research conducted by (Natividad, 2013 Bert & Guariglia, 2015)(15),(16). In general, the results of previous research allow us to draw the conclusion that firm size plays an important role in improving firm performance. Based on this finding, the second hypothesis can be formulated as follows;

H2. Firm Size has the positive impact on firm performance.

3.3. Investment and Growth rate of sales

A company that is in an industry area that has a high growth rate must provide sufficient capital to finance the activities of the company. Companies that grow rapidly tend to be able to invest. For companies with high growth rates of sales and profits, the tendency of companies to invest more consistently than companies with low sales growth. A company that has positive growth indicates the company's progress. Firms with high growth should use large amounts of debt, as development costs on common stock is higher than the cost of bond issuance (Weston and Copeland, 2000)(17).

Firms with relatively stable sales can be safer to get more loans and still bear a higher fixed burden than companies with unstable sales (Brigham and Houston, 2001)(18). Similar research has been conducted by (Rostamkalaei, A., & Freel, M. 2016; Cingano, F., et al 2016; Chen, D., & Mintz, J. M, 2017 ; Bucă, A., & Vermeulen, P. 2017)((19),(20),(21),(22)). In general, the results of previous research allow us to draw the conclusion that investment plays an important role in increasing sales growth. Based on this finding, the third hypothesis can be formulated as follows;

H3. Investment has the positive impact on Growth sales.

3.4. Growth rate of sales and Firm Performance

The ability of companies to invest in support by various components including competitiveness. The idea of competitiveness begins with the concept of comparative advantage by Ricardo since the 18th century, followed by Porter, (1995)(23). In Porter's literature, (1995) competitiveness is often translated as an ability or competitive advantage. It relates to the ability possessed or obtained by a particular manufacturer or company because of its ability to explore potential market, understand and adjust to the needs or demands of the market, especially from the point of view of consumers. In another word, the increased sales volume is the most appropriate indicator to describe the company's win against competitors.

The company's sales growth is basically influenced by internal and external factors. First, internal factor is the factor comes within the company that can affect the performance of the company and which can be regulated and controlled by the company; such as the decision to increase company's capital, the addition of labor, the determination of proportion of retained
earnings, mergers, acquisitions, determination of debt for investment, managerial structure etc. Second, external factor is the factor outside the company that cannot be controlled by the company such as; raw material prices, competitors' behavior, macroeconomic and political conditions, lending rates, business climate and market structure. These factors if indicate as a positive value will increase the company's sales volume growth. The results of the previous study were (Lechner, C., et al, 2016; Feng, H., et al 2017; Parida, V., et al., 2016)[(24),(3),(25)]. In general, the results of previous research allow us to draw the conclusion that sales growth plays an important role in improving firm performance. Based on this result, the four hypotheses can be formulated as follows’

H4. The growth rate of sales has the positive impact on firm performance.

3.5. Growth rate of sales mediates the influence on Investment and Firm Performance

Sales growth represents an increase in sales from one year to the next. This sales growth can be calculated by comparing the total sales of the current year minus to the sales in the previous year and then divided by sales in the previous year. Firms that have greater push to increase sales will generate future profits; this causes the desire to invest increases markedly. In accordance with previous research that has been done by (Rostamkalaei, A., & Freeland, M, 2016; Powell, GN, & Eddleston, K. A. 2017)[(19),(26)]. The increase of corporate investment activity will have a positive impact on firm performance. In accordance with previous research conducted by Qadorah, A. A. M, 2016; Ali, I, 2016; Wang, Y., et al, 2016;[(27),(28),(29)]. In general, the results of previous research allow us to draw the conclusion that Growth rate of sales mediates the influence of investment and firm performance. Based on this finding, the five hypotheses can be formulated as follows.

H5. Growth rate of sales mediates the influence on investment firm performance

4. RESEARCH METHOD

The samples used in this study are all manufacturing firms listed on the Indonesia Stock Exchange (IDX) in 2010 to 2016, which is reporting the complete financial statements according to data required as many as 94 firms. Manufactured products have a tremendous interest in Indonesian economic growth, and there are many research topics can be studied more in depth in this sector. The data source in this research is Bloomberg.

Endogenous variable in this study, first, is the firm performance proxies by Tobins Q measured by the sum of book value and the market long-term debt divided by total assets. Tobins Q value is used as a proxy for the firm value because is able to show the current financial market estimation about the returns value of each incremental investment. Second, Growth rate of sales is measured by deviation between the sales of ongoing years with the year before to the total of sales of the next year.

Exogenous variable in this study is the firm size measured by means of Natural Logarithm at the total assets. The firm size is used to proxy the natural logarithm of total assets, because it is capable to measure the total wealth (total assets) owned by the firm. Investment proxies by IOS, measured by Market to Book Value of Equity Ratio of the total asset. To test uses panel data regression model as follows:

\[
\text{Sales}_{\text{growth}} = \beta_0 + \beta_1 \text{Investment} + \epsilon_1
\]

\[
\text{TOBINSQ} = \beta_0 + \beta_1 \text{Investment} + \beta_2 \text{Firm Size} + \beta_3 \text{Sales}_{\text{growth}} + \epsilon_1
\]
The Role of Sales Growth to Increase Firm Performance in Indonesia

5. TEST RESULTS
The testing data in this study is to assess the Goodness of Fit model by using: Chi-Square and Probability, Goodness of Fit Indices (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Square Error of Approximation (RMSEA), Expected Cross Validation Index (ECVI), Akaike’s Information Criterion (AIC) and the CAIC, also Fit Index. The test results Goodness of Fit mode using indicators can be seen in Table 1.

<table>
<thead>
<tr>
<th>Model Fit Indicators</th>
<th>Value</th>
<th>Cut of Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square and Probability: Minimum Fit Function Chi Square</td>
<td>P = 0.49</td>
<td>P &gt; 0.005</td>
<td>Fit Model</td>
</tr>
<tr>
<td></td>
<td>Normal Theory Weighted Least Square Chi Square</td>
<td>P = 0.39</td>
<td>P &gt; 0.005</td>
</tr>
<tr>
<td>Goodness of Fit Indices (GFI)</td>
<td>1.03</td>
<td>P ≥ 0.90</td>
<td>Fit Model</td>
</tr>
<tr>
<td>Adjusted Goodness of Fit Index (AGFI)</td>
<td>0.99</td>
<td>P ≥ 0.90</td>
<td>Fit Model</td>
</tr>
<tr>
<td>Parsimony Goodness of Fit Index (PGFI)</td>
<td>0.89</td>
<td>P &gt; 0.05</td>
<td>Fit Model</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.00</td>
<td>&lt; 0.050</td>
<td>Fit Model</td>
</tr>
<tr>
<td>P-Value for Test of Close Fit (RMSEA)</td>
<td>0.009</td>
<td>&lt; 0.050</td>
<td>Fit Model</td>
</tr>
<tr>
<td>Expected Cross Validation Index (ECVI)</td>
<td>0.24</td>
<td></td>
<td>Fit Model</td>
</tr>
<tr>
<td>2. ECVI for Saturated Model</td>
<td>0.20</td>
<td></td>
<td>Fit Model</td>
</tr>
<tr>
<td>3. ECVI for Independence Model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Akaike’s Information Criterion (AIC) and CAIC:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Model AIC</td>
<td>75.99</td>
<td></td>
<td>Fit Model</td>
</tr>
<tr>
<td>2. Independence AIC</td>
<td>884.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Saturated AIC</td>
<td>90.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Model CAIC</td>
<td>293.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Independence CAIC</td>
<td>984.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Saturated AIC</td>
<td>311.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fit Index: Normed Fit Index (NFI) Comparative Fit Index (CFI) Incremental Fit Index (IFI) Relative Fit Index (RFI)</td>
<td>P &gt; 0.90</td>
<td>0.99</td>
<td>Fit Model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.98</td>
<td>Fit Model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.98</td>
<td>Fit Model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.94</td>
<td>Fit Model</td>
</tr>
</tbody>
</table>

Source: The result of data processing by LISREL.

The table result above shows that all index goodness of fit model structured is fit. This is seen from the model results value, which is appropriate by cut off value description.

Table 2 Direct Influence of IOS; SIZE; Sales Growth and TobinsQ

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Estimate</th>
<th>Standardized</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOS to TOBINSQ</td>
<td>0.001</td>
<td>0.02</td>
<td>1.94**</td>
</tr>
<tr>
<td>SIZE to TOBINSQ</td>
<td>0.09</td>
<td>0.66</td>
<td>3.79*</td>
</tr>
<tr>
<td>IOS to Sales Growth</td>
<td>0.90</td>
<td>0.39</td>
<td>1.73*</td>
</tr>
<tr>
<td>Sales Growth to TOBINSQ</td>
<td>0.24</td>
<td>0.28</td>
<td>1.64**</td>
</tr>
</tbody>
</table>

Source: The result of data processing by LISREL.

*) significant at α = 5%
**) significant at α = 10%
Table 3 Indirect Influence of Investment, Sales Growth and Tobinsq

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistical Test</th>
<th>p value</th>
<th>Standard Error</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOS to Sales growth to TOBINSQ</td>
<td>2.593</td>
<td>0.009</td>
<td>0.294</td>
<td>p value &lt; 0.05</td>
</tr>
</tbody>
</table>

Source: The result of data processing by Sobel Test

6. DISCUSSION AND CONCLUSIONS

Based on the results of data processing Investments, Firm Size, Growth rate of sales, Investment and firm performance in the Industrial Manufacturing Sector of Indonesia with the results of suspected testing found out that; first, investment has a positive impact on firm performance to get empirical support. This study indicates that the investment made by the company will improve firm performance. Investment decision, in this study affects the firm performance in the perspectives of agency theory. This can be proved by the magnitude of t value of 1.94. Manufacturing companies in Indonesia believe that high investment behavior can be used as a good internal corporate performance signal. As much investment in the projects that produce a positive NPV for the company will affect the manager's, investors 'and creditors' perspective on the value of the firm. For investors who plan to invest in a company, the magnitude of growth opportunities will form a perspective on the amount of return on investment. Second, the allegation about Firm Size has a positive impact on firm performance, gaining empirical support. It is proved by the magnitude of 3.79 t. In this study, firm size has a positive effect on firm value, empirical verification is measured by total assets owned by the company. This research is conducted in the emerging market country which is in accordance with the theory that underlies the relationship between the two variables, agency theory. There are a lot of extensive literatures about the relationship between company size and firm performance. This shows that the differences in firm performance between small and large size are caused by different behavior on investment and the ability of using output per unit as well as the research & development. This correlation varies from industry to industry. This is particularly the relationship between patent productivity that has been acquired and the size of the company in the pharmaceutical industry but that there is a positive correlation in the semi-conductor industry. It indicates that smaller companies do more investment and more efficient in innovation.

Third, the alleged investment has the positive impact on the growth of sales, obtaining empirical support with the value of t 1.73. This research contributes to the literature of corporate capital structure that has been widely known in the community. Sales growth is an effort to gain profit through this investment by taking into account the external conditions of companies in the industry. At the time the company has a number of potential investments that can be done in the future then the growth of sales will increase. The sales growth opportunities can be estimated from the many opportunities to invest. The investment opportunities that have a positive NPV will increase the value of the company. So, the company is not only valued from assets only, but by the opportunity it has to generate cash flow in the future. The growth opportunities seen from investment owned by the company will affect the company's financing decisions. Fourth, the notion of Growth sales has the positive impact on firm performance, obtaining empirical support with the value of t 1.64. This illustrates that if the company is predicted as a company that has a high value is expected to have growth prospects in the future, and then the value of its shares becomes high. Conversely, if the company is considered to have less prospect of sales growth then the stock price becomes low, so the performance of the company which is the perception of investors to the company can be built. Firm performance can be achieved through sales growth, it can be
used to measure the company's ability to generate profits from business activities so that investors can see how efficient companies use assets and in its progression to generate profits. It also provides a measure of the effectiveness of a company's management level. The success of the company in generating profits will make the firm performance increase.

Fifth, the allegation about Growth rate of sales mediates the influence of investment and firm performance to get empirical support, as evidenced by the results of the Sobel test obtained p value of 0.009 which is smaller than 0.05 which means that the role of mediation Growth rate of sales can provide additional value to the total investment and firm performance. Thus, Growth rate of sales is proven to mediate the influence between investment and firm performance. This empirically proves that the influence of investment and firm performance will be higher if it uses Growth rate of sale, means that the higher the desire of investment that aims to increase sales such as investment in real assets to update the production process becomes more efficient, with the use of technology in production then the performance of the company will increase in the eyes of investors. In addition, as the Growth rate of sale increases, it will encourage institutional investors to increase the number of shares as proof of ownership with the aim of gaining higher profits in the next period.

ACKNOWLEDGEMENT
The authors are indebted to Diponegoro University for making this work possible as part of the Competency Based Research Scheme funded by Directorate of Research and Community Service Budget for the Fiscal Year 2018, Indonesian Ministry of Research and Technology.

REFERENCE

http://www.iaeme.com/IJCIET/index.asp 1829 editor@iaeme.com


[33] Vijay.R.Kulkarni, A Study Of The Impact Of Retail Front Line Sales Personnel Behavior On Customer Buying Experience In Convenience Stores In Organized Retail In India, International Journal of Advanced Research in Management (IJARM), Volume 4, Issue 1, January- April 2013, pp. 56-64.

http://www.iaeme.com/IJCIET/index.asp 1830 editor@iaeme.com