

Agency Cost as An Intervening Variable in the Impact of Capital Structure and Company Size on Company Performance

Dewi Maryam¹, Yesa Cahyaning Ramadhani²

^{1,2}*Sekolah Tinggi Ilmu Ekonomi Indonesia, Indonesia*

Abstract

This research was aimed to examine agency cost as an intervening model between capital structure and company size towards the company's performance. Data was collected through non participatory observation method using criteria on issuing consecutive financial statements within the research period. Having the complete financial data that was consistently needed during the research period. The company was not listed during the research period. In this study, the data analysis was conducted using quantitative data analysis with compared ratios and path analysis. The analysis was used due to its possibility of inter-variable relationships in a linear model. The research hypotheses were the effect of capital structure on the company performance, the company size on the company performance, the capital structure of agency cost, the company size on agency cost, and the agency cost on the company performance. As the results, there were direct impact of capital structure, company size, and agency cost on the company's performance. In contrast, there was an indirect impact of capital structure, the size of the company on the company's performance through agency cost as the intervening variable..

Keywords

Discretionary Expense, Return On Equity (ROE), Leverage, company size (Size)

INTRODUCTION

There are several sectors of manufacturing companies in Indonesia, for example: base industry and chemical sector, diverse industry and consumer goods industry sectors. Companies on consumer goods have significant impact due to the community's buying power as the result of GDP growth, interest rate, and a nation's macro economy performance (Wulandari, 2012). With the supporting conditions, companies on the sector of consumption goods industry in Indonesia are attempting to benefit from existing opportunities in order to gain profit by improving their sales levels.

The usages of capital and debt are considered as the early stage of establishing a company. Brigham and Houston (2001) state that financial capital structure is an alternative way that can be used to improve profit. The application of debt for investment as an additional way to finance company assets is perceived to advance company profit. The company assets can be used to generate profit. Therefore, the profit available for equity holders becomes larger (Brigham & Houston,

2001). When the interest expense is enormous, the operational profit is not adequate. So the financial difficulty problems will arise and lead to the declining company performance. However, debt interest expense can also be seen as tax reduction which can increase company value (Brigham & Gapenski, 1997). In brief, it is safe to say that debt can increase a company performance.

A company that is considered as a large size is one that involves large assets and only need discretionary expense. The discretionary expense againsts net sales is the proxy to measure agency cost. With the reduction of discretionary expense, the company performance will improve, and the company profit will increase (Jensen & Meckling, 1976).

In addition, a company performance presents the company ability to generate profit from assets, equity, and debt. Company performance is defined as the company's working achievement. Another way to measure a company performance can be applied with Return on Equity (ROE). This is the measurement on company profitability that is important to measure the return to shareholders

[✉]Correspondence to dewimaryam@stiesia.ac.id

(Jones, et al, 2009). Indeed, there are several functions in a company, for example: the organization function and the ownership function. Accordingly, Jensen and Meckling (1976) state that the separation of organization function and the ownership function is vulnerable to agency conflict. Agency conflict occurs when a manager tends to make decisions that is profitable to himself rather than to the shareholders (Jensen & Meckling 1976, Myers 1977). Agency conflict may cause agency cost, which is the adequate incentive given to the manager as well as the supervision costs to avoid hazard. Agency conflict may occur between shareholders and managers as well as between shareholders and creditors (Husnan, 2001).

A company can be financed by debt and equity. The debt finances a company that is not always similar to liabilities and payable. The debt that causes interest expense may reduce tax. In other words, interest expense can be reduced from income so that profit before tax becomes lower and the tax becomes smaller. If the funding uses equity, there will be no expense that can reduce company tax.

Referring to the explanation regarding the effects of company profit, capital, debt, company asset, and discretionary expense, this research is conducted to investigate agency cost as a an intervening model of capital structure and company size to company performance.

THEORETICAL FRAMEWORK

Capital Structure

Capital structure is the permanent funding that consists of long-term debt, preferred stock, shareholder capital. Book value of shareholder capital includes common stock, paid-up capital or surplus, retained capital and accumulation. Capital structure is a part of financial structure (Sawir, 2005). According to Sjahrial (2008), the capital structure is the permanent funding that involves long-term debt, preferred stock, shareholder capital. In general, the capital structure of a company consists of several components. Moreover, the long-term debt is a debt with repayment due date for more than 10 years. This component includes mortgage and obligation debts. Then, the shareholder capital includes preferred stock and common stock.

Company Size

Brigham and Houston (2001:119) define company size as the average of total net sales for that year up to several years. Company size is the characteristic of a company that is related with the company structure. According to Jones, et al (2001) company size is described as how big or how small a company is of which can be seen from how big or how small capital that is used, total asset that is owned, or total sales that is gained.

Agency Cost

Agency relationship is a contract of which there is a person or more investors (that is called as the principal) and another person (that is called as the agent) to take action on behalf of the principal and upon whom is given the authority to make decisions. The separating ownership function and organization function may cause agency conflict since the separation can create conflict of interest between shareholders and company manager. Agency problem between shareholders and manager potentially occurs when the manager does not own the majority of stock in the company. The shareholders perceive the manager to work for maximum wealth of shareholders. However, it is possible for the manager to act not for the interest of shareholders but for his own interest and wealth, work safety and other benefits, and charge them to company expense (Jensen & Meckling, 1976).

Company Performance

Company performance is the whole state display of a company in certain period of time, which is the result or achievement affected by company operational activities in using its owned resources (Helfert, 1996). Performance is a term used for a part of or all actions or activities of an organization within a period with reference to standard amount of past or projected expenses, based on management efficiency, responsibility or accountability (Ceacilia, 2004).

Previous Researches

There are several previous researches used as reference of this research. For example, a research conducted by Patti (2006) who investigate capital structure and company performance as a new approach to agency cost theory and its application in banking industry. This includes a theory of company governance that predicts leverage affecting

agency cost and company performance. They also propose a new approach to examine this theory by using profit efficiency, or how closed a company is. Profit must be based on the best practice of a company in regard with the same exogenous condition. They also become the first research in using simultaneous equation model that contributes to the reverse causality of performance to capital structure. Finally, they find that the data in US banking industry is consistent with the theory, and the result is statistically significant and economically strong.

Hypotheses

The Effect of Capital Structure on Agency Cost

The relation between debt and agency cost in capital structure is mentioned by Jensen and Meckling (1976). The use of debt creates supervision from external parties or the bank which can motivate the manager to operate the company more efficiently. In this way, agency cost decreases and company performance increases. Based on that statement, the research hypothesis can be formulated as follows:

H1: capital structure (leverage) affects agency cost.

The Effect of Company Size on Agency Cost

The relation between debt and agency cost in capital structure is mentioned by Jensen and Meckling (1976). The use of debt creates supervision from external parties or the bank, which can motivate the manager to operate the company more efficiently. In this way, agency cost decreases and company performance increases. Based on that statement, the research hypothesis can be formulated as follows:

H1: capital structure (leverage) affects agency cost.

The Effect of Company Size on Agency Cost

Fachrudin (2011) finds in his research that company size has a negative significant effect on agency cost. If the company size improves the economic scale, performance will probably increase through expense reduction. Therefore agency cost will decrease. Based on that statement, the research hypothesis can be formulated as follows:

H2: Company size affects agency cost.

The Effect of Capital Structure on Company Performance

The use of debt in investment as an additional way to finance company assets is expected to improve company profit, as company assets can be used to generate profit. Debt causes interest expense. Interest expense is a tax reduction which can increase company value. In this way, it is safe to say that debt can increase performance. Based on that statement, the research hypothesis can be formulated as follows:

H3: Capital structure (leverage) affects company performance.

The Effect of Company Size on Company Performance

Lin (2006), Wright et al. (2009), and Calisir et al. (2010) find that company size has positive effect on company performance. This indicates that good performance in big companies is more promising. Instead, Talebria et al. (2010) finds that company size has no effect on company performance. Based on that statement, the research hypothesis can be formulated as follows:

H4: Company size affects company performance.

The Effect of Agency Cost on Company Performance

Interest expense that is one of the components of discretionary expense can reduce tax which leads to the improvement of company performance. When discretionary expense decreases, company profit will improve, so the company performance will also increase. Fachrudin (2011) and Immanuela (2014) find in their research results that agency cost has no effect on company performance. Based on that statement, the research hypothesis can be formulated as follows:

H5: Agency Cost (discretionary expense) affects company performance.

METHOD

This section presents types of research, research time and place, research target/subject, procedure, data, instrument, and data collection technique, data analysis technique.

This research applies an explanatory research that aims to explain the relations between variables, such as: capital structure, company size, agency cost and company performance of manufacturing companies in the sector of consumer goods which are listed in Indonesia Stock Exchange through hypothesis test and explanatory. The deter-

mination of explanatory research is in regard with Sekaran (2006). This research is conducted with the intention of explanatory and confirmation by providing causal explanation or relations between variables through hypothesis test.

This research includes manufacturing companies in the sector of consumption goods who have been publicly acknowledged in the Indonesia Stock Exchange during 2013 to 2017. The samples used in this research are saturated samples of which all members of research population are used as research samples.

This research is an explanatory research. Its determination is due to what is described by Sekaran (2006) in the intention of explanatory and confirmation, by providing causal explanation or relations between variables through hypothesis test.

The type of data in this research is secondary data. The data is collected from the finished forms of data, including publication and documentary. The secondary data were collected from Indonesian Capital Market Directory (ICMD) and annual reports of manufacturing companies in the sector of consumer goods from 2010 to 2014 that were collected from Indonesia Stock Exchange at Brawijaya University. The stages of data collection are as follows. First stage is conducted by collecting the necessary secondary data consisting of financial reports from Indonesian Capital Market Directory (ICMD) of manufacturing companies in the sector of consumer goods and attachments of financial reports in relation to this research. The second stage is conducted by calculating the necessary variables, such as capital structure, company size, agency cost, and company performance taken from financial reports and Indonesian Capital Market Directory (ICMD). All data are then analyzed.

The data analysis technique that is used in this research is path analysis. This aims to analyze the relational pattern between variables to find out the indirect effect of independent variables on dependent variables that are mediated with intervening variables. Before processing data, this study should firstly be free from classic assumption test. Classic assumption test is conducted to estimate model parameter value to be declared valid. The classic assumption test should also be fulfilled are normality assumption test, autocorrelation, multicollinearity, and heteroscedasticity.

RESULTS AND DISCUSSION

Based on the theoretical framework, the empirical data and analysis of research result, the relations of capital structure, company's size with agency cost and company performance can be discussed as follows.

The Effect of Capital Structure on Agency Cost

Capital structure is measured by using long-term debt against equity that induces fixed expense for company. According to Mahendra (2011) capital structure is the permanent expense reflecting the balance between long-term debt and the company's own capital coming from both internal and external sources. Capital structure that is the most suitable for company with high growth level is different from company with low growth level. Company with high growth level, in its relation with capital structure, should apply equity as its financing source to avoid agency cost between shareholders and company management; on the contrary company with low growth level should apply debt as its financing source as the use of debt will require the company to pay the interest regularly. Paying the interest regularly will reduce the interest expense which leads to minimizing discretionary expense which in this research is used as the agency cost proxy.

Agency theory explains that a company is vulnerable to agency conflict that is resulted by the difference in interest of manager and owners or shareholders. In order to resolve agency conflict, agency theory describes two ways to control the company by increasing manager ownership to align owner's interest and by using debt as a control against manager (Jensen & Meckling, 1976).

This research also finds that the direct effect of capital structure on agency cost is an insignificant one. The descriptive statistical analysis shows that the value of agency cost is higher than capital structure, which indicates that the company in conducting its operation uses more discretionary expense (operational expense, non-operational expense, interest expense, salary and wages) against net sales than debt. Therefore, the value of R square of capital structure to agency cost is small, showing that agency cost is not able to affect capital structure. This is due to the manufacturing companies in the sector of consumer goods using more of its own capital than its debt.

The result of this research is in line with Immanuella (2014) that capital structure does not have an effect on agency cost. In con-

trast, it is not in line with researches which are conducted by Fachrudin (2011) and by Campbell et al (2003) that capital structure has a significant effect on agency cost. The result of this research is also in accordance with the theory defined by Brigham and Daves (2004) stating that the high use of debt in capital structure may bring bankruptcy to the company which can reduce agency cost as manager will cut less important cost to be able to pay company's debt. However, the result of this research is not in line with the theory by Jensen and Meckling (1976) and Cao (2006) arguing that the use of debt in capital structure may prevent any unnecessary cost and encourage the manager to operate the company more efficiently.

The Effect of Company Size on Agency Cost

Brigham and Houston (2001) define company size as the average of total net sales for that year up to several years. Company size is the characteristic of a company that is related with the company structure. According to Jones, et al (2001) a company size describes how big or how small a company is which can be seen from how big or how small capital that is used, total asset that is owned, or total sales that is gained. For this, Oyelere et. al. (2001) explain that company size is the proxy for several company characteristics that several reasons have been mentioned in literatures supporting the relation between company size and information disclosure conducted by companies. In this research, company size is measured from total asset owned by a company. The total asset is defined as all resources that are owned by a company as the result of past transactions and is expected to give future economic benefit for the company (IAI, 2009).

According to Jensen and Meckling (1976), the agency cost is the prices incurred by companies to minimize agency conflict. Agency cost is proxied by discretionary expense ratio. Discretionary expense is the expenditure incurred based on a manager's discretionary. This expense includes operational expense, non-operational expense, interest expense, salary and wages. Therefore, when a company uses more of its total asset, the use of discretionary expense will be less.

The negative value of coefficient path indicates that the bigger the company size, the less the agency cost tends to be. On the contrary, the smaller the company size lead to the more the agency cost. In this research,

the company size has a negative effect on agency cost. The indications are drawn that 1) big companies can wisely organize the discretionary expense for efficiency, 2) the existence of economy scale, and 3) big companies have bigger net sales rather than small companies.

Moreover, this study find that the direct effect of company size on agency cost is a significant one. This is supported by the result of descriptive statistical analysis which figures out the dominant or high company size value. This can be concluded that the company uses the big total asset to lead for discretionary expense. The test result is in line with findings of Lin (2006). This research is also in line with Zhang and Li (2008) who find negative significant effect of company size on agency cost. Big company size requires small discretionary expense. Moreover, big companies attract more attention and they are automatically under bigger public observation. In other words, the big companies have to disclose larger information in order to reduce agency cost.

Therefore, such situation demands companies have enormous responsibility to both public and government, to operate with high professionalism, which can decrease the agency cost.

The Effect of Capital Structure on Company Performance

Capital structure can be used as an external control tool in the effort of achieving company goals which are maximizing company performance and reducing the chances for a manager to act against shareholders' interest (Jensen, 1996). Capital structure is measured using debt against equity. The debt is employed as a control by shareholders in order to make the manager more responsible in organizing the company. When a company falls into bankruptcy, a manager may lose their job. Obviously, a company performance is the ability of a company in organizing its existing resource which gives value to the company. By finding out the performance of a company, one can measure the efficiency level and productivity of the company. The measurement of company performance can also be essential to address a company development. In this research, the company performance is measured using net profit against equity.

Brigham and Houston (2001) state that financial capital structure is an alternative way to increase profit. The use of debt in invest-

ment is considered as an additional way to finance company assets. This is expected to improve company profit, since the company assets can be used to generate profit. Debt causes interest expense. Interest expense can reduce tax which can increase company value that will increase company performance. While according to theory by Jones et al. (2009), the capital structure can increase yields for shareholders (favorable leverage), but it can also be harmful to shareholders (unfavorable leverage).

The result of this research indicates that the direct effect of capital structure on company performance is not a significant one. From the descriptive statistical analysis, the capital structure with a value is presented lower than the company performance. This indicates that the company uses its own capital more than its debt. Therefore the company cannot reduce interest expense which cause the increasing tax and lead to the decreasing company performance. Accordingly, this research is not in line with the theory of Jones et al. (2009) stating that capital structure affects company performance since debt financing creates interest expense that must be paid. The research cannot show that the capital structure can lower yields for shareholders. This means that debt financing is not used effectively which leads to less profit.

From the indirect result in Table 5.12, this study convinces that agency cost cannot moderate the capital structure to company performance. When the capital structure affects company performance, the result is not significant. This means that the leverage which uses debt is not effective in Indonesian manufacturing companies, particularly in the consumer goods industries. This indicates that the use of debt is not a factor that can improve company performance. This will decrease a company profit as the company performance is decreasing since the manager who is also a shareholder does not use debt effectively. In turn, this will affect the manager's own wealth. Debt can be the control for a manager who makes decisions not to decrease company profit.

The Effect of Company Size on Company Performance

The size of a company can be measured through the company's wealth or assets. In this study, the measurement on company refers to the natural log of total asset. A big company with large asset can gain larger access to get funds in capital market than a

small company, which can be used in company operations. This larger access may enable company to improve productivity which leads to company performance advancement. Company assets are generally practiced to measure the size of a company. Moreover, company assets represent the rights and obligations as well as the company capital. A company which is determined big in size is generally known to have big assets. The asset turnover of big companies tends to be faster due to the considerable amount of sales. More sales means that company performance is more productive. Then, the company performance is measured by using net profit against equity.

Furthermore, this research results that the direct effect of company size on company performance is not significant. From the descriptive statistical analysis, the value of company size is seen lower than company performance. Owing to all companies possess large assets, they depend more on capital in order to improve company profit. Thus, this research is not in line with the finding of Gray et. al, (2008) stating that big companies will reveal more information than small companies. The research result is not accordance with research of Immanuel (2014) arguing that companies with big assets represent the company stability.

In brief, the well-established companies usually have a stable financial condition. The big company can raise the economy scale and reduce information collection and processing cost. A big company with big resource will conduct larger information disclosures and will be able to afford financing the information availability for internal needs. The information availability can also be used to provide facts for external parties, such as: investors and creditors. So spending more funds to reveal further information can be avoided. Therefore, big companies do not always have lower information production cost compared to small companies since not all big companies have a stable financial condition.

From the indirect result this study finds that agency cost can moderate company size to company performance. However, company size does not solely show significant effect on company performance. This is because the agency cost is the control from management side, the supervision functions and control in using discretionary expense against net sales will lead to the improvement of company performance.

The Effect of Agency Cost on Company Performance

Agency relationship is a contract in which involve one person or more as investor(s) (that is called principal) and another person (that is called agent) to take action on behalf of the principal and upon whom is given the authority to make decisions (Jensen & Meckling, 1976). In a company, there are several functions, such as the organization function and the ownership function. Jensen and Meckling (1976) argue that the separation of organization function and the ownership function is highly vulnerable to agency conflict.

Agency cost in this research applies the ratio proxy of discretionary expense against net sales. Discretionary expense is the expense that are based on the discretionary of a manager. Interest expense is one of the components of discretionary expense that can reduce tax; tax reduction can improve company performance. While the company performance is measured using net profit against equity. When the agency cost decreases, the company profit increases, and the company performance also improves. When the agency cost decreases, there is tendency that company performance decreases. The ignorance of agency cost can cause a reduction in competitive profit which leads to lessening company performance.

The result of this research indicates that agency cost has a significant effect on company performance. The descriptive statistical analysis evidences that the agency cost of the average company is larger than company performance. This value can increase company performance. Therefore, the research result is in line with the finding of Lin (2006) claiming that agency cost is the rates as the responsibility of shareholders so that management can efficiently organize company to raise its value or to increase shareholders wealth. The research result is in accordance with Kim and Lee (2003) who find the closed relations between agency problem and company performance. This means that company burden affects company performance. The research result is in line with Wright et al. (2009) who finds that agency cost has negative significant effect on company performance. In other words, if the agency cost is left to grow uncontrollably, it will reduce the achievement of competitive profit which has negative effect on performance.

CONCLUSIONS

The coefficient value of the capital structure variable path is 0.093, so the coefficient value indicates the amount of capital structure contribution that directly influences agency cost. The effect is statistically significant negative, since $t_{count} (1.084) < t_{tabel} (1.9995)$ is supported by the value of $sig\ t (0.281) > 0.05$. As the result, the hypothesis (H1) stating there is an effect of capital structure (X1) on agency cost (Y1) is rejected.

The path coefficient value of the company size variable is -0,596, the coefficient value indicates the size of the contribution of company size which directly influences agency cost. The effect is statistically insignificant, because $t_{count} (-6.966) > t_{tabel} (1.9995)$ is supported by the value of $sig\ t (0,000) < 0.05$. Thus, the hypothesis (H2) which states that there is an influence of company size (X2) on the agency cost (Y1) is accepted.

The coefficient value of the capital structure variable path is -0.120; the coefficient value indicates the amount of capital structure contribution that directly influences the company's performance. The effect is statistically insignificant, because $t_{count} (-1.571) < t_{tabel} (1.9995)$ is supported by the value of $sig\ t (0.120) > 0.05$. Therefore, the hypothesis (H3) which states that there is an influence of capital structure (X1) on performance company (Y2) is rejected.

The coefficient value of the company size variable path is 0.142; the coefficient value indicates the size of the contribution of the company size which directly influences the company's performance. The effect is statistically insignificant, because $t_{count} (1.508) < t_{tabel} (1.9995)$ is supported by the value of $sig\ t (0.135) > 0.05$, so the hypothesis (H4) indicating that there is an influence of company size (X2) on company performance (Y2) is rejected.

The path coefficient value of the agency cost variable is -0.593; the coefficient value indicates the amount of agency cost contribution that directly influences company performance. The effect is statistically significant negative, because $t_{count} (-6.251) > t_{table} (1.9995)$ is supported by the value of $sig\ t (0,000) < 0.05$, so the hypothesis (H5) that there is an influence of agency cost (Y1) on performance company (Y2) is accepted.

From the descriptions above, this study concluded that H2 and H5 are accepted while H1, H3, H4 are rejected. The Table 5.14 is a summary of the hypothesis and the coefficient of influence between exogenous varia-

bles and endogenous variables. From this study, the authors provide several suggestions to interested parties.

It is important for both the stock exchange and institutions in relation to ensure management of capital market and companies continuing good corporate governance. The open access of information about the company is very essential to establish investors' trust so they intend to invest in the capital market.

Information about fundamental condition of companies as the object of investment is essential for investors and potential investors in using a technical approach. By understanding company's fundamental conditions, the investors and potential investors can find real condition of the company through its financial statements. Profitability has been an important reference for investors to determine the company's performance. However, the investors also need to know how the company manages its assets productively through its liquidity. Therefore, it is important for investors and potential investors to have basic financial management knowledge, particularly financial ratios, to help them analyzing company performance through financial statements.

Companies should have large resources in making wider disclosure of information and in financing the provision of information for internal purposes. The information can be appropriate materials to disclose information to external parties, such as: investors and creditors. Thus, so the company does not require higher additional cost to make wider disclosure.

Further researchers can examine the effect of capital structure on agency costs within companies experiencing financial distress. Therefore, the empirical evidence may show increasing debt that reduce clearer agency costs. Future studies can also apply path analysis techniques to analyse non-linear relationships as explained by Hayes and Preacher (2010) to find out deeper information on the obtained research data to get better test results if the data indicates a relational non-linear data.

The results of this study provide several implications that occur in this study. Practically, the manufacturing companies in the consumer goods industry sector in Indonesia have been indicated having agency problems in accordance with the observed samples. The increasing debt cannot reduce agency costs. A high capital structure is less attrac-

tive to managers since it imposes a higher risk for managers rather than for public investors. This opinion is supported by Lin's research (2006) assuming that managers also acts as the owner of the company. When a company goes bankrupt due to the defaulted debt, the manager also bears the costs of bankruptcy.

Practically, the company size affects the agency cost. Conflicts between shareholders and managers can influence agency costs. In minimizing the occurrence of agency costs, the managers maximize the usage of company assets in carrying out company operations so that the company pays interest expenses and will reduce corporate taxes. This will improve company performance and can automatically maximize company profits.

The use of debt cannot increase the burden and does not significantly improve company performance. The managers should consider the trade off between interest expense and tax savings. Thus, the managers employ debt as an alternative capital to reduce interest costs and taxes that can increase company value. Large companies may not necessarily produce better performance. The large companies do not necessarily produce better performance even though large companies can save their discretionary expenses. Therefore, the investors and prospective investors do not concern on the size of company for investment. The theory of Brigham and Weston (1994) state that a large and established company is easier to go to the capital market. In turn, this addresses greater flexibility and gains investors' broader trust. It can be concluded that companies with large assets are not able to make greater profit if they are not followed by the result of good operational activity.

Agency cost is practically a significant effect on the company's performance. In other words, the company's burdens affect the company's performance. The interest expenses affect performance of the company. In the manufacturing company of the consumer goods sector, it is known that company size and agency cost affect the company's performance. This indicates that the company with a large scale will influence a slight burden of the company (discretionary expense) so that the ROE of a company's performance will be high. Agency cost is also a benchmark for the company's performance to increase the company's profit. Furthermore, the investor will tend to invest into a company that have maximum profit as the investor's stock.

There are some limitations that are apparent from this research. Some actions cannot be conducted due to some reasons that affect imperfections of research results. Some reasons addressing the low value coefficient of total model of research may refer to the interference linearity assumptions in the analysis of pathways. The assumption requiring relationships between existing variables need to be linear. Otherwise, nonlinear shapes may give better pictures about the data characteristics. Based on current development of statistical sciences, the analysis of pathways can be conducted in the form of nonlinear functions, instead of linear in its parameters (Hayes and Preacher, 2010). However, this study decides using the assumption of linearity.

This research only investigates the companies sector of consumer goods industry. In particular, the company produces food and beverages, medical and health products, and household needs. Therefore, the results of this study may not be widely generalized due to differences in the characteristics of research objects out of consumer goods industries.

REFERENCES

- Al Aiin, S., Carre, A., Hauwel, C. F., Baudouin, J.-Y., & Richard, C. B. (2013). What is the Emotional Core of the Multidimensional Machiavellian Personality Trait? *Frontiers in Psychology*, 4(1), 1-8.
- Ali, F., Amorim, I. S., & Premuzic, T. C. (2009). Empathy Defisit and Trait Emotional Intelligence in Psychopathy and Machiavellianism. *Personality and Individual Differences*, 47(7), 758-792.
- Arfaoui, F., Ayadi, S. D., Ghram, R., & Bouchekoua, A. (2015). Ethics Education and Accounting Students' Level of Moral Development: Experimental Design in Tunisian Audit Context. *Journal of Business Ethics*, 138(1), 1-13.
- Athoha, V., O'Connor, P. J., & Jackson, C. (2009). The role of emotional intelligence and personality in moral reasoning. In R. E. Hicks, *Personality and individual differences: Current directions*. Bowen Hills: Australian Academic Press.
- Austin, E. J., Farrelly, D., Black, C., & Moore, H. (2007). Emotional intelligence, Machiavellianism and emotional manipulation: Does EI have a dark side? *Personality and Individual Differences*, 43(1), 179-189.
- Barlow, A., Qualter, P., & Stylianou, M. (2010). Relationships between Machiavellianism, emotional intelligence and theory of mind in children. *Personality and Individual Differences*, 48(1), 78-82.
- Bebeau, M. J., & Thoma, S. J. (2003). *Guide for DIT-2* (3rd ed.). Minneapolis: Center for the Study of Ethical Development.
- Bloodgood, J. M., Tumley, W. H., & Mudrack, P. E. (2010). Ethics Instruction and the Perceived Acceptability of Cheating. *Journal of Business Ethics*, 95(1), 23-37.
- Christie, R., Geis, F. L., Festinger, L., & Schachter, S. (1970). *Studies in Machiavellism*. London: Academic Press, Inc.
- Cohn, E. S., Bucolo, D., Rebellon, C. J., & Van Gundy, K. (2010). An Integrated Model of Legal and Moral Reasoning and Rule-Violating Behavior: The Role of Legal Attitudes. *Law Human Behavior*, 34(4), 295-309.
- Daft, R. L. (2008). *Leadership* (5 ed.). South-Western: Cengage Learning.
- Damasio, H., Grabowski, T. F., Galaburda, A., & Damasio, A. (1994). The Return of Pineas Gage: Clues About the Brain From the Skull of a Famous Patient. *Science*, 264(5162), 1102-1105.
- Eisenberg, N. (2000). Emotion, Regulation, and Moral development. *Annual Review Psychology*, 51(1), 665-697.
- Elias, R. Z. (2015). The Effect of Machiavellianism on Business Students' Perception of Cheating. *Academy of Educational Leadership Journal*, 19(1), 175-183.
- Eynon, G., Hill, N. T., & Stevens, K. T. (1997). Factors that Influence the Moral Reasoning Abilities of Accountant: Implications for University and the Profession. *Journal of Business Ethics*, 16(12), 1297-1309.
- Forsyth, D. R., & Scott, W. I. (1984). Attribution and moral judgements: Kohlberg's stage theory as a taxonomy of moral attributions. *Bulletin of the Psychology Society*, 22(4), 321-232.
- Gautschi III, F. H., & Jones, T. M. (1998). Enhancing the Ability of Business Student to Recognize Ethical Issues: an Empirical Assessment of Effectiveness of a Course in Business Ethics. *A Journal of Business Ethics*, 17(2), 205-216.
- Ghozali, I. (2006). *Aplikasi Analisis Multivariate dengan Program SPSS* (4th ed.). Semarang: Badan Penerbit Universitas Diponegoro.
- Goleman, D. (2014, January 5). *Daniel Goleman: An Antidote to the Dark Side of Emotional Intelligence*. Retrieved from Daniel Goleman Web site: <http://www.danielgoleman.info/daniel-goleman-an-antidote-to-the-dark-side-of-emotional-intelligence/>
- Grant, A. (2014, January 2). *The Dark Side of Emotional Intelligence*. Retrieved from The Atlantic Web site: <http://www.theatlantic.com/health/archive/2>

- 014/01/the-dark-side-of-emotional-intelligence/282720/
- Greene, J. D., Sommerville, R. B., Nystrom, L. E., & Darley, J. M. (2001). An fMRI Investigation of Emotional Engagement in Moral Judgement. *Science*, 293(5537), 2105-2108.
- Haidt, J. (1995). The Emotional Dog and Its Rational Tail: A social intuitionist approach to moral judgement. *Psychological Review*, 108(4), 814-834.
- Haidt, J. (2003). The Moral Emotions. In R. Davidson, K. Scherer, & H. Goldsmith, *Handbook of affective sciences* (pp. 852-870). Oxford: Oxford University Press.
- Hegarty, W. H., & Sims, H. P. (1978). Some determinants of unethical decision behavior: An experiment. *Journal of Applied Psychology*, 63(4), 451-457.
- Jones, D. N., & Paulhus, D. L. (2009). Machiavellianism. In M. R. Leary, & R. H. Hoyle, *Handbook of Individual Differences in Social Behavior* (pp. 93-108). New York: Guilford Press.
- Kilduff, M., Chiaburu, S., & Menges, J. I. (2010). Strategic use of emotional intelligence in organizational settings: exploring the dark side. *Research in Organizational Behavior*, 30(1), 129-152.
- Kohlberg, L., & Hersh, R. H. (1977). Moral Development: A Review of the Theory. *Theory into Practice*, 16(2), 53-59.
- Leming, J. S. (1978). Cheating Behavior, Situational Influence, and Moral Development. *The Journal of Educational Research*, 71(4), 214-217.
- Loftus, S. T., & Glenwick, D. S. (2001). Machiavellianism and Empathy in an Adolescent Residential Psychiatric Population. *Residential Treatment for Children and Youth*, 19(2), 39-57.
- Mauss, I. B., Cook, C. L., & Gross, J. J. (2007). Automatic emotion Regulation during Anger Provocation. *Journal of Experimental Social Psychology*, 43(5), 698-711.
- Petrides, K., Vernon, P. A., Schermer, J. A., & Vasselka, L. (2011). Trait Emotional Intelligence and the Dark Triad traits of Personality. *Twin Research and Human Genetics*, 14(1), 35-41.
- Pizzaro, D. A., & Salovey, P. (2002). Being and Becoming a Good Person: The Role of Emotional Intelligence in Moral Development and Behavior. In J. Aronson, *Improving Academic Achievement* (pp. 247-266). Connecticut: Elsevier Science.
- Rest, J. R. (1979). *The Impact of Higher Education on Moral Judgement Development*. U.S. Department of Health, Education and Welfare National Institute of Education.
- Rest, J. R. (1986). *Moral Development: Advances in Research and Theory*. New York: Praeger Publisher.
- Robbins, S. P., & Judge, T. A. (2013). *Organizational Behavior* (15th Edition ed.). Upper Saddle River: Pearson Education Inc.
- Ryan, J. J. (2001). Moral Reasoning as a Determinant of Organizational Citizenship Behaviors: A Study in the Public Accounting Profession. *Journal of Business Ethics*, 33(3), 233-244.
- Salovey, P., & Mayer, J. D. (1989). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- Self, D. J., Baldwin Jr., D. C., & Wolinsky, F. D. (1992). Evaluation of teaching medical ethics by an assessment of moral reasoning. *Medical Education*, 26(3), 178-184.
- Simizhu, A. D. (2004). Defining Issues Test-2: reliability of the Brazilian version and considerations concerning its use in studies on morality. *Psychology: Reflection and Criticism*, 17(1), 5-14.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral Emotions and Moral Behavior. *Annual Review of Psychology*, 58(1), 345-372.
- Tavakol, M., & Dennick, R. (2011). Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, 2(1), 53-55.
- Transparency International. (2015). *Corruption Perception Index 2014: Results*. Retrieved June 24, 2015, from Transparency International Web site: http://files.transparency.org/content/download/1856/12434/file/2014_CPIBrochure_EN.pdf
- Transparency International. (2016). *Table of Result: Corruption Perception Index 2015*. Retrieved from Transparency International Web site: http://www.transparency.org/cpi2015?gclid=Cj0KEQjwr7S-BRD96_uw9JK8uNABEiQAuJbffEnJ1NninXoCGPp6iigg2P1pT_5VBV1CUO4IneS4pQaAoNp8P8HAQ#results-table
- Trevino, L. K. (1986). Ethical Decision Making in Organization: A Person-Situation Interactionist Model. *The Academy of Management Review*, 11(3), 601-617.
- Wai, M., & Tiliopoulos, N. (2012). The Affective and Cognitive Empathic Nature of The Dark Triad of Personality. *Personality and Individual Difference*, 52(7), 794-799.
- Weber, J., & Glyptis, S. M. (2000). Measuring the Impact of a Business Ethics Course and Community Service Experience on Students' Values and Opinions. *Teaching Business Ethics*, 4(4), 341-358.
- Weiss, H. M., & Cropanzano, R. (1996). Affective Event Theory: A theoretical Discussion of the Structure, Causes and Consequences of Affective Experience at Work. *Research in Organizational Behavior*, 18(1), 1-74.

- Welton, R. E., Lagrone, R. M., & Davis, J. R. (1994). Promoting the moral development of accounting graduate students: an instructional design and assessment. *Accounting Education*, 3(1), 35-50.
- West, T., Ravenscroft, S., & Shrader, C. (2004). Cheating and Moral Judgment in the College Classroom: A Natural Experiment. *Journal of Business Ethics*, 52(2), 173-183.
- Wong, S.-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, 13(3), 243-274.