Relationship of Proportion Independent Commissioners on Company Risk and Management Risk Committee as a Moderation

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Abstract
The objective of this paper is looking for correlation of both proportion independent commissioners and presence of a risk management committee (RMC) which influences company risk. Company risk, proxy in trade accounts receivable and inventories. Accounts receivable and inventories have a possibility of errors in valuation, which can increase financial reporting risk. The samples used manufacturing industries, various industrial sectors; automotive sub-sectors ten numbers that listing on IDX or Indonesia Stock Exchange based on the outcome of purposive sampling for 3 years of research namely 2015-2017. The data taken from financial annual report and logistic regression analysis. The outcome of the logistic regression describes that portion of independent commissioners are significantly definite related to company risk. RMC variable is proven to strengthen the influence of relation both of proportions independent commissioners on company risk.

Keywords: Risk Management, Independent Commissioners, and Automotive Industry

DOI: 10.7176/EJBM/11-21-10
Publicaiton date: July 31st 2019

1. Introduction
The global economic crisis in 2008 is steering factor for industries to extra concern for implementation of risk management systems. In adjunct to focus on obstacle that threaten profitability of the company, they must also examine the obstacle that threaten their existence. The rapidly expanding corporate circle also results in growing complex business risks coated with by the company. The various risk portfolio coated by companies are different from the risk profile in the previous decade (Beasley 2007; COSO 2009). Changing in technology, globalization, and the development of business deal such as hedging and derivatives lead for increasingly high opportunity coated by companies in managing risks (Beasley 2007). To face all the challenges, the application of a formal and structured risk management system is absolutely need. If implemented effectively, a risk management system can be a force for implementing good corporate governance.

The supervisory sector is an important key for effective functioning of the company's risk management system. Board of commissioner plays a role in control performance of risk management to make sure company has an effective risk management program (Krus and Orowitz 2009). Regarding the establishment independent commissioners is one of things, which is required for public organization listed on the exchange. Public companies must have 30% at least independent commissioners from total numbers of board commissioner members. This percentage will consider able to represent stakeholders who are considered minorities, so that the possibility of differences in treatment between major and minor stakeholders will not happen.

The proportion of independent members in board of commissioners mentioned as an indicator the independence of board from management structure. The attendance of independent commissioners in board can increase the grade of supervisory activities in companies, because they are not affiliate with companies as employees, this is an independent delegation of the interests of shareholders. Companies have large proportion of independent commissioners lean to pay more concern to risk rather than companies have low portion of independent commissioners (Carson 2002; Chen et al. 2009).

To ease encumbrance of its extensive responsibilities, the board of commissioners can hand over the risk oversight duty to the committee. The committee intended be able to examine policy and guideline, how to organize company’s risk management process (Krus and Orowitz 2009). The committee can be as an audit committee or others is distinct from the audit and independent, although main responsibility of risk management supervision full remains in the board of commissioners (Subramaniam et al. 2009).

The meaning of this study is how to examine consequence from board of commissioner’s proportion on company risk in the future, with risk management committee as a moderating variable. Risk management committee is choose as moderating variable, because this is one of the factor that can strengthen position the Board
of Commissioners in carrying out their duties as supervisory function that in turn can minimize the company's risk in the future.

Previous research has found that increase size is significant related to firm achievement. Most of the studies investigate the correlation of both board size and firm performance grade (Coles et al., 2008; Harris and Raviv, 2008; Yermack, 1996). Correlation between increase dimension and volatility in firm achievement and risk are the latest measurement of studies in corporate governance sector. Some studies throw in develop countries, US and New Zealand have unanimously deduced that if board dimension increases, variability company achievement or risk will decrease. Therefore, both of board size and company risk a negative correlation.

2. Basic Theory and Hypothesis Development

2.1 Agency Theory

In agency theory, principal and agent are presumed be rational economic people and solely activated by their individual interests. This condition arises conflict of interest of both principal and agent. To reduce the conduct of agents are not in accordance with their interests, principal have two ways, namely (Jensen and Meckling 1976; Subramaniam et al. 2009):

1. Organize agent behavior by using audit functions and other corporate governance procedures that can a line with interest of agent and principal.
2. Provide the attractive staff bonus to agents and establish desert composition that can induce agents to do in agreement with the best principal interests.

Agency theory analyzes and seeks solutions for two problems that increase in the relationship both principals and agents. Agency theory is basis of theoretical model that influences concept good corporate governance in various companies. Corporate governance needs to bring down agency problems both owner and manager, so that the harmony of interests arises.

2.2 Corporate Governance

Organization for Economic Cooperation and Development (OECD) states Corporate Governance: "The frame through shareholder, director, manager set of the board objective and monitoring performance". (A structure by which shareholder, commissioner, and management compile company objective. It is means to achieve this objective and monitor performance). Corporate governance regulates division of duties of the rights and obligations of those who have benefit in the life of company, including shareholders, boards, managers, and all members of the stakeholders and non-shareholders. Monks and Minow (2001) state that corporate governance is correlation among various participants in the company decide the aim and performance of company. Corporate Governance forum in Indonesia (FCGI) states that corporate governance is a set of precept that control connection among shareholder, manager of company, creditor, government and employee of internal and external investors related to right and their obligations or called as a system which manages the company.

2.3 Corporate Governance Mechanism

Corporate governance mechanism is a relationship between parties who make decisions and those who exercise control or supervision over decisions.

2.4 Board of Directors and Board of Commissioners

Board of directors have function to manage company, while board of commissioners have function to conduct supervision. Shareholders in general meeting of shareholders (GMS) represents the interest of shareholder elect board of directors and commissioners. The role of directors and commissioners are very significance and slightly decisive for successful implementation GCG. Board of director in company will determine the policies to take or company's strategy in short and long term. Basri (2008), Board of director must be able to formulate a strategy so that businesses can run effectively and efficiently with turbulence in internal and external conditions.

Board of commissioner has a regulation to inspector policy that implementation from board of director. Board of commissioner is responsible looking for the actions of board director and providing advice if deemed necessary. Composition board of commissioners must be effective, appropriate and fast make decision and can act independently in the sense that it does not have interests that can interfere with its ability to carry out its duties independently and critically in relation to each other and to the directors. According to Emirzon (2007), a company should at least 20% members board of commissioners must come from outside the company; this is useful to increase the effectiveness of role supervision and transparency of its considerations. The regulation of commissioner is determine to minimize agency problems that growth up between board of director and shareholder. Therefore, board of commissioner should to supervise the performance of director, so that performance produce is in consequence with the interests of investor (Wardhani, 2006).
2.5 Independent Commissioner

According to Wardhani (2006), the problem in implementation of corporate governance is the presence of CEO who has greater strength than board of commissioners, whereas the function of the board of commissioners are to oversee the performance of the board of directors led by the CEO. Independent commissioner that has functions as a control-power force. Therefore, the author draws the hypothesis as follows:

H1. The proportion of board of commissioners have negative effect on company risk.

2.6 Risk Management Committee

Risk Management Committee (RMC) has become popular as an important risk oversight mechanism for companies (Subramaniam et al. 2009). This is further reinforced by a survey by KPMG (2005) on Australian companies, which stated that more than half of respondents (54%) had RMC, of which audit committees joined 70%. In its formation, RMC can be incorporated into an audit or can also be a separate and stand-alone committee. A dissimilar committee that specifically center on risk issues to consider be an efficacious mechanism in supporting board of commissioners to satisfy their responsibilities in task of risk control and monitor internal control management (Subramaniam et al. 2009). A separate RMC from the audit will be capable to give more times and venture to combine several risks faced by the company. The hypotheses drawn as follows:

H2. Risk Management Committee strengthens the Board of Commissioners' influence on company risk.

H3. Risk Management committee has a significant definite consequence on company risk.

Dependent variables, namely Corporate Risk, are proxy by in trade accounts receivable and inventories. Accounts receivable and inventories have the possibility of errors in valuation, so that they can increase the risk of financial reporting. Because the one used is a non-financial company, the accounts receivable and inventory are the assets that are considered significant and risky. Financial reporting risk variables in this research measure by dividing the total accounts receivable and inventory with assets owned by the company.

Research Model

![Diagram of Research Model]

**Analysis Method**

The analytical methodology used to tempt hypothesis in this research is logistic regression. Logistic regression does not require a normality, Heteroscedasticity, and classical assumption measurement on dependent variable (Ghozali 2005).

The logistic regression model used to test this hypothesis is:

\[
\text{Risk of Company} = \alpha + \beta_1 \text{(COMIND)} + \beta_2 \text{(RMC)} + \beta_3 \text{(COMIND x RMC)} + e
\]

Where:
- \(\alpha\) = constant
- COMIND = Proportion of Independent Commissioners
- RMC = Existence of Risk Management Committee
- \(e\) = Error

**Population and Samples**

Sample of the data is used financial annual report disclosure companies have listed on Indonesia Stock Exchange (IDX) period 2016-2017. The population period 2016-2017 was taken to determine the development of RMC in the type of non-financial industry. The selection of samples in this research was conducted by using a purposive sampling method (automotive companies sector listed on IDX and published an annual report 2016-2017,
presented in IDR, and has complete information).

**Descriptive Statistics Test Results**

Based on the outcome of descriptive statistical measurement, information on characteristics of the variables in this study, namely Board of Commissioners Proportion \( (X_1) \), Risk Management Committee \( (X_2) \), and Corporate Risk \( (Y) \), obtained statistical descriptive tables of data from manufacture companies from 2015 to 2017.

**Table 1 Descriptive of Automotive Company.**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>( X_1 )</td>
<td>30</td>
<td>0.200</td>
<td>0.462</td>
<td>0.3460</td>
<td>0.063515</td>
</tr>
<tr>
<td>( X_2 )</td>
<td>30</td>
<td>0</td>
<td>1</td>
<td>0.90</td>
<td>0.305</td>
</tr>
<tr>
<td>( Y )</td>
<td>30</td>
<td>0.137</td>
<td>0.410</td>
<td>0.28803</td>
<td>0.073608</td>
</tr>
</tbody>
</table>

**Classical Assumption Results**

1) **Normality Testing**

Normality test is measure to assign whether in the regression design, looking for dependent variable and independent variable have normal distribution or not. The statistical tests used include histogram graph analysis, normal probability plots and Kolmogorov Simonov measurement. The following are the results of the normal probability plots (P-Plot) normality test.

**Figure 1.1 Normal P-Plot**

In the P-Plot image description, the points follow and approach diagonal line so that it can be deduce that the regression design finds the assumptions of normality.

2) **Multicollinearity Test**

The true for regression design does not have correlation with independent variables, so that there is no difficulty to analyze and see the consequence of independent variables on dependent variable. Multicollinearity testing aims to find whether there are perfect inter correlations between independent variables used in the study. This tempt is carried out with tolerance value and variance inflation factor (VIF). In order to deny multicollinearity, if the tolerance value > 0.1 and VIF <10. The outcome of multicollinearity as follows:

**Table 2 Multicollinearity Test**

<table>
<thead>
<tr>
<th>Design</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std Error</td>
<td>( \beta )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.213</td>
<td>.068</td>
<td>.147</td>
<td>3.112</td>
<td>.004</td>
</tr>
<tr>
<td>( X_1 )</td>
<td>-.163</td>
<td>.177</td>
<td>-.141</td>
<td>-.922</td>
<td>.365</td>
</tr>
<tr>
<td>( X_2 )</td>
<td>.147</td>
<td>.037</td>
<td>.608</td>
<td>3.979</td>
<td>.000</td>
</tr>
</tbody>
</table>

The multicollinearity test results in table 2 above, tolerance value> 0.1 and VIF <10. Researcher conclude there are not multicollinearity relationship of two independent variables, this measurement outcome can used for the next test.
3) Autocolinearity Test

Autocorrelation shows a relation both of confounding errors in period (t) with errors in period (t-1). To find out the existence of autocorrelation in a regression design, Durbin-Watson (DW) testing is brought out with following terms:

Table 3 Autocolinearity Test

<table>
<thead>
<tr>
<th>Design</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std Error of the Estimate</th>
<th>DW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.612</td>
<td>.375</td>
<td>.328</td>
<td>.060320</td>
<td>.800</td>
</tr>
</tbody>
</table>

- a. Constant X₂, X₁
- b. Dependent Variable Y

From the table 3.1, DW outcome value (0.800) while according to DW table the value of dL (1.284) and the value of Du (1.567). The following are data on the DW test requirements:

Table 4 Data on the Conditions of the DW Test

<table>
<thead>
<tr>
<th>DW</th>
<th>dL</th>
<th>du</th>
<th>4-du</th>
<th>4-dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.800</td>
<td>1.284</td>
<td>1.567</td>
<td>2.433</td>
<td>2.716</td>
</tr>
</tbody>
</table>

Based on the standard, the criteria fulfill if result DW < dL or DW > (4-dL) means there is Autocorrelation. If result du < DW < (4-du), there is no Autocorrelation. If result dL <DW < du or (4-du) < DW < (4-dL), means there is no conclusion. This value shows that the value of DW < dL, so that the data experiences symptoms of autocorrelation, so it must be above with the Lag Transform. Lag transformation is the conversion of the scale of data measurement into other forms with the aim of overcoming data that has autocorrelation. The following are the results of the lag transformation.

Table 5 Lag Transform Outcome

<table>
<thead>
<tr>
<th>Design</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std Error of the Estimate</th>
<th>DW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.595</td>
<td>.353</td>
<td>.330</td>
<td>.04738969</td>
<td>1.772</td>
</tr>
</tbody>
</table>

- a. Predictors: Lag ε
- b. Regression through the origin, R2 measure the proportion

This value indicates that du < d < (4-du), the result in this research can be concluded that there is no symptoms of autocorrelation.

4) Heteroscedasticity Test

Heteroscedastic test to find out whether variance and residual inequalities occur a surveillance to others in regression design. There are several ways to find the existence of heteroskedacity, which indicates that the research model is not feasible. In this study a scatter plot was used which should have random points so that there is no heteroskedacity. The following are the results of this research heteroskedasticity test.

![Scatter Plot Diagram](image)

Figure 1 Scatter Plot Diagram

Looking at the scatterplot graph, the result appears that the point’s deployment randomly, spread both above and below the number 0 on the Y-axis. It means that there are no heteroskedacity symptoms in the regression design using.
Hypothesis Test Results

1) Determinant Coefficient Test ($R^2$)

The coefficient of determination purpose for evaluate how far ability of design to define dependent variable. The value used is Adjusted R Square ($R^2$) because there are two independent variables use in this study.

Table 6. Variable X Determination Coefficient Test Result on Y Variable

<table>
<thead>
<tr>
<th>Design</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std Error of the Estimate</th>
<th>DW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.980</td>
<td>.959</td>
<td>.955</td>
<td>.063307</td>
<td>1.388</td>
</tr>
</tbody>
</table>

a. $X_2$, Lag-e, $X_1$

Describe the result from table 6 concluded that the magnitude impress of independent variables on dependent variable is 95.5% and the remaining 4.5% is impact by other factors not included in regression design.

2) Test F

Simultaneous significance testing is organize to see whether independent variables used in regression design have significant effect jointly on dependent variable. The results shows in the following table:

Table 7 Test F Results Variable X for Variable Y

<table>
<thead>
<tr>
<th>Design</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.467</td>
<td>3</td>
<td>.822</td>
<td>205.162</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>.102</td>
<td>26</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.571</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable : Y
b. Predictors: $X_2$, Lag-e, $X_1$

Based on the data, the outcome deduce that significance value result is 0,000 (less than 0.05). It is describe simultaneously or jointly independent variables and effect of dependent variable.

3) t-test

The outcome measurement for t-test to find whether or not there is an effect of independent variable on dependent variable in unison by assuming the other independent variables are constant. The following outcome of the t-test are:

Table 8 t-test Results Variable X against Variable Y

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Lag e</td>
<td>.553</td>
<td>.207</td>
<td>.107</td>
<td>2.677</td>
<td>.013</td>
</tr>
<tr>
<td>$X_1$</td>
<td>.270</td>
<td>.096</td>
<td>.321</td>
<td>2.817</td>
<td>.009</td>
</tr>
<tr>
<td>$X_2$</td>
<td>.211</td>
<td>.036</td>
<td>.670</td>
<td>5.864</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

Based on the above the result from the data as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Influence</th>
<th>$(+/-)$</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$</td>
<td>Significant (0,009)</td>
<td>$(+)$ 0.270</td>
<td>$X_1$ has significant definitive effect on Y</td>
</tr>
<tr>
<td>$X_2$</td>
<td>Significant (0,000)</td>
<td>$(+)$ 0.211</td>
<td>$X_2$ has significant devinitive effect on Y</td>
</tr>
</tbody>
</table>

4) Moderation Test Regression Analysis (MRA)

In order to test whether a variable can moderate the effect age of independent variable on dependent variable, it can be solved by MRA test. MRA test is conducted in two stages first is to regression $X_1$ to Y to see the results of the $R$ square. Here are the results:

Table 9. Result I Regression of Variable $X_1$ to Variable Y

<table>
<thead>
<tr>
<th>Design</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std Error of the Estimate</th>
<th>DW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.951</td>
<td>.904</td>
<td>.901</td>
<td>0.93596</td>
<td>.710</td>
</tr>
</tbody>
</table>

a. Predictors: $X_1$

b. Dependent Variable: Y

Regression from $X_1$, $X_2$, and $X_1 \times X_2$ against Y. Here are the results:

Table 10. Results II Regression of $X_1$, $X_2$, and $X_1 \times X_2$ Variables on Y Variables

<table>
<thead>
<tr>
<th>Design</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.981</td>
<td>.963</td>
<td>.959</td>
<td>.060320</td>
</tr>
</tbody>
</table>

a. Predictors: $X_1$,$X_2$, $X_1$, X2

b. Dependent Variable: Y

The result on this information, it has known that the value of $R^2$ in Result 1 equals 0.904; while in Result 2 is 0.963. That is, it can be concluded that the presence of $X_2$ has the effect of moderating (strengthening) the effect of $X_1$ on Y.

The results of testing hypotheses from the regression model in Table 10, the Independent Commissioner variable is definitive significantly related to Company Risk. The outcome of this study is consistent with the results.
of Carson (2002) and Subramanian et al. (2009). The absence of this negative relationship because the quality and educational background part the board of commissioners more determines the quality of board's oversight function than the composition and level of independence (Carson 2002). Another possible reason is that the appointment of independent commissioners by the company may only be done to fulfill regulations and is not intended to enforce good corporate governance. Furthermore, Utama (2004) also stated that the minimum provision of 30% of independent commissioners might not be high enough to cause the independent commissioners to dominate policies taken by board of commissioners, especially regarding establishment of new committee.

Risk Management Committee (RMC) has positive relationship (0.211 in Table 3.1.1) to Corporate Risk. RMC results are not negatively related to Company Risk, it could be because in Indonesia the Risk Management Committee members do not have to sit in the Board of Commissioners. Thus, the proportion of Dekom was not very important in the formation of committees. The result of this research is not in accordance with Subramaniam et al. (2009), Chen et al. (2009), and Carson (2002) which is states that board dimensions is significantly associated with structure of a new committee. Large council sizes do not guarantee the formation of new committees voluntarily. With increasing size of the board, supervisory and risk monitoring tasks have carried out by board of commissioners themselves, so that the pressure to form RMC is getting smaller. Another reason is large dimension of council also adds to the problem of communication and coordination. As explained by Jensen and Meckling (1976) that with the increasing number of commissioners, it will require large monitoring costs. Therefore, companies must anticipate reducing monitoring costs; one of it is size of board not too large and not too small.

**Conclusion**

This study purpose to examine the influence of board commissioners' proportion on company risk for the future with risk management committee as a moderating variable. Risk management committee as moderation because this is one of the factors that can tighten the position board of commissioners in carrying out their duties as a supervisory function, which in turn can minimize the company's risk in the future.

The sampling data using in this research are manufacture companies, various industrial sectors, automotive sub-sectors as many as 10 industries that have listed on Indonesia Stock Exchange based on the results financial annual report disclosure for 3 years. The results of the research and discussion conducted the following consequence are obtained:

1. The hypothesis proportion of independent commissioners have significant definitive consequence on company risk is rejected.
2. The hypothesis risk management committee can strengthen the influence proportion of commissioners on company risk is accepted.
3. The hypothesis Risk management committee has a significant definitive consequence on company risk is rejected.

Some things affect the results of this study are:

1. Data on the effectiveness of the board of commissioners is still very limited so that they still use the proxy of an independent commissioner.
2. Measurement of risk variables by using insignificant amounts of receivables and inventories. Suggestions for future research:
   a. In addition to secondary data also using other data such as questionnaires or interviews to find out more information about the existence and structure of the RMC completely so that it can better describe the functions and existence of the RMC
   b. If different measurement will be used for risk variables, such as intangible assets,
3. Using other measures for board of commissioners such as the educational background of the commissioners who support longer.
4. Support longer years of observation so that they know the progress of RMC in Indonesia.

**Research Limitations**

The limitation in this study is that there is a problem Autocorrelation that is showing the relation both of confounding fault in period (t) with errors in period (t-1). To find out existence of autocorrelation in a regression design, Durbin-Watson (DW) is measured. Therefore, it must be above with Lag Transformation. Lag transformation is the conversion of the scale of data measurement into other forms with the aim of overcoming data that has autocorrelation.

The results of this study also reject the hypothesis of the negative influence of independent commissioners on company risk, this can be possible company risk proxy by in trade accounts receivable and inventory in this study has not represented the company's risk in the sample of companies taken. Financial reporting risk variables in this research are measured by dividing total accounts receivable and inventory with assets owned by the company.
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