

**THE EFFECTS OF CORPORATE GOVERNANCE
TOWARDS THE CORPORATE RISK-TAKING IN
MANUFACTURING COMPANY**

(Empirical Study on Company Listed in Indonesia Stock Exchange for
the Period of 2013-2017)

A THESIS

Presented as a Partial Fulfilment of the Requirements to Obtain
Bachelor Degree in Accounting Department on Faculty of
Economics in Universitas Islam Indonesia



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YOGYAKARTA**

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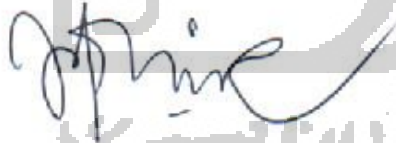
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DECLARATION OF AUTHENTICITY

Hereby I declare the originality of the thesis; I have not presented someone else's work to obtain my university degree, nor have I presented someone else's words, idea or expectations without any acknowledgements. All quotations are cited and listed in references of the thesis.

If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation or its consequence.

Yogyakarta, August 1st, 2019



Aryestantya Fikri Dewanta

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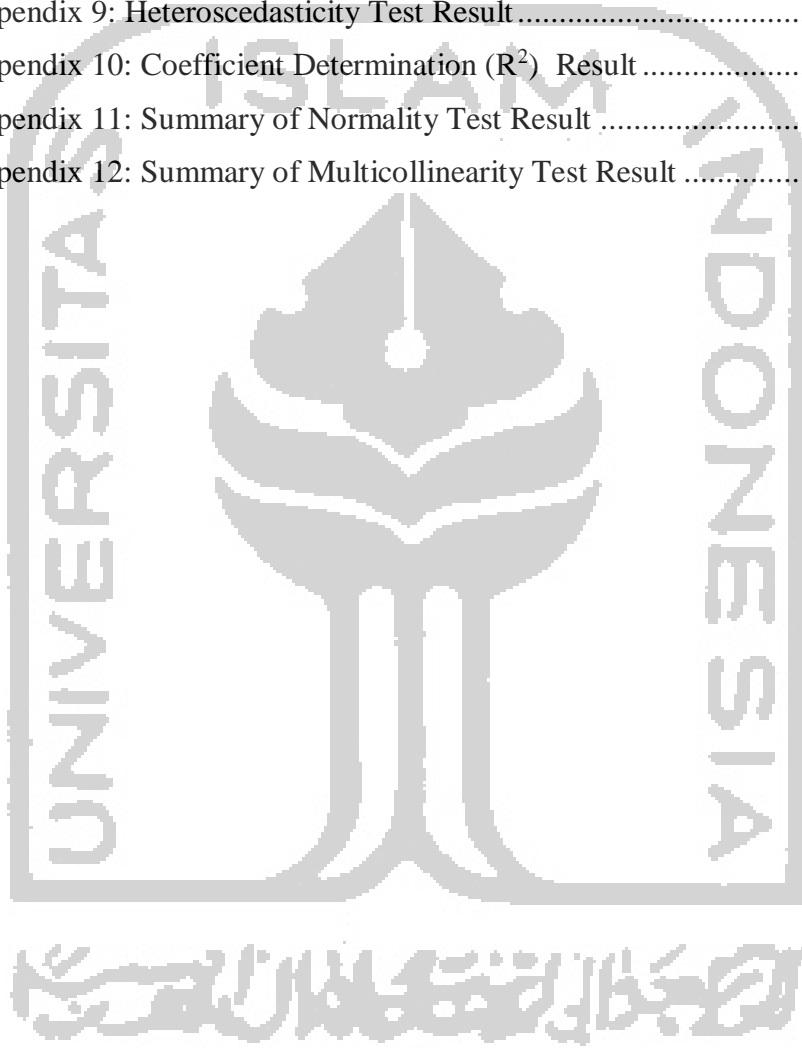
Aryestantya Fikri Dewanta

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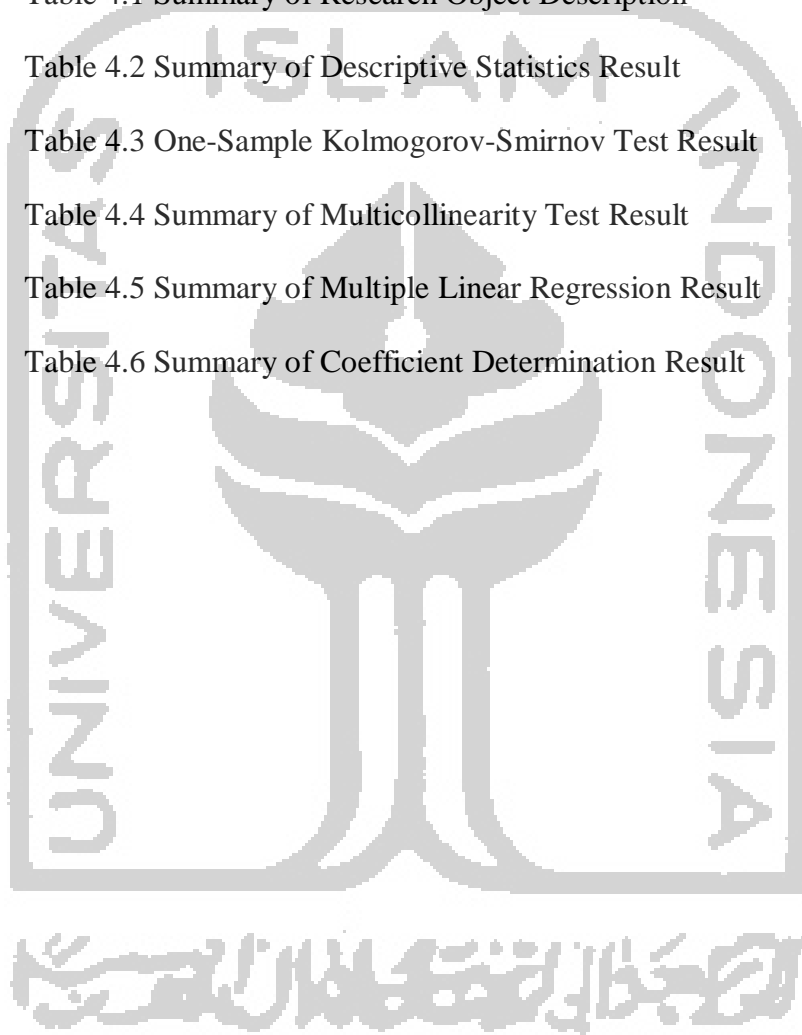
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ABSTRACT

This research analysed the effect of corporate governance which represented by board of directors, audit committee, managerial compensations, and ownership concentration toward corporate risk-taking behaviour in manufacturing companies listed in Indonesia Stock Exchange during the period of 2013-2017. The sample gathered were using purposive sampling with total of 69 companies being sampled. Data obtained were analysed using multiple linear regression technique. The results of this study showed that managerial compensations and ownership concentration are positively affect the corporate risk-taking. The members of board of directors are negatively affect the corporate risk-taking. Meanwhile, the audit committee size is insignificantly affect the corporate risk-taking behaviour in manufacturing companies listed in Indonesia.

Keywords: corporate governance, audit committee, board of directors, managerial compensations, ownership concentration, corporate risk-taking.



ABSTRAK

Penelitian ini menganalisis pengaruh *corporate governance* yang diwakili oleh dewan direksi, komite audit, kompensasi manajerial, dan konsentrasi kepemilikan terhadap perilaku pengambilan risiko perusahaan di perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia selama periode 2013-2017. Sampel dikumpulkan dalam penelitian ini menggunakan *purposive sampling* dengan jumlah 69 perusahaan yang dijadikan sampel. Data yang diperoleh dianalisis menggunakan teknik regresi linier berganda. Dari hasil olah data, peneliti membuktikan bahwa kompensasi manajerial dan konsentrasi kepemilikan berpengaruh positif terhadap pengambilan risiko perusahaan. Anggota dewan direksi berpengaruh negatif terhadap pengambilan risiko perusahaan. Sementara itu, ukuran komite audit tidak signifikan mempengaruhi perilaku pengambilan risiko perusahaan di perusahaan manufaktur yang terdaftar di Indonesia.

Kata kunci: *corporate governance*, komite audit, dewan direksi, kompensasi manajerial, konsentrasi kepemilikan, pengambilan risiko perusahaan.



CHAPTER I INTRODUCTION

1.1 Study Background

According to *Jean-Paul Page, CFA*, University of Sheerbrooke, corporate governance is consisting of the legal, contractual, and implicit frameworks that defines the exercise of power within a company, that influences decision making allowing the stakeholders to make an assumption on their responsibilities, and to make certain on the point that their privileges and rights are appreciated. Based on those definition, it is expected that corporate governance involves exercising power to create true economic value within certain limits and constraints.

Based on the traditional definition of governance, the power is delegated by the board of directors, which acts on behalf of and in the interest of the shareholders. Because shareholders usually do not have the special ability to manage the company, therefore, they delegate the responsibility to people who can manage it well. That is why at this point that legal and regulatory constraints intervene to reconcile the interests of the principals and the agents itself (Page, 2005:2). For example, corporate law is founded on the director's obligation to act as a "prudent administrator," which requires him or her to act with prudence and diligence so as not to bring the company to unnecessary risks. In other words, the agents and principals have to manage the risk in such a well-prepared risk so that the company that they run will sustain.

Corporate governance is very important to company's sustainability issue. As Claessens & Yurtoglu (2013) argued that during Asian financial crisis in 1997, many companies that the corporate governance is weak had face the high level of dropped in their shareholders value. For those who involved in the global financial crisis in 2007, it brings an emerging issue that risk-related subject has been increasing rapidly (Venuti & Alfiero, 2016). Risk-taking done by the executives is controlled by some stakeholders within company, such as board of directors, audit committee, and also shareholders itself.

Some of the components of corporate governance to be discussed in this research are audit committee, managerial compensations, ownership concentration and also size of the board. Those variables will determine whether corporate governance affects the risk-taking within company. Among all variables, they have relationships that can influence the executives as a decision maker in operational activities to take risks in the company. The board of director size which includes outside, executive and non-executive directors sometime also own the company and contribute to the ownership concentration. Thus, aside they got compensations, they will also determine the compensations that lower level executives can obtain in order to make sure that the performance of the company is growing perpetually.

Some studies have already examined the effect of corporate governance to the firms' risk-taking. The study of Venuti & Alfiero in 2016 had attempts to develop an empirical research on the nature and consequences of corporate governance on Eurozone Insurance Industry risk-taking attitude. They found that

most of the findings provide negative significant correlations except for the company dimension and technical reserves that provide a positive significant correlation. The other study by Eling and Marek in 2014 had found that the higher levels of compensation increased monitoring (more independent boards with more meetings), and more block holders are associated with lower risk-taking in U.K and German insurance markets.

To extend more understanding, there is also a research done by Nguyen (2011) who examined the influence of corporate governance on the risk-taking of Japanese firms. The results of the study showed that family control and ownership concentration are associated with higher risk-taking, whereas bank control has the opposite effect. Koerniadi *et al* (2014) examined the impact of firm-level corporate governance practices on the riskiness of a firm's stock returns in a setting that can be considered as less conducive to managerial risk-taking. Their findings showed that block holding has a positive and statistically significant impact on risk-taking and is also consistent with the view that smaller board of director sizes are associated with higher risk-taking. Finally, concentrated shareholding by insiders is associated with lower levels of risk-taking.

Huang and Wang (2015) studied that corporate governance reform in China offers an interesting context for investigating the systematic relationship between board of director size and firm's risky policy choices. The results of their study indicated that firms with smaller boards experience larger variability in future firm performance which will affect the higher risk-taking of the corporate.

Venuti and Alfiero in 2016 had tested the ownership concentration, the managerial compensation, the number of board of directors and also the gender and nationality diversity of board of directors in a company toward the corporate risk-taking behavior. For the last variable, it is still arguable because the results from study are still inconclusive. Even a study done by Firdaus and Adhariani (2017) showed that there is no relationship between board of directors' gender diversity and corporate risk-taking in Indonesia. Firdaus and Adhariani believed that it happens because of the relatively low percentage of the variable. Therefore, the researcher chooses not to use the variable of gender and nationality diversity in this research. Besides, the researcher adds one variable represented by the audit committee due to the important role that they have within a firm. The existence of audit committee can perform important corporate governance functions, such as strengthening board of directors' independence, especially outside directors, providing advice to the operational of the company, and of course auditing (Adams & Jiang, 2016). Their contribution in advising operational activities can lead to risk management done by the executives of the company.

In research done by Venuti and Alfiero (2016), they used insurance industries as the sample of the research. Meanwhile, this research was taking the sample of manufacturing company. The researcher used only one sector of industry, which is manufacturing company, to avoid complications from the differences in the characteristics of firms engaged in different industries. Furthermore, the other reason that the researcher used manufacturing companies was because in a developing country with an emerging market like Indonesia, the

manufacturing company is very important and also can give a high contribution to the economics of the country. The manufacturing company has significantly promoted industrial development in Indonesia and also give high contribution to the national GDP from 1970 to the present day (Langit & Adhariani, 2018). Besides, the number of manufacturing sector in Indonesia is the highest toward the other sectors so that the data will be easier for the researcher to collect. Manufacturing companies used as the sample were the companies listed in Indonesia Stock Exchange for the period of 2013-2017. The 5-years period used in this research because it can give more accurate information on the condition of the company. Besides, the period used was relatively recent to maximize the degree of relevance of the data result. Furthermore, 5-years period used in this research was based on John, Litov, & Yeung (2008) who required the measurement of risk-taking is based on the companies with available earnings and total assets for at least five years. The other reason to use the period of 2013-2017 is the establishment of the Indonesia Securities Investor Protection Fund (ISIPF) in the December of 2012 which gives sign that risk management is important for the company listed in the Indonesia Stock Exchange.

This study is aiming to find out and analyse the relationship of corporate governance and the corporate risk-taking in Indonesian manufacturing companies. With this study, it is hoped that the users of this research can have value added on their knowledge.

1.2 Research Problem

A lot of studies have examined the relationship between corporate governance in a company and the financial performance. On the other hand, there is only a few of the research studied on the effect of corporate governance on the company's risk-taking decision. It needs to be studied by the researcher about the components in corporate governance such as audit committee size, board of director size, managerial compensations, and ownership concentration and the impact on company's risk-taking. Thus, the problems that the researcher will discuss in this research are whether board of director size, managerial compensations, audit committee and ownership concentration will affect the corporate risk-taking.

1.3 Research Objective

This research is aiming to investigate the effect of corporate governance, represented by some components on company's risk-taking, whether it has a positive or negative correlation. Thus, the objective of this research is to analyse the effect of board of directors' size, managerial compensations, audit committee, and ownership concentration to corporate risk-taking.

1.4 Research Contribution

This study is hopefully can contribute both theoretically and practically. Theoretically, this study is expected to be able to help the understanding of elements that can affect the risk-taking decision within the firm, especially for the Indonesian manufacturing firms.

Practically, the users of the annual reports (shareholders, labour union, government, and others) can take the advantage of this research because the results will show what aspects affecting the risk-taking decision. This research is also hoped to help them analyse the results which lead them to choose what decisions that they should make.

1.5 Systematic Writing

This research used scientifically writing system, which consists of five chapters, they are:

CHAPTER I INTRODUCTION

The first chapter cover the introduction section, which explained the background of the study, the research problem, the research objectives, and the contribution of this research.

CHAPTER II LITERATURE REVIEW

Chapter two explained the concept that is used to support and clarify the discussion associated with the theory that lie within it. This chapter explained the formulation of hypothesis based on the theory and review of the previous study.

CHAPTER III RESEARCH METHOD

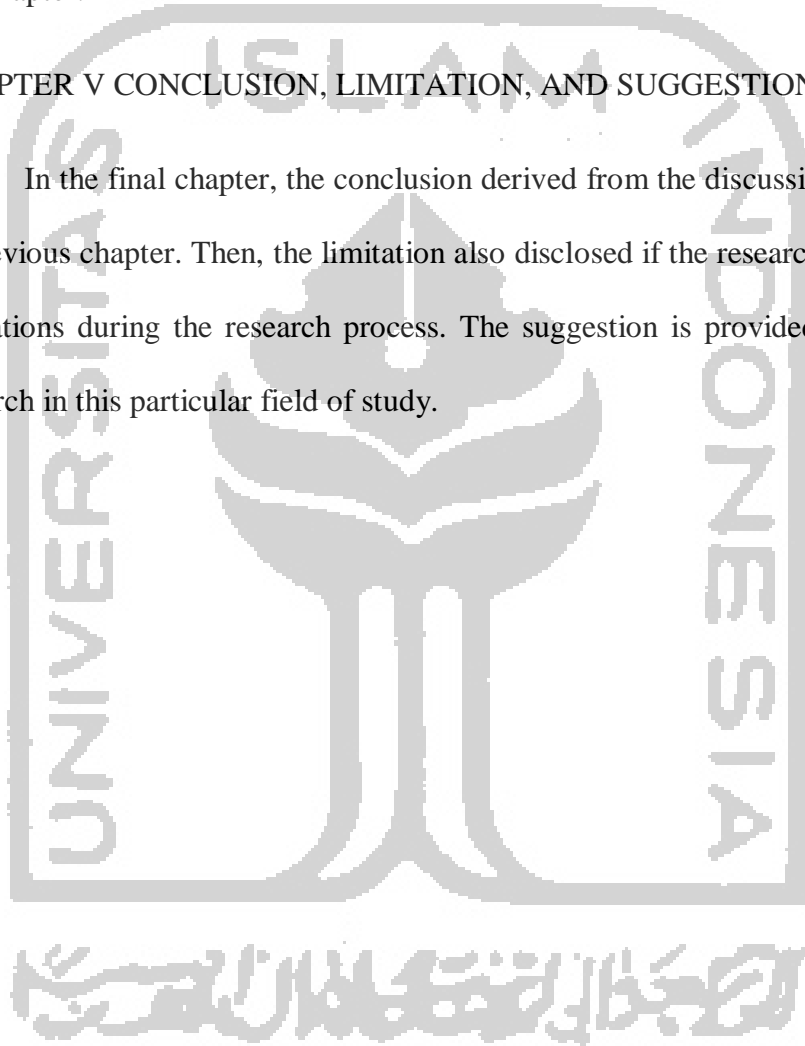
This chapter explained the population and sample, the data sources and techniques in collect the data, research variables and its measurements, and the methods of data analysis.

CHAPTER IV RESULTS AND DISCUSSIONS

This chapter explained the results of the data that have been collected and processed by the researcher. Besides, the discussion of test results is explained in this chapter.

CHAPTER V CONCLUSION, LIMITATION, AND SUGGESTION

In the final chapter, the conclusion derived from the discussion of analysis in previous chapter. Then, the limitation also disclosed if the researcher found any limitations during the research process. The suggestion is provided for the next research in this particular field of study.



CHAPTER II LITERATURE REVIEW

2.1 Agency Theory

Agency theory can be defined as the relationship between shareholders (the principal) and the management of a corporate (the agent). According to Jensen and Meckling (1976), the agency relationship can act as a contract in which individuals or groups (the agent) are being engaged by the other persons (the principal) to give or to perform some services on their interest and the agent will assign the principal to delegate decision making liberty in terms of sustainability of the organization.

Most of agency relationship will incur positive monitoring and bonding costs (monetary and non-monetary) between principal and the agent (Jensen and Meckling, 1976). It is also expected that the management's (agent's) decision will maximize the welfare of the shareholders (principal). Since the relationship between the stockholders and the managers of a corporation fits the definition of a pure agency relationship, it should come as no surprise to discover that the issues associated with the "separation of ownership and control" in the modern diffuse ownership corporation are intimately associated with the general problem of agency. Companies should seek to minimize these situations through solid corporate policy. The role of corporate governance is also important to minimize the problem. When the problem encountered, the risk in the company will be well-managed.

The decision making authority that agents have can lead them manage the risk within the company. However, in managing risk-taking decision, it is not only the agent can deal with it. The principals (shareholders) also have influence to the corporate risk-taking (Faccio, Marchica, & Mura, 2011). As what Koerniadi *et al* (2014) stated, large shareholders can facilitate a higher rate of risk-taking decision of the firm. It is exactly beneficial that the large shareholders, with high level of funding, will increase the level of corporate risk-taking because with the high risk that they took, the agent will be motivated to perform better every period of time.

Haider and Fang (2016) stated in their research that board of directors' role in the company is to reduce the problem arise from the agency theory between the shareholders and the management by monitoring, supervising and evaluating the leading executives. By monitoring the executives, it is expected that the risk management will avoid them from excessive risk-taking behavior.

In the other study, Eling and Marek (2014) believed that the relationship between shareholders and managements can be aligned with compensation schemes. When shareholders provide the managers with high bonus, it triggers the executives to manage high risk. It leads to positive correlation between level of compensation over the business risk.

Jermias & Gani (2014) asserted in their study that based on the agency theory view, it assumed that audit committee with a regular meeting and qualified members have controlling role toward the boards' behavior. Besides, the agency theory also assumed that a strong audit committee can manage an organization to

distinguish themselves with others through improving risk-taking behavior (Connelly *et al.*, 2011). The existence of audit committee expected can minimize the conflict of interest in agency theory by controlling boards' behavior within firms.

As Jensen and Meckling (1976) studied in their paper, there might be agency problems arise in the agency theory where the managers who act as the agent engage the activities of decision making on behalf of their self-interest instead of satisfying the principal (shareholders). When the managers make a decision for their own benefit, it might trigger the conflict of interest between the principal and the agent. It will lead the stakeholders that in charge with the operations of the company, hard to manage the risk-taking decision.

2.2 Corporate Governance

Corporate governance is the method of regulations, applications and processes in which a company is led, monitored and supervised. Corporate governance has to care about company's stakeholders, such as investors, board of directors, board of committee, customers, suppliers, creditors, government and the community. Besides, corporate governance also gives the basic concept for attaining a company's objectives.

Komite Nasional Kebijakan Governance/KNKG (2006) stated that good corporate governance is one of the economics market system's pillar. It has a strong dependence of credibility either to the organization that implement the good corporate governance or the markets within the country itself. The

implementation of good corporate governance enforces a good competition among organizations and also creates a conducive market.

The concept of good corporate governance has become a good issue to be discussed in recent years. In early 1990s, USA has already initiated the concept of good corporate governance by publishing the good corporate governance principles. The principles were arranged by Organization for Economic Cooperation and Development (OECD). KNKG (2006) stated that there are 5 principles that should be implemented by the company in order to fulfill the good corporate governance, which are transparency, accountability, responsibility, independency, and fairness.

Firstly, the principle is transparency. It gives understanding that the company should be objective in doing the business, has to provide material and relevant information that is accessible and understandable to the stakeholders. The information that provided by the company has to be prepared timely, clearly, accurately and comparably so that the stakeholders can access it easily. The company should disclose the information, but not limited to, the vision, mission, business target and company's strategies, financial condition, boards' structure and compensation, controlling shareholders, risk management system, internal control and monitor system, GCG implementation system, and significant events that can affect the company's condition.

The second principle is accountability. The company has to keep the responsibility of its performance fairly and transparently. Thus, the company has

to be managed properly and measurably so that it can fulfill the stakeholders' needs. To be considered as accountable, the company should determine the job lists and responsibility of all the stakeholders within company's structure clearly and in line with the vision, mission, corporate values, and the strategies. The company should ensure that all the stakeholders within company's structure have the ability in doing the job, responsibility, and their roles in the implementation of good corporate governance.

Then, responsibility is also one of the principles of the good corporate governance. The company has to follow the regulations and be responsible to society and the environment so that the good business environment can be maintained. The company should implement social responsibility by considering the society interests and environment sustainability.

The fourth principle of good corporate governance is independency. The company has to be managed independently so that the company's bodies cannot be predominated and intervened by the other parties. In the implementation, the company's bodies have to avoid a domination by other parties, are not affected by particular interests, are free from conflict of interest and all pressures so that the decision making can be taken objectively.

The fifth principle is fairness. In doing the business, the company has to consider the interests of shareholders and other significant stakeholders based on the fairness values. The company should give fair and equivalent treatment to stakeholders in accordance with the benefits and the contributions that the

company gets. The five principles have to be fulfilled by the company to implement the good corporate governance.

Based on a study done by Venuti & Alfiero (2016), there are several governance mechanisms that have already been controlled the relationship between principals and agents in agency theory. The mechanism is divided into internal mechanisms and external mechanisms. The internal mechanisms supervise the matrix of the organization's activity and correct the actions when the organization jump out from the goals. Some of the internal mechanisms are the characteristics of the board of directors, managerial compensation, insider ownership, debt and dividend policies, and large block holders. Meanwhile, the next terms are included as the external mechanisms, which are financial analysts, investors protection, legal environment, and threat of takeover. The researcher took consideration into internal mechanisms since the objective of the research is to study the effect of corporate governance, which some of the internal mechanisms affected by the agent-principal relationship (agency theory). Meanwhile, the external mechanisms did not get affected that much by the theory used in this research.

In the other studies, it stated that corporate governance mechanisms are essential and need to be considered as the factor in designing regulation as it influences the firm risk-taking (Eling & Marek, 2014). Besides, corporate mechanisms affect the executives' risk-taking preference and also firm risk which is relevant to owners and policyholders.

Generally, there are already many studies about the analysis of the effect of corporate governance to the company's performance. However, the study about the effect of corporate governance itself to firm risk-taking is still few (Venuti & Alfiero, 2016).

2.3 Risk-Taking

Risk-taking is any consciously, or non-consciously controlled behavior with a perceived uncertainty about its outcome, and/or about its possible benefits or costs for the physical, economic or psycho-social well-being of oneself or others (Trimpop, 1994). The definition refers to conscious and non-conscious behavior, outcome and consequence uncertainty, benefits and losses, intrinsic and extrinsic rewards, individual and societal risks, and the subjective experience of risk.

The dimensions of risk-taking differentiated between physical, monetary, ethical, and social dimensions. Trimpop (1994) stated in his book that the two dimensions of ethical and social will be dealt with combined as psycho-social risk taking, referring to aspects of pride, emotional experience, self-esteem, etc. The physical risk taking dimension refers to injuries, as well as positive physical experiences, such as feeling relaxes and adrenalin highs. Meanwhile, monetary risk taking will be referred to as economic risk-taking and includes any material gain or loss. Since this research covers the economics issue of risk-taking, the monetary dimension can represent this research. The researcher used the concept of risk-taking based on the volatility of firm-level earnings that studied by John *et*

al. (2008). John assumed that riskier corporate operations have more volatile returns to capital.

Younas & Zafar (2018) in their study believed that corporate risk-taking is operationalized as value enhancing investment. It is known that not all risks a tend to be undesirable and that favorable risks tend to reduce the uncertainty and come up with positive returns on investments (Stulz, 2015). As studied by Younas *et al.* (2017), though it is not that simple in measuring risk as *ex ante*, it is known that better risk management will closely relate to good governance structure of a corporate, i.e. concentrated ownership structure and better capital regulations. The statement is supported by Faccio *et al.* (2011), they observed the effect of big shareholders' ownership on risk-taking of firms and concluded that diversified institutional ownership structures are more tendentious toward higher risk-taking as compared to non-diversified large shareholders. However, to control the exaggerated behavior of corporate risk-taking, an Act called Sarbanes Oxley Act (SOX) was published in USA in 2002. In the SOX, it regulates the provision on additional internal controls that suggested to safeguard the shareholders' interests from excessive corporate risk-taking behavior.

2.4 Audit Committee

Audit committee here refers to the auditor working in a certain company. Based on the *Komite Nasional Good Corporate Governance* (2002), audit committee objectives are to independently supervise the process of financial statement and external audit, to control the risk management in a company and also the good corporate governance. The audit committee in Indonesia is consist

of at least three members and chosen by independent commissioner. The official IIA in Bender (2007) stated that audit committee helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes. It argued that the audit committee's role is to mitigate if there are potential problems and also recommend ways in improving risk management and internal control. Then, a regulation in section 407 of SOX requires that an IPO company has to disclose at least one of the audit committee members is a financial expert (Bargeron, Lehn, & Zutter, 2010).

The agency theory assumed that a strong audit committee with qualified members and effective meetings has contributed a good control over directors' behavior (Jermias & Gani, 2014). However, the result of some studies are still varied on audit committee. For example, Jermias and Gani (2014) found that there is a negative association between audit committee and risk-taking. Elamer *et al.*, (2018) found that there is negative and insignificant effect of audit committee to risk-taking. However, A study done by Sun and Liu (2014) believed that audit committee effectiveness toward risk management in monitoring executives has been increasing in the scope of not only financial risk, but also non-financial risk.

2.5 Ownership Concentration

Ownership concentration refers to the amount of stock owned by individual investors and large-block shareholders (investors that hold at least 5 per cent of equity ownership within the firm). Nguyen (2011) found that there is a positive correlation between ownership concentration and idiosyncratic risk in

Japanese firms. The result showed that the more concentrated ownership the higher the return will be delivered. Another study from Rossetto and Stagliano (2015) showed that high ownership concentration can reduce firms' risk. However, the results found that there is a consideration of no other block holders. With block holders inside, the results in their study positively affect the firms' risk. Therefore, in this case, the higher concentration of the ownership that corporates have, they will be able to manage the risk that they take. In vice versa, the corporate risk-taking will be lower due to the low ownership concentration within the firms.

2.6 Board of Director Size

Board of directors' size refers to the total number of directors on the board of the firms which is inclusive of the CEO and Chairman for each accounting period. The board of directors' size here will include outside directors, executive directors and non-executive directors. According to Venuti & Alfiero (2016), the larger the board of directors' size which means the higher total number of executive directors, non-executive directors and outside directors within the firm, the less risk the firm would take since larger board finds more difficult to converge to very risky projects. They argued that the smaller board of directors' size will take riskier in the decision making. A study by Haider and Fang (2016) to the firms in China also showed that the larger the number of boards of director had led to low risk-taking issue. From the statements, it can be argued that negative correlation between the board of directors' size and risk-taking within the firms can arise.

2.7 Managerial Compensations

Managerial compensations here refer to the both financial and non-financial compensation that managers get as a repayment from the service that they did for the firms. It can be in terms of bonuses, benefits, shares or call option on the firm's stock and also mixture of salary. According to Eling and Marek (2014), in a free market with utility-maximizing managers, managers work for companies in which they receive the highest utility. In this case, the level of compensation will be positively correlated with business risk. The higher probability of losing a job due to insolvency calls for higher compensation. Thus, the managers with higher compensation will take higher risks for the company.

2.8 Table of List of Previous Study

No.	Authors, Year, and Title	Research's Variables	Research Goals	Research Methodology	Research Findings
1.	Francesco Venuti; Simona Alfiero, 2016, The impact of corporate governance on risk taking in European insurance industry	Dependent Variable: Industry risk taking Independent Variables: Publicly traded & privately traded, ownership concentration, board of directors compensations, size of the board, gender diversity of the board, board nationality, company dimension, technical reserves, profitability, part	To develop an empirical research on the nature and consequences of corporate governance on Eurozone Insurance Industry risk taking attitude.	Regression model.	The results provide quite strong evidence that, coherently with the Agency Theory, publicly traded insurance companies with more concentrated ownership are less risky than the corresponding privately held. Most of the findings provide negative significant correlation except for company dimension and technical reserves

No.	Authors, Year, and Title	Research's Variables	Research Goals	Research Methodology	Research Findings
		of a group, international activity			that provide positive significant correlation
2.	Nguyen Pascal, 2011, Corporate governance and risk-taking: evidence from Japanese firms	Dependent Variable: Corporate risk-taking Independent variables: Family control, ownership concentration, and bank control	To examines the influence of corporate governance on the risk taking of Japanese firms.	This research uses correlation matrix, descriptive statistics and regression model.	The results showed that family control and ownership concentration are associated with higher idiosyncratic risk, whereas bank control has the opposite effect, which means a negative correlation.
3.	Martin Eling; Sebastian D. Marek, 2014, Corporate governance and risk taking: evidence from the U.K. and German insurance markets	Dependent variable: corporate's taking risk Independent variables: compensation, monitoring, blockholder, size, country, type(life), type(nonlife), type(reinsurance), accounting standard	To analyse the impact of factors related to corporate governance (i.e., compensation, monitoring, and ownership structure) on risk taking in the insurance industry	A structural equation model.	Higher levels of compensation, increased monitoring (more independent boards with more meetings), and more block holders are associated with lower risk taking which means it is significant negative. Our empirical results provide justification for including factors related to corporate governance in insurance regulation.
4.	Koerniadi, Hardjo Krishnamurti, Chandrasekhar Tourani-Rad, Alireza, 2014,	Dependent variable: firm risk taking Independent variables: Block holders, Board of	To analyze the impact of firm-level corporate governance practices on the riskiness of	Regression model.	Research findings show that block holding has positive and statistically significant impact

No.	Authors, Year, and Title	Research's Variables	Research Goals	Research Methodology	Research Findings
	Corporate governance and risk-taking in New Zealand	director size, ownership concentration	a firm's stock returns in a setting that can be considered as less conducive to managerial risk-taking.		on risk taking and also consistent with the view that smaller board of director sizes are associated with higher risk-taking. Finally, concentrated shareholding by insiders is associated with lower levels of risk-taking.
5.	Wen-Yen Hsu; Pongpitch Petchsakulwong, 2010, The Impact of Corporate Governance on the Efficiency Performance of the Thai Non-Life Insurance Industry	Dependent variable: Efficiency Performance Independent variables: Board independence, diligence, firm size, audit committee size, board tenure, board age, board ownership	To examines the relation between corporate governance and efficiency performance of public non-life insurance companies in Thailand over the period 2000–2007	Used truncated bootstrapped regression model.	The results show that the board independence, diligence, and firm size have a positive impact on the efficiency performance of the Thai non-life insurance companies. However, audit committee size, diligence, divergence between voting rights and cash flow rights, board tenure, board age, as well as board ownership have a negative impact on the efficiency performance.
6.	Huang, Ying	Dependent	To investigates	Regression	The results of the

No.	Authors, Year, and Title	Research's Variables	Research Goals	Research Methodology	Research Findings
	Sophie Wang, Chia Jane, 2015, Corporate governance and risk-taking of Chinese firms: The role of board of director size	variable: corporate risk taking Independent variables: board composition	the systematic relationship between board of director size and firm's risky policy choices.	model.	study indicated that firms with smaller boards experience larger variability in future firm performance which will affect the higher risk taking of those corporate.

2.9 HYPOTHESIS FORMULATION

Based on the agency theory, a higher manager compensation will affect the higher risk-taking that the company gets. It is known that the incentives paid to Chief Executive Officer (CEO) to maximize shareholders value tends to motivate them in doing excess risk-taking (Bolton *et al.*, 2015). Besides, it is also expected that the higher compensation that the manager gets will motivate them not only take more risks, but also can enhance the value of the firm itself (Venuti & Alfiero, 2016). Their results also found that there is positive and significant relationship between managerial compensations and company's risk-taking. Accordingly, the researcher expects that the managerial compensation has a positive correlation to the corporate risk-taking. The hypothesis suggested that the higher the compensations that key management received, the higher the risk that company will deal. On the other side, lower compensations tend to not attract managers in taking more risk since they don't have guarantee for their risk-taking behavior (higher compensations). Thus, the hypothesis developed for this variable is as follows:

H1: Managerial compensation is positively associated with company's risk-taking.

According to the agency theory, lower monitoring activity associated with diffused ownership allows managers to take less firm-specific risks (Nguyen, 2011). Higher ownership concentration meaning that more performance boosting encouragement by the owners on the executives, which eventually forced executives taking more risks to achieve good performance. Empirically, larger shareholders are generally associated with higher performances, even if there are some mixed results (Venuti & Alfiero, 2016). Nguyen (2011) stated that there is a positive correlation between ownership concentration and idiosyncratic risk. The higher concentration and better performance will lead to higher risk-taking levels. Meanwhile, lower concentration which means lower percentage of large shareholders will lead to lower risk-taking levels. The hypothesis built for ownership concentration is:

H2: Ownership concentration is positively associated with company's risk-taking.

Based on the theory developed (agency theory), it assumed that audit committee with a regular meeting and qualified members have a controlling role toward the boards' behavior (Jermias & Gani, 2014). The result of studies by some researchers varies toward audit committee. A study by Jermias and Gani (2014) found that there is a negative significant between audit committee and risk-taking behavior. Meanwhile, Sun and Liu (2014) in their study showed that there

is a positive significant between audit committee members with more additional directorships and risk-taking behavior. Adams and Jiang (2016) found that there is no significant association between the variables. Though the result of the study varied, it is known that the control function of audit committee will give effect to risk-taking within the company. Due to control and supervision of risk management function, the higher audit committee size, which means more control, will lead to lower risk-taking behavior that company had. Otherwise, lower members of audit committee, which means less effective of the control function, will affect to higher risk-taking. Thus, the hypothesis developed based on the theory is as follows:

H3: Audit committee size is negatively associated with company risk-taking.

In agency theory, it is argued that too many members of director resulting in less effective control over risk-taking behavior (Jensen & Meckling, 1976). Baccar *et al.* (2013) argued that large size of board directors will find it hard for them to force managers to control their desires in making a decision over the company. Those managers are affected from their psychological biases. When there are too many boards of director, problems may increase because some directors may tag along as free-riders. A study by Nakano and Nguyen (2012) found out that firms in Japan with a larger number of board of directors perform lower bankruptcy risks, though it is not significant compared to the US firms. Haider and Fang (2016) also examined in their empirical studies in China that board of director size is negatively associated with future firm risks. This indicated that the large size of the board will be less effective and resulting in

lower risks that the boards will take for the company. The small size of board will be more effective in working and thus taking risk is good enough for them to improve the performance of the company. Therefore, the hypothesis for the board of director size in risk-taking is:

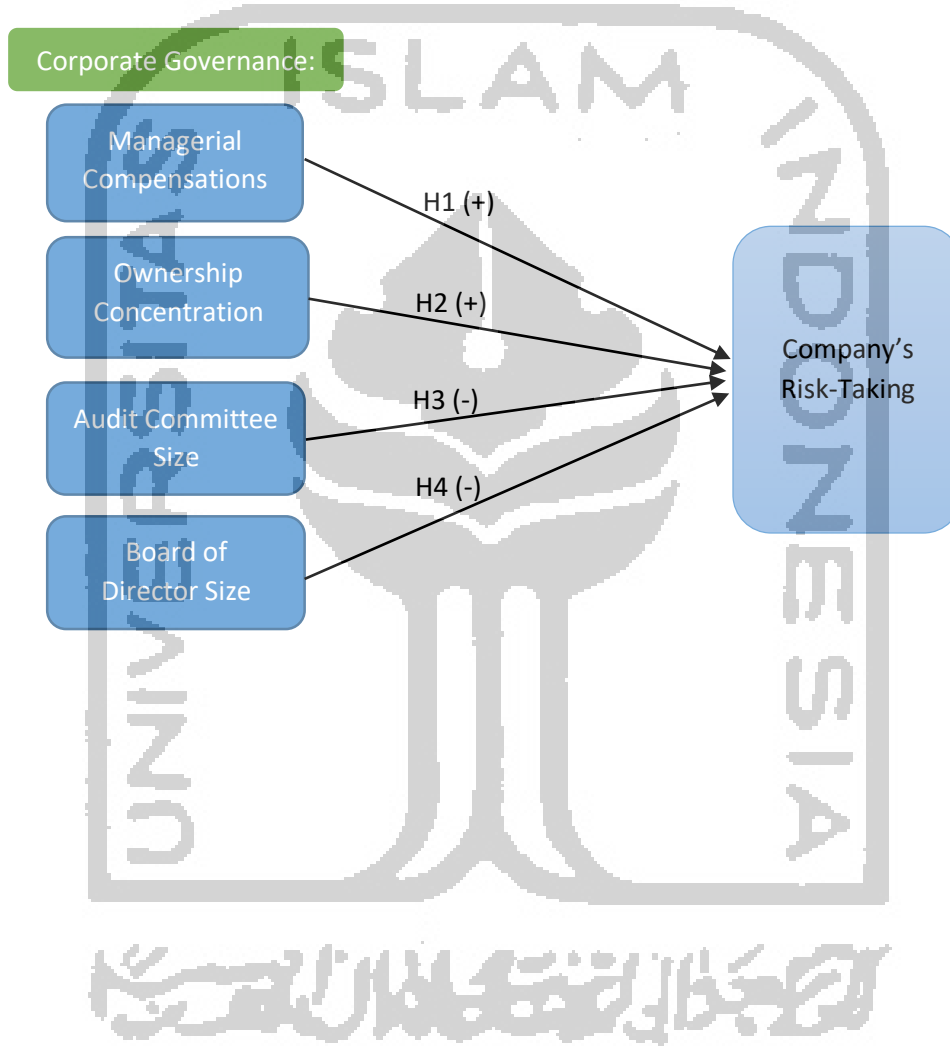
H4: Board of director size is negatively associated with company's risk-taking.



2.10 Research Model

The research model developed for this study is as follows:

Figure 2.1



CHAPTER III RESEARCH METHOD

3.1 Population and Sample

The population used in this research are all of manufacturing companies that are listed in the Indonesia Stock Exchange (IDX) and *Otoritas Jasa Keuangan* (OJK) for the period of 2013-2017. The researcher chose manufacturing companies due to the importance of the information that will be gathered. The sample taken by the researcher in this research is by purposive sampling method which the sample is chosen based on the characteristics of the population and not randomly. The samples used in this research are manufacturing companies listed in Indonesia Stock Exchange which met the following criteria:

1. Manufacturing companies that are listed in Indonesia Stock Exchange in the period of 2013-2017.
2. Manufacturing companies that provide annual reports and financial statements during the period of 2013-2017.
3. Manufacturing companies that provide adequate information and data that can be used for this study.
4. Manufacturing companies that did not having a negative equity in their financial statements during the period of 2013-2017 due to potentially excessive risk-taking behaviour.

3.2 Data Collection Method

This research is a quantitative research which means that the data collected used secondary data. The data collected was in the forms of annual reports of manufacturing companies listed in Indonesia Stock Exchange (IDX) during the period of 2013-2017.

The research data was obtained from the website of Indonesia Stock Exchange (IDX), www.idx.co.id, website of OJK www.ojk.go.id, and websites of the manufacturing companies.

The data information included in this research were annual financial statements and also the company profiles during the period of 2013-2017.

3.3 Research Variables

The variables in this research consist of dependent variable and independent variables. The dependent variable in this research is company's risk-taking. Meanwhile, the independent variable in this research is corporate governance with several sub-variables.

3.3.1 Dependent Variable

The dependent variable is the variable being affected by the other variables. The dependent variable in this research is company's risk-taking.

Company's risk-taking is an important stipulation that the aim is to improve the efficiencies in the usage of assets and the resulting profitable opportunities, returns, and firm growth (Zhao & Xiao, 2016). The measurement of the risk-taking here was based on *John et al.* (2008), where corporate risk-taking

estimations are based on a firm's earning volatility. The measurement of corporate risk-taking was symbolized as RISK and expressed in the following equation:

$$RISK_{i,c} = \sqrt{\frac{1}{T-1} \sum_{t=1}^T \left(\frac{EBITDA_{i,c,t}}{TA_{i,c,t}} - \frac{1}{T} \sum_{t=1}^T \frac{EBITDA_{i,c,t}}{TA_{i,c,t}} \right)^2}$$

$RISK_{i,c}$: Corporate risk-taking of firm i within country c

$TA_{i,c,t}$: Total assets of firm i and year t within country c

$EBITDA_{i,c,t}$: Earnings before interest, tax, depreciation and amortization of firm i and year t within country c

T : 5 years of earning volatility

3.3.2 Independent Variable

Independent variable is the variable affecting the dependent variable. The independent variable in this research is corporate governance, with sub-variables which are board of director size, audit committee size, managerial compensations, and ownership concentration.

a. Board of Director Size

Board of director size refers to the total number of directors on the board of firms which is inclusive of the CEO and Chairman for each accounting period. The board of director size here will include outside directors, executive directors

and non-executive directors (Venuti & Alfiero, 2016). The proxy to measure this variable is:

$$BODS = \text{Number of members in the Board of Directors}$$

b. Managerial Compensations

Managerial compensations here refer to the both financial and non-financial compensation that managers get as a repayment from the service that they did for the firms. It can be in terms of bonuses, benefits, shares or call options on the firm's stock and also mixture of salary. In this study, the indicator used as the measurement is remuneration received by the key management during the period of 2013-2017. The measurement is:

$$COMP = \text{Ln of total remuneration of all key management (Rupiah)}$$

c. Ownership Concentration

Ownership concentration refers to the amount of stock owned by individual investors and large-block shareholders (investors that hold at least 5 percent of equity ownership within the firm). The calculation of ownership concentration is based on Koerniadi *et al.*,(2014). The proxy used in measuring ownership concentration is as follows:

$$OWN = \text{Cumulative percentage held by shareholders with ownership}$$

$$\geq 5\%$$

d. Audit Committee Size

Adams & Jiang (2016) believed that the existence of audit committee can perform important corporate governance functions, such as strengthening board of directors' independence, especially outside directors, providing advice to the operation of the company, and of course auditing. The audit committee size will be calculated with proxy:

$$ACS = \text{Number of members in audit committee}$$

3.4 Data Analysis Method

Data collected in this research was processed by using SPSS version 20.0 and the analysis method used were descriptive statistics, multiple linear regression, classical assumption test, and hypothesis testing.

3.4.1 Descriptive Statistics

Descriptive statistics analysis is the analysis used to identify the characteristics of sample used and describe the variable in the study. It is also aiming at summarizing the data that the researcher used in the study. The descriptive statistics analysis processes resulted the statistical information such as median, mean, variance standard deviation, mode, kurtosis, and others (Ghozali, 2002) (in Efrianti, 2012).

3.4.2 Classical Assumption Test

It is a test used to test the feasibility of the regression model in order to achieve good data and generate good model. The classical assumption test is divided into heteroscedasticity test, normality test, multicollinearity test.

a. Heteroscedasticity Test

Heteroscedasticity test is used in statistics analysis, especially in the context of linear regression or for time series analysis, to describe the case where the variance of errors or the model is not the same for all observations, while often one of the basic assumptions in modeling is that the variances are homogeneous and that the errors of the model are identically distributed (Ghozali, 2013: 139). Regression analysis result which is not heteroscedastic means that the regression model is a good one. If the errors have constant variance, it is called homoscedastic. One of test in Heteroscedasticity test can be done by looking at the scatterplot graphs. If the resulting points are formed randomly, formed a certain pattern, and the direction of the dots are spread above and below number 0 on the Y axis, it does not occur heteroscedasticity symptoms in the regression so that regression models are good.

b. Normality Test

A normality test is used to determine whether the sample data have been drawn from a normally distributed population (within some tolerance). A number of statistical tests, such as the t-test and the one-way and two-way ANOVA require a normally distributed sample population (Ghozali, 2013:

160). If the assumption of normality is not valid, the results of the tests will be unreliable. The test used in this research is Kolmogorov-Smirnov test to identify the normality based on the maximum difference between the observed distribution and expected cumulative-normal distribution. When the significant value is > 0.05 , it means that the data is normally distributed.

c. Multicollinearity Test

Multicollinearity test is used to test whether there is a correlation between independent variables that results in high correlation in the regression model. It generally occurs when there are high correlations between two or more predictor variables. In other words, one predictor variable can be used to predict the others (Ghozali, 2013: 105). Detecting the presence of multicollinearity in a regression model can be seen from the tolerance value and the opposite is the Variance Inflation Factor (VIF). The VIF was used to detect the availability of the inter-correlation between variables. IF $VIF < 10$ and the tolerance > 0.10 , the result means that the variables are not inter-correlated (Ghozali, 2013: 105).

3.4.3 Multiple Linear Regression

Multiple linear regression analysis is a statistical methodology aiming at measuring the strength and direction of the relationship between independent variables and the dependent variable (Firdaus & Adhariani, 2017). The research conducted in this study analysed the effect of audit committee size, ownership

concentration, board of director size, and managerial compensations to the corporate risk-taking. The model of the analysis in this research is as follows:

$$RISK = \alpha + \beta_1 COMP + \beta_2 OWN - \beta_3 ACS - \beta_4 BODS + e$$

- RISK : Corporate risk-taking
COMP : Managerial compensations
OWN : Ownership concentration
ACS : Audit committee size
BODS : Board of director size
 α : Constant value
 β_n : Independent variables
e : Error value

3.4.4 Hypothesis Testing

The data analysis method is used to test the influence of independent variables on dependent variable.

a. Coefficient Determination (R^2)

This statistical analysis is used to determine how the dependent variable is influenced by the independent variables. The R^2 value is in between 0 and 1. The closer the R^2 value to 1, the greater the model can describe the dependent variable (Firdaus & Adhariani, 2017).

b. T-test

T-test is used in this study to identify the influence of independent variables to dependent variable. The test is conducted to determine whether the independent variables are significantly affected by the dependent variable or not (Ghozali, 2013: 98). It is concluded based on the following criteria:

- Hypothesis is accepted if $p\text{-value} < 5\%$, means that the dependent variables are significantly affected by the independent variable.
- Hypothesis is rejected if $p\text{-value} > 5\%$, means that the dependent variables are not significantly affected by the independent variable.



CHAPTER IV RESULTS AND DISCUSSIONS

4.1 Research Object Description

In this chapter, the researcher discussed and analysed the data processing results on the effect of corporate governance toward the corporate risk-taking. The data used in this research was secondary data from the financial report of manufacturing companies. The samples used were manufacturing companies listed in the Indonesia Stock Exchange (IDX) during the period of 2013-2017. The method in choosing the sample was using the purposive sampling which the sample was not chosen randomly, but based on some criteria that met the researcher's requirement in doing this research. The result of sampling was shown in the table:

Table 4.1
Summary of Research Object Description

No.	Explanation	Total
1.	Manufacturing companies listed in IDX for the period of 2013-2017	127
2.	Manufacturing companies that did not provide complete information during 2013-2017	(52)
3.	Manufacturing companies that experienced negative equity in the period of 2013-2017	(6)
4.	Total manufacturing companies used as samples	69
5.	Total observation (69 x 5 years)	345

The results of how the researcher chose the manufacturing companies used as sample can be seen from the above table. The list of manufacturing industries that published their annual report to IDX from 2013 period were 127 companies.

However, from all of the companies listed, the researcher found that some annual reports of those companies cannot be collected due to some factors, such as the data of annual reports was erased both in IDX database and company's website and also the website of the company was under maintenance. The researcher was also excluded the companies that had a negative equity in their financial statements due to potential excessive risk-taking that the company dealt.

4.2 Descriptive Statistics Analysis

Descriptive statistics is used to depict a data statistically. In this research, the descriptive statistics was done based on the standard deviation, mean, minimum and maximum score of all variables, both independent variables (managerial compensation, ownership structure, audit committee size, and board of directors' size) and dependent variable (corporate risk-taking). All the variables were shown in the table:

Table 4.2
Summary of Descriptive Statistics Result

Variable	n	Minimum	Maximum	Mean	Std. Deviation
Corporate risk-taking	345	.0028759	.1018802	.0401386	.02309722
Managerial compensation	345	18.00	26.37	23.2426	1.33893
Ownership structure	345	.2366	.9818	.748601	.1514725
Audit committee size	345	2.00	6.00	3.1130	.43332
Board of director size	345	2.00	16.00	5.2435	2.48925

Source: Descriptive Statistics Data Processing Result, 2019

From the descriptive statistics results, the explanation can be discussed as follows:

1. From the total of 345 observations of 69 companies in 5 years' data, the result of corporate risk-taking showed that the minimum score of risk-taking in company is 0.29% experienced by PT Pabrik Kertas Tjiwi Kimia and the maximum score of risk-taking that the company had in sample is 10.19% by PT Arwana Citramulia. Meanwhile, the mean for corporate risk-taking variable is 0.0401 and the standard deviation is 0.0231. The score of standard deviation in this variable is lower than the mean score which indicate that the variable data is homogenous. It showed that the mean score can represent the data well.
2. For the managerial compensation, the researcher used natural logarithm of the compensations' value. The minimum score for managerial compensation in the shown table is 18.00 by PT Eratex Djaja in 2017 and the maximum score is 26.37 by PT Japfa Comfeed Indonesia in 2017. The mean score for this variable is 23.2426 and the standard deviation is 1.3389. The data in this variable is homogenous and a good model since the standard deviation is lower than the mean score.
3. The minimum score of ownership structure in this research is 23.66% by PT Bumi Teknokultura Unggul in 2015 and the maximum score is 98.18% by PT HM Sampoerna in 2013 and 2014. For the ownership structure, the mean score is 0.7486 and the standard deviation 0.1514. Again, the lower

score of standard deviation is greater than the mean indicating that the variable is not heterogeneous.

4. The total members of audit committee are also being analysed in this descriptive statistics results. The result showed that the minimum member of audit committee in manufacturing companies is only 2 and the maximum member is 6. The average of audit committee members in manufacturing companies in this research is 3.113 and the standard deviation is 0.433. The data in this variable is homogenous.
5. For the size of board of directors, the minimum member is 2 boards of directors and the maximum member that a company had for their board of directors is 16. For this variable, the average of board of directors' members in manufacturing companies is 5.2435 and the standard deviation is 2.4892. The lower score of standard deviation which is over the mean indicating that the data in this variable is homogenous.

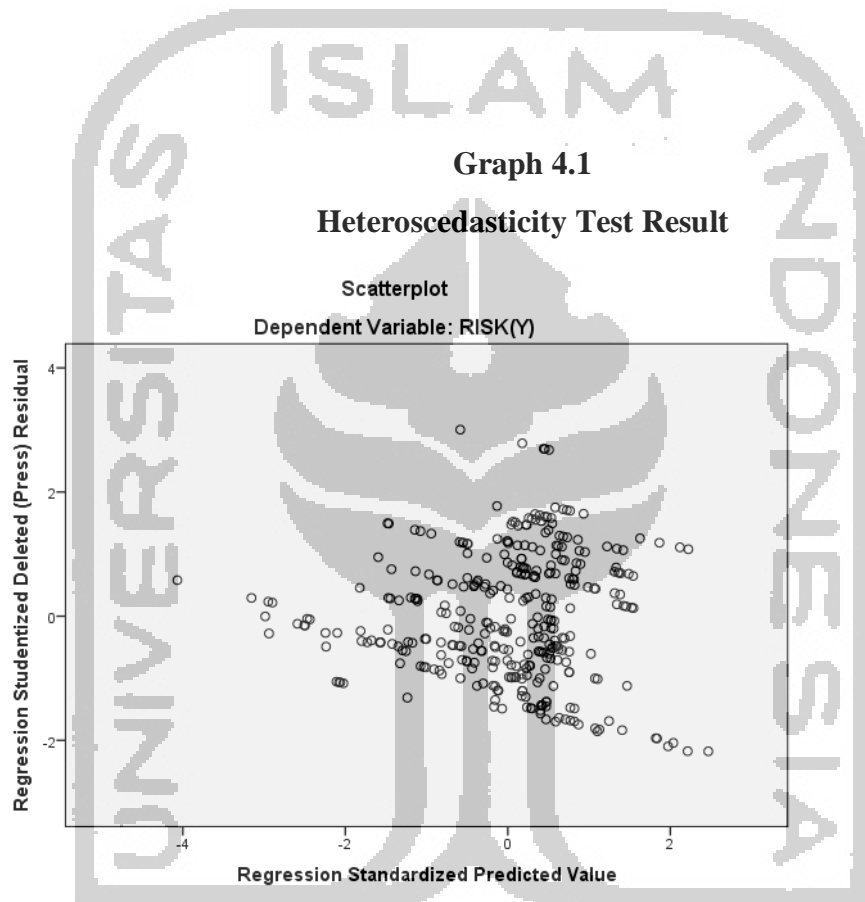
4.3 Classical Assumption Test

Classical assumption test is used to test the feasibility of the regression model in order to achieve good data and generate a good model. The tests conducted in this analysis are as follows:

4.3.1 Heteroscedasticity Test

Heteroscedasticity test is used in a statistical analysis, especially in the context of linear regression or for time series analysis. The test is to describe the case where the variance of errors or the model is not the same for all observations, while often one of the basic assumption in modeling has the variances which are

homogeneous and the errors of the model are identically distributed. This research used the scatterplot graph to test the heteroscedasticity in this model. The indicator of the graph is SDRESID as the Y and ZRESID as the X. The result of the scatterplot graph is as follows:



The regression is a good model if the dots in the graph are spread randomly above 0 and below 0 in Y axis. In this research, it can be seen from the table that the dots were spread randomly above and below 0 number in Y axis. The random spread dots in the graph indicates that the data results are not heteroscedastic and it is a good model.

4.3.2 Normality Test

A normality test is used to determine whether the sample data have been drawn from a normally distributed population (within some tolerance). The test used in this research is Kolmogorov-Smirnov test. The result of the test was shown in the table below:

Table 4.3
One-Sample Kolmogorov-Smirnov Test Result

		Unstandardized Residual
n		345
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	2.21249787
Most Extreme Differences	Absolute	.060
	Positive	.060
	Negative	-.040
Kolmogorov-Smirnov Z		1.115
Asymp. Sig. (2-tailed)		.166

a. Test distribution is Normal.

b. Calculated from data.

Source: Normality Test Data Processing Result, 2019

Based on the Kolmogorov-Smirnov test, the data is distributed normally if the significant value is closer or more than 0.05. The table above showed that the significant value is 0.166 which means that it is more than 0.05. Thus, it can be concluded that the data is distributed normally and can be used for analysis.

4.3.3 Multicollinearity Test

Multicollinearity test is used to test whether there is a correlation between independent variables that results in high correlation in the regression model. This research used multicollinearity test by looking at the tolerance value and the Variance Inflation Factor (VIF). The result of the test was shown in the table:

Table 4.4
Summary of Multicollinearity Test Result

Model	Collinearity Statistics	
	tolerance	VIF
COMP(X1)	.645	1.550
OWN(X2)	.956	1.046
ACS(X3)	.974	1.027
BODS(X4)	.673	1.486

Dependent Variable: RISK

Source: Data Processing Result of Multicollinearity Test, 2019

Legend: COMP= managerial compensations, OWN= ownership concentration, ACS= audit committee size, BODS= board of director size.

The variables are not inter-correlated if the tolerance value is more than 0.1 and the VIF value is less than 10. Based on the table, it is known that all the tolerances variables value are more than 0.1 and the Variance Inflation Factor (VIF) is less than 10. It means that there is no strong correlation between all independent variables being analysed in this research or there is no indication of multicollinearity issue.

4.4 Multiple Linear Regression Analysis

The analysis that used in this research is multiple linear regression analysis. This analysis is aiming to measure the strength and direction of the relationship between managerial compensation, ownership concentration, audit committee size, and board of director size toward the company's risk-taking. Based on the results of data processing using IBM SPSS Statistics 20, the multiple linear regression is as follows:

Table 4.5
Summary of Multiple Linear Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients	t.statistic	Sig.
	B	Std. Error	Beta		
(constant)	-.023	.028		-.851	.395
COMP(X1)	.002	.001	.144	2.172	.031
OWN(X2)	.021	.008	.140	2.579	.010
ACS(X3)	-.001	.003	-.013	-.246	.806
BODS(X4)	-.002	.001	-.164	-2.523	.012

Dependent Variable: RISK(Y)

Source: Multiple Linear Regression Data Processing Result, 2019

Legend: COMP= managerial compensations, OWN= ownership concentration, ACS= audit committee size, BODS= board of director size.

From the result of multiple linear regression analysis above, the formula developed for this research is as follows:

$$\text{RISK} = -0.023 + 0.002\text{COMP} + 0.021\text{OWN} - 0.001\text{ACS} - 0.002\text{BODS}$$

The formula above explained the effect of independent variables to dependent variable. The explanation of the coefficients regression is:

1. The intercept score of constant is -0.023. This score indicated that if the managerial compensation, ownership structure, audit committee size, and board of director size value is 0, the company's risk-taking value will be -0.023.
2. The coefficient regression of COMP is 0.002. This score indicated that if the managerial compensation is increasing 1 unit, the company's risk-taking will increase as much as 0.002. It assumed that the other independent variables are constant.

3. The coefficient regression of OWN is 0.021. This score indicated that if the ownership concentration is increasing 1%, the company's risk-taking will increase 0.021 with the assumption that other independent variables are constant.
4. The coefficient regression of ACS is -0.001. This score indicated that if the audit committee size is increasing 1 unit, the company's risk-taking will decrease 0.001 with the assumption that other independent variables are constant.
5. The coefficient regression of BODS is -0.002. This score indicated that if the board of director size increasing 1 unit, the company's risk-taking will decrease 0.002 with the assumption that other independent variables are constant.

4.5 Coefficient Determination (R^2)

The coefficient determination measures on how the independent variables can describe the dependent variable. The value of coefficient determination is ranged from 0 to 1. When the R^2 value is closer to 1, it indicated that there is a strong correlation between independent variables and dependent variable. On the other hand, if the R^2 value is closer to 0, it means that there is no strong correlation between independent variables and dependent variable or the independent variables cannot describe more about dependent variable. The result of the coefficient determination is shown in the table:

Table 4.6
Summary of Coefficient Determination Result

Model	R	R square	Adjusted R square
1	0.309	0.095	0.085

a. Predictors: (Constant), BODS(X4), OWN(X2), ACS(X3), COMP(X1)

b. Dependent Variable: RISK(Y)

Source: Data Processing Result of Coefficient Determination, 2019

From the table above, the adjusted R^2 value is 0.085 or 8.5%. Those values indicated that the managerial compensations, ownership concentration, audit committee size, and board of director size can only describe 8.5% of company's risk-taking behaviour. The remaining 91.5% is explained by the other factors outside the model.

4.6 Hypothesis Testing

This research was used t-statistics to test the hypothesis. The result of the test can be seen in the table 4.3. T-test is used to prove the effect of managerial compensations, ownership concentration, audit committee size, and board of director size toward the company's risk-taking individually (t-statistic) with the assumption that the other factors are constant. Based on the result of regression using IBM SPSS 20 Statistics, the discussions for the result are as follows:

4.6.1 The result on the effect of managerial compensations (X1) on the company's risk-taking (Y)

As shown in the Table 4.3, the hypothesis testing was done to test the coefficient significant of managerial compensations toward corporate risk-taking.

The first hypothesis stated that managerial compensation is positively significant associated with corporate risk-taking. Based on the result, the coefficient regression value is 0.002 and the significant value is 0.031. At the significant level of $\alpha = 5\%$, the result showed that the significant value is $0.031 < 0.05$ which means that the independent variable significantly and positively affects the dependent variable. It indicated that the managerial compensations significantly and positively affect the corporate risk-taking behaviour. The hypothesis was supported for this variable model.

In this research, the managerial compensations refer to all of the compensations received by all of key managements. The positively significant effect of managerial compensations over company's risk taking indicated that the higher the compensations that the key managements get, the higher the risk that they will take. Nowadays, managers work for companies in which they receive the highest utility in a free market with utility-maximizing managers. The higher probability of losing a job due to insolvency tends to give the managers a higher compensation. Managers of high-risk companies should eventually receive higher compensation since they will face the uncertainty of future employment due to their risk-taker behaviour (Eling & Marek, 2014). This result of study supports the research from Venuti and Alfiero (2016) and Bolton *et al.* (2015) which stated that the compensations of managers affect the company's risk-taking behaviour.

4.6.2 The result on the effect of ownership concentration (X2) on the company's risk-taking (Y)

The hypothesis testing was done to test the coefficient significance of ownership concentration towards corporate risk-taking. The second hypothesis stated that ownership concentration is positively significant associated with the company's risk-taking. Based on the model's result, the coefficient regression value is 0.021 and the significant value is 0.01. From the regression result, at significant level of 5%, the independent variable significantly and positively affects the dependent variable in this second hypothesis. It indicated that the ownership concentration significantly and positively associated with corporate risk-taking. The hypothesis developed was supported.

The ownership concentration in this study refers to the cumulative percentage of ownership held by the shareholders who own the shares of more than 5% in manufacturing companies. The result of the study indicates that the higher the ownership concentration, the higher risk-taking of the company. The higher the ownership concentration leads to more control by the owners over the managers. Based on the empirical literatures, the large shareholders are generally associated with high performances (Venuti & Alfiero, 2016). It needs more risk-taking behaviour to attain targeted performances expected by the owners of the company. From the result, it can be known that the large shareholders might have power to control the managers' behaviour and might force the managers to take more risks, since the high risks will give them high returns. The result of this

hypothesis is supported the previous study from Nguyen (2011) who stated that the ownership concentration is associated with higher risk-taking strategies.

4.6.3 The result on the effect of audit committee size (X3) on the company's risk-taking (Y)

The hypothesis testing was done to test the coefficient significant level of audit committee size towards corporate risk-taking. The third hypothesis stated that audit committee size is negatively significant associated with the company's risk-taking. Based on the regression model's result, the coefficient regression value is -0.001 and the significant value is 0.806. From the regression result, at significant level of 5%, the independent variable insignificantly and negatively affects the dependent variable in this second hypothesis. It indicated that the audit committee size insignificantly and negatively associated with corporate risk-taking. The hypothesis developed was not supported.

The result of the study showed that the members of audit committee are not affecting the risk-taking that the company deals with. The result that came into insignificant can be derived due to most of the firms in the study having three members of the audit committee. The hypothesis is not accepted in this model. The result is not consistent with the hypothesis developed. Despite there are some companies with members of five and six in the audit committee structure, the existence of audit committee in Indonesia cannot give effective contribution and effect to the risk management because the company only follow the rules by the higher authority to fulfilled the needs of audit committee based on regulation by BAPEPAM no. IX.1.5 KEP 29/PM/2004 about establishment and guidance of

implementation audit committee's work. The regulation stated that the existence of audit committee is needed and the authority of audit committee is only giving the opinion on financial statement process, risk management, and corporate governance and the decision will be on the commissioners. Based on the result, the size of audit committee is not effective in helping managing risk-taking behaviour within company. From the regulation, it might be known that the controlling role of audit committee in Indonesia is indirectly affect the risk management within manufacturing company. This result is consistent with the previous study done by Elamer *et al.*, (2018) which stated that there is a negative effect of audit committee size towards risk-taking, however, the relationship is not significant. Besides, a study by Adams and Jiang (2016) also found that the relationship of audit committee size and risk-taking behaviour is not significant.

4.6.4 The result on the effect of board of director size (X4) on the company's risk-taking (Y)

The hypothesis testing was done to test the coefficient significant of board of director size towards corporate risk-taking. The fourth hypothesis stated that board of director size is negatively significant associated with the company's risk-taking. Based on the regression model's result, the coefficient regression value is -0.002 and the significant value is 0.012. From the regression result, at significant level of 5%, the independent variable significantly and negatively affects the dependent variable in this second hypothesis. It indicated that the board of director size significantly and negatively associated with corporate risk-taking. The hypothesis developed was supported.

Based on the Table 4.3, the result showed that the total board of director members is associated with the risk-taking, but negatively affect. It showed that too large board of director size will lower the corporate risk-taking. Venuti and Alfiero (2016) stated that the larger board of director size had a tendentious of taking a less risky project because it is more difficult to convince a large number of board of directors that the risky project is worth to do. Besides, Pathan and Faff (2013) in their study stated that a large board of director size may lead to problems, such as poor communication and co-ordination and eventually give an impact to negative ability on monitoring their managers. From the result shown, it might be known that too many board of directors' member will find it hard for them to reach the same level of agreement in risk-taking. This result is consistent with some previous literatures (Venuti and Alfiero, 2016; Elamer *et al.*, 2018; Haider and Fang, 2016; Nakano and Nguyen, 2012). Those literatures found that the board of director size negatively significant affects the corporate risk-taking.

CHAPTER V

CONCLUSIONS, LIMITATION, AND SUGGESTIONS

5.1 Conclusions

Based on the results of this study, it can be concluded that the researcher attempts to empirically examine the effect of corporate governance towards the company's risk-taking. The corporate governance's indicators in this study are managerial compensations, ownership concentration, audit committee size, and board of director size. The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period of 2013-2017. The sampling in this study was using purposive sample and the result showed that there are 69 manufacturing companies being analysed and total of 345 observations of 5 years' annual reports. The results of the study are as follows:

1. There is a positive and significant association between managerial compensations and company's risk-taking. It means that the higher the compensations that the managerial get, it will lead to higher company's risk-taking.
2. There is a positive and significant association between ownership concentration and company's risk-taking. It means that the higher the ownership concentration will lead to the higher company's risk-taking.
3. There is a negative and insignificant association between audit committee size and company's risk-taking. It means that the total members of audit committee did not affect the risk-taking that the company had.

4. There is a negative and significant association between the board of director size and company's risk taking. It means that the higher the total members of board of directors, the lower the company's risk-taking will be.

5.2 Limitation

After conducted the study, the researcher found a limitation in this study that might give an impact to the result of the study, which is the information of annual report of some companies cannot be collected due to the data was not available on the website (IDX and company's website).

5.3 Suggestions

The researcher gives suggestions after conducting the study, which are:

1. The future research should consider other sectors of company, especially financial companies since it is more relatable to risk-taking behaviour.
2. The future research should add more factors in the study to explain more on the effect of corporate governance towards company's risk-taking.
3. The corporate governance is influencing the risk-taking that company had, so the company should consider their good corporate governance mechanism, especially the indicators that is used in this research in managing the risks.

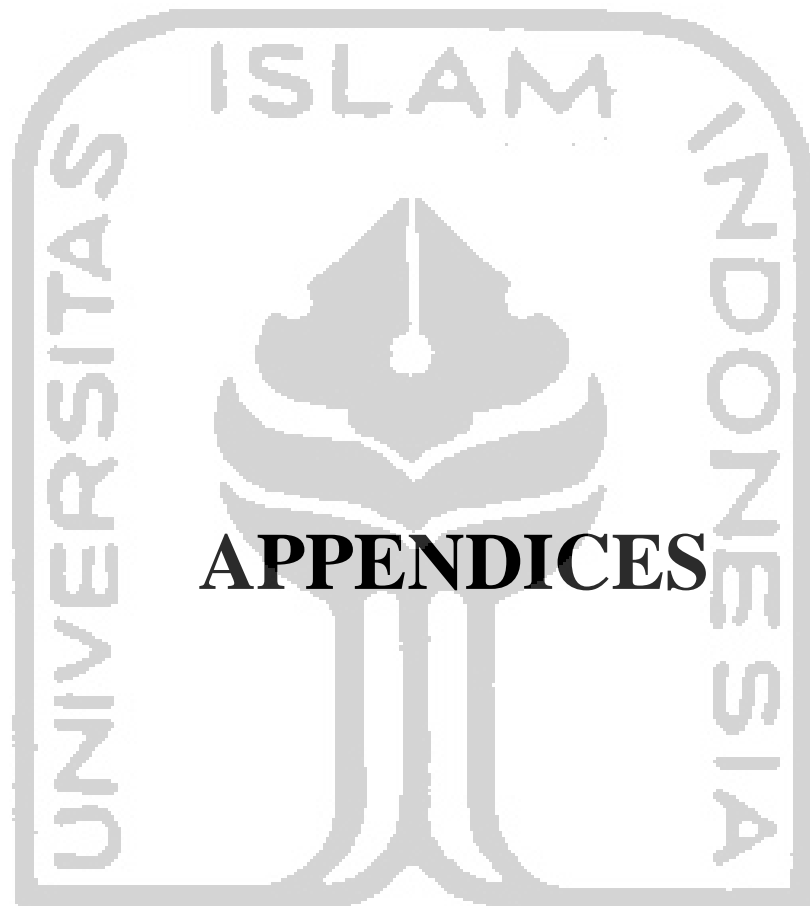
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APPENDICES

كليات جامعة إندونيسيا الإسلامية

Appendix 1: List of Company Name

No.	Company Code	Company Name
1	ARNA	Arwana Citramulia Tbk
2	GDST	Gunawan Dianjaya Steel Tbk
3	IGAR	Champion Pacific Indonesia Tbk
4	CTBN	Citra Tubindo Tbk
5	DVLA	Darya-Varia Laboratoria Tbk
6	DPNS	Duta Pertiwi Nusantara Tbk
7	FASW	Fajar Surya Wisesa Tbk
8	GGRM	Gudang Garam Tbk
9	INKP	Indah Kiat Pulp & Paper Tbk
10	INAF	Indofarma (Persero) Tbk
11	INTP	Indocement Tunggul Prakarsa Tbk
12	ICBP	Indofood CBP Sukses Makmur Tbk
13	JPFA	Japfa Comfeed Indonesia Tbk
14	KLBF	Kalbe Farmab Tbk
15	KICI	Kedaung Indah Can Tbk
16	KBRI	Kertas Basuki Rachmat Indonesia Tbk
17	KAEF	Kimia Farma (Persero) Tbk
18	FPNI	PT Lotte Chemical Titan Tbk
19	MBTO	Martino Berto Tbk
20	MYOR	Mayora Indah Tbk
21	MLBI	Multi Bintang Indonesia Tbk
22	ROTI	Nippon Indosari Corpindo Tbk
23	ADMG	Polychem Indonesia Tbk
24	PSDN	Prasidha Aneka Niaga Tbk
25	PYFA	Pyridam Farma Tbk
26	HMSP	HM Sampoerna Tbk
27	UNVR	Unilever Indonesia Tbk
28	AKPI	Argha Karya Prima Ind. Tbk
29	KRAS	Krakatau Steel (Persero) Tbk
30	NIKL	Pelat Timah Nusantara Tbk
31	ADES	Akasha Wira International Tbk
32	BRNA	Berlina Tbk
33	BTON	Betonjaya Manunggal Tbk
34	BTEK	Bumi Teknokultura Unggul Tbk
35	TPIA	Chandra Asri Petrochemical Tbk
36	CEKA	Wilmar Cahaya Indonesia Tbk
37	EKAD	Ekadharma International Tbk
38	ERTX	Eratex Djaja Tbk

39	GJTL	Gajah Tunggal Tbk
40	GDYR	Goodyear Indonesia Tbk
41	BRAM	Indo Kordsa Tbk
42	IMAS	Indomobil Sukses International Tbk
43	INDR	Indorama Synthetics Tbk
44	INDS	Indospring Tbk
45	KBLM	Kabelindo Murni Tbk
46	KBLI	KMI Wire and Cable Tbk
47	TCID	Mandom Indonesia Tbk
48	MERK	Merck Tbk
49	MASA	Multistrada Arah Sarana Tbk
50	PBRX	Pan Brothers Tbk
51	RICY	Ricky Putra Globalindo Tbk
52	BAJA	Saranacentral Bajatama Tbk
53	PTSN	Sat Nusaperdana Tbk
54	SKLT	Sekar Laut Tbk
55	SMSM	Selamat Sempurna Tbk
56	SMGR	Semen Indonesia (Persero) Tbk
57	STTP	Siantar Top Tbk
58	SIDO	PT Industri Jamu dan Farmasi Sido Muncul Tbk
59	SIPD	Sierad Produce Tbk
60	IKBI	Sumi Indo Kabel Tbk
61	SPMA	Suparma Tbk
62	TSPC	Tempo Scan Pacific Tbk
63	TKIM	Pabrik Kertas Tjiwi Kimia Tbk
64	AISA	Tiga Pilar Sejahtera Food Tbk
65	TRIS	Trisula International Tbk
66	UNIC	Unggul Indah Cahaya Tbk
67	YPAS	Yanaprima Hastapersada Tbk
68	ETWA	Eterindo Wahanatama Tbk
69	TOTO	Surya Toto Indonesia Tbk

Appendix 2: Audit Committee Size Data

No.	Company Code	Year				
		2013	2014	2015	2016	2017
1	ARNA	3	4	4	4	4
2	GDST	4	4	4	4	4
3	IGAR	3	3	3	3	3
4	CTBN	3	3	3	4	3
5	DVLA	4	4	3	3	3
6	DPNS	3	3	3	3	3
7	FASW	3	3	3	3	3
8	GGRM	3	3	3	3	3
9	INKP	3	3	3	3	3
10	INAF	3	3	3	3	3
11	INTP	3	3	3	3	3
12	ICBP	3	3	3	3	3
13	JPFA	3	3	3	3	3
14	KLBF	3	3	3	3	3
15	KICI	3	3	3	3	3
16	KBRI	3	3	3	2	2
17	KAEF	3	3	3	4	4
18	FPNI	2	3	3	3	3
19	MBTO	2	2	2	2	2
20	MYOR	3	3	3	3	3
21	MLBI	3	3	3	3	3
22	ROTI	3	3	3	3	3
23	ADMG	3	3	3	3	3
24	PSDN	3	3	3	3	3
25	PYFA	3	3	4	4	4
26	HMSP	3	3	3	3	3
27	UNVR	3	3	3	3	3
28	AKPI	4	4	4	4	4
29	KRAS	4	4	3	4	3
30	NIKL	4	4	3	3	3
31	ADES	3	3	3	3	3
32	BRNA	3	3	3	3	3
33	BTON	3	3	3	3	3
34	BTEK	3	3	3	3	3
35	TPIA	3	3	3	3	3
36	CEKA	3	3	3	4	3
37	EKAD	3	3	3	3	3

38	ERTX	3	3	3	3	3
39	GJTL	3	3	3	3	3
40	GDYR	3	3	3	3	3
41	BRAM	3	3	3	3	3
42	IMAS	3	3	3	3	3
43	INDR	3	3	3	3	3
44	INDS	3	3	3	3	3
45	KBLM	3	3	3	3	3
46	KBLI	3	3	3	3	3
47	TCID	4	4	4	3	3
48	MERK	3	3	3	3	3
49	MASA	3	3	3	3	3
50	PBRX	3	3	3	3	3
51	RICY	3	3	3	3	3
52	BAJA	4	4	4	4	4
53	PTSN	3	3	3	3	3
54	SKLT	3	3	3	3	3
55	SMSM	3	3	3	3	3
56	SMGR	5	6	5	5	5
57	STTP	3	3	3	3	3
58	SIDO	3	3	3	3	3
59	SIPD	3	3	3	3	3
60	IKBI	3	3	3	3	3
61	SPMA	3	3	3	3	3
62	TSPC	3	3	3	3	3
63	TKIM	3	3	3	3	3
64	AISA	3	4	4	4	4
65	TRIS	3	3	3	3	3
66	UNIC	3	3	3	3	3
67	YPAS	3	3	3	3	3
68	ETWA	3	3	3	3	3
69	TOTO	3	3	3	3	3

Appendix 3: Board of Director Size Data

No.	Company Code	Year				
		2013	2014	2015	2016	2017
1	ARNA	3	3	3	3	3
2	GDST	9	9	10	11	9
3	IGAR	3	3	3	5	5
4	CTBN	6	6	6	5	5
5	DVLA	9	7	7	8	8
6	DPNS	4	4	4	4	4
7	FASW	4	6	6	6	6
8	GGRM	7	7	7	7	7
9	INKP	9	10	10	10	10
10	INAF	4	3	3	3	5
11	INTP	9	9	9	9	9
12	ICBP	9	9	9	9	9
13	JPFA	5	5	5	5	5
14	KLBF	5	5	5	6	7
15	KICI	3	3	3	3	3
16	KBRI	3	3	2	2	2
17	KAEF	5	5	5	5	5
18	FPNI	2	2	2	2	3
19	MBTO	4	4	4	4	4
20	MYOR	5	5	5	5	5
21	MLBI	4	4	4	4	4
22	ROTI	6	6	6	5	5
23	ADMG	5	5	5	4	4
24	PSDN	6	6	6	5	5
25	PYFA	3	4	4	4	3
26	HMSP	7	7	7	8	8
27	UNVR	10	8	9	10	10
28	AKPI	5	5	5	5	5
29	KRAS	7	7	6	6	6
30	NIKL	5	5	5	5	4
31	ADES	4	4	4	3	3
32	BRNA	4	4	3	3	3
33	BTON	3	3	3	3	3
34	BTEK	4	4	4	4	4
35	TPIA	7	7	7	7	7
36	CEKA	6	6	6	5	5
37	EKAD	3	3	3	3	3

38	ERTX	4	3	3	3	3
39	GJTL	11	13	13	10	10
40	GDYR	3	4	4	3	3
41	BRAM	7	7	7	6	5
42	IMAS	7	6	6	6	6
43	INDR	2	2	2	2	2
44	INDS	3	3	3	3	3
45	KBLM	3	3	3	4	3
46	KBLI	5	6	6	3	5
47	TCID	11	15	15	16	14
48	MERK	7	5	5	5	5
49	MASA	7	6	6	7	7
50	PBRX	6	6	5	5	5
51	RICY	4	4	4	4	4
52	BAJA	4	4	4	4	4
53	PTSN	3	3	3	3	3
54	SKLT	3	4	4	4	5
55	SMSM	5	5	5	5	5
56	SMGR	7	7	7	7	7
57	STTP	3	3	4	4	4
58	SIDO	5	5	5	5	5
59	SIPD	5	7	5	5	4
60	IKBI	5	6	5	5	5
61	SPMA	4	4	4	4	4
62	TSPC	12	11	11	10	10
63	TKIM	9	9	9	9	7
64	AISA	4	3	3	3	3
65	TRIS	4	3	3	4	4
66	UNIC	5	5	4	4	4
67	YPAS	3	3	3	2	2
68	ETWA	4	4	4	4	4
69	TOTO	10	11	11	11	11

Appendix 4: Managerial Compensations Data

No.	Company Code	Year	Compensations	Natural Logarithm of Compensations
1	ARNA	2013	Rp 5.990.000.000,00	22,513
		2014	Rp 7.530.000.000,00	22,742
		2015	Rp 7.650.000.000,00	22,758
		2016	Rp 9.870.000.000,00	23,013
		2017	Rp 10.730.000.000,00	23,096
2	GDST	2013	Rp 5.614.840.000,00	22,449
		2014	Rp 6.701.380.625,00	22,626
		2015	Rp 7.214.361.250,00	22,699
		2016	Rp 7.038.442.813,00	22,675
		2017	Rp 9.334.645.625,00	22,957
3	IGAR	2013	Rp 1.182.000.000,00	20,890
		2014	Rp 2.340.000.000,00	21,573
		2015	Rp 1.555.000.000,00	21,165
		2016	Rp 5.596.000.000,00	22,445
		2017	Rp 3.290.000.000,00	21,914
4	CTBN	2013	Rp 14.410.638.000,00	23,391
		2014	Rp 17.445.200.000,00	23,582
		2015	Rp 18.325.205.000,00	23,632
		2016	Rp 13.417.900.000,00	23,320
		2017	Rp 12.736.132.000,00	23,268
5	DVLA	2013	Rp 15.600.000.000,00	23,471
		2014	Rp 17.000.000.000,00	23,556
		2015	Rp 34.000.000.000,00	24,250
		2016	Rp 38.000.000.000,00	24,361
		2017	Rp 38.000.000.000,00	24,361
6	DPNS	2013	Rp 17.057.549.611,00	23,560
		2014	Rp 17.192.648.705,00	23,568
		2015	Rp 16.733.362.377,00	23,541
		2016	Rp 13.349.619.719,00	23,315
		2017	Rp 12.484.092.198,00	23,248
7	FASW	2013	Rp 12.114.830.640,00	23,218
		2014	Rp 18.516.631.520,00	23,642
		2015	Rp 22.494.278.700,00	23,837
		2016	Rp 23.121.481.186,00	23,864
		2017	Rp 29.397.503.650,00	24,104
8	GGRM	2013	Rp 52.392.000.000,00	24,682
		2014	Rp 54.188.000.000,00	24,716

		2015	Rp 61.305.000.000,00	24,839
		2016	Rp 84.744.000.000,00	25,163
		2017	Rp 118.041.000.000,00	25,494
9	INKP	2013	Rp 24.499.890.000,00	23,922
		2014	Rp 24.880.000.000,00	23,937
		2015	Rp 21.244.300.000,00	23,779
		2016	Rp 24.453.520.000,00	23,920
		2017	Rp 10.838.400.000,00	23,106
10	INAF	2013	Rp 5.903.795.985,00	22,499
		2014	Rp 3.533.208.000,00	21,985
		2015	Rp 4.860.451.200,00	22,304
		2016	Rp 5.285.099.200,00	22,388
		2017	Rp 6.071.526.205,56	22,527
11	INTP	2013	Rp 57.095.000.000,00	24,768
		2014	Rp 64.136.000.000,00	24,884
		2015	Rp 80.504.000.000,00	25,112
		2016	Rp 78.697.000.000,00	25,089
		2017	Rp 80.785.000.000,00	25,115
12	ICBP	2013	Rp 50.000.000.000,00	24,635
		2014	Rp 56.000.000.000,00	24,749
		2015	Rp 55.000.000.000,00	24,731
		2016	Rp 47.000.000.000,00	24,573
		2017	Rp 51.000.000.000,00	24,655
13	JPFA	2013	Rp 209.939.000.000,00	26,070
		2014	Rp 246.449.000.000,00	26,230
		2015	Rp 234.300.000.000,00	26,180
		2016	Rp 252.500.000.000,00	26,255
		2017	Rp 283.000.000.000,00	26,369
14	KLBF	2013	Rp 45.300.000.000,00	24,537
		2014	Rp 44.660.000.000,00	24,522
		2015	Rp 42.700.000.000,00	24,477
		2016	Rp 39.990.000.000,00	24,412
		2017	Rp 47.870.000.000,00	24,592
15	KICI	2013	Rp 3.217.612.464,00	21,892
		2014	Rp 4.001.126.185,00	22,110
		2015	Rp 4.562.395.208,00	22,241
		2016	Rp 4.311.045.590,00	22,184
		2017	Rp 4.147.308.791,00	22,146
16	KBRI	2013	Rp 3.493.070.000,00	21,974
		2014	Rp 2.589.946.000,00	21,675
		2015	Rp 2.699.779.034,00	21,716

		2016	Rp 2.699.779.034,00	21,716
		2017	Rp 2.166.000.000,00	21,496
17	KAEF	2013	Rp 18.675.500.000,00	23,650
		2014	Rp 28.920.100.000,00	24,088
		2015	Rp 26.414.414.000,00	23,997
		2016	Rp 36.243.080.000,00	24,314
		2017	Rp 54.585.400.000,00	24,723
		18	FPNI	2013
2014	Rp 1.206.680.000,00			20,911
2015	Rp 1.117.395.000,00			20,834
2016	Rp 1.155.496.000,00			20,868
2017	Rp 1.124.484.000,00			20,841
19	MBTO	2013	Rp 13.271.205.197,00	23,309
		2014	Rp 12.666.728.251,00	23,262
		2015	Rp 17.008.060.024,00	23,557
		2016	Rp 19.998.926.131,00	23,719
		2017	Rp 20.509.864.995,00	23,744
20	MYOR	2013	Rp 21.822.000.000,00	23,806
		2014	Rp 17.448.000.000,00	23,582
		2015	Rp 18.211.000.000,00	23,625
		2016	Rp 20.643.000.000,00	23,751
		2017	Rp 19.710.000.000,00	23,704
21	MLBI	2013	Rp 33.095.000.000,00	24,223
		2014	Rp 38.293.000.000,00	24,369
		2015	Rp 39.851.000.000,00	24,408
		2016	Rp 51.597.000.000,00	24,667
		2017	Rp 34.976.000.000,00	24,278
22	ROTI	2013	Rp 26.747.089.633,00	24,010
		2014	Rp 22.232.758.888,00	23,825
		2015	Rp 42.081.137.226,00	24,463
		2016	Rp 51.839.046.306,00	24,671
		2017	Rp 41.034.430.231,00	24,438
23	ADMG	2013	Rp 5.035.068.687,00	22,340
		2014	Rp 2.741.738.680,00	21,732
		2015	Rp 1.604.192.960,00	21,196
		2016	Rp 1.860.254.508,00	21,344
		2017	Rp 1.927.744.920,00	21,380
24	PSDN	2013	Rp 9.541.884.463,00	22,979
		2014	Rp 10.472.531.134,00	23,072
		2015	Rp 11.313.714.098,00	23,149
		2016	Rp 11.860.929.130,00	23,197

		2017	Rp 11.555.985.219,00	23,170
25	PYFA	2013	Rp 2.475.306.112,00	21,630
		2014	Rp 4.161.374.720,00	22,149
		2015	Rp 3.688.291.585,00	22,028
		2016	Rp 4.511.790.383,00	22,230
		2017	Rp 5.411.968.067,00	22,412
26	HMSP	2013	Rp 94.400.000.000,00	25,271
		2014	Rp 107.900.000.000,00	25,404
		2015	Rp 113.600.000.000,00	25,456
		2016	Rp 123.000.000.000,00	25,535
		2017	Rp 98.500.000.000,00	25,313
27	UNVR	2013	Rp 62.303.000.000,00	24,855
		2014	Rp 61.891.000.000,00	24,849
		2015	Rp 58.736.000.000,00	24,796
		2016	Rp 66.940.000.000,00	24,927
		2017	Rp 83.776.000.000,00	25,151
28	AKPI	2013	Rp 14.030.500.000,00	23,364
		2014	Rp 14.327.000.000,00	23,385
		2015	Rp 14.423.000.000,00	23,392
		2016	Rp 15.575.900.000,00	23,469
		2017	Rp 16.089.100.000,00	23,501
29	KRAS	2013	Rp 61.968.876.000,00	24,850
		2014	Rp 65.521.480.000,00	24,906
		2015	Rp 60.491.075.000,00	24,826
		2016	Rp 60.784.464.000,00	24,831
		2017	Rp 61.182.768.000,00	24,837
30	NIKL	2013	Rp 5.911.665.000,00	22,500
		2014	Rp 5.448.720.000,00	22,419
		2015	Rp 5.637.630.240,00	22,453
		2016	Rp 4.672.597.412,00	22,265
		2017	Rp 4.233.059.052,00	22,166
31	ADES	2013	Rp 5.167.000.000,00	22,366
		2014	Rp 5.808.000.000,00	22,483
		2015	Rp 5.379.000.000,00	22,406
		2016	Rp 4.857.000.000,00	22,304
		2017	Rp 4.326.000.000,00	22,188
32	BRNA	2013	Rp 10.143.848.000,00	23,040
		2014	Rp 7.902.121.000,00	22,790
		2015	Rp 8.304.494.000,00	22,840
		2016	Rp 11.397.484.000,00	23,157
		2017	Rp 10.246.794.000,00	23,050

33	BTON	2013	Rp 2.035.151.650,00	21,434
		2014	Rp 2.500.694.584,00	21,640
		2015	Rp 2.620.579.828,00	21,687
		2016	Rp 2.240.009.721,00	21,530
		2017	Rp 2.854.466.906,00	21,772
34	BTEK	2013	Rp 225.000.000,00	19,232
		2014	Rp 6.000.000.000,00	22,515
		2015	Rp 4.500.000.000,00	22,227
		2016	Rp 9.000.000.000,00	22,920
		2017	Rp 9.000.000.000,00	22,920
35	TPIA	2013	Rp 43.685.376.000,00	24,500
		2014	Rp 55.718.760.000,00	24,744
		2015	Rp 51.441.555.000,00	24,664
		2016	Rp 59.494.608.000,00	24,809
		2017	Rp 102.395.784.000,00	25,352
36	CEKA	2013	Rp 3.848.227.800,00	22,071
		2014	Rp 6.208.142.500,00	22,549
		2015	Rp 10.167.697.600,00	23,042
		2016	Rp 10.481.673.400,00	23,073
		2017	Rp 9.476.389.600,00	22,972
37	EKAD	2013	Rp 4.500.000.000,00	22,227
		2014	Rp 4.800.000.000,00	22,292
		2015	Rp 5.200.000.000,00	22,372
		2016	Rp 5.873.878.030,00	22,494
		2017	Rp 6.711.074.337,00	22,627
38	ERTX	2013	Rp 836.750.472,00	20,545
		2014	Rp 477.148.640,00	19,983
		2015	Rp 211.573.915,00	19,170
		2016	Rp 169.374.216,00	18,948
		2017	Rp 65.545.224,00	17,998
39	GJTL	2013	Rp 98.087.000.000,00	25,309
		2014	Rp 129.466.000.000,00	25,587
		2015	Rp 136.819.000.000,00	25,642
		2016	Rp 134.566.000.000,00	25,625
		2017	Rp 147.013.000.000,00	25,714
40	GDYR	2013	Rp 16.066.247.766,00	23,500
		2014	Rp 15.415.672.880,00	23,459
		2015	Rp 17.558.165.640,00	23,589
		2016	Rp 21.061.050.924,00	23,771
		2017	Rp 20.502.093.564,00	23,744
41	BRAM	2013	Rp 8.500.000.000,00	22,863

		2014	Rp 8.500.000.000,00	22,863
		2015	Rp 12.700.000.000,00	23,265
		2016	Rp 12.700.000.000,00	23,265
		2017	Rp 16.000.000.000,00	23,496
42	IMAS	2013	Rp 13.436.629.117,00	23,321
		2014	Rp 14.133.137.701,00	23,372
		2015	Rp 13.095.478.999,00	23,296
		2016	Rp 14.597.219.456,00	23,404
		2017	Rp 17.357.356.507,00	23,577
43	INDR	2013	Rp 2.679.190.956,00	21,709
		2014	Rp 11.444.103.360,00	23,161
		2015	Rp 12.135.971.915,00	23,219
		2016	Rp 21.902.292.320,00	23,810
		2017	Rp 27.353.601.672,00	24,032
44	INDS	2013	Rp 11.953.997.828,00	23,204
		2014	Rp 13.719.384.130,00	23,342
		2015	Rp 14.510.079.216,00	23,398
		2016	Rp 16.222.560.182,00	23,510
		2017	Rp 16.889.269.334,00	23,550
45	KBLM	2013	Rp 2.800.000.000,00	21,753
		2014	Rp 1.900.000.000,00	21,365
		2015	Rp 2.100.000.000,00	21,465
		2016	Rp 2.090.000.000,00	21,460
		2017	Rp 2.710.000.000,00	21,720
46	KBLI	2013	Rp 7.974.332.230,00	22,799
		2014	Rp 10.757.647.385,00	23,099
		2015	Rp 14.263.223.700,00	23,381
		2016	Rp 14.478.564.798,00	23,396
		2017	Rp 18.641.879.872,00	23,649
47	TCID	2013	Rp 17.000.000.000,00	23,556
		2014	Rp 24.000.000.000,00	23,901
		2015	Rp 27.000.000.000,00	24,019
		2016	Rp 27.000.000.000,00	24,019
		2017	Rp 32.000.000.000,00	24,189
48	MERK	2013	Rp 16.128.000.000,00	23,504
		2014	Rp 13.141.000.000,00	23,299
		2015	Rp 12.162.000.000,00	23,222
		2016	Rp 15.163.000.000,00	23,442
		2017	Rp 18.161.000.000,00	23,623
49	MASA	2013	Rp 54.495.568.509,00	24,721
		2014	Rp 52.471.696.080,00	24,684

		2015	Rp	55.010.887.095,00	24,731
		2016	Rp	63.112.251.000,00	24,868
		2017	Rp	65.592.194.916,00	24,907
50	PBRX	2013	Rp	15.229.216.947,00	23,446
		2014	Rp	16.021.102.800,00	23,497
		2015	Rp	22.722.034.195,00	23,847
		2016	Rp	26.408.269.896,00	23,997
		2017	Rp	32.143.239.660,00	24,193
51	RICY	2013	Rp	2.181.414.600,00	21,503
		2014	Rp	2.608.214.450,00	21,682
		2015	Rp	2.608.214.450,00	21,682
		2016	Rp	2.635.855.612,00	21,692
		2017	Rp	2.635.855.612,00	21,692
52	BAJA	2013	Rp	3.757.123.100,00	22,047
		2014	Rp	3.647.600.000,00	22,017
		2015	Rp	3.897.400.000,00	22,084
		2016	Rp	4.058.050.000,00	22,124
		2017	Rp	4.562.850.000,00	22,241
53	PTSN	2013	Rp	15.565.304.244,00	23,468
		2014	Rp	13.778.158.360,00	23,346
		2015	Rp	13.529.087.580,00	23,328
		2016	Rp	16.758.171.924,00	23,542
		2017	Rp	19.395.005.196,00	23,688
54	SKLT	2013	Rp	1.380.421.000,00	21,046
		2014	Rp	1.890.900.000,00	21,360
		2015	Rp	2.111.125.000,00	21,470
		2016	Rp	2.391.500.000,00	21,595
		2017	Rp	2.608.150.000,00	21,682
55	SMSM	2013	Rp	40.617.000.000,00	24,427
		2014	Rp	44.904.000.000,00	24,528
		2015	Rp	27.400.000.000,00	24,034
		2016	Rp	29.019.000.000,00	24,091
		2017	Rp	55.522.000.000,00	24,740
56	SMGR	2013	Rp	67.399.810.000,00	24,934
		2014	Rp	81.328.921.000,00	25,122
		2015	Rp	91.632.377.000,00	25,241
		2016	Rp	71.436.355.000,00	24,992
		2017	Rp	99.372.379.000,00	25,322
57	STTP	2013	Rp	2.239.732.766,00	21,530
		2014	Rp	2.510.101.605,00	21,644
		2015	Rp	3.369.180.900,00	21,938

		2016	Rp	3.608.919.759,00	22,007
		2017	Rp	3.767.332.100,00	22,050
58	SIDO	2013	Rp	15.678.000.000,00	23,476
		2014	Rp	27.208.000.000,00	24,027
		2015	Rp	29.688.000.000,00	24,114
		2016	Rp	21.582.000.000,00	23,795
		2017	Rp	24.613.000.000,00	23,927
59	SIPD	2013	Rp	17.983.000.000,00	23,613
		2014	Rp	21.351.347.447,00	23,784
		2015	Rp	14.945.944.000,00	23,428
		2016	Rp	11.905.481.799,00	23,200
		2017	Rp	10.920.000.000,00	23,114
60	IKBI	2013	Rp	4.900.672.773,00	22,313
		2014	Rp	6.823.016.560,00	22,644
		2015	Rp	7.566.198.830,00	22,747
		2016	Rp	5.724.663.084,00	22,468
		2017	Rp	5.860.918.992,00	22,492
61	SPMA	2013	Rp	3.874.988.425,00	22,078
		2014	Rp	4.393.043.831,00	22,203
		2015	Rp	4.759.500.000,00	22,283
		2016	Rp	5.207.400.000,00	22,373
		2017	Rp	5.742.100.000,00	22,471
62	TSPC	2013	Rp	28.100.000.000,00	24,059
		2014	Rp	29.600.000.000,00	24,111
		2015	Rp	31.900.000.000,00	24,186
		2016	Rp	32.800.000.000,00	24,214
		2017	Rp	34.100.000.000,00	24,253
63	TKIM	2013	Rp	15.845.700.000,00	23,486
		2014	Rp	16.918.400.000,00	23,552
		2015	Rp	14.622.700.000,00	23,406
		2016	Rp	15.451.400.000,00	23,461
		2017	Rp	12.328.680.000,00	23,235
64	AISA	2013	Rp	13.035.000.000,00	23,291
		2014	Rp	25.781.000.000,00	23,973
		2015	Rp	36.249.000.000,00	24,314
		2016	Rp	55.596.000.000,00	24,741
		2017	Rp	69.363.000.000,00	24,963
65	TRIS	2013	Rp	2.114.415.614,00	21,472
		2014	Rp	1.647.647.174,00	21,223
		2015	Rp	1.625.520.143,00	21,209
		2016	Rp	1.841.353.887,00	21,334

Appendix 5: Ownership Concentration Data

No.	Company Code	Ownership Structure				
		2013	2014	2015	2016	2017
1	ARNA	50.4%	54.83%	48.09%	51.29%	51.3%
2	GDST	50.11%	50.11%	50.11%	50.11%	50.11%
3	IGAR	84.82%	84.82%	84.82%	84.82%	84.82%
4	CTBN	82.45%	82.45%	88.69%	88.68%	88.68%
5	DVLA	92.66%	93%	93%	92.46%	92.46%
6	DPNS	72.13%	65.35%	65.58%	65.58%	65.77%
7	FASW	75.74%	74.74%	74.91%	84.77%	86.21%
8	GGRM	75.55%	75.55%	75.55%	75.55%	75.55%
9	INKP	52.72%	52.72%	52.72%	52.72%	52.72%
10	INAF	80.66%	80.66%	87.12%	87.12%	87.72%
11	INTP	64.03%	64.03%	64.02%	51%	51%
12	ICBP	80.53%	80.53%	80.53%	80.53%	80.53%
13	JPFA	57.51%	57.51%	57.84%	62.98%	62.98%
14	KLBF	56.71%	56.71%	56.68%	56.5%	56.77%
15	KICI	83.06%	83.06%	83.06%	83.06%	83.36%
16	KBRI	33.22%	75%	75%	75%	75%
17	KAEF	90.02%	90.02%	90.02%	90.02%	90.02%
18	FPNI	95.15%	95.15%	95.15%	90.4%	90.4%
19	MBTO	66.82%	66.82%	66.82%	66.82%	66.82%
20	MYOR	32.93%	32.93%	32.93%	84.29%	84.29%
21	MLBI	83.67%	81.78%	81.78%	81.78%	81.78%
22	ROTI	66.5%	66.5%	66.5%	65.12%	70.28%
23	ADMG	76.17%	76.17%	85.5%	85.5%	85.5%
24	PSDN	91.02%	91.02%	91.02%	83.5%	83.25%
25	PYFA	76.07%	76.07%	76.07%	76.07%	76.07%
26	HMSP	98.18%	98.18%	92.5%	92.5%	92.5
27	UNVR	85%	85%	85%	85%	85%
28	AKPI	65.13%	65.13%	65.13%	65.13%	83.85%
29	KRAS	80%	80%	80%	80%	80%
30	NIKL	80.55%	80.55%	80.55%	93.37%	80.55%
31	ADES	91.94%	91.94%	91.94%	91.52%	91.52%
32	BRNA	60.84%	58.62%	60.09%	70.06%	70.06%
33	BTON	89%	89%	89%	89%	89%
34	BTEK	50.03%	42.07%	23.66%	73.47%	73.47%
35	TPIA	90.64%	90.64%	90.63%	90.64%	86.83%
36	CEKA	82.48%	88.72%	88.72%	88.68%	88.68%
37	EKAD	75.45%	75.45%	75.45%	75.45%	76.81%

38	ERTX	86.85%	88.38%	92.38%	95.38%	95.38%
39	GJTL	59.70%	59.50%	59.51%	59.51%	59.51%
40	GDYR	94.04%	94.04%	94.17%	92.09%	92.09%
41	BRAM	89.74%	89.74%	89.74%	89.74%	89.74%
42	IMAS	89.54%	89.54%	89.54%	89.54%	89.54%
43	INDR	57.18%	57.18%	56.23%	56.23%	51.71%
44	INDS	88.11%	88.11%	88.11%	88.11%	88.11%
45	KBLM	89.25%	89.25%	91.34%	91.34%	90.48%
46	KBLI	73.72%	58.38%	58.38%	58.38%	58.38%
47	TCID	76%	76%	73%	73%	73%
48	MERK	86.65%	86.65%	86.65%	86.65%	86.65%
49	MASA	52.8%	58.9%	58.9%	56.3%	62.7%
50	PBRX	46.19%	60.41%	51.6%	53.15%	47.84%
51	RICY	48.14%	48.14%	48.14%	48.14%	53.51%
52	BAJA	73.93%	73.93%	73.93%	73.93%	73.93%
53	PTSN	66.47%	66.47%	66.47%	66.47%	66.47%
54	SKLT	96.09%	96.09%	96.09%	83.83%	84.72%
55	SMSM	58.13%	58.13%	58.13%	58.13%	58.13%
56	SMGR	51.01%	51.01%	51.01%	51.01%	51.01%
57	STTP	56.76%	56.76%	56.76%	56.76%	56.76%
58	SIDO	81%	82%	82%	82%	82%
59	SIPD	41.44%	41.44%	57.27%	84.22%	85.24%
60	IKBI	93.06%	93.06%	93.06%	92.2%	92.2%
61	SPMA	80.5%	74.2%	78.13%	75.64%	83.44%
62	TSPC	77.34%	77.52%	78.16%	78.42%	78.92%
63	TKIM	60%	60%	60%	60%	64%
64	AISA	60.32%	66.29%	67.22%	67.22%	66.58%
65	TRIS	69.82%	67.07%	66.95%	66.95%	67.58%
66	UNIC	79.01%	79.01%	79.01%	68.9%	69.04%
67	YPAS	89.82%	89.82%	89.82%	89.82%	89.82%
68	ETWA	55.9%	55.9%	55.9%	55.9%	55.9%
69	TOTO	96.2%	96.2%	92.36%	92.36%	92.36%

Appendix 6: Company's Risk-taking Data

No.	Company Code	Company's Risk-Taking				
		2013	2014	2015	2016	2017
1	ARNA	10,19%	10,19%	10,19%	10,19%	10,19%
2	GDST	5,87%	5,87%	5,87%	5,87%	5,87%
3	IGAR	2,81%	2,81%	2,81%	2,81%	2,81%
4	CTBN	6,63%	6,63%	6,63%	6,63%	6,63%
5	DVLA	6,17%	6,17%	6,17%	6,17%	6,17%
6	DPNS	7,42%	7,42%	7,42%	7,42%	7,42%
7	FASW	3,53%	3,53%	3,53%	3,53%	3,53%
8	GGRM	1,90%	1,90%	1,90%	1,90%	1,90%
9	INKP	2,03%	2,03%	2,03%	2,03%	2,03%
10	INAF	5,68%	5,68%	5,68%	5,68%	5,68%
11	INTP	6,33%	6,33%	6,33%	6,33%	6,33%
12	ICBP	6,27%	6,27%	6,27%	6,27%	6,27%
13	JPFA	5,70%	5,70%	5,70%	5,70%	5,70%
14	KLBF	1,85%	1,85%	1,85%	1,85%	1,85%
15	KICI	4,22%	4,22%	4,22%	4,22%	4,22%
16	KBRI	5,04%	5,04%	5,04%	5,04%	5,04%
17	KAEF	0,73%	0,73%	0,73%	0,73%	0,73%
18	FPNI	7,30%	7,30%	7,30%	7,30%	7,30%
19	MBTO	2,57%	2,57%	2,57%	2,57%	2,57%
20	MYOR	3,68%	3,68%	3,68%	3,68%	3,68%
21	MLBI	6,47%	6,47%	6,47%	6,47%	6,47%
22	ROTI	4,98%	4,98%	4,98%	4,98%	4,98%
23	ADMG	3,61%	3,61%	3,61%	3,61%	3,61%
24	PSDN	5,63%	5,63%	5,63%	5,63%	5,63%
25	PYFA	0,67%	0,67%	0,67%	0,67%	0,67%
26	HMSP	7,30%	7,30%	7,30%	7,30%	7,30%
27	UNVR	3,21%	3,21%	3,21%	3,21%	3,21%
28	AKPI	1,13%	1,13%	1,13%	1,13%	1,13%
29	KRAS	2,52%	2,52%	2,52%	2,52%	2,52%
30	NIKL	4,68%	4,68%	4,68%	4,68%	4,68%
31	ADES	6,93%	6,93%	6,93%	6,93%	6,93%
32	BRNA	5,93%	5,93%	5,93%	5,93%	5,93%
33	BTON	7,87%	7,87%	7,87%	7,87%	7,87%
34	BTEK	1,46%	1,46%	1,46%	1,46%	1,46%
35	TPIA	8,27%	8,27%	8,27%	8,27%	8,27%
36	CEKA	5,87%	5,87%	5,87%	5,87%	5,87%
37	EKAD	7,68%	7,68%	7,68%	7,68%	7,68%

38	ERTX	4,70%	4,70%	4,70%	4,70%	4,70%
39	GJTL	2,29%	2,29%	2,29%	2,29%	2,29%
40	GDYR	0,90%	0,90%	0,90%	0,90%	0,90%
41	BRAM	4,81%	4,81%	4,81%	4,81%	4,81%
42	IMAS	0,92%	0,92%	0,92%	0,92%	0,92%
43	INDR	1,28%	1,28%	1,28%	1,28%	1,28%
44	INDS	5,33%	5,33%	5,33%	5,33%	5,33%
45	KBLM	3,95%	3,95%	3,95%	3,95%	3,95%
46	KBLI	4,87%	4,87%	4,87%	4,87%	4,87%
47	TCID	2,56%	2,56%	2,56%	2,56%	2,56%
48	MERK	2,85%	2,85%	2,85%	2,85%	2,85%
49	MASA	1,41%	1,41%	1,41%	1,41%	1,41%
50	PBRX	2,08%	2,08%	2,08%	2,08%	2,08%
51	RICY	2,04%	2,04%	2,04%	2,04%	2,04%
52	BAJA	3,01%	3,01%	3,01%	3,01%	3,01%
53	PTSN	3,24%	3,24%	3,24%	3,24%	3,24%
54	SKLT	2,06%	2,06%	2,06%	2,06%	2,06%
55	SMSM	2,30%	2,30%	2,30%	2,30%	2,30%
56	SMGR	6,42%	6,42%	6,42%	6,42%	6,42%
57	STTP	1,52%	1,52%	1,52%	1,52%	1,52%
58	SIDO	0,81%	0,81%	0,81%	0,81%	0,81%
59	SIPD	3,81%	3,81%	3,81%	3,81%	3,81%
60	IKBI	2,43%	2,43%	2,43%	2,43%	2,43%
61	SPMA	3,45%	3,45%	3,45%	3,45%	3,45%
62	TSPC	1,94%	1,94%	1,94%	1,94%	1,94%
63	TKIM	0,29%	0,29%	0,29%	0,29%	0,29%
64	AISA	7,85%	7,85%	7,85%	7,85%	7,85%
65	TRIS	2,53%	2,53%	2,53%	2,53%	2,53%
66	UNIC	3,34%	3,34%	3,34%	3,34%	3,34%
67	YPAS	1,29%	1,29%	1,29%	1,29%	1,29%
68	ETWA	6,68%	6,68%	6,68%	6,68%	6,68%
69	TOTO	3,88%	3,88%	3,88%	3,88%	3,88%

Appendix 7: Descriptive Statistics Test Result

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
COMP(X1)	345	18.00	26.37	23.2426	1.33893
OWN(X2)	345	.2366	.9818	.748601	.1514725
ACS(X3)	345	2.00	6.00	3.1130	.43332
BODS(X4)	345	2.00	16.00	5.2435	2.48925
RISK(Y)	345	.00288	.10188	.0401386	.02309722
Valid N (listwise)	345				

Appendix 8: Multiple Linear Regression Result

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	BODS(X4), OWN(X2), ACS(X3), COMP(X1) ^b		Enter

a. Dependent Variable: RISK(Y)

b. All requested variables entered.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.007	4	.002	3.177	.014 ^b
	Residual	.177	340	.001		
	Total	.184	344			

a. Dependent Variable: RISK(Y)

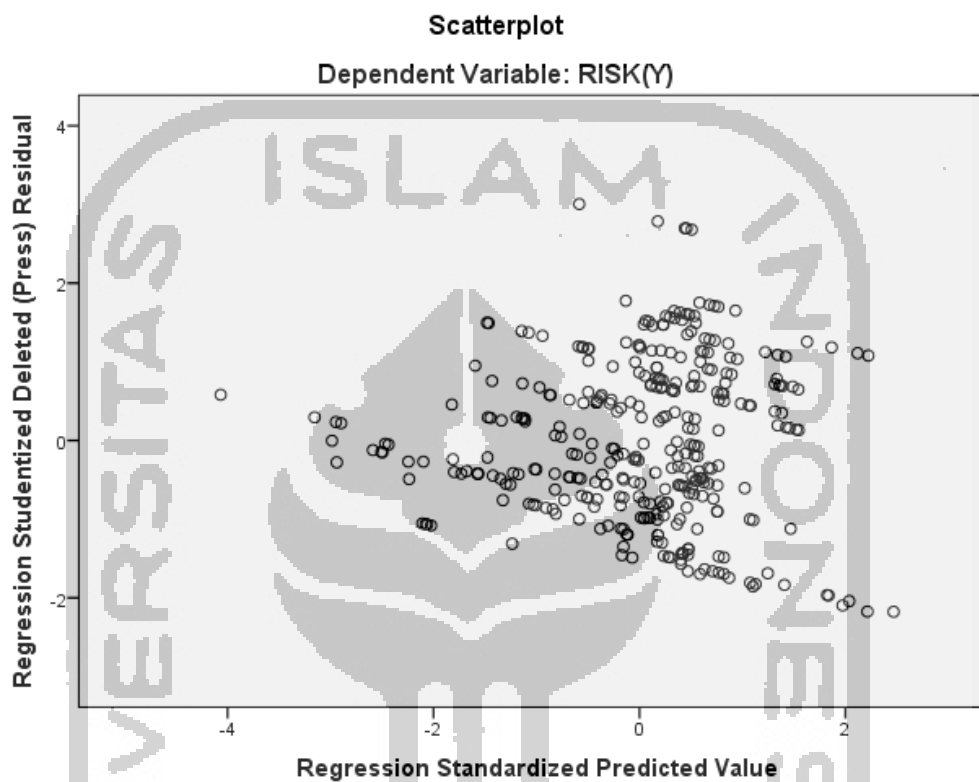
b. Predictors: (Constant), BODS(X4), OWN(X2), ACS(X3), COMP(X1)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.023	.028		-.851	.395
	COMP(X1)	.002	.001	.144	2.172	.031
	OWN(X2)	.021	.008	.140	2.579	.010
	ACS(X3)	-.001	.003	-.013	-.246	.806
	BODS(X4)	-.002	.001	-.164	-2.523	.012

a. Dependent Variable: RISK(Y)

Appendix 9: Heteroscedasticity Test Result



Appendix 10: Coefficient Determination (R^2) Result

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.309 ^a	.095	.085	2.20959248	1.920

a. Predictors: (Constant), BODS(X4), OWN(X2), ACS(X3), COMP(X1)

b. Dependent Variable: RISK(Y)

Appendix 11: Summary of Normality Test Result

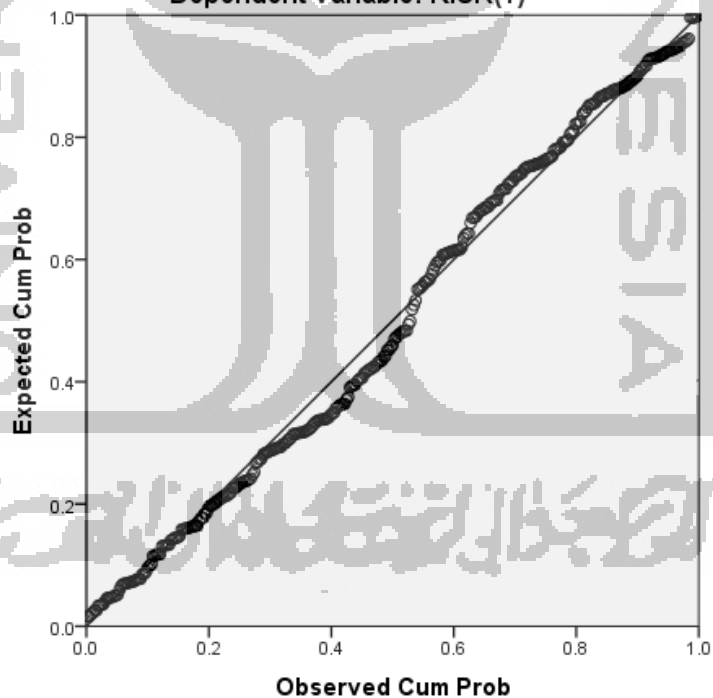
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		345
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	2.21249787
Most Extreme Differences	Absolute	.060
	Positive	.060
	Negative	-.040
Kolmogorov-Smirnov Z		1.115
Asymp. Sig. (2-tailed)		.166

a. Test distribution is Normal.

b. Calculated from data.

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: RISK(Y)



Appendix 12: Summary of Multicollinearity Test Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.023	.028		-.851	.395		
1 COMP(X1)	.002	.001	.144	2.172	.031	.645	1.550
OWN(X2)	.021	.008	.140	2.579	.010	.956	1.046
ACS(X3)	-.001	.003	-.013	-.246	.806	.974	1.027
BODS(X4)	-.002	.001	-.164	-2.523	.012	.673	1.486

a. Dependent Variable: RISK(Y)

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.0262147	.0493932	.0401386	.00438445	345
Std. Predicted Value	-3.176	2.111	.000	1.000	345
Standard Error of Predicted Value	.001	.008	.003	.001	345
Adjusted Predicted Value	.0262595	.0493249	.0401129	.00444432	345
Residual	-.03964250	.07326156	0E-8	.02267726	345
Std. Residual	-1.738	3.212	.000	.994	345
Stud. Residual	-1.753	3.258	.001	1.002	345
Deleted Residual	-.04050521	.07540099	.00002572	.02303932	345
Stud. Deleted Residual	-1.759	3.306	.001	1.005	345
Mahal. Distance	.195	45.423	3.988	4.446	345
Cook's Distance	.000	.062	.003	.007	345
Centered Leverage Value	.001	.132	.012	.013	345

a. Dependent Variable: RISK(Y)