The Role of Risk and Sustainability Management in the Effects of Corporate Governance on Firm Value

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ABSTRACT: This study analyzes both of directly effects between corporate governance on firm value and indirectly effect through enterprise risk management and sustainability management. Subjects of this study were all the manufacture company listed in Indonesia Stock Exchange (IDX). Based on population criteria stated previously the total population was 24 companies. Result of this study reveal that improving corporate governance would led to increased enterprise risk management, sustainability management, and firm value. In the other hand, enterprise risk management have inversely effect on firm value and sustainability management have no significant effect on firm value. Enterprise risk management have negative mediating role in effect of corporate governance on firm value, otherwise sustainability are not. The study also make categorization for each index of Corporate Governance (CG), Enterprise Risk Management (ERM), and Sustainability Management (SM) and compare it with same sector industry and overall industry in manufacture with categories “above” and “below” rate. The quality of CG, ERM, and SM practices in each manufacture companies have been improved during 2011 to 2013 period. The finding show that the bigger companies with market categorization up to IDR 90 trillion which have above rate category doing the better implementation of CG and ERM than the companies which have market capitalization less to IDR 90 trillion, but it was not for their SM implementation. Results and findings of the study are discussed with suggestion for future research, which include the need of developing proxy in conceptual model analyzed and using the market capitalization based on its criterion.

Keywords: Corporate Governance, Enterprise Risk Management, Sustainability Management, Firm Value

I. INTRODUCTION

Every company in business generally has its own desire to grow and develop, in search of their competitive advantage. Companies’ objective commonly known to maximize prosperity of owners or shareholders which are realized by maximizing firm value (Gilman and Zutter, 2012). For companies listed on stock exchange, their firm value reflected in its stock price. The higher stock price will enhance firm value (Husnan, 2008). Firm value could increase prosperity for shareholders, so they willing to invest more for companies (Haruman, 2008). Higher firm value will have an impact on market trust, not only on the company's performance present, but also on the company's prospects in the future. In principle, a manager appointed by company must act regarding to shareholder interests. However, in practice the management as like managers has interest's contrary with shareholders. Divergence of interests between managers and shareholders have resulted in the emergence of conflict is commonly called agency conflict or agency problems. In addition agency problem is caused by the asymmetric information. This is a situation where the manager has access to information on the company's prospects are not owned by outside parties (Rahmawati, et al. 2006). Asymmetric information reflects imbalance of information held by the shareholder as a principal and manager as an agent. This is how urgency of principal needs to create a system to monitor the performance of agent arise to run business in accordance with shareholders expectations. One way to monitor agency problem and opportunistic managers is corporate governance (Watts, 2003). This is a control mechanism to regulate and manage business with a schematic view in order to improving prosperity and corporate accountability, which its ultimate objective to create shareholders value (Lastanti, 2005).

There are growing awareness and concern to equitable efforts implementation of Good Corporate Governance (GCG) principles in Indonesia. Enforcement of laws or regulations by government and other stakeholder relating to the implementation of corporate governance principles are binding solution (regulatory...
driven) and force to any legal entity about enterprise. In addition, Indonesian government also increasing awareness for good governance in public sector, since implementation of GCG could not be realized without moral awareness and community participation.

Guidelines for GCG implementation in Indonesia refer to five principles, which are: Transparency, Accountability, Responsibility, Independency and Fairness. These principles are adopting OECD principles (Organization for Economic Corporation and Development), and it contains basic principles and guidelines for good corporate governance implementation, as well as a minimum standard to be specified in the sector guidelines issued by the NCG. In addition relating to agency theory, GCG implementation is also associated with signaling theory. Generally companies are using signaling theory to publish GCG implementation in order to create good reputation so that it would increase firm value (Andarini and Indira, 2010). One of signaling given by the company in GCG implementation is the application of effective risk management. Companies that recognize and address their risks, will gain a competitive edge in the long term (Lipworth, 1997), which contribute in keeping stakeholders get their rights respectively. It because of risk management system designed properly will ensure all activity in which risks are evaluated by managers and workers who are responsible (Nocco and Stulz, 2006).

In accordance with organizational paradigm change and increasing levels of complexity faced by companies, there is growing recognition about the need in managing those companies’ risks which are higher nowadays. What lies behind is the emergence of evolitional concept of risk management that changing approach from Traditional Risk Management (TRM) into Enterprise Risk Management (ERM). TRM manage risks partially (silo-based) and its purpose is limited to risk mitigation that is only on a specific activity or business unit. While ERM is a comprehensive, integrated, and cross-divisional, which has a strategic goal for achieving of corporate goals better, as well as creating, adding, or to protect company value. Banham (2003) states that TRM need accounting skills, while ERM requires strategic planning, innovation and marketing skills. It could be stated that ERM has more advantages over TRM, because it does not only manage risk at any moment based on decentralization, but rather on a systematic and constant.

Enterprise Risk Management (ERM) as an approach to risk management (integrated risk management) enable management to deal effectively with uncertainty associated about company’s risks and opportunities, as well as increasing capacity to build firm value (COSO, 2004). ERM implementation has a positive impact on firm value, because it would be seen as a value driver instead of cost (Bertinetti, et al. 2013). Schoeck (2002) also explained that the application of risk management reduce agency costs and enhance shareholder value. The one framework that is widely recognized and used about considering ERM is the Committee of Sponsoring Organizations (COSO) through ERM-Integrated Framework which issued in September 2004. The framework developed by COSO has become a leader since 2004 until today. COSO framework has been widely adopted, implemented and applied by many firms in Indonesia, because the framework integrates all aspects of company. ERM-Integrated Framework helps an entity to be directed where and avoid the risks of unanticipated or visible and shocks that affect value creation (Schoeck, 2002).

Beside of ERM implementation, the signal given by company from the implementation of GCGis the sustainability management. Sustainability management is a company ability to achieve business objectives and improve long-term value for shareholders by integrating all of economic, social and environmental considerations into its business strategy (Pujiastruti, 2013). According to Gray and Milne (2002) emphasize sustainability not only the efficient allocation of resources over time, but also a fair distribution of resources between the current generation and future generations. Three major key in implementing corporate sustainability management can be done by integrating the economic, social and environmental, known as the Triple Bottom Line (Dyllick and Hockerts, 2002). The concept of 3P (Triple Bottom Line) is considered as a key pillar in building a sustainable business, as well as to achieve sustainable development.

One guideline used to measure sustainability management is the Global Reporting Initiative (GRI). GRI is a non-profit organization aiming to promote sustainability reporting and Environmental, Social and Governance (ESG). GRI sustainability reporting framework is the most widely used around the world in order to encourage greater transparency. The reports are known as Ecological Footprint reporting, Environmental Social Governance (ESG) reporting, Triple Bottom Line (TBL) reporting, and Corporate Social Responsibility (CSR) reporting.

Based on explanation above, the existence of corporate governance practices are not only intend to monitor internal problems from agency’s conflicts between manager (agency) and owner (principal), but also to influence external conditions of company through signal positive. The implementation of corporate governance principles has been well-managed and transparent, as well as providing benefits to all stakeholders. GCG in a company also set up the leadership to maximize the shareholders value legally, ethically and sustainably, and also ensuring fairness and transparency for all stakeholders (Shill, 2008). Regarding the transparency principle of corporate governance, the applicability of ERM and sustainability management in companies should be published. Usually the publication of corporate governance implementation has been done by a
Studies about the effect of corporate governance implementation on enterprise risk management and sustainability management implementation has been done by some previous authors such as Meizaroh and Lucyanda (2011); Idah (2013); Sari and Marsono (2013); and Wijananti (2015). Meizaroh and Lucyanda (2011); and Wijananti (2015) have studied the influence of corporate governance on ERM. Sari and Marsono (2013), by using measurements of Corporate Governance Perception Index (CGPI), has found that the score CGPI have significant effect on ERM. While Meizaroh and Lucyanda (2011) and Wijananti (2015) using the measurement of corporate governance mechanism has shown results that are not consistent with others work. Wijananti (2015) found that board size could affect ERM, but contrary to that, Meizaroh and Lucyanda (2011) did not find that board size of commissioner has significant effect on ERM. Furthermore, findings shown that the presence of Risk Management Committee (RMC), reputation of the auditor, and ownership concentration have significant effect on the ERM, while the independent directors have no significant effect on the ERM.

The effect of corporate governance on sustainability management has been reviewed by Idah (2013) and Sari and Marsono (2013). By using measurements of corporate governance mechanisms, Idah (2013) found a positive effect of board of directors and governance committee on sustainability management, while Sari and Marsono (2013) did not find any significant effect of board of directors on sustainability management. Furthermore, Idah (2013) also found that the board of directors and audit committee has no effect on sustainability management. Otherwise Sari and Marsono (2013) found audit committee and independent board has a positive effect on sustainability management. Qualitative research is also done by Aras and David (2008); found that majority of companies which implement GCG claimed good governance policies related to CSR practices.

Previous studies about the effect of corporate governance on firm value also reviewed by some previous authors, either directly or indirectly through the implementation of enterprise risk management and sustainability management practices. The direct effect between corporate governance on firm value has found a positive influence by Bertholot, et al. (2010); Indarti and Ex talliyus (2013); Siagian, et al. (2013); and Mishra and Pitabas (2014). Otherwise, Gupta et al. (2009) has found a negative influence among corporate governance on firm value. Different results are also shown in the effect of ERM on firm value. Bertinetti, et al. (2013) found a positive influence between the ERM and firm value, while Tseng (2007), Ballantyne (2013), as well as Sanjaya and Linawati (2015) found negative effect between ERM and firm value. Another work done by McShane, et al. (2011) also found an increasingly firm value on TRM implementation, but did not find any increasing firm value on ERM implementation.

Sustainability management influence on firm value has been found to be significant by Bartlett (2012) and Gherghina, et al. (2015). Specifically Lioui and Sharma (2012) have found a negative influence of sustainability management on firm value. Rafika and Husaini (2012) found that ERM does not mediate effect of corporate governance on firm value. Badriyah, et al. (2015) found mediating role of ERM in the effect of corporate governance and company size and firm performance. Another study have explain about effect of corporate governance on firm value with sustainability management or CSR as a mediating variable, such as Amanti (2012) as well as Purbopangestu and Subowo (2014). In their study findings show that CSR does not moderate or mediate the effect of corporate governance on firm value. Sitorus, et al. (2013) found the mediating role of CSR in the effect of corporate governance on firm value.

Several studies about direct and indirect effect of corporate governance, ERM, sustainability management, on firm value showed inconsistent results. Difference results of these studies due to there was different measurements models of each variable. This indicates a research gap, which became one of relationships pattern or direct and indirect effect of corporate governance, ERM, sustainability management on firm value, using the relevant and more comprehensive measurement models. This research was build in integrative and broader models, through models development from previous studies which has been done such as by Tseng (2007), Gupta, et al. (2009), McShane, et al. (2011), Meizaroh and Lucyanda (2011), Bartlett (2012), Rafika and Husaini (2012), Amanti (2012), Idah (2013), Siagian, et al. (2013), Sitorus, et al. (2013), Purbopangestu and Subowo (2014), Badriyah, et al. (2015), Sanjaya and Nanik (2015), and Wijananti (2015). Most research about corporate governance, ERM, and sustainability management among them has been done from an accounting perspective. Therefore, this study tries to analyze and assess firm value from a management perspective, using index measurement method of corporate governance, ERM, and sustainability management as well as ratio of firm value. Expected result is more comprehensive and representative.

There are independent institutions like the Indonesian Institute for Corporate Governance (IICG) which has assessed the implementation of corporate governance, but only very few public companies (listed on the Stock Exchange) who become participants of IICG, especially manufacturing companies. Based on these assumptions, corporate governance index used in this study based on assessment framework developed by
Organization of Economic Cooperation and Development (OECD). Corporate governance framework based on OECD principles has been widely recognized around the world and usually used as basis for developing corporate governance guidelines in Indonesia.

Determination of enterprise risk management index used in this study based on the COSO-Integrated Framework, which is an integrated risk management covering all the risks both from internal and external environment. The COSO ERM-Integrated Framework has been recognized internationally and has been widely adopted by companies in Indonesia. Furthermore, decision to choose sustainability management indexin this study is based on Global Reporting Initiative (GRI) guidelines, in which guidelines is sustainability reporting for companies implementing sustainability management. The latest guidelines that issued by GRI is a fourth generation (GRI-G.4). Because of these guidelines are still new and not many companies are implementing it presently, this study used previous reporting guidelines, the GRI-3.1. Findings of this study will be able to give information about how implementation of corporate governance could have an impact, either directly or indirectly to the firm value through ERM and sustainability management practices applied by companies listed on Indonesian Stock Exchange in period of 2011 till 2014. In this paper we also examine what factors predict firm value in emerging markets. However, we do this in a different way than the previously mentioned papers.

II. THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The hypothesis we want to test is that certain corporate governance would have an important role in determining changes in firm value through enterprise risk management and sustainability management. In this section, several concept of theory related to corporate governance and other explanatory variables are discussed below.

Agency theory

Jensen and Meckling (1976) define agency theory as the relationship between agent and principal. In the agency relationship there is a contract in which parties would govern another parties to give a service on behalf of principal. What would authorized agent to do is how to make best decisions for principal. The successful company is ultimately regarded as in the best managed especially about managing interest of all parties. Perspective of agency relationship is basic premises used to understand concept of corporate governance. Agency theory used to explain separation between companies ownership and management that could increase agency problems, which mainly consist of misalignment of interests between the principal and the agent. The agency problem can be minimized through a monitoring mechanism that aims to align various interests of principal and agent.

The linkage between agency theory to risk management demonstrated by Schoeck (2002) in which his study stated that risk management can reduce agency costs and enhance shareholder value. Otherwise, enterprise risk management can also be used as a surveillance mechanism in reducing asymmetric information and contribute in avoiding opportunistic behavior of managers (Kajuter, et al., 2005). Relations of sustainability management and agency theory demonstrated through the practice of corporate social responsibility (CSR). Agency theory could explain the conflict of interest between the manager (agent) and the owner (principal), and CSR practice have its aim to maximize benefit and minimize hazardous effect of company’s action. The owners want to know all of information from company including management activities and other matters related to investments or funding in company. This could be done by using standardized reports required of manager’s performance, and another organizational performance indicators.

Signalling theory

Signaling theory describe about signals of information needed by investors to consider and determine whether the investors will invest their shares or not to the company they are concerned (Swardjono, 2005). Signaling theory also emphasizes the importance of information released by the company's about investment decisions outside the company. According to Jogiyanto (2000: 392), company information published as an announcement will give a signal to investors in making decisions about investment. If announcement contains a positive value, it is expected that stock exchange market will react better. In general, company uses the signaling theory to publish GCG implementation in order to create a good reputation as to increase firm value (Andarini and Indira, 2010). In addition, company also competes with complex enterprise systems and trying hard to improve their quality inspite of facing risky situation.

Companies that implement GCG have to publish sustainability management, both in order to provide a signal to stakeholders about company's concern in considerate social and environmental matters as well as the signals sent by the management to public about future good prospects and creation of a sustainability development (Laksmitaningrum, 2013). Thus, finally it will directly affect the company’s image and reputation and even its market value (Toms, et al., 2011).
Firm Value

According Husnan (2008) firm value is the price that is willing to be paid by prospective buyer if company is sold. According to Martin et al. (2000) company's value is the value or prevailing market price of the shares issued by public companies. In the long term, company's goal is to optimize firm value. Higher firm value will led high prosperity of shareholders (Husnan, 2008). Higher firm value will also make the shareholders believe not only on company's performance today, but also on company's future prospects.

Firm value is usually measured using financial ratios, which the ratio may provide an indication for the management of investors' assessment of the company's past performance and future prospects. One of alternatives used in the company evaluation is Tobin's Q ratio which considered by shareholders in provide most financial information needed. This ratio would put all the elements of debt and equity shares of the company, not only the common stock but also equity firm entered with all of the company assets.

Governance

Contemporary interest in corporate governance in the Asian region has mainly begun in the context of the Asian financial crisis in 1997. In otherwise, concept of governance has been broadly discussed and analyzed within the academic literature and not only along with its various influences on development outcomes. Governance approach is a neutral concept, in which the term “good corporate governance” mechanisms are value enhancing, and their importance on firm value has long been established since the work of Jensen and Meckling (1976) in form of contracts among various stakeholders. Jensen and Meckling view financial claims as contracts that give outside investors, such as shareholders and creditors, claims to the cash flows. Transparency and accountability are terms that were closely used in early elaborations of corporate governance ideas.

According to the Organization for Economic Cooperation and Development (OECD) corporate governance is defined as a set of relationships between the company's management, board and shareholders, and others who have an interest in the company. OECD sees corporate governance as a system in which a company or business entity directed and supervised. Corporate governance structure could explain distribution of rights and responsibilities of each party involved in a business, which include the Board of Commissioners and Board of Directors, managers, shareholders and other parties related as stakeholders. The role of stakeholders in corporate governance has been recognized in this framework to the extent that their rights as established by law or agreements.

Generally, the purpose of corporate governance is to create added value for all interested parties or stakeholders. Corporate governance mechanisms are ways to deal with the agency problems between managers and shareholders. Another purpose of corporate governance is controlling between shareholders and minority shareholders. Otherwise corporate governance have its aims at resolving conflicts of interest between managers and shareholders and also mitigates agency costs. Recent research on corporate governance around the world has established a number of empirical regularities. Positive contribution that corporate governance is applied properly can be useful to improve the performance and value of the company in the long term.

Enterprise Risk Management

Committee of Sponsoring Organizations of the Treadway Commission or COSO (2004) defines Enterprise Risk Management (ERM) is a process that is influenced by the company's management, which is implemented in each of the company's strategy and are designed to provide reasonable assurance in order to achieve company goals. Companies that understand risks they have a greater ability to prevent or react to events that may impact the company's goals and objectives. From here, ERM enables management and board committee have a view and a more consistent to risk approach. There an ERM framework which is a reference risk management has been widely adopted by companies from various parts of the world. ERM Framework provides guidance on application of risk management with the aim of supporting effectiveness of risk management for its users. As for the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2004 and known as the Enterprise Risk Management (ERM) - Integrated Framework.

Risk evaluation and risk management instruments are difficult to use and monitor. Understanding them often requires a good grasp of mathematics and statistics. In monitoring and approving their risks, a number of firms (especially financial ones) replace the audit committee with other mechanisms such as the risk management committee. This implies that one of the main goal of risk management is to maximize the firm’s value or shares. But risk management can also serve to maximize the well-being of executives and this second objective can be contrary with the first one. The fact that risk management policies can give potential conflicts of interest between shareholders and executives when executives are remunerated in stock options.

*Corresponding Author: Iin Agustina
Sustainability Management

According Global Reporting Initiative (GRI) cited in Dilling (2009) defines sustainability report as a practice about measuring and expressing company activities, as responsibility for internal and external stakeholders about organizational performance in achieving sustainable development goals. Otherwise, Dyllick and Hockerts (2002) conclude three main key in implementing sustainability management which can be done by integrating economic, social and environmental, known well as triple bottom line concept. Triple bottom line used as an external reporting tool designed for shareholders. The concept of triple bottom line seems to be fairly addressed by many stakeholders because it contains integral strategy with a combination of social and economic motives.

Sustainability can be seen as a way when a firm creates value for its shareholders by maximizing positive and minimizing negative effects of three lines which consist of environmental, social and economic issues. Otherwise, corporate sustainability is understood as the ability of a company, through its governance practices and market presence, to positively influence ecosystems, society and economic development (Sustentare, 2010). Publications on sustainability management currently occupied importantly as publication of company’s financial activities. Through publication of social and environmental activities, company provide more information and complete enough related to company activity and its effects on social and environmental conditions (Ghozali and Chariri, 2007).

By running GCG mechanisms, companies not only pay attention and take consideration to economic value of their activities but also to the other value added, balancing stakeholders interests, and compliance with regulations and norms applicable to activity undertaken. GCG mechanisms in particular board characteristics are very influential in sustainability management implementation, which in turn will affect publication of sustainability report (Janggu, et al. 2014). Previous study by Idah (2013) found that board of directors and governance committee has a positive effect on sustainability management. Sari and Marsono (2013) found that board composition had no effect on sustainability management. On the other hand, Idah (2013) also found that board of commissioner and audit committee has no effect on sustainability management, but Sari and Marsono (2013) found that the audit committee and independent board of commissioner have a positive effect on sustainability management.

The Effect of Corporate Governance, Enterprise Risk Management And Sustainability Management on Firm Value

Good Corporate Governance are well recognized in almost all over the world and of companies’ testimony which have implemented conclude matching of its application. Corporate governance can make a positive contribution to the company and investors and other stakeholders. Positive contribution from corporate governance when applied properly is useful to improve firm performance and value in long term. Study by Silveira and Barros (2006); Beiner, et al. (2006); Berthelot, et al. (2010); Siagian et al. (2013); and Sheikh, et al. (2013) show empirical evidence about positive effect between corporate governance and firm value. Contrary to that, Gupta, et al. (2009) found a negative influence of corporate governance on firm value. Previous researches have shown that well governed firms have higher firm value. Otherwise, findings about the main characteristics of corporate governance identified in previous studies include ownership structure, board characteristics, and managerial group.

Theoretically the objective of ERM is achieving company’s goal, and create, add, or to protect firm value. Various arguments appeared on many of existing literature in accounting and financial management, which stated that implementation of Enterprise Risk Management (ERM), will improve firm performance (COSO, 2004; Hoyt, et al., 2006; Nocco and Stulz, 2006). Although previous studies provide a strong theoretical basis for financial gain from ERM practices, empirical research that validates and quantify benefit of business case for ERM are still relatively small. Enterprise risk management found to have a positive effect on firm value (McShane, et al., 2011). In contrary, enterprise risk management was found to have a negative effect on firm value (Tseng 2007). Even enterprise risk management could have no effect on firm value (McShane, et al.,2011;and Ballantyne,2013).

Implementation of sustainability management is represented by the company’s CSR activities. Targets to be achieved by the company not only focus on profit, but also how to provide caring to humans and environment. Thus, the adoption of sustainability management should be implemented consistently and thoroughly, not limited to philanthropy itself. Corporate sustainability management empirically found to have an important and a positive relationship to firm value directly (Rustiarini, 2010), and indirectly (Saeidi, et al. 2014). Another study have shown that Sustainability management have negative affect on firm value (Lioui and Sharma, 2012).

*Corresponding Author: Iin Agustina
The Mediating Role of Risk Management on the Effect of Corporate Governance on Firm Value

Corporate governance is a set of organizational mechanisms which intend to reduce company risk from information asymmetry (Asbaugh, et al., 2004). Corporate governance also determine management practices and decision-making processes relating to the establishment of a special committee to oversee company's risk management process (Badriyah, et al. 2015). This is where about the implementation of good corporate governance is related to implementation of enterprise risk management. Companies’ implementation of ERM to public indicates the ability of coping with risk.

Key implementation of an effective risk management system is the aspect of control by the board of directors, supervisory committee of risk management, and external auditors (Meizaroh and Lucyanda, 2011). Particularly issue about corporate governance implementation company is growing up related with composition of board of directors, who plays an important role in the adoption of ERM in a company (Beasley, et al. 2005). Companies that implement ERM has a higher firm value than companies do not (Liebenberg and Hoyt, 2003; Bertinetti, et al.2013).

The indirect effect of corporate governance on firm value through ERM is shown in Rafika and Husaini (2012), which their finding reveals ERM is not have mediating effect in the relationship of good corporate governance on firm value. However, research by Badriyah, et al. (2015) found that presence of the Risk Management Committee (RMC), which is a proxy of the ERM, could mediate influence between corporate governance and firm size on firm performance.

Corporate governance mechanism consisting of the existence of the Risk Management Officer (RMC), auditor reputation, concentration of ownership and institutional ownership. Which all of these has a significant effect on enterprise risk management (Meizaroh and Lucyanda, 2011; Wijananti, 2015). The size of board commissioners and independent directors have no significant effect on enterprise risk management (Meizaroh and Lucyanda, 2011; Wijananti, 2015). On the other hand, by using measurements of Corporate Governance Perception Index (CGPI), Puspitasari (2012) has found that significant effect of CGPI score on ERM practices. Other results are significant mediating effects of enterprise risk and sustainability management on the relationship of corporate governance on firm value.

The Mediating Role of Sustainability Management on the Influence of Corporate Governance on Firm Value

Sustainability Management and Reporting (SMR) by institutions especially in developing and emerging economies is still low. This is contrary to the industrial sector plays an important role in sustainable development as intermediaries to the allocation of capital. Sustainable management is needed because it is an important part of the company’s ability to maintain the quality of life, about its external and internal environmental factors. Design in sustainability management will requires identifying areas of feasible innovation and development which are being able to locate areas that can benefit with improvement, including in financial sector. In manufacturing companies, this would be an important issues about maintain sustainability of business, which it will require additional cost if it is not well prepared and managed.

Basically, sustainability management in stakeholders perspective is agreed with main principles of good corporate governance: “responsibility”, while the publication of CSR implementation in line with “transparency”. CSR practice will provide positive benefits for company in order to create good relationships with stakeholders. For strategic use of CSR activities, it would enhance greater opportunity by creating social and reputational capital that ultimately leads to profitability. Considering with their interest, CSR practices will also ultimately enhance shareholder value. Sustainability management is approved and supervised as a form of corporate policy about responsibility to environment and social issues. Study by Amanti (2012) as well as Purbopangestu and Subowo (2014) have found that CSR does not mediate the effect between of GCG on firm value. Another research by Sitorus et al. (2013) showed the opposite, in which conclusion show mediating effect of CSR are exist and important. The effect was found stronger than direct effect of corporate governance on firm value.

III. OBJECTIVES OF THE STUDY

From literature review above, progress into our understanding of mediating effect such as risk and sustainability management in relationship of corporate governance on firm value is still somewhat limited. This research uses positivist approach to research, because researchers sought to explore and analyze further on modeling the relationship between corporate governance, enterprise risk management, sustainability management, and firm value, so it is expected to obtain a comprehensive overview of the relationship between these constructs. The purpose of this study was to describe corporate governance directly to firm value and indirectly through the enterprise risk management and sustainability management in companies listed on the Stock Exchange.

*Corresponding Author: Iin Agustina
The Role of Risk and Sustainability Management in the Effects of Corporate Governance

Figure 1 Conceptual Framework

The model focuses on a firm value with the effect of corporate governance, enterprise risk management, and sustainability management. From theoretical perspective and conceptual framework above, there are three important variables that could affect firm value (see Fig. 1). Seven hypotheses proposed in this study are mention below:

H.1. Increasing implementation of corporate governance will enhance practice of enterprise risk management.
H.2. Increasing implementation of corporate governance will enhance practice of sustainability management.
H.3. Increasing implementation of corporate governance will enhance firm value.
H.4. Increasing implementation of enterprise risk management practice will enhance firm value.
H.5. Increasing implementation of sustainability management practice will enhance firm value.
H.6. Increasing implementation of corporate governance will enhance firm value through Enterprise Risk Management.
H.7. Increasing implementation of corporate governance will enhance firm value through Sustainability Management.

IV. METHODOLOGY

Population and Sample
Definitions of corporate governance are numerous, in which some definitions highlight that corporations and corporate governance mechanisms are instruments for shareholders or other stakeholders. Population in this study are all manufacturing companies listed on the Stock Exchange in the period of 2011 through 2014. The criteria for the population in this study listed below:

1. Companies that are not in delisting or relisting during period of study.
2. Companies that applied corporate governance and publish its implementation in the annual report during period of study.
3. Companies that applied enterprise risk management and sustainability management practice and publish it in the annual report during period of study.

Based on the above criteria of population, the numbers of manufacturing companies that meet the population criteria in this study were 24 companies. Sampling method used is the census, so the overall population were 24 used as samples. Unit processed data is about 72, derived from the 24 sample multiplied by 3 years.

Measures
Corporate Governance
Corporate governance is a company’s strategic activity in which primary activity is build relationship between commissioners, directors, shareholders, and other stakeholders. These function well recognized as company’s control on possibility of mismanagement and misappropriation assets. Corporate governance in this study was measured by using Corporate Governance Index (CGI), which uses five indicators Organization for Economic Cooperation and Development (OECD) Principles. OECD Principles adapted as indicators include below:

1. Rights of shareholders
2. Equal treatment of shareholders (Equitable treatment of shareholders)
3. The role of the stakeholders (Role of Stakeholders)
4. Disclosure and transparency (Disclosure and Transparency)
5. The responsibility of the board of directors and commissioners (Responsibility of Boards)

Criteria scoring for each of the indicators of corporate governance include:

*Corresponding Author: Iin Agustina
The Role of Risk and Sustainability Management in the Effects of Corporate Governance ...

1. A value of 1 if item in any corporate governance indicators published in the annual report of the company.
2. A value of 0 if the item in question on each indicator which are not published in corporate governance report in company's annual report.

CGI calculation in this study is formulated below:

\[
CGI = \frac{\text{Number of items published}}{\text{Total item indicator of OECD (Siagian, et al. 2013)}}
\]

**Enterprise Risk Management (ERM)**

Enterprise Risk Management (ERM) is a structured and systematic process of identifying, measuring, mapping, analyzing, evaluating, controlling and supervising risks faced by company. Concept of ERM was measured by using ERM Index (ERMI) which uses eight indicators COSO-Integrated Framework.

The indicators COSO-Integrated Framework include below:
1. The internal environment
2. Setting goals
3. Identification of Genesis
4. Assessment of risk
5. Respond to risks
6. Activity surveillance
7. Information and communication
8. Monitoring

Criteria scoring for each of the indicators of ERM include:
1. A value of 1 if item in any ERM indicators are published in the annual report of the company.
2. A value of 0 if the item in question on each ERM indicator which are not published in corporate governance report in company's annual report.

ERM calculation in this study is formulated below:

\[
ERMI = \frac{\text{Number of items published}}{\text{Total item indicators of COSO (Wijananti, 2015)}}
\]

**Sustainability Management**

Sustainability management is the process of sustainability on the company's activities that integrate economic, social and environmental as a form of corporate responsibility towards both internal and external stakeholders. Sustainability management in this study was measured by the Corporate Sustainability Index (CSI), which using three indicators of Global Generation 3.1 Reporting Initiative (GRI-G3.1) Guidelines.

The indicators of GRI-G3.1Guidelines include below:
1. Economic Category, include:
   a. economic performance
   b. market Presence
   c. Indirect economic impact
2. Environmental Category, include:
   a. Materials / Material
   b. Energy
   c. Water
   d. Biodiversity
   e. Emissions, effluent and waste
   f. Products and Services
   g. Obedience
   h. Transportation
   i. Overall
3. Social categories, covering
   a. Labor practices and working comfort
   b. Human rights
   c. Community
   d. Responsibility for product

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Criteria scoring for each of the indicators of sustainability management, which are:
1. A value of 1 if the item in question at any sustainability management indicators published in companies’ annual report or sustainability reporting.
2. A value of 0 if the item in question on each indicator sustainability management indicators which are not published in the annual report or sustainability reporting companies.

CSI calculation formula in this study shown below:

\[ \text{CSI} = \frac{\text{Number of items published}}{\text{Total item indicators of GRI-G3.1}} \] (Rahmadhani, 2015)

Firm Value
The firm value is the fair value of the company is reflected in the market price of its shares.
Firm value in this study was measured by Tobin's Q, which is a ratio to measure the company's market value and book value of total assets.

Tobin's Q formula is below:

\[ \text{Tobin's Q} = \frac{\text{MVE} + \text{BVL}}{\text{BVA}} \] (Hoyt and Liebenberg, 2011)

Information:
- Q : Firm Value
- MVE : Market Value of Equity (closing price ending year stocks by the number of shares outstanding)
- BVL : Net Book Value of Total Liabilities
- BVA : Net Book Value of Total Assets

Data Sources
Data in this research is secondary data, which obtained by indirectly through an intermediary medium (obtained and recorded by the other party). Secondary data used in this study include below:
1. Corporate governance report published annual reports of companies in the period 2011-2013.
3. Data sustainability or CSR reports published through the annual report or corporate sustainability report in the period 2011-2013
4. Data published financial statements as of December 31 and published through the company website and IDX website (www.idx.co.id) in the period 2012-2014.
5. The market capitalization data published through share website ok (www.sahamok.com) in the period 2012-2014.

Data Analysis
Data were analyzed using Path analysis, which is an extension of multiple linear regression analysis. Path analysis is use of regression analysis to estimate the causal relationships between variables (causal models) predetermined based on the theory. Calculation of path coefficient using SPSS software 23 version through a standardized coefficients beta for its direct effect, whereas effect of indirect path coefficient multiplication of paths through each equation, then the total effect is sum of effects of direct and indirect influence.

V. RESULT AND DISCUSSION
Data in this study using panel data, which is a combination of time series and cross sectional data, so calculation of descriptive statistical analysis performed for each of the years observed with the aim to provide an overview of changes in achievement or implementation for every period (annual period). Descriptive statistics of dependent and explanatory variables used in this study are presented in Table 1 which indicates that average corporate governance, enterprise risk management, sustainability management, and firm value. Result of descriptive statistical analysis in this study are presented in Table 1 below:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td>24</td>
<td>0.64</td>
<td>0.66</td>
<td>0.66</td>
</tr>
<tr>
<td>ERM</td>
<td>24</td>
<td>0.56</td>
<td>0.58</td>
<td>0.62</td>
</tr>
<tr>
<td>SM</td>
<td>24</td>
<td>0.39</td>
<td>0.40</td>
<td>0.50</td>
</tr>
<tr>
<td>FV</td>
<td>24</td>
<td>0.22</td>
<td>0.13</td>
<td>0.11</td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td>24</td>
<td>0.94</td>
<td>0.95</td>
<td>0.96</td>
</tr>
<tr>
<td>ERM</td>
<td>24</td>
<td>0.78</td>
<td>0.82</td>
<td>0.85</td>
</tr>
<tr>
<td>SM</td>
<td>24</td>
<td>0.98</td>
<td>0.98</td>
<td>0.96</td>
</tr>
</tbody>
</table>

*Corresponding Author: Iin Agustina
The Role of Risk and Sustainability Management in the Effects of Corporate Governance …

<table>
<thead>
<tr>
<th>Mean</th>
<th>FV</th>
<th>13.95</th>
<th>15.26</th>
<th>17.65</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG</td>
<td>24</td>
<td>0.7583</td>
<td>0.7975</td>
<td>0.8221</td>
</tr>
<tr>
<td>ERM</td>
<td>24</td>
<td>0.6542</td>
<td>0.6992</td>
<td>0.7212</td>
</tr>
<tr>
<td>SM</td>
<td>24</td>
<td>0.6154</td>
<td>0.6592</td>
<td>0.6992</td>
</tr>
<tr>
<td>FV</td>
<td>24</td>
<td>2.8171</td>
<td>2.7642</td>
<td>2.8288</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG</td>
</tr>
<tr>
<td>ERM</td>
</tr>
<tr>
<td>SM</td>
</tr>
<tr>
<td>FV</td>
</tr>
<tr>
<td>0.08484</td>
</tr>
<tr>
<td>0.05830</td>
</tr>
<tr>
<td>0.13161</td>
</tr>
<tr>
<td>2.8171</td>
</tr>
<tr>
<td>0.05830</td>
</tr>
<tr>
<td>0.08352</td>
</tr>
<tr>
<td>0.14161</td>
</tr>
<tr>
<td>2.7642</td>
</tr>
<tr>
<td>0.14161</td>
</tr>
<tr>
<td>0.08314</td>
</tr>
<tr>
<td>0.1448</td>
</tr>
<tr>
<td>2.8288</td>
</tr>
<tr>
<td>0.13131</td>
</tr>
<tr>
<td>4.20869</td>
</tr>
<tr>
<td>4.32358</td>
</tr>
</tbody>
</table>

Source: output analysis

Based on TABLE 1 above, descriptive statistical results for all variables used in this study can be explained as follows:

1. Corporate Governance (CG)
   Corporate Governance (CG) showed that the value of the average (mean) increased, with 0.7583 (SD = 0.08484) in year 2011, and 0.7975 (SD = 0.08352) in 2012, and 0.8281 (SD = 0.08314) in 2013. This indicates that implementation of corporate governance practices conducted by manufacturing company shown by sample is quite good and is getting better or increased for each year, with an average of 60 to 66 items published from a total of 80 items based on OECD principles.

   Thus, the minimum and maximum value on corporate governance data show changes between 0 up to 0.02 on each year, indicates that variations in level of corporate governance practices only slightly greater each year. Total range of 12.30 in 2011, 12.29 in 2012 and 12.30 in 2013, indicates that corporate governance practices weren't differing greatly among manufacturing firms.

2. Enterprise Risk Management (ERM)
   Average mean in ERM value also increased. It can be seen in each period such as 0.6542 (with SD = 0.05830) in 2011, 0.6992 (with SD = 0.06620) in 2012, and 0.7212 (with SD = 0.06340) in 2013. This indicates that ERM practices for manufacturing companies sampled was quite good and is getting increased for each year, with an average of 70 up to 78 items published from a total of 108 items based on COSO-Integrated Framework.

   The minimum and maximum value on ERM data show changes between 12.02 until 12.04 on each year, indicating that variations in level of ERM practices only slightly greater each year. While range of 12.22 in 2011, 12.24 in 2012 and 12.23 in 2013, indicates that level of ERM practices were not differing greatly among manufacturing firms.

3. Sustainability Management (SM)
   Sustainability management Implementation or adoption by manufacturing firms sampled was quite good and it is getting better for each year. With an average of 51 to 58 items published from a total of 84 items based on the GRI-3.1 Guidelines. From average mean increased during the three periods about 0.6154 (SD = 0.14161) in 2011, 0.6592 (SD = 0.14148) in 2012, and 0.6992 (with SD = 0.13131) in 2013.

   On the other hand, minimum and maximum value on sustainability management data show changes between 0 and 0.10 on each year, indicating that variations in the level of sustainability management practices are pretty much every year. While total range of 0.59 in year 2011, 0.58 in 2012 and 0.46 in 2013, indicating that differentiation of sustainability management practices among manufacturing companies are large enough.

4. Firm Value (FV)
   Data about firm value shows that average value about 2.8171 (SD = 3.93956) in 2011, declined to 2.7642 (SD = 4.20869) in 2012, and increased to 2.8288 (SD = 4.32358) in 2013. Firm value in this study was measured by using Tobin's Q which represents its average value above 1, indicates the manufacturing companies have good growth prospects to go further in market competition.

   On the other hand, the minimum and maximum value of firm value data show changes between 0.02 until 2.39 on each year, with a range of 13.73 in 2011, 15.13 in 2012 and 17.54 in 2013. This suggests that variations in the level of firm value highly lots each year and differentiation in the level of firm value achievement among manufacturing companies are very large.

From data screening results and transformation reveals that all data on each variable was normally distributed, so assumption of multivariate normality have been met. In addition, classic assumption test results also indicate that fit multicolinearity, heterocedastisity, and normality test, that research data qualifies BLUE linear equations and models are built could be analyzed.

During data analysis process, the test was done by path analysis performed using SPSS software 23. Statistical tests performed using one-way model (one-tailed test), therefore t-value and probability value from

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the output of test results should be halved in advance to determine its significance. Results of regression testing of each equation can be explained as follows:

1. Regression analysis of corporate governance on enterprise risk management

Regression analysis model in this path was simple linear regression, conducted to determine direct effect of corporate governance to enterprise risk management. Results of linear regression analysis are shown below.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>t_statistic</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Governance</td>
<td>0.568</td>
<td>2.8875</td>
<td>0.000</td>
</tr>
<tr>
<td>F</td>
<td>33.347</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.313</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the results shown that F value is 33.347> F-table is 3.98 with a probability of 0.000 (below α = 0.05). Corporate governance in regression model is feasible, or can be used to predict enterprise risk management. Adjusted R square of 0.313 shown that corporate governance as contributing variables could explain enterprise risk management by 31.3%, while the rest (68.7%) is an error or other variables that are not included in this regression model. Beta coefficient of variable corporate governance is positive about 0.568. This suggests that if corporate governance implementation has improved about 1%, then enterprise risk management practices would be increased to 56.8%.

2. Regression analysis of corporate governance on sustainability management.

In this path regression model used was simple linear regression, which is conducted to determine direct effect of corporate governance to sustainability management. Results of linear regression analysis are shown below.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>t_statistic</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Governance</td>
<td>0.553</td>
<td>2.7795</td>
<td>0.000</td>
</tr>
<tr>
<td>F</td>
<td>30.899</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.296</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the results shown that F coefficient about 30.899, in which this F value is greater than F-table 3.98. Probability of 0.000 were far below α = 0.05. It could be concluded that corporate governance in regression model is feasible, or can be used to predict sustainability management. Adjusted R square value of 0.296 indicates that the contribution of corporate governance explain sustainability management is equal to 29.6%, while the rest (71.4%) is an error or other variables that are not included in this regression model. Beta coefficient of corporate governance is positive for 0.553, which means that if corporate governance implementation improved about 1%, then sustainability management practices would be increased to 55.3%.

3. Regression analysis of corporate governance, enterprise risk management, and sustainability management toward firm value.

In this path regression model used was multiple linear regression, which is conducted to determine effect of corporate governance, enterprise risk management, and sustainability management to firm value. Results of multiple linear regression analysis is shown below.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>t_statistic</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Governance</td>
<td>0.505</td>
<td>1.860</td>
<td>0.000</td>
</tr>
<tr>
<td>Enterprise Risk Management</td>
<td>-0.312</td>
<td>-1.973</td>
<td>0.027</td>
</tr>
<tr>
<td>Sustainability Management</td>
<td>0.147</td>
<td>0.470</td>
<td>0.175</td>
</tr>
<tr>
<td>F</td>
<td>6.119</td>
<td></td>
<td>0.001</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.178</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on results of multiple linear regression analysis shown F value about 6.119 which is larger than F-table (2.74) with a probability value of 0.001 (below α = 0.05). It can be concluded that corporate governance, enterprise risk management, and sustainability management in regression model is feasible or variables could be used to predict firm value. Adjusted R square of 0.178 shows the contribution of corporate governance, enterprise risk management, and sustainability management to explain firm value is about 17.8%, while the rest (82.2%) is an error or other variables that are not included in this multiple regression model.

Beta coefficient of corporate governance to firm value is positive for 0.505 can be interpreted that if corporate governance have improved about 1%, then firm value would be increased about 50.5%. Beta coefficient on the enterprise risk management shown opposite direction, which has negative effect about -
0.312. It means that if risk enterprise management practices have improved about 1%, then firm value will be decreased about 31.2%. Beta coefficient sustainability management to firm value showed positive effect about 0.147. It means that if sustainability management practices improved about 1%, then firm value would be increased about 14.7%.

Based on the results of statistical analysis are described above, the final model in this research with path diagram shown in figure below.

**Figure 2 Path Diagram**

4. **Mediating effect of enterprise risk management**

   The calculation result shown beta coefficient of corporate governance to firm value through enterprise risk management: \( \beta_1 \times \beta_3 = 0.568 \times (-0.312) = -0.177 \). Direct effect of corporate governance to firm value (\( \beta_4 \)) found about 0.505. It can be concluded that the variable ERM provides mediating role on the effect of corporate governance to firm value. To determine of mediation role can be seen through figure below.

**Figure 3 Mediating Effect of ERM**

Based on the criteria stated by Hair, et al. (2010), it can be concluded that enterprise risk management is able to have partial mediation on the effect of corporate governance to firm value. It because of coefficient value between enterprise risk management and firm value smaller than coefficient value between corporate governance and firm value.

5. **Mediating effect of sustainability management**

   Probability values of sustainability management showed no significant effect \( (0.175 > 0.05) \), beta coefficient could not be calculated on the indirect effect of corporate governance to firm value through sustainability management. It can be concluded that sustainability management could not provides mediating role on the effect of corporate governance on firm value. To determine of mediation role can be seen through figure below.

**Figure 4 Mediating Effect of Sustainability Management**

Based on Figure above sustainability management is not able to mediate on effect of corporate governance toward firm value. Based on criteria stated by Hair, et al. (2010), if there is one relationship or insignificant effect in mediating conceptual model, so there will be no significant mediating role. In contrast...
with mediating role of enterprise risk management, findings show that it can be concluded that sustainability management does not mediate effect of corporate governance on firm value.

Results of each hypothesis tests in this study is shown in table below:

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Hypothesis Testing Result</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG → ERM</td>
<td>H1 Accepted</td>
<td></td>
</tr>
<tr>
<td>CG → SM</td>
<td>H2 Accepted</td>
<td></td>
</tr>
<tr>
<td>CG → FV</td>
<td>H3 Accepted</td>
<td></td>
</tr>
<tr>
<td>ERM → FV</td>
<td>H4 Accepted, Beta coefficient was not significant</td>
<td></td>
</tr>
<tr>
<td>SM → FV</td>
<td>H5 Rejected, Negative effect (-)</td>
<td></td>
</tr>
<tr>
<td>CG → ERM → FV</td>
<td>H6 Accepted, Beta coefficient was not significant</td>
<td></td>
</tr>
<tr>
<td>CG → SM → FV</td>
<td>H7 Rejected</td>
<td></td>
</tr>
</tbody>
</table>

Note: CG = Corporate Governance; ERM = Enterprise Risk Management; SM = Sustainability Management; FV = Firm Value

Overall, the results of the study reveals that two of hypotheses proposed rejected in this study. From the table above further explanation are:

1. **Effect of Corporate Governance on Enterprise Risk Management**

   Implementation of corporate governance proved to be important in influencing enterprise risk management among manufacturing companies. It has been suggested that improved corporate governance would directly encourage the adoption of enterprise risk management practices in their respective companies. Based on agency theory perspective, problem of governance are about how to accommodate and harmonize between principal and agent interests. One of reason why agency relationship exist between principal and agent because of risk aversion which done by the principal. Within risk management, firm can proactively identified potential problems and choose mitigation task effectively.

   Manifestation of corporate governance implementation to have an important effect on enterprise risk management is shown by the presence of a special division to handle risk management. The company's risk is not managed separately by each division within the company, but is managed in an integrated hierarchy by the special division which appointed by the company. Based on the annual report published by the manufacturing company is known that each company have a special division in implementation of risk management, either through internal division or the risk management controls division. Even some companies also have a risk management committee that is directly responsible to the board of directors of the company.

2. **Effect of Corporate Governance on Sustainability Management**

   Implementation of corporate governance proved to be important in influencing sustainability management among manufacturing companies. It has been suggested that improved corporate governance would directly encourage sustainability management practices in their respective companies. From the perspective of agency theory, it has explained that governance issues is the problem of how to accommodate and balance interests between principal and agent. But it must be recognised that sustainability must become an integral part of strategic management and business planning. The reason is about the parties with an different interest in business is not just the principal and the agent, but also other stakeholders, especially external stakeholders. By accommodating stakeholders’ interest both internal and external, the company is expected to be able to push level of sustainability achieved. Sustainability management means how to build responsible business practice, in essence, means determining whether stakeholders are treated with dignity and respect.

   In this case, of course, business entity must be economically viable (profitable), socially (give good benefits to surrounding communities), as well as the environment (give a good benefit to the balance of nature and environment). When corporate governance has been well implemented, it will be able to boost sustainability management among manufacturing companies. Corporate governance is understood as an important key in achieving economic performance and ensuring increased investor confidence for company. This includes the various relationships between management, stakeholders and other concerned parties on the corporate governance implementation. Based on annual report issued by manufacturing companies known that implements and publishes reports on corporate governance has also been publish their CSR report, either in the form of CSR report (published in conjunction with the annual report) or in the form of sustainability report (published separately from the annual report). The company’s report published not only aims providing information to shareholders, but also to other company’s stakeholders. Recently, sustainable development is important for companies, and one of its determinant was corporate governance practices.

3. **Effect of Corporate Governance on Firm Value**

   Finding reveals evidence that corporate governance have an important effect on firm value among

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manufacturing company. Companies which are implement good corporate governance practices would lead to increased firm value. Findings in this study support the agency theory, especially with regard to control function between principal and agent. When viewed from the annual reports published by manufacturing companies, it is well known that all companies have been running good corporate governance based on the provisions of Bapepam-LK or FSA (Indonesian Financial Authority on Public Listed Companies). Good corporate governance implementation known increased well in years so that is another argument why corporate governance can have an important effect on firm value.

Relationship between corporate governance and firm value are examined in other context of study by focusing on the issue of transparency from investors’ perspective. Although corporate governance has both strategic advantages and disadvantages, in general it has positive value implications for company. This happen because of investors are able in receiving meaningful information concerning their investments. This is in line with the opinion of Silveira, et al. (2007) which states that company with good quality of corporate governance will have supervision mechanism that operated effectively and efficiently thus it will enhance shareholder value.

From an investor's perspective the implementation of corporate governance is also expected to serve as a tool to provide assurance for investors that they would receive a positive return for funds they have invested. The need for publication of corporate governance often seen as an effort to give positive signal for the stock market (potential investors). In addition, regarding to the principles of transparency, enterprise information publicity were also associated with signaling theory. Based on publication of company’s annual report, it is known that most of companies have reported corporate governance practices clearly and comprehensively in every year. Thus, it is expected to create a good and positive response that will ultimately have an impact on company stock prices. The increase in stock price indicates increased firm value.

4. Effect of Enterprise Risk Management on Firm Value

Enterprise Risk Management (ERM) has proven to have an important effect in explaining the firm value among manufacturing companies, but the nature of the effect was negative. In terms of the increasing adoption of enterprise risk management can directly reduce the firm value, especially in manufacturing companies. This finding is interesting because if it is based on the concept of ERM, the ERM application as one form is intended to create, add, or protect the firm value. ERM approach adoption is one way to redirect everyone related to company with the same interest and purpose. Good understanding over the company risks can improve decision-making by the board. However, the results showed that the reverse condition because it found a negative impact on the firm value. Environmental changes may have made the company's core capabilities become ineffective or irrelevant, so that cause negative effect on the firm value. On the other hand, Handayani and Yanto (2013) also explained manufacturing company with great business complexity has a relatively higher risk, so that for the larger company would allow them to bear administrative costs in managing enterprise risk.

Kleffner, et al. (2003) from his research reveals about the biggest obstacle in enterprise risk management that are still many managers who have mental and desires problem about each division in order to protect their area itself, causing difficulty in communication and coordination between divisions. In the mid-level management, ERM even perceived as a threat, because of difficulty in dealing with company's internal politics. Another constraint is expressed by Kleffner, et al. (2003) that is related to issue of resources (time, financial, and people involved in company). Basically, obstacle that arise in implementing ERM is all about requires a huge cost, while it is very difficult to quantify its benefits. ERM requires the commitment of the staff and people with expertise in implementing ERM.

For management, the implementation of ERM practices is expected to reduce the overall costs arising from the company's operations (overall costs), with assumption that all risk could actually be better managed and the potential risks have been reduced. However risk context has a different interpretation when viewed from perspective of shareholders and stakeholders. From the perspective of shareholders, especially majority shareholder, risk management means that all of company risks might add enormous costs, so it will reduce profit margin, which in turn impact on the return on their shares. While the views from stakeholder perspectives, more riskinventory both of internal and external risks will give perception about company has the negative prospect because of its more potential problems.

Peter Drucker in Krames (2008) stated that success can be achieved by exploiting opportunities, not by solving problems. This opinion is considered correct refers to results of this study especially about the relationship between enterprise risk management and firm value. For the majority of investors or shareholders, company achievement can be obtained by maximizing potentiality with exploiting all of the opportunities it brings, not to calculate all of the risks and maximize risk management in an attempt to resolve the company's problems.
5. Effect of Sustainability Management on Firm Value

Research findings showed that sustainability management proved to be an unimportant factor to have effect on firm value. Improved sustainability management can not enhance firm value directly. This condition occurred because the company may still be overshadowed by the traditional view so that publication on social responsibility will incur additional costs for companies and will reduce firm profitability and competitiveness.

Based on the three-dimensional concept (triple bottom line) a sustainable corporation considers not only about economic factor but also social and environmental factor and impacts of its actions as well as the interdependencies between them. Corporate sustainability thus means to add environmental and social aspects to the set of common business objectives. Thus, institutional pressures to develop a meaningful social and environmental agenda can emanate externally from customers, partners, government agencies, and local communities. Internally, this pressures can arise from employees and salient business references groups.

Implementation of sustainability management further strengthen conflict of interest between shareholders, management and other stakeholders. Managers and shareholder tend to be interested in short-term financial performance, while other (non-shareholder) stakeholders (public, workers, governments, suppliers and others) have a focus on long-term company goals of sustainability (Handajani, et al. 2014). From here it can be seen why the implementation and publication of CSR or sustainability management activities do not affect the firm value.

There are small number of manufacturing companies that publishes sustainability reporting as a company's CSR activities report. This argument can also be indicated as a reason why sustainability management does not affect firm value. From 24 manufacturing companies studied as research samples, only five companies publish sustainability reporting separately (Indocement, Holcim, Semen Indonesia, Astra International and Multi Bintang), while the rest just make CSR report as part of the company's annual report. Based on index calculation result, it is known that sustainability management index has lowest rate when compared to CG and ERM index. This is what causes lack of information obtained by stakeholders. Finally investors would less able to give a positive response to signal information published by the company.

6. Effect of Corporate Governance on Firm Value through Enterprise Risk Management

Findings indicate that direct effect of corporate governance can enhance firm value, but different results are shown about indirect effect through enterprise risk management. ERM implementation is able to provide a positive mediation role of the effect of corporate governance on firm value. Although corporate governance could directly affect enterprise risk management, increasing practices in enterprise risk management could decrease firm value among manufacturing companies. The explanation could gained from the perspective of agency theory, which principals is risk adverse and tend to maximize their interest. Agency problems will arise in identifying firm value if boards not wasting time by controlling management’s behavior when allocate resources and operate the company.

Responsible market endeavor calls for a careful consideration of all stakeholder relationships in calculating risk factors. ERM will attempts to deal with additional risks such as operational or strategic risks. The goal of ERM is coordinated management of all risks faced by the firm, whether it is risk related to corporate governance or not. Controlling a corporation is consist of both a risk-bearing and also a risk imposing process which this could affect stakeholder interests. Some risks arise from many sources such as use of power, corporate strategy, competitors, managerial efforts, and how human resources are deployed. Boards must be sure there is a reasonably informative level of transparency that is inclusive of additional indicators of risk – corporate intentions, methods, goals and anticipated outcomes, including quantifiable data expressed in meaningful ways.

ERM approach which adopted by manufacturing companies could be seen as an effort to control and mitigate potential risks. However, increasing practice of ERM actually will reduce firm value, as shareholder still considers it will require enormous costs and impact on their stock return. Many investors believe that risk is indicated as a potential problem faced by company. The more risk could be identified, the more potential company problems would arise. It can be concluded that corporate governance as strategic implementation could not increase firm value through ERM. Thus, ERM are still viewed as a cost or a problem and not seen as a value driver plays key role for this phenomenon.

There are several potential explanations to why ERM provides a negative mediating effect of corporate governance on firm value. First, the management's decision to acquire capital investments do not provide appropriately information for risk return, so this will absolutely decrease stock prices. Therefore, in some cases, diversification policies may be considered as an attractive way to manage risk, but most shareholders or investors did not rate companies more positive in which are diversified. Second, the possibility that management made a mistake in assessing capacity of ERM as a way to improve financial performance or firm value. ERM implementation may be considered to be effective in managing risk and volatility of the company, but it cannot increase capital efficiency, profitability, and firm value.

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7. Effect of Corporate Governance on Firm Value through Sustainability Management

Findings reveal that direct effect of corporate governance can enhance firm value, but different results are shown in the effect through sustainability management. Sustainability management cannot provide a mediating role in the effect of corporate governance on firm value. Corporate governance implementation is able to improve sustainability management practices, but contrary to that, greater sustainability management practices did not have an important impact on firm value among manufacturing companies.

There are several reasons could explain this findings. First, the difference in interest between the agent, principal, and stakeholders. Managers and shareholder may be more interested in short-term financial performance, while non-shareholder (public, workers, governments, suppliers and others) are more interested in long-term performance. Second, low sustainability management implementation exist among manufacturing companies, which it is found from CSR output index or sustainability reporting statements published by the company. Most companies are still not present sustainability reports based on the GRI guidelines publication, although they have implement sustainability management practices in managing their business. Third, the assumption about impact of CSR or sustainability management would provide greater firm value would really existed and proved, if only company have a R & D department which working greatly and contribute to higher competitive advantage, and have a good reputation in the market competition. This argument is in line with survey results from Hockerts (2001) shows that the majority of consumers will abandon a product that has a bad image or reported negatively. That is why today the publication of a sustainability report can be used as a marketing tool for company.

VI. Conclusion

This paper establishes that among all of the relationships, sustainability management could not play role as significant determinant of firm value. In particular, corporate governance have an important effect on enhance firm value, despite of risk management also have important effect but found to be negative. This paper also extend literature beyond of Indonesian market and reveals difference contribution among corporate governance, enterprise risk management, sustainability management on firm value.

Results of this study have some implications on for theoretical perspective. One of them is supporting agency theory as a theoretical foundation concerning corporate governance, enterprise risk management, and sustainability management in relation to firm value. Findings also validate signaling theory as a basic assumption about the effect of corporate governance publication in order to increase firm value. The study also reveals that such corporations, especially which are publicly listed in Indonesia stock exchange, require a broad range of stakeholder governance mechanisms depending on organizational readiness.

Findings would imply on building integration model of corporate governance implementation on firm value through role of enterprise risk management and sustainability management. ERM implementation have a significantly negative impact on firm value. Contrary to existing theories, new assumption is recognizable about the need for expansion of theoretical study of enterprise risk management concept. This will led us to provide a better understanding of risk reporting practices especially in developing country such as Indonesian context and fills some gaps in the risk reporting literature. The measures followed thoroughly to understand companies’ annual reports, and also about scoring and classification process which suffers from inherent judgment limitations and subjectivity.

Practical implications identified that most corporations in Indonesia confirm about urgency of corporate governance practices that must be applied in a corporation, especially manufacturing companies. Good corporate governance seriously considered and understood within its implementation by the manufacturing company when compared to other aspects such as enterprise risk management and sustainability management. The conventional corporate governance practices are almost all concentrated on strengthening governance and reinforcing monitoring and evaluation aspects. Current approach in corporate governance is unfortunately geared toward imposing rules and regulations that in many cases are not sync with the manager’s worldview.

This study extends current findings by examining the presumed link between corporate governance practices and firm value in a context of standards based governance principles. But still another gap exist about how well negative effect of risk management will enhance firm value. If enterprise risk management is increased, it will decrease firm value directly. Due to signaling theory, when companies publish ERM practices, for majority of investors this action is considered as company’s decision to allocate budgets (additional costs) for managing enterprise risk. This is how emergence of negative sentiment arise from shareholders of risk management decisions. That is why firm value will directly decrease even though manufacturing company have been improved well in managing risk. Therefore companies need to re-evaluate factors that led to decrease ERM value of related companies, both in terms of investment of resources and exposure to the potential risks arising.

The results showed that sustainability management in most manufacturing companies is still not quite optimal. It can be seen apart from the practice among the lowest index of SM, in which also have no important
The Role of Risk and Sustainability Management in the Effects of Corporate Governance ...

effect on firm value. The condition indicates that although most manufacturers are already implementing sustainability management practices, but in reality they do not integrate all of three principles triple bottom line (economic, social, and environmental) well balanced. Some manufacturing companies also responded that sustainability according to them is not seriously matter. Because as they are already engaged in the practice of CSR, they believed that they already have contribution to surrounding communities. Therefore, companies need to improve their CSR activities and improve the CSR or sustainability report according to GRI guidelines, either in the form of sustainability reporting or CSR reports. Companies also need to identify other aspects such as the quality of R & D companies, level of competitive advantage and reputation of the company in an effort to improve the company’s CSR activities, so firm value can be raised greatly.

Suggest for stakeholders are: (1) the need to improve or re-evaluate form and manner of ERM practices publication of companies, and it will create a positive perception of investors. Publication may be done with reference to the framework of the adoption of risk management (such as COSO-integrated framework). In addition, company also may need more time to make announcement by appointment of Chief Risk Officer (CRO) or a risk manager in order to create a positive market perception. (2) To improve the implementation of sustainability management practices, company needs to integrate economic, social, and environment better. Most companies recognize that implementation of sustainability management within the company still follows the GRI standard as a whole, thus causing CSR report published also not comprehensive and it has not been able to create a positive perception from market (investors).

Suggest for future research are: (1) the need to reconsider measures of concepts that were observed in this study. Several measures are observed especially for enterprise risk management and sustainability management is still not widely used. This becomes an opportunity for further research to re-examine it in the different context and perspective. The measures valued by company also use a different measurement model so that is why it is important to enable a replicated similar model from this study to future studies. (2) Model analysis in future studies could be done based on market capitalization, to distinguish those companies that fall into each category are determined by the size of the market capitalization.

REFERENCES


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The Role of Risk and Sustainability Management in the Effects of Corporate Governance ...