Does Corporate Governance Influence Merger and Acquisition Performance?

Master Thesis

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Abstract

This thesis discusses the correlation between corporate governance and merger and acquisition performance. Using the merger and acquisition activities period 2000 – 2016, the result shows that board size and board duality have inverse correlations to merger and acquisition performance. Furthermore, the result supports that by giving management equity based compensation, merger and acquisition performance increased. On the other side, direct monitoring from the investor who has at least 5% of stock ownership also leads to incremental of merger and acquisition performance. However, the results show that there are insignificant associations between board independence and institutional ownership with merger and acquisition performance. Overall, the corporate governance mechanisms influence merger and acquisition performance.

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Table of Contents

Chapter 1 Introduction

Merger and acquisition activity is one of the critical corporate decisions for a firm. Merger and acquisition can become a tool to increase firm value when firm has already reached its peak performance. By acquiring another company, the management expects business performance to improve and prove more beneficial to the acquiring firm (DePhampilis, 2011). Globally, M&A activity has currently become one of the key strategies for many corporations. Thus, the trend of merger and acquisition activities follows economic trends. As a result of the incremental economic activity after the end of the Enron scandal in 2002, the number and value of merger and acquisition deals has been increasing, which shows the close relation between the status of the economy and such activities. Conversely, when there is a downturn in economic activity, the number and value of merger and acquisition too follow suit. Demonstrating the effect of the level of economic activity on merger and acquisitions, the Enron scandal in 2002, the Subprime mortgage issue in 2008 and the financial crisis in 2012 have all had predictable adverse impact on the volume of merger and acquisition activities, resulting in a significant fall.

Currently, the number of merger and acquisition deals have been increasing dramatically. The year 2015 witnessed the largest number and the biggest of merger and acquisition transaction, which increased by 42% over the 2014 figures, to a new high of US$ 4.7 trillion. The year 2015 was also the strongest year for merger activity since 1980, when Thomson Reuters began its recording. Another tremendous fact about merger and acquisition deals in 2015 is that for three consecutive quarters, the value of the deal exceeded $1 trillion per quarters for announced merger and acquisition, with June, October and November 2015 becoming the all-time top three months for global merger and acquisition activity. (Source: https://blogs.thomsonreuters.com/answerson/record-year-deal-making/). The number of the deals announced in 2016 recorded an increase of 1% compared to 2015 and though the value of transactions decreased by 16%, this represented the third largest annual period for worldwide deal making since 1980. (Source: Thomson Reuters, Merger and Acquisition Review Financial Advisory for full year 2016).

Considering the great trend of deal activity, merger and acquisition activities should provide benefits for all parties involved in the transactions. As found by Andrade et, al. (2001), combination value for both the acquirer firm and the target firm record a positive value. The comparison of performance of a firm before and after a merger and acquisition activity tends to show a positive change, which means that merger and acquisition create value for both, the acquirer and the target firm. However, the research of Jensen & Ruback (1983) stated that the acquirer company tends to receive the negative gain or zero gain, in the period around the announcement date of merger and acquisition. This result is also supported by Moeller et, al. (2004), who found that although on an average, the acquirer company obtained a positive return amounting to 1.1%, in monetary value, this amount is translated into an average loss of $25.2 million following the announcement. Andrade et, al. (2001) also see two aspects of the merger and acquisition performance: the viewpoint of the acquirer and the target firm. When the target company recorded a high positive abnormal

return during the date of announcement of merger and acquisition activity, the acquirer firm recorded a negative abnormal return. This result shows that most of the value of the combined company is derived from the target firm's return (Andrade et, al., 2001).

Morck et, al. (1988) argue that the negative return of acquirer firms occurs due to overpaying of target firms. The overpayment occurs when the management of acquirer firm overestimates their own ability to manage the business of target firms and when management pursues their objectives, rather than maximizing shareholder value. Another view from Jensen (1986) is that a merger and acquisition which occurs due to free cash flow in a firm does not create value for the acquirer firm. The free cash flow theory indicated that management uses the free cash flow to do "empire the building" (over-investment), without considering the shareholder interest which leads to goal incongruence between the management and the shareholder.

In this regard, it should be noted that the agency problem has become the reason why acquirer companies get a negative return over merger and acquisition activity (Jensen, 1986; Morck et al., 1988). The agency problem is a problem that arises when there is a misalignment interest between the principal and the agent. In order to understand this concept, it should be noted that in a corporation, the principal is the shareholder and the management is the agent. As an agent, every decision made by the management should be for maximizing corporate value which is the shareholder's goal. However, in doing decision making, management might create a decision which is opposite from shareholder's goals, resulting in the so-called agency problem (Jensen and Meckling, 1976). In short, the agency problem occurs because there is a separation of ownership from control (Jensen and Meckling, 1976).

In order to resolve the issue above, corporate governance can be used as a mechanism to minimize the agency problem. Thomsen and Conyon (2012) stated that one reason why corporate governance exists is to become a mechanism to mitigate the agency problem between the shareholder and the management, which includes decision making on merger and acquisition.

The aim of this thesis is to examine how corporate governance, as a mitigation mechanism of agency problem, correlates to merger and acquisition, by focusing the effect of corporate governance on merger and acquisition performance. Results of this study are analyzed to answer the following research question:

"Does corporate governance affect merger and acquisition performance?"

Several mechanisms of corporate governance establish alignment between the shareholder and executive interest (Denis and McConnel, 2003). Firstly, the board of director, as the primary link between shareholder and management, play a critical duty in the decision-making process and a monitoring role for aligning the interests of the shareholder and the management (Hermalin and Weisbach, 2003). Next, the corporate governance mechanism is executive compensation. By giving the management a portion of the company in term of equity-based compensation, management is expected to align their goals with shareholder's interest (Shleifer and Vishny, 1997). The last corporate governance mechanism is direct monitoring by shareholders

when shareholder holds a significant amount of corporate shares (called block-holder). It can minimize misalignment interest between principal and agent (Denis and McConnel, 2003).

In order to find the correlation between corporate governance and merger and acquisition performance, I conducted the research by analyze merger and acquisition transactions during 2000 – 2016. The empirical results show that the board size and board duality have inverse correlations with merger and acquisition performance during the announcement date. Meanwhile, positive associations are found between both, equity-based executive compensation and block-holder ownership, and cumulative abnormal return during the merger and acquisition announcement. Lastly, the regression results show insignificant relation with merger and acquisition performance for board independence and institutional ownership.

The results of this thesis can contribute to current literature and the business world in several ways. First, the outcome of this thesis will extend earlier researches related to merger and acquisition performance. Additionally, this thesis will also contribute to the corporate governance literature. It can also answer the question as to what extent corporate governance mechanism can mitigate negative performance of acquiring companies at announcement date. Furthermore, the outcome of this thesis may also become a reference for firms that opt for merger and acquisition in their corporate strategy. Second, the results of this thesis can elucidate the association between corporate governance and merger and acquisition, considering that this thesis combines and elaborates studies of several researchers. This thesis also uses relatively recent data representing a period of magnificent growth in merger and acquisition activity, compared to the last decade and the increasing practice of corporate governance following the era of globalization. Lastly, the result of this thesis can be used as a solution to enhancing merger and acquisition performance.

The remainder of this thesis is organized as follows. Chapter 2 provides a theoretical background related to the agency theory and corporate governance. Chapter 3 discusses the literature review for the association between corporate governance and performances, including firm and merger and acquisition performance. Chapter 4 presents the hypothesis development and is followed by chapter 5, which provides the data and the methodology. Chapter 6 discusses the empirical result and analysis for the result. Lastly, chapter 7 presents a discussion on the conclusions reached in this research.

Chapter 2 Theoretical Background

The agency problem might be the root-cause for many of the problems in the firm, as most of the firms usually have a segregation between ownership and control. Corporate governance is one tool to reduce the agency problem in a firm. This chapter will discuss the definition of agency problem and how it can occur in the firm, as also the element of corporate governance and its role in reducing agency problem in the firm.

2.1. Agency Theory

According to Jensen and Meckling (1976), the agency relationship occurs when two parties agree to enter into a contract which states that a party (agent) will act for the other party (principal). In a corporation, the principal is the shareholder while the agent is the management. As an agent, every decision made by the management should be for maximizing corporate value purpose as it is the shareholder's goal. In performing this contract, normally there is a misalignment interest between the shareholder as the principal and the management as the agent, because both parties will try to maximize their own benefits. Management might take decisions which are opposed to shareholder interest, in order to reap more benefit for themselves. This misalignment is called an agency problem (Jensen and Meckling, 1976). In sum, the agency problem occurs because there is a separation between ownership and control.

Separation of ownership and control occurs because the party who has money is different from the side having capability to manage the business. The party who has money which is the shareholder put their own money to be managed by the party who has capacity which is the management. The shareholder expects that they can get a higher return on the money which they have invested. The contract between these two parties is made to ensure that the management will give the investor a positive return on their investment (Shleifer and Vishny, 1997).

The contract itself does not provide an insurance that the management will earn a positive return for the shareholder, because the contract cannot include everything. Direct monitoring by the investor can be a tool to ensure that the shareholder get back their investment. However, the shareholder is too dispersed and have too little power. Free rider problem from most shareholder makes direct monitoring by them become ineffective. These two problems lead to the concentration of powers in the management with absolute discretion of utilizing all the firm assets for their own benefits (Shleifer and Vishny, 1997). Three major problems which can be created by management discretion are expropriation of the investment fund, entrenching themselves to stay on in the position despite the lack of capability, and management opportunism by misallocation of firm capital (Shleifer and Vishny, 1997).

Other than goal incongruence, asymmetric information can also be the reason why there is agency problem in a firm. Management has more information about the company activities and position, compared to the shareholder (Shleifer and Vishny, 1997). Thus, the management has comparatively greater ability to make prediction of firm future performance, which can influence firm value. By using this available information,

management finds it is easier to utilize the firm capabilities to fulfill their own goal. Meanwhile, the principal cannot adequately monitor the reason behind each and every decision of the management. Such asymmetric information could lead to a moral hazard problem which will increase the agency cost of the principal and the agent (Jensen and Meckling, 1976).

Free cash flow becomes one of the cause why agency problem can occur. Jensen (1986) discussed free cash flow theory, based on which, the management prefers to pursue activities to their own benefit, such as investing in a project which will give negative return to firm, rather than paying back the free cash to shareholder. Free cash flow can also lead to overinvestment, or what is called by empire building. Goal incongruence between the management and the shareholder can drive the management to invest more than what is optimal from shareholder's perspective (Myers, 2003).

Initially, agency problem can occur in every management business action, including strategic decision making. Goal incongruence between management and shareholder can lead to decreasing value of strategic decision making. DePamphilis (2012) states that one reason for the happening of merger and acquisition is managerialism. Managerialism motive for merger and acquisition is solely based on the management's selfish reason such as pride, empire building, higher compensation, and self-preservation. When carried out with such malicious motivations, merger and acquisition activity will destroy the firm value, thereby hurting shareholder's interest.

2.2. Corporate Governance

In order to resolve the agency problem, some mechanisms like corporate governance can be adopted as mitigation strategies. Shleifer and Vishny (1997, p.737) stated that "Corporate governance deals with the ways in which supplier of finance to corporations assure themselves of getting return on their investment." Based on this definition, corporate governance is a way to mitigate the agency problem between the shareholder and the management. As stated by Thomsen and Conyon (2012), one of the reasons for establishing culture like corporate governance is as a mechanism to reduce the agency problem between shareholder and management, which includes decision-making on merger and acquisition activity.

Denis and McConnell (2003, p.2) also discussed international corporate governance. Their definition is as follows: "Corporate governance is defined as the set of mechanisms-both institutional and market-based-that induce the self-interested controllers of a company (those that make decisions regarding how the company will be operated) to make decisions that maximize the value of the company to its owners (the suppliers of capital)". Denis and McConnell (2003) also classifies the corporate governance become two mechanisms based on the sources, which are institutional based mechanism and market-based mechanism. Institutional based mechanisms, also called internal governance mechanisms, consist of the board of director and ownership structure while market-based mechanisms, also called external governance mechanisms, are takeover market and legal system (Denis and McConnell, 2003).

Corporate governance can be used as a tool which can minimize the agency problem between the shareholder and the management in company. From a broader perspective, corporate governance can be divided into three main mechanisms, consisting of the board of director, executive compensation, and ownership structure. Board of director is an intermediary between the shareholder and the management which has a role in monitoring management for the benefit of shareholder (Hermalin and Weisbach, 2003). Besides using an intermediary, shareholder can ensure that the management will behave on their interest by giving executives compensation linked to the company wealth. By providing equity based compensation to the executives, the executive compensation will be tied to the interest of the shareholder (Shleifer and Vishny, 1997). Investors also play an active role in monitoring management actions directly when investor have a power which represents with high portion of the ownership (Denis and McConnel, 2003).

2.2.1. Board of Director

Board Role and Duty

The primary purpose of corporate governance is to align the interest of the management and shareholder, which result from a separation of control and ownership. In this case, the shareholder will appoint board of directors as their representative to monitor what managers do. As representatives of shareholder, board of director has to ensure that management action will lead to value maximization, which is in line with shareholder's interest (Denis and McConnell, 2003).

The importance of board of director emerges as Enron and WorldCom scandals happened in 2000s. These two-accounting scandals occurred due to lack of monitoring by board of directors. In U.S., Sarbanes-Oxley Act (SOX) was created as consequences of the scandals and to guard against its recurrence. The overall intention of creating SOX is to increase the accuracy of information presented to shareholder (Denis and McConnell, 2003). In addition to their monitoring function, the board of director is required by SOX to have more independent board and at least one director who knows about the financials of the firm (Denis and McConnell, 2003; Linck et, al., 2008).

The board of director is supposed to be appointed by shareholder because board of director is shareholder's representative. Shareholder elects board of directors and it's approved at the annual shareholder meeting. In practice, management will suggest the names of the directors to the shareholder at the annual meeting and shareholder will approve the same at that meeting (Denis and McConnell, 2003; Adam et, al., 2010).

Denis and McConnell (2003) state that the importance of the board of directors lies in their monitoring and advising role. The monitoring function is exercised to oversee the business in the interest of shareholder, kind of opposite role from management. The board of director has to ensure that decisions made by the management are in shareholder's interest. The advising role of the board of director involves extending support to the economic performance of the business. This role is more cooperative with the management (Denis and McConnell, 2003).

There are three primary duties of board of director. The first is hiring and firing management (Jensen, 1993; Hermalin and Weisbach, 2003). The board of director decides to hire or dismissal management based on the assessment of management. The evaluation includes two main factors, which are management performance and management capability for future performance (Adam et, al., 2010).

Second, the board of director has a duty to involve in determining corporate strategic decision, according to Adam et, al. (2010). Jensen (1993) also stated that one of the board of director duties is to give high-level advice for corporate strategy. In selecting the project, the board of director has to ensure that management decision will impact positively on shareholder value. Thus, the board of director has to monitor every action of management.

Finally, another principal duty of the board of director is determining executive compensation (Jensen, 1993; Denis and McConnell, 2003), which plays a vital role in aligning management interest with shareholder goal. As stated by Shleifer and Vishny (1997), bribing management with cash, as management compensation form, would give an effect of alignment between management and shareholder interest. Thus, it is the task of the board of director to determine the compensation level to ensure alignment between management and shareholder interest (Denis and McConnell, 2003). These three primary duties of the board of directors should be performed in the interests of the shareholder (Denis and McConnell, 2003).

Board Structure

There is no uniform of board structure. Linck et, al. (2008) argued that every firm has its optimal board structure, which is determined by the netting off between cost and benefit between two major roles of the board of director, monitoring and advising. Linck et, al. (2008) divide board characteristics into three characters, which are board size, board composition, and board leadership.

Board Size

Board size, which is determined by the number of directors on the board is different for every business. Coles et, al. (2008) state that complicated and large firms need a higher number of directors to fulfill the monitoring and advising roles. However, at some point, a large number of director will not lead to better performance. The problem with inefficient decision making due to more time consuming and free-riding could emerge from increasing board size (Yermack, 1996).

Lipton and Lorsch (1992) stated that the maximum board size should be ten people, with the optimal number of board eight or nine people. The number of directors correlates with frequency of board meeting. With limitation of the number of meeting, no more than eight times annually, small number of board is easier to discuss every decision because the directors know one another, which could lead to efficiently and effectively reaching a real consensus (Lipton and Lorsch, 1992).

Coles et, al. (2008) also support a small number of board of director and conclude that small board size will lead to effective monitoring of every decision, because a limited number of board are more connected and

more productive. Conversely, a large number of board tend to slower in decision making due to wasting time in decision making. A large board size also involves higher coordination cost to reach a single decision (Coles et, al. 2008).

Board Composition

Director based on their relationship with the firm consists of two types; inside director and outside director (Adam et, al., 2010). Inside director is one who also serves as part of the management of the firm, while outside director is one who does not participate in the management of the firm (Faleye et, al., 2011; Adam et, al., 2010). Board composition is a judicious mixture of inside directors and outside directors, depending on the firm's characteristic which differs for firm to firm (Hermalin and Weisbach, 2003).

Having more inside directors is perceived to be an advantage for a firm which needs more firm-specific knowledge. By focusing on research and development, it is more beneficial for specific knowledge firms to have insider directors who know well about the ability and capability of the company (Coles et, al., 2008). However, the cost of having more insider directors is a reduction in their monitoring role, which is usually performed by outside directors (Hermalin and Weisbach, 2003; Linck et, al., 2008).

Outside directors are those who are not part of the management and can be divided into two types: gray directors and independent directors. Grey directors are outside directors who still have an indirect relation with firm, for instance, a bank which company has borrowed from or corporate lawyer. Independent directors are outside directors who do not have any relationship with the firm (Adam et, al., 2010).

Independent directors perform as watchdogs of management action with shareholder goal as the primary purpose to be achieved. Though they perform the monitoring function, outside directors have limitations regarding specific knowledge about the firm (Linck et, al., 2008). The cost of acquiring information for effectively and efficiently monitoring the firm should be less than benefit of monitoring performed by independent directors, to ensure that they are an advantage to a firm (Linck et, at., 2008).

SOX of 2002 emphasizes the importance of an independent board. Lack of board monitoring function due to most of the board members being part of the management, can have a significant impact on the firm financial reporting. The accounting scandal in early 2000s occurred mostly because of the lack of board monitoring (Denis and McConnell, 2003). As opposed to the main function of monitoring management action, most of the board member agree with management decision to maximize their own wealth without considering shareholder interest (Linck et, al., 2008).

Apart from the cost of independent directors and regulation requirements, independent outside directors impart a positive impact to firm value and shareholder value. As the main function of outside directors is to oversee management action, board monitoring is expected to increase management responsibility to increase shareholder value (Faleye et, al., 2011). Increasing shareholder value is the primary focus of the existence of the board of directors which is the main link between the management and the shareholder

(Denis and McConnell, 2003). Lipton and Lorsch (1992) state that an optimal board structure includes at least two independent directors. This proportion of independent directors is required to ensure that there is an effective monitoring role performed by some members of board (Lipton and Lorsch, 1992).

As stated by Bhagat and Black (1999), an important role of the board of director is approving major investment decisions, an increasing monitoring function by independent director leads to an enhancement in firm performance which also increased in firm value through the choice of the best investment decision. This accretion to the firm value is in line with shareholder interest. The monitoring role performed by independent board of directors can prevent the management practice of the empire building and overpayment a disadvantage investment. The shareholder will get a high return for the investment, which shows that corporate governance with more independent directors as board members is an excellent tool to align management action with shareholder interest (Bhagat and Black, 1999).

Board Leadership

The last board characteristic indicated by Linck et, al. (2008) is board leadership. Board of directors is usually lead by one chair, called chairman of the board. Jensen (1993) stated that chairman of the board has two main functions. First, chairman is the leader in every board meeting. Second, the chairman has to supervise the process of hiring, firing, evaluating, and compensating management. The chairman's task is also to lead and ensure that the board functions are well allocated and performed efficiently and effectively. The chairman is also shown as the main link between the shareholder and the management (Denis and McConnell, 2003).

In the modern days, most of position of the chairmen are held by one person who also serves as head of management, the CEO. The advantage of this duality leadership is efficiency in decision making. Every decision relating to corporate strategy does not have to be approved by two different people, which makes the process less time-consuming and less costly. The quality of decision could be better because the CEO is the best person who knows about the ability and capability of the company (Brickley et, al., 1997).

On the other hand, as the job of the chairman is related to management performance, it would be more effective to separate the function of the chairman and the CEO. The cost of duality leadership is less monitoring from independent parties. Because of this, CEO could well make a decision based only on their own benefit and interest, without considering shareholder's interest. Such decision-making could lead to a decrease in firm value, which contradicts shareholder goal (Jensen, 1993).

Segregation of the position of the chairman of board and CEO gives the shareholder greater power to get reasonable return for their investment. The chairman main task is to act as a link between the shareholder and the management. The chairman has to make sure that management acts in line with the interest of the shareholder by monitoring all decisions that management takes (Jensen, 1993).

2.2.2. Structure of Executive Compensation

Initially, alignment between shareholder and management interest can be done through two types of structure. First, it is monitoring management action from parties who are an extension of shareholder. Second, it is management remuneration from shareholder to compensate if management act as shareholder interest. The example of first structure is board of directors and ownership structure. This section will explain related to the second structure.

Executive compensation is comprised of four basic elements; a base salary, an annual bonus, stock options, and long-term incentive plans (Murphy, 1999).

Base Salary

Base salary is a fixed compensation, which management will receive periodically. The amount of base salary is fixed and does not depend on management performance. Base salary is usually determined by the market level for similar positions or for the particular industry, depending upon the nature of the industry. The amount of base salary does not form a major portion of the total compensation. However, base salary is an important element of management compensation. There are three reasons why base salary is significant. First, it is a fundamental contract between the firm and the management which will attract high-quality management. Second, for a risk-averse management, the amount of base salary has an essential meaning. Risk-averse management is more likely to choose a high base salary compared to other variable compensation, due to the risks of non-achievement of targeted performance. Lastly, base salary usually become a benchmark for other elements of compensation. For example, annual bonus is generally calculated as a multiplier of base salary (Murphy, 1999).

Annual Bonus Plan

The second element of management compensation is the annual bonus plan. This is given to the management annually and depending on the accomplishment of target performance. At the beginning of the year, the firm sets a performance goal for each management personnel. Annual bonus will be paid if management achieves the performance goal. Murphy (1999) stated that not every company put their annual bonus plan in their report. A typical annual bonus plan includes three elements: performance threshold, performance standard, and pay-for-performance relation. Utilizing this basic annual bonus plan, management will receive a minimum bonus, when their performance exceeds the performance threshold. The amount of bonus received keeps increasing, in proportion to the percentage achievement of performance target. The company usually uses either financial or non-financial measures as yardstick for performance measurement. Accounting performance is an example for financial measure, as evidenced by, earnings per share (EPS), return on assets or equity (ROA/ROE) and operating profit (EBIT). Other than financial measures, company uses customer satisfaction and strategic objectives as a nonfinancial measure of performance.

Stock Option

A stock option is the third element of management compensation. Murphy (1999, p. 2507) stated "stock options are contracts which give the recipient the right to buy a share of stock at a pre-specified "exercise" (or "strike") price for a pre-specified term." Management who get stock option as their compensation usually cannot directly exercise the stock option. They have to wait for a period of time before using the option. Giving stock option as payment will give the management much benefit, as management will get high incentive, along with increase in the stock price. Thus, stock options provide a linkage between management compensation and stock price performance (Murphy, 1999).

Long-term Incentive Plans

The last element of management compensation is other long-term incentive plans, as for instance, restricted stock, long-term incentive plan, and retirement plans. Restricted stock is a benefit similar to stock option. In the case of restricted stock, management is compensated by stock, with some specific condition such as a provision for forfeited during some period of time (Murphy, 1999). The long-term incentive plan is an extension of the annual bonus plan. The incentive is usually accumulated and given at the end of three years or five years performance (Murphy, 1999). The retirement plan is compensation which management will get after retiring from their position (Murphy, 1999).

The three main goals of executive compensation are attracting the right management at low cost, retaining the right management with lower cost, and aligning interest to motivate management to take action which will create long-term shareholder value (Denis and McConnell, 2003). By using pay for performance, these three main goals can be achieved. The company often links the performance of management with the incentive which management will get. Performance target setting usually has link with shareholder interest. Thus, management incentive will be in line with shareholder interest (Denis and McConnell, 2003).

2.2.3. Ownership Structure

Denis and McConnel (2003, p.2) stated that "Ownership and control are rarely completely separated within any firm. The controllers frequently have some degree of ownership of the equity of the firms they control; while some owners, by virtue of the size of their equity positions, effectively have some control over the firms they own. Thus, ownership structure (i.e., the identities of a firm's equity holders and the sizes of their positions) is a potentially important element of corporate governance." The size of shareholder's position is determined by the fraction of shares held by the shareholder. The higher the percentage of stock held by the shareholder, the less friction between ownership and control which leads to less agency problem and could lead to higher firm value (Denis and McConnel, 2003).

Shleifer and Vishny (1997) stated that one way to match control and ownership is by having high ownership for a firm. By having a significant percentage of ownership, the shareholder has the power to intervene in every decision of the management. For instance, by having more than 51% of the shares of a firm, the shareholder can monitor management and ensure management actions oriented towards profit

maximization for shareholder interest (Shleifer and Vishny, 1997). The cost of gathering information lessen, with increase in the percentage of ownership (Chen et, al., 2007).

Nowadays, ownership of a company is dispersed through small ownership stakes. This dispersed ownership leads to the free riding problem. Monitoring of management action become less effective and efficient. By having a slightly higher percentage of ownership, a shareholder would have power to monitor management work (Denis and McConnel, 2003). A block-holder, shareholder who hold at least 5% of the total shares of a firm, has greater opportunity to watch management decision because they have power (Bhagat and Black, 2000). By having large portion of ownership, block-holders have the reason and capability to influence decision-making in the company. They also have the power to enforce their owned interest. This power should make management's act more in line with maximizing shareholder value. Block-holders can also serve as watchdogs of management performance (Thomsen and Conyon, 2012).

Having a block-holder also gives three main advantage, according to Barclay and Holderness (1991). First, block-holders influence management decisions, using their different managerial and monitoring skills. Block-holder provides many different specific managerial skills which help management to make the decision which are best for both the management and investors. Second, larger block-holders create synergies in research and development. Last, the existence of block-holder increases the incentive to get higher firm value.

Institutional investors have bigger proportion compared to other types of block-holders. Institutional investors based on Thomsen and Conyon (2012, p.223) are "Organization which invest a large amount of money on behalf of others in order to provide financial service to them, including pension funds, insurance companies, mutual funds, and other investment companies." Currently, the role of institutional ownership has become widely relevant. Thomsen and Conyon (2012) stated that in the United States, 68% of the public firms have 5% of institutional ownership (data from the Thomson Reuters International 2009).

Similar to other block-holders, institutional ownerships have a monitoring role over the management action. They also have the ability to influence movement of management action towards shareholder satisfaction (Ferreira et, al., 2008). Institutional ownerships have more concern about company performance. They have financial interest and have unbiased views relating to management action and corporate policies (Jensen, 1993). Ferreira et, al. (2008) concluded that institution investors can influence firm performance directly and indirectly. The direct impact is by expressing shareholder interest while indirect effect is by changing investment scheme which will improve cost of capital of a firm.

The advantage of institutional investors is a net-off between the benefit and cost of monitoring. The cost of oversight by institutional investor is related to gathering of information about the firm. The larger the share of institutional investor and the longer the period of ownership, the lower will be the cost of gathering information just like economies of scale theory. The large stake of ownership by institutional investors give the investor more connection to management and board which lead to reduction in the cost of gathering

information. The longer period of ownership creates competence to deal with existing knowledge and absorbing new information (Chen et, al., 2007). All cost should be netted off by the benefit the shareholder gets from monitoring the management action. Chen et, al. (2007) stated that the financial benefit the shareholder receives is in line with the percentage and period of ownership. The larger the ownership and the longer its duration, the higher the power institutional investor to control management action and orient it towards shareholder value maximization.

Chapter 3 Literature Review

In this Chapter, literature which relates to corporate governance and firm performance will be discussed, including merger and acquisition performance. Furthermore, the association of corporate governance element and merger and acquisition performance will be discussed.

3.1. Merger and Acquisition Performance

The purpose of a company is to earn profit which will give benefit to either the shareholder, by increasing shareholder's value, or the management, for ensuring their job security and incentives. Merger and acquisition is one tool to obtain more profit when a company has already reached its peak performance. Merger and acquisition activity refers to the combining or acquiring of other businesses for own company benefit. Merger and acquisition is expected to create greater value for the firm. (DePamphilis, 2012)

Based on the industry relationship and position in the value chain between the acquirer and the target companies, merger and acquisition can be divided into three types; horizontal merger, vertical merger, and conglomerate mergers. A horizontal merger occurs when the acquirer and the target are competitors presents in the same industry. Vertical merger happens when a company acquires its value chain, as for example, its supplier or its customer. Backward integration is when vertical merger is with the company's supplier while forward integration represents vertical merger with company's distributor or customer. Conglomerate merger is merger activity between two firms which are not related to each other (DePamphilis, 2012).

Andrade et, al. (2001) considered in their research the question why a company wants to engage in merger and acquisition activities. The most common reason is to improve efficiency which will lead to increase shareholder's value. Another reason is to make future performance predictable. The future performance is represented by abnormal return around the announcement date. These two ideas are basically derived from the economic reason related to merger and acquisition activities. The first economic reason is creating economies of scale for the company, which will create synergies. Another reason is to increase the market capitalization. The market capitalization goal could create a competition-less market if the merger and acquisition activity leads to monopolies or oligopolies (Andrade et, al., 2001). Another economic reason stated by Andrade et, al. (2001) is related to diversification. Through merger and acquisition activities, the company can diversify its own business through acquisition, using horizontal, vertical or conglomerate merger. Management of the acquiring company will earn benefits which can increase the company value (Andrade et, al., 2001)

DePamphilis (2012) indicate two common reasons as to why merger and acquisition occur, operating synergy and financial synergy. Operating synergy is related to economies of scale and economies of scope, as confirmed by Andrade et, al. (2001). The operating synergy focuses on upgrading efficiency of both combined companies. Economies of scale represents improvement in efficiency by producing more

products in order to reduce the fixed cost per product while economies of scope use combined distinct skill and assets to produce more efficiently (Depamphilis, 2012).

Financial synergy is related to the cost of capital of the combined company or the acquirer company. By carrying out merger and acquisition activity, the acquirer company or the combined company is expected to have a lower cost of capital, compared to the two companies' cost of capital prior to the merger and acquisition. Financial synergy can be done for diversification, strategic realignment, mismanagement, managerialism, tax considerations and market power (Depamphilis, 2012). Diversification relates to products and market of the combined firm. By opting for diversification, the acquirer firm has three options, to launch new product for the current market, to enter new market with previous product and to create new product, while simultaneously entering a new market (DePamphilis, 2012).

Strategic alignment reason occurs when there is shock which will impact business strategy of acquirer company. Technological, regulatory and political changes are examples of shock that will change the business strategy of a company.

Some firms have potential for business profit, but are managed poorly. The acquirer companies acquire these inefficiently managed firm to improve the efficiency because they see the potential of the target firms. This reason is called mismanagement (DePhamphilis, 2012), while in the case of managerialism, the management of the acquirer firms has their egoistic reason to go in for merger and acquisition activity. Empire building, increase pride of management, ensuring job safety and increase incentive are examples of selfish reasons which can induce the management to opt for merger and acquisition strategy (DePamphilis, 2012).

Another financial synergy reason for undertaking merger and acquisition is tax related. Benefit from tax loss carry forward from the acquirer firm can be used when the combined company records profit, by reducing the tax payable to be paid (DePamphilis, 2012). The last reason is to increase market power. Through merger and acquisition activity, the combined firm can improve its ability to determine price in the market, which can impact the competitiveness of its industry. The competitor will keep up their competitiveness by adjusting the price (Jensen and Ruback, 1983).

With many motives for going in for merger and acquisition, many researchers have found that merger and acquisitions do create value for combined firms. Researchers used the reaction of the stock market towards announcement of merger and acquisition activity. In an efficient capital market, investors will react to any public information from the market, including merger and acquisition. By analyzing the market reaction, researchers could know whether investors consider the merger and acquisition activity as a capable of creating value or of destroying the combined firm value (Andrade et, al., 2001).

Andrade et, al. (2001) calculate abnormal return using a short event window and long event window of merger and acquisition announcement date for both the acquirer and the target firms. Short event window is calculated using three days around the announcement date, one day before to one day after the

announcement, while long event window is calculated using more extended period which begins 20 days prior the announcement date and ended at the closing date of the merger. The result has shown that abnormal return for the combined firm, acquirer and target, is positive for both short event window and long event window which means that merger and acquisition does create value.

Jensen and Ruback (1983) also state that takeovers create value for successful tender offers and merger activity. The aggregate of equity value of the combined firm at month after the announcement significantly escalates, compared to a month prior to the announcement of merger and acquisition. Bradley et, al. (1988) found that shareholder wealth of the combined firm increased by 7.4% during the period from 5 days prior to 5 days after the announcement date of tender offer. These results show that merger and acquisition activity create synergy for the combined firm, the acquirer and the target firms.

The synergy of merger and acquisition activity will be created if merger and acquisition performance is seen based on the combined firm performance. However, if performance of merger and acquisition activity is considered based on the performance of acquirer and target firms, the acquirer firms have negative return while the target firms have positive return (Andrade et, al. 2001). Andrade et, al. (2001) divide the performance between acquirer and target firms. The result shows that target firm got positive abnormal return of around 16% and 23.8% at the short and long event windows respectively. Whereas, acquirer firm recorded negative abnormal return around 0.7% and 3.8% at the short and long event windows respectively. This result shows that in most transactions, only the target firms gain value from merger and acquisition activity.

Bidding-firm shareholder return recorded slightly positive gain for successful tender offer and zero gain for successful merger around announcement date of merger and acquisition (Jensen and Ruback, 1983). This result is also supported by Moeller et, al. (2004) who found that although, on an average, the acquirer company obtained positive return amounting to 1.1%, in monetary term, this number translated into an average loss of $25.2 million on announcement date. Moeller et, al. (2004) analyze the influence of firm size on merger and acquisition performance. The result showed that small size acquirer firm creates positive gain with small number, while large size acquirer firm usually gets negative return when doing merger and acquisition activity. The amount of loss created by the large firm is larger than the gain created by the small firm. Thus, in aggregate, the acquirer firm recorded loss during announcement date of merger and acquisition activity.

Many researchers tried to find the reason as to why the acquirer firm gets a negative return around the announcement date. One point of view relating to the negative performance of acquirer the firm is due to the form of payment for the merger and acquisition. Negative return of the acquirer firm arises, if the payment is in the form of stock of the acquirer company. According to the Pecking Order Theory of Myers and Majluf (1984) issuing stock would give a negative signal to the investor even though issuance of stock is for funding merger and acquisition activity. Moeller et, al. (2004) conducted the research relating to the payment for the merger and acquisition activity and the acquirer firm return. The result supports the

signaling theory. Abnormal return three days around the announcement date in dollar term is significantly negative if payment of deals is made through stock of the acquirer company.

Another reason why the acquirer firm gets a negative return is analyzed by Morck et, al. (1988) who found that the negative return of the bidder firms can occur due to overpayment to the target firms. Sometimes, the management of the acquirer company overestimates its own ability to manage the target firms. This is called management hubris. Due to this, the management tends to pay more than the value of target firm. By overpaying the target firm, the acquirer firm will get a negative return around the announcement date of the merger and acquisition.

Morck et, al. (1988) also stated that overpayment to the target firm can occur because management has their own personal motives. The particular aims, such as empire building and increasing job safety and incentives, drive management of acquirer company to do merger and acquisition activity even though it negatively compensates shareholder value. Jensen (1986) discusses free cash flow theory. Based on this theory, when there is free cash flow in company, management prefers to pursue activity for their own benefit, such as making empire building acquisition, rather than increase shareholder value. Difference in objectives between the management and shareholder expectation can create negative return for the acquirer company. In relation thereto, agency problem becomes a reason why the acquirer firm records a negative return during the merger and acquisition announcement (Jensen, 1986; Morck et, al., 1988).

3.2. Impact of Corporate Governance on Merger and Acquisition Performance

Corporate governance can be used as a mechanism to minimize the agency problem between the shareholder and management in Company, which can influence merger and acquisition performance. The corporate governance mechanisms consist of board of director, executive compensation, and ownership structure.

Hermalin and Weisbach (2003) stated that board characteristics can be divided into board size and board composition. Board size concerns the number of directors on the board while board composition relates to the proportion of inside directors or outside directors on the board. Hermalin and Weisbach (2003) stated that the board of director can have influence not only in determining the firm performance but also have on the quality of decision making of the firm in critical situations such as CEO turnover, acquisition decision, and takeover defenses.

Yermarck (1996) studied the relation between board size and firm value. The number of directors has negative association with firm value, the more directors in board the lower firm value. Board size also has a negative relation with the firm profitability and operating efficiency. This results support those of Jensen (1993) who found that a small number of board of director leads to enhancement of the company performance. Board with more than eight directors are less effective, as the CEO can control everything (Jensen, 1993). This result is also supported by Singh and Davidson (2003).

Using another country as sample, Eisenberg et, al. (1998) evidenced an inverse association between number of board member and firm profitability in the small and mid-size companies in Finland. Firm profitability is proxied by industry-adjusted return on assets. Eisenberg et, al. (1998) stated that there are two main consequences of board size effect. The first consequence is costly communication and coordination, with every increase board size. The second consequence is less power in the hands of the board of director to control the management. Besides, Mak and Kusnadi (2005) also studied the relation between board size and firm performance. Using companies listed on Kuala Lumpur Stock Exchange (KLSE) and Singapore Stock Exchange (SGX), Mak and Kusnadi (2005) found that board size has an inverse relation with firm performance.

Moving to critical corporate decision, as stated by Hermalin and Weisbach (2003), board characteristics are related to the quality of critical corporate decisions, as for instance, merger and acquisition activity. Brown and Maloney (1998) found the correlation between the role of corporate directors and acquisition performance. Using abnormal return of acquiring companies on a 3-day period from announcement date of merger and acquisition deals, Brown and Maloney (1998) stated that there is a significant negative association between the board size and 3-days abnormal return. The negative relation is more significant when the regression included industry fixed effect.

Carline et, al. (2009) have studied the corporate governance of the acquirer company and its relation to merger and acquisition performance, using operating performance changes after merger and acquisition activity as proxy merger and acquisition performance. Their results indicated that board size has significant and negative correlation with merger and acquisition performance, which is confirmed by the study of Amar et, al. (2011).

Board composition is the second characteristic of board which can be different for each company. As mentioned before, the main functions of the board of director are monitoring and advising by independent directors, according to Faleye et, al. (2011) who proved that there is an inline relation between the monitoring role performed by independent directors and the quality of board monitoring. A higher proportion of independent directors leads to higher quality of board monitoring and is represented by incremental of firm performance, improved earning quality and decrement of excess executive compensation (Faleye et, al., 2011).

To see the effect of board composition in a different country, Hossain et, al. (2001) conducted research related to effect of board composition on firm performance by using New Zealand companies. Using the sample of firms listed on the New Zealand Stock Exchange (NZSE) during 1991 – 1997, they found that more independent directors led to higher firm performance, proxied by Tobin's Q. This result support that independent directors are chosen as an extension of shareholder interest, as found by Rosenstein and Wyatt (1990), who also concluded that appointment of independent directors in firms delivers a positive impact on the market which is shown by increasing stock price of the firm.

Related to acquisition decision making and merger and acquisition return, Byrd and Hickman (1992) conduct a study using board composition as a proxy for board characteristics and found a nonlinear relation between board composition and return for the bidder on announcement date of tender offer. Board composition is proxied using the proportion of independent outside directors compared to the total number of directors. The result stated that firms with more than 50% of outside directors has a positive return on announcement date of merger and acquisition. This positive return turned to negative if independent outside directors formed an extremely high proportion of the board of director (Byrd and Hickman, 1992).

Amar et, al. (2011) also found that the level of board independence affects merger and acquisition performance in deal activities in Canadian firms, during 1998 – 2002. Using cumulative abnormal return during announcement date, Amar et, al. (2011) found that a higher percentage of independent directors on the board leads to a higher return on merger and acquisition activities. It proves that independents directors have a monitoring role in corporate strategic decisions, including merger and acquisition activities.

Initially, the board of director has a leader who is called chairman of the board (COB). Chairman can be independent of the management or from the management itself. A good number of scholars prefers a separation of management and the chairman, to increase his monitoring role of management action. Rechner and Dalton (1991) compare the performance firm with separation of leadership and with those without. Using a random sample of Fortune 500 companies during 1978 – 1983, the result shows that return on investment, return on equity and profit margin of firm with separation of leadership is better than those of firms with CEO duality.

Pi and Timme (1993) found the same result, with a sample from a different industry. With the banking sector for period 1978 – 1983 as sample, the result showed that bank with separation of leadership earned a greater return on assets, compared to bank with duality in leadership.

CEO hubris or CEO overconfidence become another reason for the acquirer facing a negative return during announcement date (Morck et, al. 1988). CEO hubris could happen due to lack monitoring by the board of director, which results from CEO duality. As explained previously, CEO duality occurs when the position of chairman of the board is occupied by the company's CEO. This duality result in lack of monitoring due to the absence of the ultimate monitoring function, with the chairman of the board and the CEO being identical (Hayward and Hambrick, 1997). Hayward and Hambrick (1997) stated that CEO hubris, which are proxied four indicators: the acquiring company recent performance, recent media praise for CEO, CEO's self-importance and the combinations of these three indicators, is highly associated with merger and acquisition premium which can lead to a negative return for the acquiring company on deal announcement date. The relation is strengthened when there is board vigilance on the firm. The presence of CEO duality and a greater proportion of insider directors proportionately increase the relation between CEO hubris and merger and acquisition performance (Hayward and Hambrick, 1997).

The result from the study of Hayward and Hambrick (1997) is supported by Carline et, al. (2009) who use completed domestic deals of merger and acquisition in the UK during 1985 – 1994 as a sample. Although not statistically significant, CEO duality has negative correlation with operating performance change after merger and acquisition deals.

Besides the monitoring role of the board of directors, alignment of interest between the management and shareholder is another way to minimize agency problem. Provision of incentive to management is one of the ways to affect such alignment which can be done by using the firm performance as base for incentivizing management, pay-for-performance. By connecting firm performance and management incentive, the management is expected to act for maximizing the firm performance which leads to incremental shareholder value (Murphy, 1999).

Abowd (1990) conducted research to prove that pay-for-performance will result in firm value maximization. Using data of 250 companies for the period 1981 – 1986, Abowd (1990) made a correlation between management compensation and firm performance for the next year. The result showed that the incremental compensation leads to increase in the firm performance, using economic return and shareholder return as proxies for firm performance and that pay-for-performance affects the management performance in increasing the firm performance.

Equity-based compensation, as an alignment tool between shareholder and management interests, has become an essential element of management compensation. By being rewarded with some ownership of the firm, the management is expected to have a sense of belonging to the firm. Equity-Based Compensation also connects management wealth with firm wealth. Management wealth will increase as increment of firm wealth, which is also shareholder interest. Thus, equity-based compensation is the best tool to align management action with shareholder interest which can reduce agency problem in a firm.

To prove that giving management a portion of the company's share will increase alignment between management and shareholder, Mehran (1995) conducted the study about the correlation between equity-based incentive and firm performance. By using Tobin's Q and return on assets (ROA) as proxy for firm performance, Mehran (1995) found a linear correlation between percentage equity-based compensation and firm performance. Mehran (1995) result is supported by Bebchuk and Fried (2003, 2010) who argue that equity-based compensation, in form of stock or stock option, leads to better long-term performance.

Alignment of interest between the management and the shareholder using equity-based compensation can also be viewed when management takes decision about corporate strategies such as merger and acquisition activity. Datta et, al. (2001) conducted research related to effect of the executive compensation structure on corporate acquisition decision. By using acquisition activities, including mergers and tender offers, for the period 1993 – 1998, Datta et, al. (2001) found that equity-based incentives have a significant positive correlation with merger and acquisition performance, around and after merger and acquisition announcement date. Datta et, al. (2001) also stated that management who work in the firm which give the

management with high equity-based compensation engages in the value-making acquisition compare to management in low equity-based compensation firm. That management tends to acquire with lower premium and higher growth opportunity firm. It showed that the management with equity-based compensation acts in line with shareholder's interest by doing value-making merger and acquisition activity (Datta et, al., 2001).

Another research done by Tehranian et, al. (1987) compared the effect on return at merger and acquisition announcement date for firms with long-term performance plans with firms without such plans. On the basis of completed acquisition activities, including merger and tender offer activities, for the period 1972 – 1981, the result showed that firms with long-term performance plan have a positive return at announcement date, compared to firm without such plans. A positive correlation was also found when post-acquisition EPS is used as proxy merger and acquisition return (Tehranian et, al., 1987). This result shows that alignment of interest between the management and shareholder can occur when the management is compensated based on its performance, pay-for-performance (Tehranian et, al., 1987).

Lewellen, Loderer, and Rosenfeld (1985) also found that managerial welfare has a positive impact on the merger decision. The larger the compensation to management through equity, the higher is the alignment between management welfare and firm performance. This alignment influence management action to make decision which increases the firm performance and increases shareholder value. The result shows that abnormal return during announcement until approval date has a positive correlation with equity compensation of management. The result is also supported by William et, al. (2008) who studied the impact of management stock option to variance performance after merger and acquisition activities. Using the sample of banking industry during 1993 – 2002, William et, al. (2008) found that management stock option has positive impact on post-merger performance which means mitigating the agency problem.

Having a large block-holder is expected to have a positive impact on a firm. Reducing agency cost is one of the important roles of a block-holder. By active and direct monitoring from the block-holder, management is expected to act based on shareholder interest. The market also views a large block-holder as a positive point from a firm. It has been proven by many studies that market evidences a positive reaction to announcement a large block-holder share purchase. Research by Shome and Singh (1995), Bethel et, al. (1998) and Allen and Phillips (2000) found positive correlation between block share purchase and stock price return during the announcement date of purchase. There is also increase of operating profitability and financial performance following block stock purchase.

Moreover, Chen and Yus-Austin (2007) also found evidence that the existence of block-holder leads to a reduction in the agency problem in the firm. Active monitoring from the block-holder gives management less opportunity for the management to spend the firm asset for their benefit. Block-holders, especially inside block-holders, help management to maximize assets utilization which leads to better performance. Inside block-holder also assists a risk-averse management to invest more as in line with shareholder interest.

This result supports the finding of Barclay and Holderness (1991), which showed that not only the concentration of a block-holder, but also specific skills and incentive of a block-holder affect firm value.

Carline et, al. (2009) found the correlation between outside block-holder and merger and acquisition performance, using Herfindahl index value for concentration of the acquiring firm's proportional common votes controlled by outside block-holders before merger and acquisition activity. Block-holders are shareholders who has at least 5% of the stock of the firm. Higher Herfindahl index means higher control by block-holders. The regression result shows that outside block-holders have significant positive association with operating performance change after deals.

The last corporate governance mechanism to align management and shareholder interest relates to ownership structure of a company. Firms which have institutional owners usually have a direct monitoring role for every decision that management makes (Shleifer and Vishny, 1997). Cornett et, al. (2007) proved that institutional ownership has correlation with the performance of firms by studying S&P 100 firms for the period 1993 – 2000. Cornett et, al. (2007) used two proxies for institutional ownership which is proportion and number of institutional ownership. The result showed that institutional ownerships have robust and positive relation with firm performance which is proxied by operating cash flow return on assets. The relation is stronger when the number of institutional ownership is used as proxy for institutional involvement. Moreover, Cornett et, al. (2007) also divide institutional ownership into two types, institutional ownership which has business related with firm and that which does not. Among these two categories, firms with related institutional ownership have a positive relation with firm performance, suggesting that business related institutional ownerships have monitoring role in a firm (Cornett et, al., 2007).

Ferreira and Matos (2008) studied the relation between institutional investors around the world and firm value. The research used companies in 27 different countries for the period 2000 – 2005 as a sample. Institutional ownership is proxied by the proportion of shares owned by all institutions in a firm to end-year market capitalization, while firm value is proxied by Tobin's Q. The result showed that institutional ownership has positive association with firm value (Ferreira and Matos, 2008).

Ferreira and Matos (2008) break up institutional ownership based on geographical origin and potential business ties, to see which type of institutional ownership has a correlation with firm value. Based on geographical origin, institutional ownership is divided into classes: domestic institutional ownership and foreign institutional ownership. Based on potential business ties, institutional ownership is further divided into two categories: independent institutional ownership and gray institutional ownership (Ferreira and Matos, 2008). The result showed that only foreign and independent institutional ownership have strong positive association with firm value, while other the two showed insignificant relation with firm value. These results confirm that institutional ownership has a monitoring role in a firm.

Oversight is an important role in decision-making related to corporate strategy. Ambrosse and Megginson (1992) conducted research related to the acquisition likelihood with insider and institutional ownership. Acquisition likelihood refers to whether a company becomes a target of a tender offer or not. Ambrosse and Megginson (1992) use three variables to proxy institutional ownership, which are the number of institutional managers following firm, percentage institutional investors to total share, and net change in institutional shareholding in the firm. The result showed that only net change in institutional holding has negative correlation with the probability of a firm becoming a target firm in a tender offer (Ambrosse and Megginson, 1992).

Chen et, al. (2007) examine the monitoring role of institutional ownership, by looking at the return on merger and acquisition activity, using return on announcement date, three years' post-merger abnormal return and post-merger change on return on assets as proxy for firm performance, to test the effect of independent presence in firms. The result shows that independent institutions with a long-term purpose have positive and significant effect, only for post-merger performance while institutional ownership does not have any significant impact on the return around the announcement date. These results show that institutions perform a monitoring role in critical corporate strategic decision-making, including merger and acquisition (Chen et, al., 2007).

3.3 Literature Matrix

Table 1. Literature Matrix

Author	Research Question	Variables	Methodology & Sample	Outcome
Jensen and Meckling (1976)	Theory of The Firm: Managerial Behavior, Agency Cost and Ownership Structure	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	The agency problem is a problem that arises when there is a misalignment of interest between principal and agent. As an agent, every decision taken by the management should be for maximizing corporate value, as it is the shareholder's goal. When fulfilling this mandate, the management can create a decision as opposite of shareholder's interest, which called agency problem
Jensen and Ruback (1983)	How are gains on corporate takeover created?	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Positive gains are obtained from corporate takeover for both company including the acquirer and the target firm. However, the positive return is not created due to increment in market power.
Lewellen et, al. (1985)	Does executive stock ownership relate to merger and acquisition performance of acquiring company?	**Dependent Variable:** Cumulative Prediction Errors (-108,0) **Independent Variable:** aggregate direct current remuneration number of own-company common shares owned; the number of such shares due to be received by the executives pursuant to deferred stock compensation awards made to date; the number of	Methodology: Archival (Event Study) Sample: Firms which are acquired (determined from Wall Street Journal) during 1963 - 1981	A higher percentage of own-company stock held by the senior management of the acquiring firm leads to better abnormal stock return for the acquiring firm. This result supports the premise that alignment of interest between the management and shareholder occurs when the management has partial ownership of the firm. The management wealth lead to better acquisition decision which is also in line with shareholder goal.

Author	Research Question	Variables	Methodology & Sample	Outcome
		shares outstanding under stock option grants not yet exercised		
Jensen (1986)	What is the relation between agency cost of free cash flow, corporate finance, and takeover?	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Free cash flow theory foresee that M&A activity are likely to become a value destroyer activity rather than value creation activity. Since, the management prefer to use the excess cash to empire the building rather than giving the cash back to shareholders. In descend economic condition, the diversification deal is resulting a low or even negative profit while merger with the same industry firms can become a value-creation transaction. The deals paid by cash and debt are more profitable than the deal paid by stock.
Tehranian et, al. (1987)	Do acquirer with long-term performance plans experience higher abnormal stock returns at acquisition announcements relative to bidding firms without such?	**Control Variable:** market value of bidder's common equity, value of the acquisition, relative size **Dependent Variable:** CAR (-15, +15), CAR (-1, +1), post-acquisition EPS change **Independent Variable:** Long-term performance	Methodology: Archival (Event Study) Sample: Completed tender offer and merger transactions for the period 1972 - 1981	Long-term performance plan compensation lead to higher performance which is shown from higher stock price during the announcement of merger and acquisition activities. The post-acquisition EPS also a positive reaction for firm which have long-term performance plans.
Bradley et, al. (1988)	Does merger and acquisition activity create synergy value of	Combined CAR (-5, +5), CAR target (-5, +5), and CAR acquirer (-5, +5), Number of bidder.	Methodology: Archival (Event Study)	Merger and acquisition activities do create synergy value which is proved by increase of the combined value of the acquirer and target firms by an average 7.4%.

Author	Research Question	Variables	Methodology & Sample	Outcome
	combined firms? How is the synergy value is divided between the acquirer and target firms?		Sample: Successful tender offer during 1963 - 1984.	Competition between bidder also increases the return for the target firm but inversely affect the return of the acquirer firm.
Morck et, al. (1988)	Does ownership structure of the firm affect the market valuation of the firm?	**Dependent variable:** Tobin's Q **Independent Variables:** Board of Director ownership Inside Director ownership Outside director ownership Family founder management Independent management **Control Variables:** R&D expenses, Advertising expenses, Leverage, Firm Size, Industry dummy	Methodology: Archival (Cross-section) Sample: 371 firms which are included in the Fortune 500 list for the year 1980	Tobin's Q increase when director's ownership is in the range of 0 - 5%. Then, Tobin's Q value decrease when director's ownership is in the range of 5% - 25% and increases again when the ownership is above 25%. A similar pattern is also found when the ownership is divided into inside and outside directors. Moreover, the existence of the family founder on board of directors leads to a decrease in Tobin's Q number.

Author	Research Question	Variables	Methodology & Sample	Outcome
Brown and Maloney (1988)	How do board of director characteristics influence acquisition performance?	**Dependent Variable:** CAR (-1, +1) **Independent Variable:** Board composition; Director stockholdings; Director turnover; Board size; Number of other directorships held **Control Variable:** Firm size, Firm performance, Method of payment	Methodology: Archival (Event Study) Sample: 106 acquisition activities of 82 companies during 1980s	Smaller boards are related to improved acquisition performance. If at the beginning, the ownership of a firm by director is small, ownership by director has a positive correlation with firm performance.
Morck et, al. (1990)	Are acquisitions bad investments for bidding shareholders? Do acquisitions appear to provide private benefits to the bidding manager?	**Dependent Variable:** Quality of bidder management measured by 3-year income growth relative to industry and 3-year equity return relative to industry **Control Variable:** method of payment; acquisition multiple bidder **Independent Variable:** **Past performance of firm:** change in log sales over the five years prior to the year of the acquisition; income growth relative to industry; stock returns relative to industry;	Methodology: Archival (Panel Data) Sample: 326 US acquisitions between 1975 and 1987	It is costly to acquire firm with steady growth. The profitability of merger and acquisition transaction is determined by performance of management of the acquirer firm. The good management record a better acquisition return compared to others. Firms which acquire unrelated firm record a negative return.

Author	Research Question	Variables	Methodology & Sample	Outcome
		diversification on bidding firm's returns: the measure of relatedness; the time period dummy; the interaction between relatedness and time period.		
Rosenstein and Wyatt (1990)	Do appointment of new outside directors leads to higher stock-price reaction?	Cumulative average prediction errors (CAPE) of abnormal return on announcement date of appointment of outside director (-1,0)	Methodology: Archival (Event Study) Sample: All WSJ firms on the CRSP daily stock returns database over the period 1981-1985.	The empirical result stated that the appointment of outside director leads to an increase in the share-price reaction of the market even though before the appointment the board is already dominated by outside directors. This result shows that outside directors are chosen in the interest of shareholders.
Abowd (1990)	Does performance-based managerial compensation affect corporate performance?	**Dependent Variable:** Firm performance (after-tax return on assets, after-tax return on equity, after-tax gross economic return, and total shareholder return) **Independent Variable:** Executive Compensation **Control Variable:** Firm financial data	Methodology: Archival (Panel Data) Sample: 250 large corporations during the period 1981 - 1986	There is a positive association between the pay-for performance compensation and firm performance which is shown from increasing the return on equity and stock price following of adoption of the pay-for performance compensation.
Rechner and Dalton (1991)	What is the financial implication of the choice of duality	**Dependent Variable:** Firm performance (return on investment, return on equity, and profit margin)	Methodology: Archival (Mancova, Panel Data)	There are significant differences of performance between firms with duality leadership and firm with separation leadership of the board. The result shows that firm with

Author	Research Question	Variables	Methodology & Sample	Outcome
	leadership or separation leadership?	**Independent Variable:** CEO duality; Independent board leadership	Sample: A randomly selected 250 of the Fortune 500 firms for the period 1978-1983.	independent leadership on the board perform better compared to firms with duality leadership.
Barclay and Holderness (1991)	What is the relation between negotiated block trades and corporate control?	**Dependent Variable:** Firm Value **Independent Variable:** Change in block-holder	Methodology: Archival (Panel Data) Sample: 106 negotiated trades of at least 5% of the common stock of NYSE and AMEX	Purchasing large-percentage of block stock is categorized as a corporate control transaction which leads to an increase in cumulative abnormal return. The result also shows that the specific skill and incentive of the large-block shareholder are also important factors which can affect the firm value, besides the concentration of block-holders.
Byrd and Hickman (1992)	Do independent outside directors monitor firm decisions on behalf of shareholders during the acquisition process?	Abnormal returns on announcement date of bidding firms Proportion of outside directors (independent or affiliated with managers)	Methodology: Archival (Event Study) Sample: Tender offer bids made from 1980 through 1987	There is a nonlinear association between board composition, proxied by the number of independent directors on the board, and merger and acquisition performance. The correlation starts from positive correlation and become negative correlation when there is an extraordinary large proportion of independent directors (over 60%). This result showed that the outside director performs an essential role in the guidance of merger activities. However, this non-linear relation does not fully support the statement that the shareholder will get their maximum value when all the member of the board of director members are outsider directors.

Author	Research Question	Variables	Methodology & Sample	Outcome
Ambrose and Megginson (1992)	Does acquisition likelihood incorporate with insider and institutional shareholdings, the importance of tangible assets in a firm's production process, and the presence of formal takeover?	**Dependent Variable:** acquisition likelihood estimation **Independent Variable:** **Financial Variables:** average excess return, average adjusted return, liquidity, leverage, growth-resource dummy, firm size, market to book ratio, price earnings ratio, tangible assets to total assets. **Ownership structure variable:** institutional manager, percent of institutional investor shareholdings, change in institutional shareholdings, percent of officer and director shareholdings. **takeover defense:** poison pill, antitakeover charter amendments, blank-check preferred stock, classified boards, fair-price requirements, supermajority requirements, dual-class recapitalizations, voting right.	Methodology: Archival (Panel Data, Logit Regression) Sample: Random sample of nonregulated industries that are listed on the NYSE and ASE as of 1 January 1981.	There is a positive relation between voting right defense and the probability of a takeover. However, a negative relation is found between the presence of blank-check preferred stock and the likelihood of becoming a takeover target. There is no significant relation between poison pill defense and the probability of takeover bid. No significant effect is also found between insider and institutional shareholding and the likelihood of takeover bid. Although, there is negative relation between net change in institutional shareholdings to the probability of becoming takeover target. This negative result also showed for proportion of fixed asset to total assets although asset size does not have significant influence on the likelihood of receiving takeover bid.
Jensen (1993)	How do internal control systems influence in slow	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Board of director is a critical part of a company. They have responsibilities to effectively direct the firm by choosing the CEO and providing advises and counsel to the firm. There are some reasons why board failure

Author	Research Question	Variables	Methodology & Sample	Outcome
	growth and requirement of exit?			impacts the slow growth in modern industry. First reason is that board culture to have ineffectiveness in action which lead reducing CEO and firm performance. Second reason is asymmetric information between the board and the management. Next reason is lack of motivation of the board, either from legal liability and lack of ownership in the firm. These two reasons account for the lack of a sense of belonging on the part the board towards the firm, which can impact the effectiveness and efficiency of the board action. Last reasons are an oversized board and duality leadership on the board. Board with large membership will have problems in communicating and with free-riders, while duality leadership will invest huge power in the CEO, which can lead to lower firm performance.
Pi and Timme (1993)	What is the correlation between firm performance and management characteristic, ownership structure and board composition in US large public firms?	**Dependent Variable:** Firm performance (return on assets and percentage production cost efficiency) **Independent Variable:** Duality leadership Management ownership **Control Variable:** Total assets, Leverage, concentration ratio, Percentage of banks in statewide banking states	Methodology: Archival (Panel Data) Sample: 112 publicly traded US commercial bank holding companies	There is an inverse association between duality leadership and firm performance, proxied by cost efficiency and return on assets. The Non-chairman-CEO ownership influence positively cost efficiency and return on assets. There is no correlation between ownership structure and board composition with cost efficiency and return on assets.

Author	Research Question	Variables	Methodology & Sample	Outcome
Mehran (1995)	Does executive compensation structure motivate manager to increase firm value?	**Compensation structure determinant:** **Independent Variable:** percentage of equity held by managers, percentage of equity held by all outside block-holders, percentage of outside directors. **Dependent Variable:** Compensation Structure ((1) percentage of total compensation in grants of new stock options, with the options valued by the Black-Scholes formula, (2) percentage of total compensation that is equity-based, and (3) percentage of total compensation in salary plus bonus.) **Effect of compensation structure and firm performance:** **Independent Variable:** compensation structure, percentage of equity held by managers, percentage of equity held by all outside block-holders, percentage of outside directors, **Dependent Variable:**	Methodology: Archival (Panel Data) Sample: 153 randomly-selected manufacturing firms during the period 1979-1980	There is a positive correlation between the proportion of outside directors and equity-based CEO compensation. Also, there is a negative correlation related to the percentage of equity holdings and outside block-holders with equity-based compensation. In regard to the firm performance effect, there is a linear effect between percentage equity-based compensation and percentage of equity held by managers and firm performance.

Author	Research Question	Variables	Methodology & Sample	Outcome
		Firm value **Control Variable:** R&D/sales, (Inventory + gross plant and equipment)/total assets, Long-term debt/total assets, Standard deviation of the percentage change in operating income, Log of total assets		
Shome and Singh (1995)	What are the valuation consequences of external block-holdings?	**Dependent Variable:** Market response to the announcement of block-holder **Independent Variable:** Mismatch between the firm's cash flow and its investment opportunities Debt agency costs Residual variance of the market model The percentage holdings of the block purchasers Dummy variables of block-holder type Accounting Returns Market-to-Book Ratio Undistributed Cash Flow Capital Expenditures	Methodology: Archival (Event Study) Sample: 330 firms of the announcement of new block-holder from 1984 to 1986 the data is collected by examining CDA Investment Technologies' Spectrum 5	On an average, the market reacts positively on the announcement of block-holder formation, which is shown by event study result revealing positive abnormal returns on the stock during the announcement of block-holder formation. The sources of positive return are potential wealth transfer from bondholders and also depend on the size and the identity of the block-holder.

Author	Research Question	Variables	Methodology & Sample	Outcome
Yermack (1996)	Does board size influence firm value?	**Dependent variables:** Tobin's Q ratio **Independent variables:** board size; board composition; director compensation and turnover; governance structure; director ownership **Control variables:** ROA; log of total capital; capital expenditure to sales ratio; number of business segments; industry dummies	Methodology: Archival (Panel Data) Sample: 3,438 firm-year observations for period 1984-1991	Board size affects firm performance negatively. There is no evidence to support a change board size due to past performance. A large board size contributed to decline in firm profitability and operating efficiency.
Hayward and Hambrick (1997)	What is the relation between CEO hubris and large size of acquisition premium Does lack of board vigilance make stronger the relation between CEO hubris and acquisition premiums?	**CEO hubris:** Recent acquirer performance, Media praise for CEO, CEO relative pay **Board vigilance:** CEO duality, proportion of inside directors, outside director holding **Acquisition Premium** **Control Variable:** Relatedness, Target's relative profitability, Target financial synergies, Target poison pill, Acquirer liquidity, Target officer and board holdings, Competing	Methodology: Archival (Panel Data) Sample: Pairs of publicly traded firms which merged and acquired during 1989 to 1992	There is a closely association between premium of merger and acquisition activity and CEO hubris. This association is stronger if there is a large proportion of inside directors and duality leadership.

Author	Research Question	Variables	Methodology & Sample	Outcome
		bidders, Relative size of target, Payment method		
Shleifer and Vishny (1997)	What is correlation between legal aspect and ownership concentration with corporate governance?	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Corporate governance relates to mechanisms designed for ensuring that investors would get back the return on their investment in a firm. Two common mechanisms which give investors power to control their return are legal protection from the management and ownership concentration.
Eisenberg et, al. (1998)	Does board size have impact on financial performance in small and middle size Finnish firms?	**Dependent Variable:** Industry-adjusted return on assets **Independent Variable:** Board Size **Control Variable:** firm size, industry, firm age, growth opportunity.	Methodology: Archival (Panel Data) Sample: Random sample of small and middle size Finnish firms	Board size has a negative and significant relation with firm performance
Bethel et, al. (1998)	What types of firms do activist investors target? What types of operational and corporate governance changes do activist investors pursue? Does performance improve after large	**Determinant of Block Purchase** **Dependent Variable**: Probability of Block Purchase **Independent Variable:** ROA, Market to book value **Control Variable:** Industry market-to-book, Herfindahl ratio, Shark repellent dummy, ESOP dummy, State antitakeover statute dummy, High insider ownership	Methodology: Archival (Panel Data) Sample: Fortune 500 firms from (excluding foreign firms, subsidiary companies, cooperatives, and bankrupt firm).	Activist investors are more likely to invest in firms with high diversification and poor performance firm. Block purchase by activists leads to increase in the rate of assets divestitures and share repurchase. The block purchase also leads to decrease in the rate of merger and acquisition activities. Block purchase also has positive consequences as revealed by the increase in operating profitability and also positive reaction from market, evidenced by higher abnormal stock price.

Author	Research Question	Variables	Methodology & Sample	Outcome
	share block purchases by activist investors?	dummy, Log Net assets. **Consequences Block Purchase** **Dependent Variable:** Corporate divestiture/spinoff, Corporate merger/acquisition, Share repurchase program, Employee layoffs, CEO change, ROA change, CAR (-30,+30) **Independent Variable:** Block purchase		
Murphy (1999)	Executive Compensation	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Executive package in a firm usually consist of four basic components: basic salary, annual bonus based on accounting performance, stock option, and long-term incentive plans. CEO pay is explicitly and implicitly related to the firm performance. Explicitly, CEO pay is related to accounting return for the annual bonus and the stock-price, for stock option and restricted stock. Implicitly, CEO pay relates to performance by adjustment in every basic element of CEO compensation.
Allen and Philips (2000)	What is the correlation between long-term block ownership by corporations and performance changes	**Event Study:** CAR (- 10, + 10) **Consequences of Block purchase:** **Dependent Variable:** Change in EBITDA/Assets Change in capital and R&D	Methodology: Archival (Panel Data and Event Study) Sample: 402 announcements of	On an average, the stock price of target firms increases significantly during the announcement of block purchase. The target firms also show increase in investment expenditure and additional operating cash flow subsequent to the block purchase.

Author	Research Question	Variables	Methodology & Sample	Outcome
	in firms with corporate block owners?	expense/Assets Change in EBITDA/interest expense **Independent Variable:** Block purchase	change in ownership for the period of 1980 to 1991	
Andrade et, al. (2001)	Why do mergers occur?	CAR for acquirer, target and combined Pre- and post-merger abnormal operating performance (AOP) Financing of acquisition (stock and no stock)	Methodology: Archival (Theoretical Review) Sample: Merger and acquisition in 1990s	Shareholders of the combined firm obtain value from mergers. This value is mostly from the target's shareholders. One reason occurrence of merger is for improving efficiency and predicting future performance, as reflected from increase in shareholder value on the announcement date.
Datta et, al. (2001)	Does the executive compensation structure determine corporate acquisition decision?	**Independent Variable:** equity based compensation **Dependent Variable:** CAR (-1,0) Long Run Post-Acquisition Performance **Control Variable:** acquisition mode, means of payment, managerial ownership, and previous option grants.	Methodology: Archival (Event Study) Sample: 1,719 US acquisitions from 1993 to 1998	Equity-based compensation of acquirer firm management leads to higher merger and acquisition performance, which is shown from higher stock price around the announcement of merger and acquisition date. This positive correlation occurs due to lower acquisition premium. The management also consider the growth opportunities and firm risk when deciding the target. The performance in the post-acquisition period also showed a difference. Firm with high EBC outperform the firm with low EBC.

Author	Research Question	Variables	Methodology & Sample	Outcome
Hossain et, al. (2001)	What is the effect of the 1993 Companies Act on the relation between board composition and firm performance?	**Dependent Variable:** Firm performance (Tobin's Q) **Independent Variable:** Board composition Board size CEO Duality Inside ownership Largest shareholders ownership **Control Variable:** Firm size, leverage, number of business segment, capital expenditure.	Methodology: Archival (Panel Data) Sample: Firms listed on the New Zealand Stock Exchange (NZSE) during the period of 1991 and 1997	Board characteristics have an impact on firm performance in respect of New Zealand firms. Board size has a negative and significant association with Tobin's Q value while the proportion of independent directors of the firm positively and significantly influence firm performance. Ownership by insider has a positive impact on Tobin's Q value. Ownership by 20 of the biggest shareholders has an inverse correlation with firm performance. For control variables, firm size and capital expenditure have positive and significant relation with firm performance while leverage and number of business segment have negative and significant relation with Tobin's Q value.
Denis and McConnel (2003)	How are two generations of research on international corporate governance different from each other?	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	The first generation of research on international corporate governance relates to individual countries which include internal mechanisms of corporate governance. The internal mechanisms are board of directors and ownership structure. The second generation of research on international corporate governance spans several countries; it also includes the external mechanisms of corporate governance such as the legal system and the structure between the country and the takeover market.

Author	Research Question	Variables	Methodology & Sample	Outcome
Hermalin and Weisbach (2003)	How do board characteristics affect profitability? How do board characteristics affect observable actions of the board? What factors affect the makeup of boards and how do they evolve over time?	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Board composition, proportion of inside and outside directors, do not affect the firm profitability. Board size has an inverse relation with firm profitability. Firms with a small board size and high outside proportion of board of director have better quality related to corporate strategy such as acquisition, poison pill, executive compensation and CEO replacement. The evolving of board depends on the bargaining power of the CEO relative to the current directors. The important determinants of board characteristics are firm performance, CEO turnover and ownership structures.
Singh and Davidson (2003)	What are the relations between ownership structure and agency cost in large public companies?	**Dependent variable:** Asset utilization efficiencies Operating expenses **Independent variable:** Management ownership Outside block-holder ownership **Control Variable:** Board size, Board composition, Firm Size, Leverage	Methodology: Archival (Time Series) Sample: All NYSE/AMEX/NASDAQ firms with sales more than $100M (excluding financial service and utilities firms)	Managerial ownership has a positive and significant association with corporate asset utilization efficiency. Managerial ownership has negative but insignificant association with operating expense. Outside block-holder ownership does not have a significant correlation with asset utilization efficiency and operating expense. Board size has a positive correlation with operating expenses.
Bebchuk and Fried (2003)	Executive Compensation as an Agency Problem	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Executive compensation becomes a corporate governance mechanism to mitigate the agency problem between the management and the shareholder which occurs due to separation of ownership and control. Another view of executive compensation has been

Author	Research Question	Variables	Methodology & Sample	Outcome
				emerging making executive compensation very much a part of the agency problem itself. Due to increasing power of the management due to separation of ownership and control, management can affect determination and structure of executive compensation. Thus, executive compensation can also be seen as part of the agency problem.
Moeller et, al. (2004)	Does firm size affect gain from acquisition? Do abnormal returns differ between large and small firms depending on the organizational form of the assets acquired and the form of payment?	CAR (1, +1). Market capitalization. Organizational form of assets acquired: private target, public target, and subsidiary target. Form of payment: equity payment, cash payment, and mixed payment	Methodology: Archival (Panel Data) Sample: US firms acquisitions from 1980 to 2001	The regression result showed that small firm obtain positive abnormal return at the announcement date of acquisition. On the other hand, large firms suffer a significant negative shareholder return at the announcement date of acquisition. The evidence is robust and there is no reversed evidence of the effect of size to acquisition return. Based on the result, large firms tend to pay large acquisition premium compared to small firm which makes large firm prone to acquisition losses. This result support the statement that stated CEO hubris is one of the reason why large firms resort to merger and acquisition activities.
Mak and Kunadi (2005)	What are the impacts of corporate governance on the firm value of Singapore and Malaysia firms?	**Dependent Variable:** Firm value (Tobin's Q) **Independent Variable:** Board Size, Duality, Board composition, audit committee, audit committee composition. Inside director ownership, block-	Methodology: Archival (Panel Data) Sample: 271 firms listed on the SGX and 279 firms listed on the	There is an inverse relation between board size and firm value (using Tobin's Q). Board size has negative and significant correlation with firm performance while block-holder ownership has positive and significant correlation with firm performance which are proxied by return on assets, return on sales, and assets turnover.

Author	Research Question	Variables	Methodology & Sample	Outcome
		holder ownership, number of block-holder, largest block-holder ownership, financial institution ownership **Control Variable:** total assets, leverage, proportion fixed assets, sales growth, capital expenditure, firm age, government ownership, main board dummy.	KLSE (excluding financial firms)	
Chen et, al. (2007)	Do institutional owner monitor firms?	Institutional presence (independent long-term institutions - ILTI ownership). Bid announcement return. three-year buy-and-hold post-merger abnormal return. post-merger changes in industry-adjustment return on assets. Post-merger change in analyst earning forecast.	Methodology: Archival (Event Study) Sample: US mergers which the with announcement dates lies in period of 1984 and 2001	The regression result showed that independent institutional investors have positive and significant relation with post-merger performance. This offers a view that independent institutional investors have a monitoring role in firms. However, the regression results also showed that there is no correlation between the degree of ownership of institutional investors and performance during the announcement date. The authors also did additional tests by linking institutional holdings with bid withdrawal. Concentrated holdings by ILTI (independent long-term institutions) showed their monitoring role by choosing bad merger withdrawal rather than selling their share after the announcement.
Cornett et, al. (2007)	Does institutional investor involvement	Firm performance using cash flow return on assets. Institutional Investor:	Methodology: Archival (Panel Data)	There is a positive and significant relation between the proportion of institutional ownership and the firm's performance, which is proxied by operating cash flow

Author	Research Question	Variables	Methodology & Sample	Outcome
	relate to the operating performance of firm?	number of shares owned by all institutional investors, number of shares owned by investment companies and independent investment advisors number of shares owned by banks, insurance companies, and others	Sample: S&P 100 firms from 1993 through 2000	return on assets. This relation is stronger when the number of institutional owners is used as proxy for institutional involvement. Yet, this positive relation is found in pressure-insensitive institutional investor (institutional investors without potential business relation). This result suggests that institutional investors with potential business relations with the firms in which they invest are compromised as monitors in their monitoring role.
Chen and Yur-Austin (2007)	Can block-holders act as effective monitoring mechanisms in reducing the agency costs?	**Dependent Variable:** Managerial extravagance Poor Asset Management Underinvestment Problem **Independent Variable:** Block-holder ownership **Control Variable:** Firm size, Leverage	Methodology: Archival (Panel Data) Sample: Randomly selected sample from large publicly traded companies for period 1996 through 2001.	Block-holder can generally mitigate the agency problem. The ownership by outside block-holder has an inverse correlation with managerial discretionary expenses, while ownership by inside block-holder, including management block-holder, has a positive and significant correlation with improving assets utilization. Lastly, management ownership block-holder weaken the underinvestment problems.
William et, al. (2008)	Do the risk-incentive effect of CEO stock options affect merger volatility in the banking industry?	**Dependent Variable:** Merger Volatility **Independent Variable:** Risk-incentive effect of CEO stock option holdings; Firm Size; Ratio of all regulatory capital to risk-weighted assets; Ratio of total deposits to book value of assets	Methodology: Archival (Panel Data) Sample: 131 bank mergers between 1993 and 2002	Stock option is an effective way of mitigating agency problem between the management and the shareholder when the management does not want to make high risk investments. By giving stock-option, management has a risk-incentive effect, which leads to higher post-merger risk. The firm size also has positive relation with post-merger volatility ratio while the interaction term between the risk-incentive effect of CEO stock options and firm size has an inverse relation with volatility.

Author	Research Question	Variables	Methodology & Sample	Outcome
Ferreira et, al. (2008)	What drives institutional investors to firms and what role do these investors play?	**Determinant of Institutional Ownership:** **Dependent:** Institutional ownership (foreign, domestic, independent, and grey) **Independent:** Size, Book to market, investment opportunities, stock return, turnover, dividend yield, ROE, idiosyncratic variance, MSCI dummy, leverage, cash holding, closely held share, AR exchange-listed dummy, legal regime, disclosure index, geographic distance, English user dummy, GDP per capita, and market capitalization to GDP. **Effect institutional ownership and firm performance** **Dependent:** Tobin's Q, operating performance and capital expenditures **Independent:** Institutional ownership (foreign, domestic, independent, and grey) **Control:** firm size, growth	Methodology: Archival (Panel Data) Sample: All except financial firms in the Datastream / WorldScope (DS/WS) database for the period 2000 to 2005	The determinants for institutional investors are large firms with strong governance indicators. At the country level, countries with strict disclosure standards are more preferable for institutional investors. There is a positive relation between foreign and independent investors and firm performance. Higher ownership of foreign and independent investors leads to higher firm valuation, better operating performance and lower capital expenditure. This result showed that foreign and independent institutional investor do have a monitoring role in worldwide corporation.

Author	Research Question	Variables	Methodology & Sample	Outcome
		opportunity, leverage, cash holding, cross-listing		
Carline et, al. (2009)	Do corporate governance characteristics of the acquirer firm affect operating performance after the merger and acquisition activities?	**Dependent Variable:** Operating performance changes (Industry-adjusted operating cash-flow return) **Independent Variable:** Board ownership; Board size; Duality; Block holder control **Control Variable:** Year effect, regulated industry, firm size, valuation ratio, cash liquidity, leverage, same industry, Valuation ratio for acquiring firm relative to firm being acquired, Product of difference in cash liquidity ratios of acquiring firm and firm being acquired, Absolute difference in leverage ratios of merging firms, size of firm being acquired relative to acquiring firm before merger, Dummy variable for stock payment, hostile takeover, other bidders, toehold.	Methodology: Archival (Panel Data) Sample: UK companies completed and domestic deals over 1985–1994	Corporate governance mechanisms of acquiring firm economically and significantly impact the merger and acquisition performance. Proved by positive correlation of board ownership and operating performance changes after merger and acquisition activities. The result also support the notion that board size has an inverse relation with merger and acquisition performance. From the angle of ownership structure, block-holder ownership has a positive association with operating performance changes after merger and acquisition occurs.

Author	Research Question	Variables	Methodology & Sample	Outcome
Bebchuk and Fried (2010)	How does equity compensation tie-up with long-term results?	N/A	Methodology: Archival (Theoretical Review) Sample: N/A	Equity-based compensation should be tied to long-term performance in order to make executive focused on long-term goals, rather than short-term ones. The firm should also avoid equity-based compensation with regard to "hold-till-retirement", which can trigger the management to contemplate early retirement. Equity-based awards should be subject to grant-based and aggregate limitations on unwinding along the lines we put forward. Finally, in giving equity-based compensation, the firm also has to impose constraints relating to hedging and derivatives in order not to cancel out the effect of long-term equity-based compensation.
Faleye et, al. (2011)	What are effects of the intensity of board monitoring on directors' effectiveness in performing their monitoring and advising duties?	**Independent Variable:** independent directors monitoring-intensive **Control Variable:** director's external time commitment, board size, board composition, director ownership, firm size, investment opportunity, industrial and geographic diversification. **Dependent Variable:** Effectiveness of Board oversight: CEO turnover, executive compensation, and earnings quality. strategic advising: Acquisition	Methodology: Archival (Panel Data) Sample: Firms in the S&P 1500 over 1998 – 2006.	There is a positive correlation between the monitoring role of independent directors and the quality of board monitoring. Better quality of board monitoring is represented by incremental performance of the firm, improvement of earning quality and reduction of excess executive compensation. Board with intense monitoring roles have another impact in the firm strategic events. The result showed that the board with a higher monitoring role reduces the quality of board advising by lower merger and acquisition performance.

Author	Research Question	Variables	Methodology & Sample	Outcome
		return, corporation innovation Firm value: Tobin's Q.		The last result showed negative relation between firm value and board monitor intensely.
Amar et,al. (2011)	Do CEO attributes, board composition, and ownership structure have correlation with share performance of acquiring firm around the acquisition announcement?	**Dependent Variable:** CAR (-1, +1) **Independent Variable:** CEO attributes (CEO ownership, CEO duality, CEO age, and CEO tenure); Board composition (Director ownership, Board Independence, and Board Size) Ownership structure (External block-holder) **Control Variables:** Cash-based deals, Leverage, Public status of target, country of target, cultural of target, firm size, similar industry, Transaction announcement period.	Methodology: Archival (Event Study) Sample: 273 acquisitions by Canadian firms in period of 1998 - 2002	CEO and director ownership have positive and significant correlation with performance of the acquirer firm around announcement date of M&A. Board size has an inverse relation with cumulative abnormal return while board independence has positive relation to cumulative abnormal return around the announcement date. External block-holders influence short-term performance of the acquirer firm positively. From control variables, cash-based deals and cross-border deal have a positive impact to the shareholder of acquirer firm wealth.

The conclusion that can be drawn from Table 1 is that the acquirer firm's negative performance in merger and acquisition activity occurs due to an agency problem (Jensen, 1986; Morck et, al., 1988). The negative performance can be mitigated with a set of corporate governance mechanisms (Denis and McConnel, 2003), consisting of board of directors, executive compensation, and ownership structure. Board of directors, which can be structured in terms of board size, board independence, and board duality, has a role in monitoring firm (Hermalin and Weisbach, 2003). The oversight role is shown from the inverse correlation between board size and board duality with merger and acquisition performance (Brown and Maloney, 1998; Hayward and Hambrick, 1997) and the positive association of board independence with merger and acquisition performance (Byrd and Hickman, 1992). Second, giving the management an equity-based compensation can align shareholder interest with management interest (Mehran, 1995) which is evidenced by the positive relation between merger and acquisition performance and executive equity–based compensation (Datta et, al., 2001). Lastly, direct monitoring by the investors can also create lower agency problem which can enhance the merger and acquisition performance (Denis and McConnel, 2003). Ownership structure show a positive correlation between number of block-holders and institutional ownership with merger and acquisition performance (Carline, 2009; Chen et, al., 2007).

3.4 Summary and Conclusion

Merger and acquisition are one of the key strategies for many corporations in the world. The companies adopt merger and acquisition activities for gaining the synergy of the combined firms. For this reason, merger and acquisition activities expect to create value for both the acquirer and the target firms. Researchers have studied the gain of merger and acquisition from the angle of every party; combined companies, acquirer companies and target companies. The gain of merger and acquisition activity around announcement date is usually calculated by cumulative abnormal return (CAR). CAR can be calculated by short window and long window. Short window abnormal return is calculated using three days as of announcement date, one day before announcement date, at announcement date and one day after announcement date while for the long window, there is not rigid formulation.

Many researchers found that combined companies have positive value of CAR around announcement date of merger and acquisition activity. This positive CAR shows that merger and acquisition activity does create value. However, if the gain is calculated based on the acquirer company and target company, different results are obtained. The target company receives positive CAR while the acquirer company records negative CAR around the announcement date. In conclusion, positive abnormal return which is obtained by the combined company is mostly created by the target company.

The question is why the acquirer companies record a negative abnormal return during the announcement date. Many factors could influence abnormal return of each party related to the merger and acquisition activity. Relatedness of the industry of the acquirer and the target company, method of payment for the deals and the number of bidders, are some factors that can influence abnormal return of merger and acquisition activity.

The main reason why the acquirer firm faces a negative return is the agency problem between the management and the shareholder of the acquirer company. The agency problem occurs due to the misalignment of interest between the management and shareholder, with management seeking to maximize their own benefit instead of maximizing shareholder value. Another reason is CEO hubris, when management overestimates their own ability to manage the target firm, which leads to overpayment to the target company.

Agency problem in company is hard to get rid of. The shareholder can at best minimize the agency problem by using corporate governance mechanisms. Corporate management tools that can the reduce agency problem between the shareholder and the management are intensive monitoring by the board of directors and institutional investor and the management incentive plans using equity-based compensation plan. Intensive monitoring is needed to ensure that actions taken by the management will create shareholder value and are not intended solely for the management own benefit, while, management incentive plan is used to ensure alignment between the benefit which management will get and firm value, which is the shareholder's goal.

To conclude, the corporate governance mechanism function in company is to minimize agency problem between the management and the shareholder. Thus, corporate governance is expected to have an effect abnormal return of the acquirer company around the announcement date of merger and acquisition activities.

Chapter 4 Hypotheses Development

In this chapter, I develop hypotheses with respect to theoretical background and prior literature review. As stated in the theoretical background, Thomson and Conyon (2012) have argued that the agency problem can be mitigated by using corporate governance, considering that corporate governance deal with day to day activities and also relate to corporate strategic activities such as merger and acquisition activity, will help the shareholder obtain their return on their investment. Therefore, the existence of corporate governance leads to a better merger and acquisition performance. Since, the agency problem may affect the company performance, as it can be seen from the negative performance of a company during merger and acquisition activity which occurs due to different goal between management and shareholders (Morck et, al., 1988). Normally, this different goal occurs due to a separation between ownership and control (Denis and McConnel, 2003). Thus, corporate governance can create better merger and acquisition performance.

The board size has an inverse correlation with firm performance, same as merger and acquisition performance. The higher number of board size lead to ineffective and inefficient in decision making, including corporate strategic decision (Jensen, 1993). At the same time, Yermack (1996) has supported that board size has a negative correlation with firm performance by using Tobin's Q as a proxy for firm performance. In addition, other researches have also found the negative correlation between board size and merger and acquisition performance. By using cumulative abnormal return during announcement date of deal as merger and acquisition performance, Brown and Maloney (1988) and Amar et, al. (2011) have found that the higher number of directors in board lead to lower merger and acquisition performance. The inverse association is also found by replacing cumulative abnormal return using change in operating performance after merger and acquisition activity (Carline et, al., 2009). Having regard the foregoing, I formulate hypothesis 1a as follows:

H1a: There is a negative relation between M&A performance during announcement date and board size

Furthermore, I also want to discuss regarding the relation of the board and the firm performance, particularly during merger and acquisition transaction. Since the board of directors comprise of either inside director or outside director, the board structure can influence the firm performance. The outside directors have important function in a firm which is to oversight and to counsel management in daily basis action. Furthermore, they also have more important role in the company, which is to monitor the management in their decision making related to corporate strategic action, including value-creation merger and acquisition activity. Thus, the more outside director serves in the board, the decision will be more in line with shareholder interest due to board of director goal which is to in line the management action with shareholder interest (Falaye et, al., 2011). A positive correlation between proportion outside director on the board and

merger and acquisition performance is found by Amar et, al. (2011) and earlier research by Byrd and Hickman (1992). Therefore, I formulate hypothesis 1b as follows:

H1b: There is a positive relation between M&A performance during announcement date and board independence

Furthermore, I also want to discuss regarding the effect of the duality function in the board of director to merger and acquisition performance. The importance of monitoring role by the board of director will decrease if the chairman on board is the same person as the CEO of the company. The duality function of COB and CEO leads to lower monitoring from independent party which can influence management decision including merger and acquisition activity (Rechner and Dalton, 1991). The duality function can also lead to lower merger and acquisition performance as found by Hayward and Hambrick (1997) and Carline (2009). In addition, the duality function of COB and CEO head to CEO hubris which caused overpayment of merger and acquisition deal. In relation thereto, I formulate hypothesis 1c as follows:

H1c: M&A performance during announcement date is lower when CEO is also COB

It should be noted that apart from the monitoring by the board of director, the agency problem can be reduced by aligning interest between the management and the shareholder. For example. giving a proper compensation becomes an alignment tool between management and shareholder. By linking compensation with performance, it may influence management action to maximize firm performance which is shareholder interest (Murphy, 1999). The positive effect of higher management compensation to firm performance is found by (Abowd, 1990). The result has shown that the higher compensation affects the management action which leads to an increasing the firm performance. Performance based compensation is also used as a tool to motivate the management to do value maximizing decisions, including merger and acquisition decision (Mehran, 1995).

The best management compensation element which can link management compensation with future firm performance is equity-based compensation. By giving the management of the company wealth, the management action and performance will lead to firm value maximization because firm value affects management wealth (Mehran, 1995). It is supported by the prior research which found the positive correlation between equity-based compensation and firm performance (Bebchuck and Fried, 2010). Furthermore, equity-based compensation has also induced foresight for corporate strategic decision including merger and acquisition activity. Management with higher equity-based compensation chooses a value-creating merger and acquisition deal which lead to higher merger and acquisition performance during announcement date of the deal (Tehranian et, al., 1987; Datta et, al., 2001). In relation thereto, I formulate hypothesis 2b as follows:

H2: There is a positive relation between M&A performance during announcement date and equity based compensation of executive

The last corporate governance tool to reduce agency problem in a firm is a direct monitoring from the investor of the company. Due to the dispersal of ownership in many companies, having a block of ownership in a firm gives the investor the power to control the management in order to fulfill shareholder interest. A block-holder ownership, having about 5% and more of firm stock, provides a direct monitoring for management performance (Bhagat and Black, 2000). The market also views a block-holder as a good prospect for a firm which is shown by positive stock return when there is announcement of block share purchase (Shame and Singh, 1995; Bethel et, al., 1998; Allen and Phillips, 2000). Block-holder also leads to a higher operating performance after merger and acquisition activity. The direct monitoring role from block-holder is effectively performed which caused a higher operating performance (Carline et, al., 2009). Having considered the foregoing, I then formulate hypothesis 3a as follows:

H3a: There is a positive relationship between M&A performance during announcement date and number of block holder ownership

On the other hand, the effectiveness of direct monitoring from owners will be increased if the investors have capabilities to monitor the management performance. Institutional investors have the capacity due to their professional involvement in the monitoring function (Thomsen and Conyon, 2012). Due to their professional abilities and direct monitoring, firms with higher institutional investor have higher firm performance (Cornett et, al., 2007; Ferreira and Matos, 2008). The effect of direct monitoring by the institutional investor is also seen in the merger and acquisition performance. The firms with institutional investor obtain higher post-merger return comparing to firms without institutional investor (Chen et, al., 2007). In relation thereto, I formulate hypothesis 3b as follows:

H3b: There is a positive relationship between M&A performance during announcement date and institutional ownership

Chapter 5 Methodology

This chapter will discuss the construction of sample which has been presented in the thesis as well as the variables and the research methodology which have been used in this thesis.

5.1. Sample Construction

This research relates to the merger and acquisition and corporate governance data. The unit analysis used in this thesis is the merger and acquisition performance during the announcement date. Thus, the sample selection starts by defining merger and acquisition activities. The data for merger and acquisition deal is taken from Thomson One database and selection criteria for merger and acquisition are as follows:

1. The announcement date of merger and acquisition activities occurs between 1 January 2000 and 31 December 2016.
2. Merger and acquisition deal should be completed as of 31 December 2016.
3. The acquirer must acquire at least 51% of target firm share in order to categorize as acquiring control of the target firm.
4. The acquirer must be located in the United States of America.
5. The acquirer must be publicly listed to collect the cumulative abnormal return and corporate governance data.
6. The financial service and utilities companies (Standard Industrial Classification (SIC code) 6000 – 6999 and 4900 – 4999) are excluded due to these industries are highly regulated thus governance is less efficient in the firms (Vafeas and Theodorou, 1998). The merger and acquisition activities in these industries usually occur initiated by regulator due to economic condition such as saving distress firm (Swanstrom, 2006).

The independent and control variables are obtained from Wharton Research Data Services (WRDS) database consisting of three elements of corporate governance which are the board characteristic, executive compensation, and ownership structure. Firstly, the board characteristic data is obtained from Institutional Shareholder Services (ISS) database. Secondly, the executive compensation data is obtained from Compustat database. Lastly, the ownership structure data is obtained from Thomson Reuters database. Meanwhile, the control variables are obtained from Compustat database.

Each of dataset of dependent, independent, and control variable are merged using identifier of 6 digits of CUSIP and year of merger and acquisition. During merging of dataset, some deal-observation has been drop due to availability of either independent or control variable data. The regression analysis is performed by Stata.

5.2. Variable Description

5.2.1. Dependent Variable

As stated previously, the dependent variable is a merger and acquisition performance. Merger and acquisition performance is calculated using cumulative abnormal return of acquirer share during the announcement date of merger and acquisition activity. Based on Hayward and Hambrick (1997), the cumulative abnormal return is a good proxy to represent merger and acquisition performance since it reflects market reaction upon the announcement of merger and acquisition activity. A positive value of cumulative abnormal return represents a positive response to market in respect of announcement of the merger and acquisition activity on the other hand negative value of cumulative abnormal earning represents the negative reaction of market.

The cumulative abnormal return is calculated by using the event study method. At first, the event study is performed by Fama et, al. (1969) and have been reformulated by Brown and Warner (1985). This type of study is also performed by many other kinds of research such as Agrawal et, al. (1992) and Hayward and Hambrick (1997). The cumulative abnormal return is calculated using sample construction from Thomson One database as constructed earlier.

An event study is performed by deciding the estimation window to calculate expected average return. The estimation window is a benchmark to compare the market reaction during announcement date of merger and acquisition date with the normal expected market return. As used by Tehranian et, al. (1987), Moeller et, al. (2004) and Masulis et, al. (2007), this thesis uses 200 trading days as the estimation window.

The second step in event study sets up the specific event window. The event window is when the abnormal return is measured. The event window varies from the period in between the announcement date of merger and acquisition activity. In determining the event window, if the event window is boarder, many other aspects can more influence the impact of announcement of merger and acquisition activity. This thesis uses event window 30 days prior of the announcement of merger and acquisition activity up until 30 days after the announcement of merger and acquisition activity (Campa and Hernando, 2004 and Goergen and Renneboog, 2004). The long period of prior announcement date sets to capture the effect of unofficial information which relates to M&A deal process which can also effect market reaction. The longer period prior announcement date of the transaction can also cover the issue and predictive power long before the merger and acquisition activity announced. Many studies have provided evidence for long period before the announcement of merger and acquisition activity including Andrade et, al. (2001) and Hayward and Hambrick (1997).

Meanwhile, the cumulative abnormal return is calculated by using Datastream Event Study Tool. The software uses the data from CSRP database and the software calculates cumulative abnormal return based on SEDOL identifier of acquirer company and date of announcement merger and acquisition activity. The result from Datastream Event Study Tool is abnormal return for each day of event window. The cumulative abnormal return is calculated as sum of abnormal return along the event window period.

5.2.2. Independent Variable

Independent variables which used in this thesis is the corporate governance mechanism. As discussed in the hypothesis development, the corporate governance mechanism is divided into three elements, which consisting of board characteristics, executive compensation, and ownership structure.

Board Characteristics

The first corporate governance mechanism used in this thesis relates to board of director characteristics. The board characteristics can be divided into three elements; (i) board size, (ii) board composition, and (iii) board leadership.

Board Size

The board size is calculated as the total directors who serve in the company. The number of director data is obtained from ISS database. This proxy is in line with board size proxy which used by Yermarck (1996) and Eisenberg et, al. (1998).

Board Composition

The board composition represents the proportion of a number of independent directors to board size. The classification of independent directors is retrieved from ISS database. The director is categorized as independent director if the classification in ISS database is "I". Then, board composition is calculated by proportion of total independent directors to overall board number. This calculation has been used by prior research such as Yermarck (1997), Amar et, al. (2011) and Faleye et, al. (2011).

Board Leadership

The board leadership is the one who leads the board. The board leadership is defined as dummy variable, which values "1" if chairman of board is the same individual as corporate CEO and "0" if otherwise. The board leadership data is obtained from ISS database. This proxy is supported by Hayward and Hambrick (1997). The duality leadership is expected to have negative correlation with merger and acquisition performance

Executive Compensation

This thesis discusses the executive compensation as the second corporate governance mechanism which can influence merger and acquisition performance. The main focus of the executive compensation is equity – based compensation of the corporate executive. This kind of compensation is calculated by using the proportion of total equity compensation that executives received to overall total compensation that executives received. These data are obtained from Compustat database on Execucomp part. Tehranian et, al. (1987) and Datta et, al. (2001) also used this proportion.

Ownership Structure

The last corporate governance used in this thesis is the ownership structure which is divided into two types; (i) block-holder and (ii) institutional ownership.

Block-holders

Block-holder is defined as an investor who owns at least 5% of the share ownership in a firm (Bhagat and Black, 2000 and Carline et, al., 2009). By having more block-holders, the merger and acquisition performance is expected to increase due to an increase of direct monitoring from investors. The power of direct monitoring from block-holder is represented by the amount of block-holder in a firm, which indicate higher number of block-holder means higher direct monitoring. This type of data is retrieved from Thomson Reuters database.

Institutional Ownership

This thesis also discusses the institutional ownership which means having more expertise, indicating more power to do effective monitoring that can lead to higher merger and acquisition performance. The institutional ownership is measured as shares owned by institutional investor divided by total share outstanding of a firm. Shares held by institutional investor data is obtained from Thomson Reuters database while, share of outstanding data is obtained from Compustat database. This calculation is in line with Ambrosse and Megginson (1992) and Cornett et, al. (2007).

5.2.3. Control Variable

The merger and acquisition performance is influenced by two characteristics, acquirer firm characteristics and deal characteristics. This thesis includes both characteristics as the control variable. Acquirer firm characteristics used in this thesis consist of firm size, firm value, leverage, free cash flow, firm profitability and firm risk. Meanwhile, the deal characteristics consist of target relatedness, cash deal acquisition, competition bidder, target status and target nationality.

Acquirer Firm Characteristics

Firm Size

Many of prior studies find that the size of acquirer firm can influence the gain of merger and acquisition activity. Moeller et, al. (2004) argued that small firm obtains better merger and acquisition performance as the premium which small firm pay is less than what large firm pay. Normally, the large firms pay higher premium that leads to lower gain on merger and acquisition activity. Datta et, al. (2001) has also found that the firm size affects the market reaction to merger and acquisition activity during short-term and long-term period of performance. Thus, it is important to include firm size as control variable since many studies found the correlation of firm size with merger and acquisition performance. Following Datta et, al. (2001),

firm size is defined as natural logarithm of market capitalization of acquiring firm. The market capitalization data is obtained from Compustat database.

Firm Value

Lang et, al. (1989) found that acquirer company with high Tobin's Q value have better merger and acquisition performance compare to firms with low Tobin's Q value. Higher Tobin's Q value represents the better-managed firm. Others viewed the Tobin's Q as a growth opportunity for a company. The acquirer firms with high growth opportunity are most likely using stock as payment of merger and acquisition premium which lead to lower merger and acquisition performance (Kogan and Papanikolaou, 2014; Martin 1996; Moeller et, al., 2004). In congruence with Lang et, al. (1989) and Masulis et, al. (2007), Tobin's Q is calculated as proportion of acquirer market value of assets to the acquirer book value of assets. Calculation of the market value of assets is the book value of assets minus the book value of common equity plus the market value of common equity. Data of book value and market value for both assets and equity is retrieved from Compustat database.

Leverage

High leverage is one of the ways to overcome the agency problem which occurs in a firm. By having large debt, the free cash flow of the company declines which create a lower probability of management to do empire building. As found by Masulis et, al. (2007), the higher debt level leads to better short-term performance of merger and acquisition activity. Thus, this thesis controls the leverage level of the acquiring firm. The leverage is calculated by dividing the total liabilities of the firm with the overall total assets. Such data is obtained from Compustat database.

Free Cash Flow

Pursuant to further explanation of leverage theory, the firm with large free cash flow are more likely to engage in the unprofitable merger and acquisition activity. The worst case is that they engage in value-destroying merger and acquisition activity. Free cash flow variable is calculated as a firm operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets as also used by Masulis et, al. (2007).

Firm Profitability

Morck et, al. (2004) has found that prior performance of acquirer firm can influence the merger and acquisition performance since the market will look through the acquirer prior performance before judging the merger and acquisition performance will be success or not. The firm prior performance can be reflected through their profitability. The firm profitability is calculated as proportion of earnings before interest and tax (EBIT) to overall total assets in order to see how overall assets of a firm can create profit without being affected by management financing decision. The firm profitability data is retrieved from Compustat database.

Firm Risk

Firm risk is calculated as firm volatility prior the announcement of the merger and acquisition activity. Based on Altman (1968) the firm pre-merger risk can be calculated as ratio of retained earnings to total assets. The data of retained earnings and total assets is retrieved from Compustat database.

Deal Characteristics

Target Relatedness

According to Morck et, al. (1990) and Moeller et, al. (2004), the merger and acquisition activity which performed by acquirer and target firm in the same industry have better performance rather than the diversification merger and acquisition activity. Thus, this thesis includes dummy variable of target relatedness to acquirer firm. The dummy variable of "1" is when first three digits of SIC code of target company match with first three digits of SIC code of the acquirer company. The SIC code for both acquirer and target firm is retrieved from Thomson One database.

Cash Deal Acquisition

As Pecking Order Theory by Myers and Majluf (1984) stated that issuing stock will provide negative signal to investor even though the issuance of stock is conducted for the purpose of funding merger and acquisition activity. Moeller et, al. (2004) also found the result of negative performance of acquirer stock when merger and acquisition activity is funded using issuance of stock. Andrade et, al. (2001) supported the result by finding that all cash deal acquisition creates more positive return for acquirer company compare to acquisition paid by all stock. Thus, the thesis has included the dummy variable which states "1" if the merger and acquisition activity is paid all by cash. The payment method data is obtained from Thomson One database.

Competition Bidder

The next control variable of this thesis is dummy variable of number of bidder in the merger and acquisition activity. The dummy variable will be valued “1” if there are more than 1 bidders in the merger and acquisition activity. As stated in Hayward and Hambrick (1997), the premium of the merger and acquisition activity can be influenced by number of bidder of the transaction since higher number of bidder could lead to higher premium which can influence the merger and acquisition return. Number of bidder data is obtained from Thomson One database.

Target Status and Target Nationality

The next control variables for the thesis are the target status and target nationality. Target status is dummy variable which is valued “1” if target is a public firm and “0” for the otherwise. Meanwhile, the target nationality is dummy variable which values “1” if the target is also a United States firm which is same with the acquirer nation and “0” for the otherwise. In line with Amar et, al. (2011) research, the status of target

should be included in the model since Amar et, al. (2011) found that acquiring public firm will reduce merger and acquisition performance. Decreasing of merger and acquisition performance occurs due to higher premium which should be paid by acquirer since the public company is more accurately valued by the analyst. Amar et, al. (2011) also control the nation of the target firm since some researches find that cross border acquisition is better value creation compared to the local acquisition (Eun et, al., 1996). Both target status and nationality data are retrieved from Thomson One database.

Year Fixed Effect

The last control variable is to control for the years of the transaction occurs, also known as 'year effects'. The year fixed effect is placed in this thesis to control the time effect when merger and acquisition occur, since the number of transaction for each year is different. Thomsen et, al. (2006) stated that year fixed effect is used to determine whether the year of transaction occurred influence the merger and acquisition activity. The year fixed effect is defined as dummy variable which value "1" for the year when merger and acquisition activity occur and "0" for the otherwise.

Table 2. Variable Description

Variable	Measurement
CAR (-30, +30)	Cumulative abnormal return calculated from 30 days prior and after announcement date of merger and acquisition
Board Size $_{t-1}$	Total directors who serve on the company
Board Independence $_{t-1}$	Proportion of number of independent directors to total board number
Board Duality $_{t-1}$	1 if CEO = Chairman on Board
Executive EBC $_{t-1}$	Proportion of total equity compensation to overall total compensation
Number of Block-holder $_{t-1}$	Number of investor who have more than 5% of stock
Institutional Ownership $_{t-1}$	Proportion of shares owned by institutional investor to total share outstanding of a firm
Firm Value $_{t-1}$	Tobin's Q = proportion of acquirer's market value of assets to the acquirer book value of assets
Leverage $_{t-1}$	Proportion of total liabilities of the firm to the overall total assets
Free Cash Flow $_{t-1}$	Operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets
Profitability $_{t-1}$	Proportion of earnings before interest and tax (EBIT) to overall total assets
Firm Risk $_{t-1}$	Ratio of retained earnings to total assets
Firm Size	Natural logarithm of market capitalization
Related Acquisition	1 if three first number of SIC target = three first number of SIC acquirer
Cash Payment Deal	1 if deal paid by 100% cash
Number of Bidder	1 if number of bidder more than 1
Target Status	1 if target firm is public
Target Nationality	1 if target firm is located in the United States of America

5.3. Research Method

As discussed before, the ordinary least square (OLS) regression model for this thesis is:

$$CAR\ -30, +30_{in} = \alpha + \beta_1 Board\_size_{it-1} + \beta_2 Board\_independence_{it-1} + \beta_3 CEO\_duality_{it-1} + \beta_4 executive\_equity\_compensation_{it-1} + \beta_5 Block\text{-}holder_{it-1} + \beta_6 Institutional\_own_{it-1} + \beta_7 Firm\_size_{it} + \beta_8 Firm\_Value_{it-1} + \beta_9 Leverage_{it-1} + \beta_{10} FCF_{it-1} + \beta_{11} Firm\_Profitability_{it-1} + \beta_{12} Firm\_Volatility_{it-1} + \beta_{13} Firm\_Risk_{it-1} + \beta_{14} Relatedness_n + \beta_{15} Cash\_deal\_payment_n + \beta_{16} Number\_bidder_n + \beta_{17} Target\_status_n + \beta_{18} Target\_Nationality_n + YearFE_i + IndustryFE_i + \varepsilon_{it}$$

With:

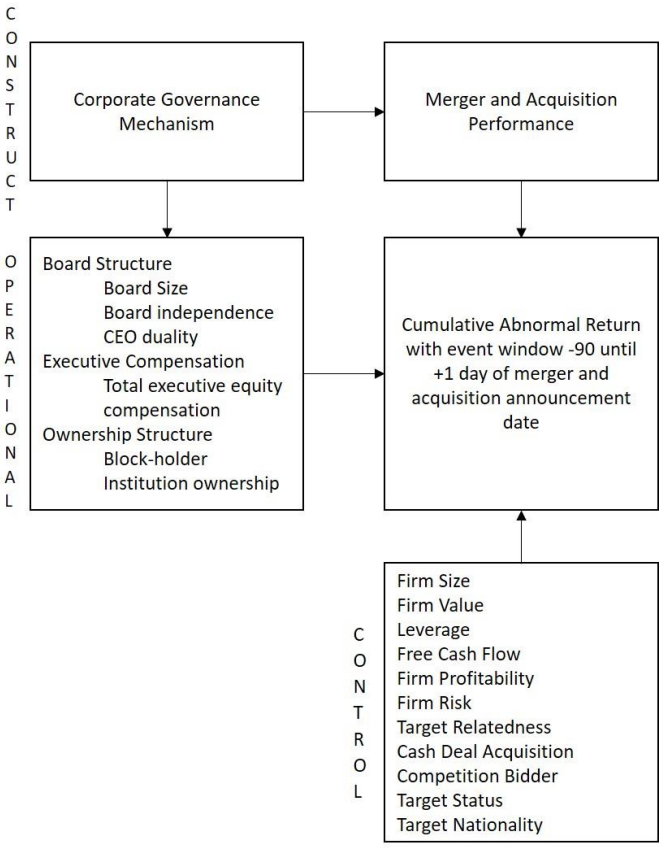
i = Acquirer firm

n = merger and acquisition transaction

t = year of merger and acquisition transaction activity

To figure the previous regression model, the predictive validity frameworks (Libby's Boxes) is presented below. Libby's Boxes consist of the Concept and Operational level which is divided into independent and dependent variables. The Libby's Boxes also consist of the control variables of the thesis.

Figure 1. Libby's Boxes



Chapter 6 Empirical Result and Analysis

Based on the variables discussed in the previous chapter, this chapter will discuss the empirical result and analysis which related to the empirical result. This chapter will start with descriptive statistic and continue with regression result to prove the relation between the corporate governance mechanisms and merger and acquisition performance.

6.1 Descriptive Statistic

The descriptive statistic starts with the number of merger and acquisition which occurred during 2000 – 2016. Based on Table 3, total merger and acquisition activities included in the sample are 11,818 deals which spread unevenly along the year. The highest number of merger and acquisition deals occurred in the year 2000, conversely the lowest occurred in the year 2009. Meanwhile, if the merger and acquisition activities are viewed by using the deal value of the transaction, the highest deal value of the transaction is occurred at the year 2015. The deal value of the transaction is the price which paid by acquirer company to acquire the target company. The deal value of transaction data is obtained from Thomson One database. The deal value of merger and acquisition transaction is not in line with number of the transaction. It should be noted that the higher number of merger and acquisition transaction does not lead to the higher value of the transaction. One of the reasons as to why this could happen is to the fact that the merger and acquisition transaction do not disclose their deal value. Thus, the year fixed effect is used to control a different number of transaction occurred during the sample period.

Table 4 discusses the descriptive statistic of dependent, independent, and control variables of the thesis. The number of observation, mean, median, minimum value, maximum value, and standard deviation are reported for each dependent, independent, and control variables. Starting with the dependent variable, dependent variable of this thesis is cumulative abnormal return of acquirer company with the event window 30 days prior the announcement of merger and acquisition activity until 30 days after the announcement date. The average of dependent variable is minus 0.01 point. This number supports the Jensen and Ruback (1983) result which showed that acquirer firm has negative performance during announcement date of merger and acquisition activity.

Moving to independent variable, the independent variables are divided into three big corporate governance mechanisms, namely: board of director structure, executive compensation, and ownership structure. The board of director structure is divided into board size, board composition, and board leadership. The average of board size is 9.412 member with median nine people. This number is similar with the recommendation of Lipton and Lorsch (1992). Lipton and Lorsch (1992) stated that the optimal number of board size in order to mitigate the cost of decision making is around 8 – 9 people.

Table 3. Merger and Acquisition Trends

Year	Frequency	Percent	Deal Value of Transaction
2000	872	7.38	274,178.11
2001	665	5.63	143,705.61
2002	624	5.28	123,815.55
2003	675	5.71	93,737.05
2004	650	5.5	92,680.86
2005	767	6.49	273,581.79
2006	697	5.9	250,272.74
2007	636	5.38	129,304.23
2008	725	6.13	117,370.57
2009	448	3.79	215,794.73
2010	746	6.31	166,644.29
2011	762	6.45	159,069.57
2012	800	6.77	158,910.23
2013	624	5.28	148,197.16
2014	811	6.86	307,056.93
2015	700	5.92	349,054.06
2016	616	5.21	165,672.83
Total	**11,818**	**100**	**3,169,046.30**

Board independence mean is about higher than 0.7 which means that most of the firms have higher proportion of independence director comparing to inside director. As stated by Bhagat and Black (1999), the higher proportion of independence director leads to better monitoring since the independent director role is to observe executive decision making. The last board of director structure is board leadership. Since board leadership is proxied by dummy variable, the mean number can be interpreted as around 55% of acquirer company have duality leadership in the company which means that the CEO of the firm is also served as chairman of the board. It shown that the duality leadership leads to goal incongruence between management and executive, which also stated by Jensen (1993).

The next corporate governance mechanism is the executive compensation which is proxied by the proportion of earning based compensation to total compensation which executive obtained. The average of equity based compensation is around 30% which means that the company still compensate the executive using other compensations instead of equity based compensation. The higher equity based compensation

of the executive compensation can influence the alignment between executive goal and shareholder goal since the executive have a portion of ownership in the firm (Bebchuck and Fried, 2010).

The last independent variables are the ownership structure mechanism, which uses a number of block-holder and institutional ownership as proxies. The average of number of block-holder is around two owners. This number means that on average firm have two investors who own at least 5% shares ownership of the acquirer firm. The number of block-holder shows the direct monitoring role from investor. The higher number of block-holder leads to higher incentive to obtain higher firm value (Barclay and Holderness, 1991). The monitoring function also can be shown from type of ownership. Institutional ownership has more benefits with more expert to supervise and monitor management decision making (Ferreira et, al., 2008). The average of institutional ownership is about 70% which means that institutional investor has around 70% of stock in acquirer company compare to total stock of the acquirer firm.

Table 4. Descriptive Statistics

Variable	Number	Mean	Median	Minimum Value	Maximum Value	Standard Deviation
CAR (-30, +30)	11,563	-0.010	-0.004	-1.534	1.584	0.179
Board Size $_{t-1}$	10,961	9.412	9.000	3.000	21.000	2.269
Board Independence $_{t-1}$	10,961	0.743	0.778	0	1.000	0.149
Board Duality $_{t-1}$	10,961	0.554	1.000	0	1.000	0.497
Executive EBC $_{t-1}$	11,756	0.295	0.278	0	0.984	0.299
Number of Block-holder $_{t-1}$	11,470	2.047	2.000	0	23.000	1.458
Institutional Ownership $_{t-1}$	11,470	0.701	0.728	0.001	0.999	0.173
Firm Size	11,792	8.504	8.299	3.280	13.348	1.751
Firm Value $_{t-1}$	11,785	2.429	1.881	0.453	82.470	2.885
Leverage $_{t-1}$	11,750	0.491	0.493	0.028	2.333	0.194
Free Cash Flow $_{t-1}$	11,123	0.068	0.070	-1.746	0.482	0.069
Profitability $_{t-1}$	11,818	0.114	0.109	-1.747	0.865	0.081
Firm Risk $_{t-1}$	11,812	0.270	0.297	-10.401	2.337	0.455
Related Acquisition	11,818	0.423	0	0	1.000	0.494
Cash Payment Deal	11,818	0.203	0	0	1.000	0.402
Number of Bidder	11,818	0.006	0	0	1.000	0.078
Target Status	11,818	0.077	0	0	1.000	0.266
Target Nationality	11,818	0.721	1.000	0	1.000	0.449

Furthermore, the control variables of this thesis are separated into two characteristics, which are acquirer characteristic and deal characteristics. The acquirer firm characteristics is started with the firm size. The mean of firm size is about 8.5 points. The next control variable is firm value. The average of firm value is around 2.4 points. There is much difference between minimum and maximum value of firm value. The large difference means that some of the firm is better managed compare to another firm thus it can influence the merger and acquisition performance.

Pursuant to the Table 4, the average of leverage is around 49%, which means that on average firms has used debt less than equity to finance their business. Meanwhile, the average of free cash flow variable is about 0.07 points. The free cash flow number reflect the excess of cash which can be used by the executive, including for the merger and acquisition activity. Management can use the free cash flow for empire building, which can reduce merger and acquisition performance (Jensen, 1986).

The next control variable is the firm profitability. Pursuant to the Table 4, the firm profitability has the average of around 0.114 points. It means that firm can create 0.114-point earnings for every 1 point of assets without considering of the company financing decision. The last control variable for acquirer firm characteristics is firm risk. From descriptive statistic, the firm risk of acquirer firm lies between minus 10 points to 2 points.

The control variables of the deal characteristics are dummy variable. From the average number in Table 4, it can be seen that around 42% of the acquirer firm has acquired the target firm within the same industry, using three number of SIC. The merger and acquisition within industry usually create positive merger and acquisition performance compare to diversified deal (Morck et, al., 1990 and Moeller et, al., 2004). In respect of the payment type and bidder competition, 20% of the merger and acquisition activities is paid using cash. On the other hand, only 0.6% of the merger and acquisition activities have more than one bidders. Andrade et, al. (2001) stated that merger and acquisition activity which paid by cash has generated more positive performance compare to the merger and acquisition activity paid by stock. Hayward and Hambrick (1997) stated that number of bidder may influence the premium which paid by the acquirer firm which can lead to higher premium and lower merger and acquisition performance. The last two control variables of the deal characteristics relate with target firm, which are target status and target nationality. Pursuant to the Table 4, it's only 7.7% of target firm which is listed as public firm and around 72% of target firm is located in the United States of America.

Furthermore, the Table 5 presents the Pearson correlation matrix for independent variables which are used in this thesis. The correlation between independent variables shows a significant sign at 5% level of confidence. Although the correlation shows a significant sign, the value of the correlation lies between minus 1 and 1. Thus, I can conclude that there is no multicollinearity problem between independent variable. To extend of the multicollinearity test, I then conduct VIF test. Based on the VIF result, all the inverse VIF value is higher than 0.1, which means that there is less problem related with multicollinearity in the regression.

6.2 Regression Result and Analysis

In order to run the regression analysis, I conduct the normality test and the heteroskedasticity test. Based on the Jacque-Bera normality test, the residual of the regression is normally distributed on 1% level of significance. Furthermore, the Breusch-Pagan test for heteroskedasticity test shows significant result with F-test valued 164.26 on 1% level of significance. Having regard to those tests above, the regression result is free from normality and heteroskedasticity problem.

Table 6 shows the regression result which explains the relation between the corporate governance and merger and acquisition performance. The result for all hypothesis is shown in Model 1 result. Firstly, the board of director characteristics affect the merger and acquisition performance. The board size result shows a negative and significant correlation with merger and acquisition performance. This result means that every increase in number of board leads to lower merger and acquisition performance. The negative correlation supports the result of Brown and Maloney (1998) and Amar et, al. (2011) which also stated that larger number of board leads to lower merger and acquisition performance. The higher number of board have longer time consuming to decide merger and acquisition activity which can make the decision making is ineffective and inefficient. Hence, the result supports the hypothesis 1 (H1a).

Moving to regression result of board independence effect to merger and acquisition performance, the regression result in model 1 shows that board independence has negative and insignificant influence with merger and acquisition performance. This result has answered the hypothesis 2 oppositely. Hermalin and Weisbach (2003) stated that higher proportion of independent director in the board of director leads to a better decision making related to merger and acquisition activity. Furthermore, Amar et, al. (2011) also find positive relation between board independence merger and acquisition performance since the monitoring role of independent directors is performed well.

Table 5. Pearson Correlation Matrix

Variable	Board Size $_{t-1}$	Board Independence $_{t-1}$	Board Duality $_{t-1}$	Executive EBC $_{t-1}$	Number of Block-holder $_{t-1}$	Institutional Ownership $_{t-1}$	Firm Value $_{t-1}$	Leverage $_{t-1}$	Free Cash Flow $_{t-1}$	Profitability $_{t-1}$	Firm Risk $_{t-1}$	Firm Size	Related Acquisition	Cash Payment Deal	Number of Bidder	Target Status	Target Nationality
Board Size $_{t-1}$	1																
Board Independence $_{t-1}$	0.1219*	1															
Board Duality $_{t-1}$	0.0724*	0.0891*	1														
Executive EBC $_{t-1}$	0.0678*	0.4045*	-0.1662*	1													
Number of Block-holder $_{t-1}$	-0.2760*	0.0677*	-0.0233*	0.0665*	1												
Institutional Ownership $_{t-1}$	-0.1295*	0.2520*	-0.0198*	0.2067*	0.4457*	1											
Firm Value $_{t-1}$	-0.0985*	-0.1218*	-0.0404*	-0.0802*	-0.1033*	-0.1980*	1										
Leverage $_{t-1}$	0.3211*	0.1244*	0.1144*	0.0292*	-0.0386*	-0.0024	-0.1965*	1									
Free Cash Flow $_{t-1}$	0.0568*	0.0962*	-0.0555*	0.1307*	-0.0869*	0.0259*	0.1924*	-0.1056*	1								
Profitability $_{t-1}$	0.0622*	0.0065	-0.0168	0.0131	-0.1605*	-0.0126	0.2456*	-0.0326*	0.7646*	1							
Firm Risk $_{t-1}$	0.1350*	0.0688*	0.0345*	0.0332*	-0.0297*	0.0285*	-0.005	-0.0428*	0.3997*	0.4232*	1						
Firm Size	0.4940*	0.1798*	0.0313*	0.2497*	-0.4330*	-0.1330*	0.1748*	0.1451*	0.2156*	0.2412*	0.1274*	1					
Related Acquisition	-0.1218*	-0.0978*	-0.0648*	0.0159	0.0287*	0.0105	0.0541*	-0.0970*	-0.0431*	-0.0224*	-0.0883*	-0.0664*	1				
Cash Payment Deal	-0.0384*	-0.0056	-0.0131	-0.0357*	0.0368*	0.0390*	-0.0212*	-0.0604*	0.0044	-0.0158	-0.0466*	-0.0245*	0.0266*	1			
Number of Bidder	0.0177	-0.0144	-0.0018	-0.0335*	-0.0124	-0.0025	0.0037	0.002	0.0151	0.0261*	0.0065	0.0219*	0.0266*	0.0516*	1		
Target Status	0.0417*	-0.0166	0.0239*	-0.0430*	-0.0452*	-0.0277*	0.0159	0.001	-0.0123	-0.0101	-0.0229*	0.0806*	0.0604*	0.2423*	0.2123*	1	
Target Nationality	-0.0635*	-0.0646*	-0.0077	-0.0502*	0.0019	-0.0366*	0.0019	-0.0354*	-0.0431*	-0.0088	-0.0528*	-0.0594*	0.0272*	0.0429*	-0.016	0.0592*	1

In order to investigate the reason of negative correlation, I divided the board independence into four dummy variables. The first categorize is dummy variable which values 1 if the proportion of independent directors is fall between 51% to 60% from the total number of board. Furthermore, the second categorize is a dummy variable which values 1 if the proportion of independent director is in range between 61% to 70%. Afterwards, the third categorize of board independence is dummy variable values 1 when the independent directors are in range between 71% to 80% from the total number of board. Lastly, the last variable categories dummy variable which values 1 if the proportion of independent director is larger than 80%. Model 2 shows the result for categorizing variable of board independence. Pursuant to the Table 5 model 2, even though the number showed insignificant result, the result indicates that the board independence of categorize 1, 2, and 3 have positive correlation on merger and acquisition performance which in line with research from Amar et, al. (2011). The negative correlation occurs when the independent board has too many power in the board structure. This view is in line with Byrd and Hickman (1992), whereas they held that there is positive correlation of proportion independent directors on board with tender offer bid, however the correlation turns into a negative correlation when proportion of independent director is high (defined as over 60%). In addition, this view is also supported by Coles et, al. (2008) who held that firm with specific knowledge is suggested to have inside directors as well, considering that the inside directors have more awareness in respect of the company which means that they can provide advice during critical decision making.

The third board of director characteristic is board duality. From model 1, the coefficient result of board duality amounting minus 0.010 shows a negative correlation with merger and acquisition performance. The result is also statistically significant at 5% level of significance. This result answers the hypothesis 3 which stated that merger and acquisition performance is lower when CEO of the acquirer firm also serves as the chairman of the board the acquirer firm. Supporting the result from Morck et, al. (1988), the duality leadership leads to inefficient monitoring role from chairman. The chairman on board independence will be influenced by his interest as CEO which made the main goal of board of director to supervise management become unachievable. The lower merger and acquisition performance is also caused by the CEO hubris which usually higher when there is duality leadership in the acquirer company (Hayward and Hambrick, 1997). Overall, the result supports the hypothesis 1c (H1c).

The positive coefficient of executive equity based compensation approves the prediction that the management, who is compensated by the equity of the firm have the sense of belonging to the firm and will drive to value creation of merger and acquisition activity. The result also shows a statistically significant at 5% level of confidence. The result means that every increment of 1% of equity-based compensation to total compensation leads to increment in cumulative abnormal return during announcement date on average approximately 0.024 unit. As stated previously by Mehran (1995) and Bebchuck and Fried (2003, 2010), the agency problem between shareholder and management decrease due to the increasing in equity compensation received by the executive. The executive should take into consideration the firm value since their wealth is influenced by the firm value. The interest of executive becomes in line with the interest of

shareholder which means a decreasing agency problem. The positive correlation between executive equity based compensation and merger and acquisition performance supports the research from Tehranian et, al. (1987) and Datta et, al. (2001). The result supports the hypothesis 2 which stated that there is a positive relation between M&A performance during announcement date and equity based compensation of executive.

Table 6. Regression Result

Variables	**Model 1 Coefficient (Standard Error)**	**Model 2 Coefficient (Standard Error)**
Board Size $_{t-1}$	-0.003**	-0.003**
	(0.001)	(0.001)
Board Independence $_{t-1}$	-0.017	
	(0.019)	
Board Independence Categorize 1		0.009
		(0.011)
Board Independence Categorize 2		0.001
		(0.009)
Board Independence Categorize 3		0.003
		(0.008)
Board Independence Categorize 4		-0.001
		(0.007)
Board Duality $_{t-1}$	-0.010**	-0.010**
	(0.004)	(0.004)
Executive EBC $_{t-1}$	0.025**	0.025**
	(0.013)	(0.013)
Number of Block-holder $_{t-1}$	0.004**	0.004**
	(0.002)	(0.002)
Institutional Ownership $_{t-1}$	0.008	0.006
	(0.016)	(0.016)
Firm Value $_{t-1}$	-0.014***	-0.014***
	(0.003)	(0.003)
Leverage $_{t-1}$	-0.015	-0.015
	(0.017)	(0.017)

Variables	Model 1 Coefficient (Standard Error)	Model 2 Coefficient (Standard Error)
Free Cash Flow $_{t-1}$	0.091	0.090
	(0.075)	(0.075)
Profitability $_{t-1}$	-0.031	-0.030
	(0.066)	(0.067)
Firm Risk $_{t-1}$	-0.012	-0.012
	(0.009)	(0.009)
Firm Size	0.009***	0.009***
	(0.002)	(0.002)
Related Acquisition	0.002	0.002
	(0.004)	(0.004)
Cash Payment Deal	0.006	0.006
	(0.005)	(0.005)
Number of Bidder	-0.026	-0.026
	(0.021)	(0.021)
Target Status	0.003	0.003
	(0.008)	(0.008)
Target Nationality	-0.002	-0.002
	(0.003)	(0.003)
Observations	9,830	9,830
R-squared	0.074	0.075
Year Fixed Effect	Yes	Yes
Industry Fixed Effect	Yes	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Dependent Variable is Cumulative Abnormal Return between 30 days prior and after the announcement date

The variables are described in table 2

Move to the last corporate governance mechanism, ownership structure, the result of Table 6 from model 1 shows that there is positive and significant correlation between the number of block-holder and merger and acquisition performance during the announcement date. As stated by Carline et, al. (2009), the merger and acquisition performance has increased along with the increase of number block-holder ownership. The

result supports the view of having a block stock will boost a significant impact in decision making in dispersal ownership condition. The direct monitoring from the investor drives to efficient and value creation in every decision making including merger and acquisition decision (Barclay and Holderness, 1991). This result approves the hypothesis 3a (H3a).

The last main independent variable in this thesis is the percentage of institutional ownership. The result shows a positive correlation between proportion of institutional investor to total ownership and cumulative abnormal return during the announcement date of merger and acquisition activity. The result is in line with research conducted by Chen et, al. (2007) which stated that higher institutional ownership leads to higher direct monitoring since the institutional investor has capabilities and professionalism in doing monitoring for the business activities. However, the result from this thesis does not show statistically significant. In my view, the possible reason of the insignificant result is due to the proportion of institutional investor which includes all type of institutional investor. Ferreira and Matos (2008) has performed the research in effect of institutional investor on firm value by dividing the institutional investor based on the origin and the potential business ties of the institutional investor to the firms.

6.3. Summary Result and Comparison with Previous Literature

This thesis discusses related to the influence of corporate governance mechanism to merger and acquisition performance. In particular, the thesis examines the correlation between the board of director characteristics, executive compensation and ownership structure as the corporate governance mechanisms. In line with Hayward and Hambrick (1997), Brown and Maloney (1998), Carline et, al. (2009), and Amar et, al. (2011), the regression result shows that the board size and board duality have negative correlation with merger and acquisition performance. The correlation indicates that cumulative abnormal return has decreased as the increment of number of directors who serve on the board. The merger and acquisition performance also drop when CEO on the acquirer firm also acts as the chairman of board of the firm.

On the other hand, the executive equity based compensation and number of block-holder investor have positive and significant association with merger and acquisition performance. This result agrees with result of the researches by Lewellen et, al. (1985), Tehranian et, al. (1987), Datta et, al. (2001), Willian et, al. (2001) and Amar et, al. (2011). The coefficient of executive equity based compensation implies that the more executives are compensated using equity based compensation, the more merger and acquisition performance which can acquirer firm create.

Similar to the above, the same result shows in number of block-holder variable. The increasing in number of block-holder investors leads to the increasing of cumulative abnormal return during the announcement of merger and acquisition date as found by Carline et, al. (2009) and Amar et, al. (2011). However, the result has showed the opposite view from researches by Byrd and Hickman (1992), Ambrose and Megginson (1992) and Chen et, al. (2007), which stipulated that the board independence and institutional ownership result do not show statistically significant result. Table 7 below summarizes the comparison between findings of this study with previous related literature.

Table 7. Comparison Thesis Result with Prior Literature Result

Author	Outcome	Thesis Outcome
Lewellen et, al. (1985)	The higher percentage of own-company stock held by senior management of acquiring lead to better abnormal stock return for acquiring firm.	The thesis outcome **partially agrees** with the journal outcome since the journal use stock-held by senior management while this thesis using equity-based compensation as proxy. Both proxies showed positive correlation with merger and acquisition performance. The similarity is that the share ownership of the company leads to alignment interest between management and shareholders.
Tehranian et, al. (1987)	Long-term performance plan compensation lead to higher performance which is shown from higher stock price during the announcement of merger and acquisition activities. The post-acquisition EPS also a positive reaction for firm which have long-term performance plans.	The thesis outcome **partially agrees** with the journal outcome. Both stated that executive compensation is one of tool to align the interest between management and shareholder. Meanwhile the journal uses long-term performance compensation, the thesis uses the equity-based compensation as proxy of executive compensation.
Brown and Maloney (1988)	Firm with higher turnover of outside director and lower turnover of inside director have more poor performance. Smaller boards are related to improved acquisition performance. If at the beginning, the ownership of a firm by director is small, ownership by director has a positive correlation with firm performance.	The thesis outcome **partially agrees** with the journal outcome. The same result is for the board size result which shows an inverse correlation. Meanwhile for other proxies used in the journal are excluded from the thesis.
Byrd and Hickman (1992)	There is a nonlinear association between board composition, proxied by the number of independent directors on the board, and merger and acquisition performance. The correlation starts from positive correlation and become negative correlation when there is an extraordinary large proportion of independent directors (over 60%).	The thesis outcome is **inconsistent** with the result from the journal. The result of this thesis shows that board independence does not have correlation with merger and acquisition performance while the journal result shows a nonlinear relation between board independence and merger and acquisition performance.
Ambrose and Megginson (1992)	No significant effect is also found between insider and institutional shareholding and likelihood of takeover bid. Although, there is negative	The thesis outcome is **inconsistent** with the journal result. The journal found that the changes in the institutional shareholding lead to higher possibility to be takeover. Meanwhile, the thesis result concluded that

Author	Outcome	Thesis Outcome
	relation between the net change in institutional shareholdings to probability to become takeover target.	there is no correlation between institutional ownership and merger and acquisition performance.
Hayward and Hambrick (1997)	There is positive correlation between CEO hubris and premium of merger and acquisition activity. The correlation is strengthened when the board monitoring role is lacking which is proxied by large proportion of inside director and duality. Higher premium of merger and acquisition activity lead to lower shareholder wealth.	The thesis outcome **partially agrees** with the journal result. The thesis focuses on merger and acquisition performance during the announcement date of deal activity. Meanwhile the journal focuses on premium of merger and acquisition activity and shareholder wealth. On the other side, both found that board duality creates lower shareholder wealth during the merger and acquisition announcement date.
Datta et, al. (2001)	There is positive and significant association between equity – based compensation received by management of acquirer company and stock performance during acquisition announcement date. The association still shows a positive relation when using control variable of acquisition mode, payment method, managerial ownership, and previous option grants.	The thesis outcome is **consistent** with the journal result. The thesis result also shows positive correlation between equity – based compensation received by executive of the acquirer firm.
Chen et, al. (2007)	Independent institutional investors have positive and significant relation with post-merger performance. Concentrated holdings by ILTI showed their monitoring role by choosing bad merger withdrawal rather than selling their share after the announcement.	The thesis outcome is **inconsistent** with the journal result. The thesis result shows no correlation between institutional ownership and merger and acquisition performance during the announcement date.
William et, al. (2008)	By giving stock-option, management have a risk-incentive effect which lead to higher post-merger risk. The firm size also has positive relation with post-merger volatility ratio. While the interaction term between the risk-incentive effect of CEO stock options and firm size has inverse relation with volatility.	The thesis outcome **partially agrees** with the journal result. The thesis result supports the executive equity based compensation has positive and significant correlation with merger and acquisition performance

Author	Outcome	Thesis Outcome
Carline et, al. (2009)	Proved by positive correlation of board ownership and operating performance changes after merger and acquisition activities. The result also supports that board size have inverse relation with merger and acquisition performance. From ownership structure, block-holder ownership has positive association with operating performance changes after merger and acquisition occurred. The result also shows that board duality has negative correlation but insignificant.	The thesis result is **consistent** with the journal result. The journal uses the operating performance changes after merger and acquisition activities, whereas the thesis uses cumulative abnormal return during announcement date. The thesis also found the inverse correlation between board size and merger and acquisition performance and positive correlation between number of block-holder and merger and acquisition performance. The result of the thesis also proves that board duality has inverse correlation with merger and acquisition performance when the journal found an insignificant result.
Amar et, al. (2011)	The journal found the correlation of CEO attributes, board composition, and external ownership with merger and acquisition performance. For CEO attributes, only CEO ownership have positive and significant correlation, while CEO duality, age and tenure do not show a significant correlation. For board composition, board size has inverse correlation while board independence and director ownership have positive correlation with merger and acquisition performance. Lastly, External block-holder influence short-term performance of acquirer firm positively.	The result of the thesis is **consistent** with the journal result. The thesis result shows inverse correlation of board size and merger and acquisition performance. The thesis results also show positive correlation between executive equity – based compensation and number of block-holder and merger and acquisition performance. However, the thesis result does not support positive correlation between board independence and merger and acquisition performance. Lastly, opposite from journal, the thesis result found inverse correlation between board duality and merger and acquisition performance.

Chapter 7 Conclusion and Limitations

7.1. Conclusion

Many of prior research have found that the merger and acquisition activity creates value for the combined firms, whereas most of profit is obtained by the target firm. Most of the time, the acquirer firm recorded zero return or even negative return for the worst during the merger and acquisition activity. On the other hand, the corporate governance is a mechanism which established to minimize the agency problem in a firm. Negative performance of acquirer firm during the announcement date is predicted due to agency problem between management and shareholders (Morck et, al., 1988). The goal incongruence reason causes management decisions are not to the best interest of shareholder. This idea leads to lower merger and acquisition performance of the acquirer firms.

The goal of this thesis is to examine whether the corporate governance mechanisms have a significant influence to the merger and acquisition performance during the announcement date which leads to the research question of this thesis:

"Does corporate governance affect merger and acquisition performance?"

The corporate governance is divided into three mechanisms, which consisting of board of director structure, executive compensation, and ownership structure. The first hypotheses relate to the board of director structure. The primary role of board of director is to provide link between shareholder and management with focusing on shareholder interest. Thus, the board of director is expected to have influence in every management decision making including merger and acquisition activity (Denis and McConnel, 2001). The board size, board composition, and board leadership are board of director structure which is predicted to have impact on merger and acquisition performance (Amar et, al., 2011). Hence, the first hypotheses are as follows:

H1a: There is a negative relation between M&A performance during announcement date and board size

H1b: There is a positive relation between M&A performance during announcement date and board independence

H1c: M&A performance during announcement date is lower when CEO is also COB

Overall, the regression result shows a significant correlation with board size and board duality. Both variables result show negative and significant impact on merger and acquisition performance. The effectiveness and efficiency of board decrease when board of director has large member and the leader also serve as CEO. Thus, it leads to lower merger and acquisition performance. On the other hand, the result of board independence is significant even after board independence is derived into four categories based on percentage of independent directors.

The second hypothesis relates to the executive compensation as corporate governance mechanism which can increase the merger and acquisition performance. By giving part of company to the management as their compensation, the shareholder expects that management interest becomes in line with the shareholder interest (Datta et, al., 2001). Thus, this reason leads to the second hypothesis as follow:

H2: There is a positive relation between M&A performance during announcement date and equity based compensation of executive

Based on the regression result, the executive equity based compensation have significant and positive correlation with merger and acquisition performance. The resulting supports the view that giving portion of corporate wealth to the management will cause the management acting based on shareholder interest since it would affect their own wealth as well.

The last hypotheses relate to the ownership structure. Shleifer and Vishny (1997) stated that the agency problem is decreased when the owner has power in the firm which is noted by having large portion of the company stock. The ownership structure can mitigate the agency problem in the firm which can influence the merger and acquisition performance of the acquirer firm. Thus, this reason leads to the third hypothesis as follow:

H3a: There is a positive relationship between M&A performance during announcement date and number of block holder ownership

H3b: There is a positive relationship between M&A performance during announcement date and institutional ownership

Number of block-holder ownership have positive and significant association with cumulative abnormal return during the announcement date of merger and acquisition activity. However, the institutional ownership regression result does not show a significant result.

In conclusion, by using sample of merger and acquisition activity during the period 2000 – 2016, the result shows that corporate governance mechanisms, consist of board size, board duality, executive equity based compensation, and number of block-holder ownership, have a significant effect of merger and acquisition performance.

The result of this thesis contributes to academic insight related with association between corporate governance and merger and acquisition performance, considering that this thesis combines and elaborated researches from several researchers. This thesis uses long period of sample also a recent data in the period of merger and acquisition activity growth magnificently compare to last decade and corporate governance rise widely following globalization era. The result of this thesis also provides the insight for business world. The acquirer firm which includes merger and acquisition as its critical corporate decision know solution of lower merger and acquisition performance. The acquirer company can change their corporate governance mechanisms to achieve better merger and acquisition performance.

7.2. Limitation and Suggestion

Although some beneficial results can be concluded from this thesis, there are as well some limitations which connected to the research. Firstly, there are some possibilities of other variables which are not included in the regression have a significant influence on the merger and acquisition performance. The omitted variable could affect the empirical result. Year and industry fixed effect are used to mitigate the omitted variable. However, the fixed effect could not reduce the omitted variable problem adequately. The second limitation can be found in the fact that, the institutional ownership used in this thesis have not further been specified which is predicted to become a reason why there is insignificant result of institutional ownership correlation to merger and acquisition performance. As found by Ferreira and Matos (2008), the origin of institutional investor and the potential business ties of institutional investor have impact to firm performance. This could be an interesting topic for the further research.

Results of this thesis also suggest several matters could be elaborated in the future research. First, the future research can expand the research beyond the U.S. business environment since other countries have their own legal framework. It is interesting to see whether corporate governance in another legal framework can influence the merger and acquisition performance. Second, this thesis excludes financial industry and utility industry since those two industries are highly regulated industry. It is interesting to view the correlation between corporate governance and merger and acquisition performance in Financial Service and Utilities Industry.

References

Abowd, J. M. 1990. Does Performance-Based Managerial Compensation Affect Corporate Performance? *ILR Review* 43(3): 52S-73S.

Adam, B., R., H. B., & Weisbach, M. 2010. The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey. *Journal of Economic Literature* 48(1): 58-107.

Agrawal, A., Jaffe, J. F., & Mandelker, G. N. 1992. The Post-Merger Performance of Acquiring Firms: A Re-examination of an Anomaly. *The Journal of Finance* 47(4): 1605-1621.

Allen, J. W., & Phillips, G. M. 2000. Corporate Equity Ownership, Strategic Alliances, and Product Market Relationships. *The Journal of Finance* 55(6): 2791-2815.

Altman, E. I. 1968. Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *The Journal of Finance* 23(4): 589-609.

Amar, W. B., Boujenoui, A., & Francoeur, C. 2011. CEO Attributes, Board Composition, and Acquirer Value Creation: A Canadian Study. *Canadian Journal of Administrative Sciences* 28: 480–492.

Ambrose, B. W., & Megginson, W. L. 1992. The role of asset structure, ownership structure, and takeover defenses in determining acquisition likelihood. *Journal of Financial and Quantitative Analysis* 27(4): 575-589.

Andrade, G., Mitchell, M., & Stafford, E. 2001. New evidence and perspectives on mergers. *The Journal of Economic Perspectives* 15(2): 103-120.

Baker, M., & Gompers, P. A. 2003. The Determinant of Board Structure at The Initial Public Offering. *Journal of Law and Economics* 46: 569–598.

Barclay, M., & Holderness, C. 1991. Negotiated Block Trades and Corporate Control. *Journal of Finance* 46(3): 861 – 878.

Bebchuck, L. A., & Fried, J. M. 2003. Executive Compensation as an Agency Problem. *Journal of Economic Perspectives* 17(3): 71–92.

Bebchuck, L. A., & Fried, J. M. 2010. How to Tie Equity Compensation to Long-Term Results. *Journal of Applied Corporate Finance* 22(1): 99 – 106.

Berger, P. G., Ofek, E., & Yermack, D. L. 1997. Managerial entrenchment and capital structure decisions. *The Journal of Finance* 52(4): 1411-1438.

Bethel, J. E., Liebeskind, J. P., & Opler, T. 1998. Block Share Purchases and Corporate Performance. *The Journal of Finance* 53(2): 605-634.

Bradley, M., Desai, A., & Han Kim, E. 1988. Synergetic Gains from Corporate Acquisitions and Their Division Between the Stockholders of Target and Acquiring Firms. *Journal of Financial Economics* 21: 3 – 40.

Brickley, J., Coles, J., & Jarrell, G. 1997. Leadership structure: Separating the CEO and Chairman of the Board. *Journal of Corporate Finance* 3: 189 – 220.

Brown, S. J., & Warner, J. B. 1985. Using daily stock returns: The case of event studies. *Journal of Financial Economics* 14(1): 3-31.

Brown, W. O., & Maloney, M. T. 1998. Exit, Voice, and the Role of Corporate Directors: Evidence from Acquisition Performance. *Claremont Colleges Working Papers in Economics*, 1999: 27.

Byrd, J. W., & Hickmann, K. A. 1992. Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics* 32: 195-221.

Campa, J. M., & Hernando, I. 2004. Shareholder Value Creation in European M&As. *European Financial Management*: 47 - 81.

Carline, N. F., Linn, S. C., & Yadav, P. 2009. Operating performance changes associated with corporate mergers and the role of corporate governance. *Journal of Banking & Finance* 33: 1829 – 1841.

Chen, X., & Yur-Austin, J. 2007. Re-measuring agency costs: The effectiveness of blockholders. *The Quarterly Review of Economics and Finance* 47: 588–601.

Chen, X., Harford, J., & Li, K. 2007. Monitoring: Which institutions matter? *Journal of Financial Economics* 86: 279–305.

Coles, J. L., Daniel, N. D., & Naveen, L. 2008. Boards: Does one size fit all? *Journal of Financial Economics* 87(2): 329-356.

Cornett, M. M., Marcus, A. J., Saunders, A., & Tehranian, H. 2007. The impact of institutional ownership on corporate operating performance. *Journal of Banking & Finance* 31: 1771–1794.

Datta, S., Iskandar-Datta, M., & Raman, K. 2001. Executive compensation and corporate acquisition decisions. *The Journal of Finance* 56(6): 2299-2336.

Denis, D. K., & McConnell, J. J. 2003. International corporate governance. *Journal of Financial and Quantitative Analysis* 38(1): 1-36.

Depamphilis, D. M. 2012. *Merger, Acquisition, and Other Restructuring Activities. An Integrated Approach to Process, Tools, Cases, and Solutions*. Sixth Edition. Academic Press.

Eisenberg, T., Sundgren, S., & Wells, M. 1998. Larger board size and decreasing firm value in small firms. *Journal of Financial Economics* 48: 35 – 54.

Eun, C. S., Kolodny, R., & Scheraga, C. 1996. Cross-border Acquisitions and Shareholder Wealth: Test of the Synergy and Internalization Hypothesis. *Journal of Banking and Finance* 20: 1559-1582.

Faleye, O., Hoitash, R., & Hoitash, U. 2011. The costs of intense board monitoring. *Journal of Financial Economics* 101: 160-181.

Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. 1969. The adjustment of stock prices to new information. *International Economic Review* 10: 1-21.

Ferreira, M. A., & Matos, P. 2008. The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics* 88: 499–533.

Ferreira, M., Massa, M., & Matos, P. 2010. Shareholders at the gate? Institutional investors and cross-border mergers and acquisitions. *Review of Financial Studies* 23: 601-644.

Finkelstein, S., & D'Aveni, R. A. 1994. CEO duality as a double edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal* 37: 1079-1108.

Goergen, M., & Renneboog, L. 2004. Shareholder Wealth Effects of European Domestic and Cross-border Takeover Bids. *European Financial Management* 10(1): 9–45.

Goranova, M., Dharwadkar, R., & Brandes, P. 2010. Owners on both sides of the deal: mergers and acquisitions and overlapping institutional ownership. *Strategic Management Journal* 31(10): 1114-1135.

Hayward, M. L., & Hambrick, D. C. 1997. Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly* 42(3): 103-127.

Hermalin, B. E., & Weisbach, M. S. 2003. Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review - Federal Reserve Bank of New York* 9(1): 7-26.

Hossain, M., Prevost, A. K., & Rao, R. P. 2001. Corporate governance in New Zealand: The effect of the 1993 Companies Act on the relation between board composition and firm performance. *Pacific-Basin Finance Journal* 9: 119 -145.

Jensen, M. 1993. The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance* 48: 831–880.

Jensen, M. C. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics* 3(4): 305-360.

Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 76 (2): 323-329.

Jensen, M. C., & Ruback, R. S. 1983. The market for corporate control: The scientific evidence. *Journal of Financial economics* 11(1): 5-50.

Kogan, L., & Papanikolaou, D. 2014. Growth Opportunities, Technology Shocks, and Asset Prices. *The Journal of Finance*: 675-718.

Lang, L. H., Stulz, R. M., & Walking, R. A. 1989. Managerial Performance, Tobin's Q, and the Gains from Successful Tender Offers. *Journal of Financial Economics* 24: 137-154.

Lewellen, W., Loderer, C., & Rosenfeld, A. 1985. Merger Decisions and Executive Stock Ownership in Acquiring Firms. *Journal of Accounting and Economics* 7: 209-231.

Linck, J. S., Netter, J. M., & Yang, T. 2008. The determinants of board structure. *Journal of Financial Economics* 87: 308–328.

Lipton, M., & Lorsch, J. W. 1992. A Modest Proposal for Improved Corporate Governance. *The Business Lawyer*, 48(1): 59-77.

Mak, Y., & Kusnadi, Y. 2005. Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal* 13: 301 – 318.

Martin, K. J. 1996. The Method of Payment in Corporate Acquisitions, Investment Opportunities, and Management Ownership. *The Journal of Finance*, 51(4): 1227-1246.

Masulis, R. W., Wang, C., & Xie, F. 2007. Corporate Governance and Acquirer Returns. *The Journal of Finance* 62(4): 1851-1889.

Mehran, H. 1995. Executive compensation structure, ownership, and firm performance. *Journal of Financial Economics* 38(2): 163-184.

Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. 2004. Firm size and the gains from acquisitions. *Journal of Financial Economics* 73(2): 201-228.

Morck, R., Shleifer, A., & Vishny, R. W. 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics* 20(2): 293-315.

Murphy, K. 1999. Executive Compensation. *Handbook of Labor Economics* 3(B): 2485–2563.

Myers, S. 2003. Financing of corporations. In G. Constantinides, M. Harris, & R. Stulz, *Handbook of The Economics of Finance: Corporate Finance Volume 1A* (pp. 215 – 253). North Holland: Elsevier.

Myers, S., & Majluf, N. 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13: 187−221.

Pi, L., & Timme, S. G. 1993. Corporate control and bank efficiency. *Journal of Banking and Finance* 17: 515-530.

Rechner, P. L., & Dalton, D. R. 1991. CEO Duality and Organizational Performance: A Longitudinal Analysis. *Strategic Management Journal* 12(2): 155-160.

Rosenstein, S., & Wyatt, J. G. 1990. Outside directors, board independence, and shareholder wealth. *Journal of Financial Economics* 36: 175 – 191.

Shleifer, A., & Vishny, R. W. 1997. A survey of corporate governance. *The Journal of Finance* 52(2): 737-783.

Shome, D. K., & Singh, S. 1995. Firm Value and External Blockholdings. *Financial Management* 24(4): 3-14.

Singh, M., & Davidson III W, N. 2003. Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking & Finance*, 27: 793 -816.

Swanstrom, M. 2006. Corporate Governance and the Abnormal Returns to Acquisition Announcements. *Journal of Business Strategies* 23(2): 115-129.

Tehranian, H., Travlos, N. G., & Waegelein, J. F. 1987. Management compensation contracts and merger-induced abnormal returns. *Journal of Accounting Research* 25: 51-76.

Thomsen, S., & Conyon, M. 2012. *Corporate Governance Mechanisms and Systems*. McGraw-Hill.

Thomsen, S., Pedersen, T., & Kvist, H. K. 2006. Blockholder ownership: Effects on firm value in market and control based governance systems. *Journal of Corporate Finance* 12(2): 246-269.

Toole, M. (n.d.). 2016. A record year for deal making. Source https://blogs.thomsonreuters.com/answerson/record-year-deal-making/.

Vafeas, N., & Theodorou, E. 1998. The Relationship between Board Structure and Firm Performance in the UK. *British Accounting Review*: 383–407.

Williams, M. A., Michael, T. B., & Rao, R. P. 2008. Bank mergers, equity risk incentives, and CEO stock options. *Managerial Finance* 34(5): 316-327.

Wreight, P., Kroll, M., Lado, A., & VanNess, B. 2002. The Structure of Ownership and Corporate Acquisition Strategies. *Strategic Management Journal* 23(1): 41-53.

Yermack, D. 1996. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40(2): 185-211.