Determinants and Effects of Antitakeover Provisions on Corporate Governance and Firm Performance

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Determinants and Effects of Antitakeover Provisions on Corporate Governance and Firm Performance

Abstract:

This thesis analyses and groups antitakeover provisions as they relate to CEO’s monetary benefits. It specifically focuses on the six provisions that were proposed by Bebchuk et Al. (2009) to conversely affect firm value. Although all provisions provide managers with a takeover protection, some provisions provide managers with a monetary outcome (Category A provisions) if a takeover was successful while others do not (Category B provisions). Findings indicate that CEOs with a role duality use their power to influence the adoption of takeover defences that provide them with a monetary outcome. Moreover, in the presence of CEO duality, the relationship between Category A provisions and firm value worsens. On the other hand, the relationship between Category B provisions and firm value is unaffected by the presence of CEO duality. This suggests that CEOs having a role duality do not feel the need to work in the shareholders’ best interest when entrenched with Category A provisions.

The second model of this thesis explains the conflicting evidence found on agency theory in previous literature. This is achieved by introducing interaction variables between three of the main governance mechanisms used to mitigate agency problems: Shareholder rights, CEO ownership and board independence. Findings suggest that board independence and the market for corporate control act as substitutes. Board independence has a positive effect on firm value for firms with a weak governance structure. For firms having high levels of governance and shareholder rights, no extra monitoring by independent directors is needed. Such firms could benefit more from the firm-specific knowledge of insider directors. Results also show that both takeover defences and CEO ownership increase managerial power. Therefore, providing CEOs with antitakeover provisions and high levels of ownership increases the entrenching effect of CEO ownership on firm value.

The overall findings of this thesis indicate that internal and external governance mechanisms interact in affecting firm performance. Suggestions of agency theory (increasing CEO ownership, increasing board independence and removing CEO duality) are valid for firms with low levels of external governance and shareholder rights. On the other hand, firms that are already enjoying a good level of governance benefit from providing managers with more power and leadership roles that are in line with the stewardship theory.
Determinants and Effects of Antitakeover Provisions on Corporate Governance and Firm Performance

by

Bilal Abdallah Al Dah

A thesis submitted for the degree of Doctor of Philosophy

University of Durham

Durham University Business School

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2015
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Declaration

I, the author of this thesis, declare that this thesis is the result of my own hard work. Up to my own knowledge, the content of this paper has not been formerly published nor submitted to any other institution. The copyright of this thesis shall remain with the author, hence acknowledgment related to any information derived from it should be noted.
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God bless you all,

Bilal
Chapter 1

Introduction
1.1 Background and Overview

Ever since the famous book by Berle and Means in 1932 “The Modern Corporation and Private Property”, researchers have strived to find the optimal combination of mechanisms for governing firms. However, conflicts of interest between managers and shareholders occur due to opportunistic behavior by some managers. Therefore, several internal and external governance mechanisms have been suggested by researchers to reduce this conflict of interest and, thus, enhance firm performance.

This research revisits the interest alignment hypothesis between managers and shareholders. Agency theory proposes several governance mechanisms that could be used in order to mitigate agency problems among firms. Increasing board independence, having an independent leadership structure, increasing managerial ownership and the presence of an active market for corporate control have all been suggested separately as solutions to the conflicts of interest that can take place between managers and shareholders and thus increase firm value (Dalton et al., 2007; Rhoades et al., 2001).

The main focus of this study is the market for corporate control, which is one of the main mechanisms used in corporate governance to discipline managers (Bebchuk et al., 2009; Dalton et al., 2007). An underperforming firm would become undervalued in the market and therefore would become an interesting takeover target for bidding firms. In most cases, after a takeover successfully takes place, the bidding firm brings a management team of its own to replace the management team of the target firm. Knowing so, managers of these firms tend to adopt antitakeover provisions to lower the probability of a takeover threat taking place even if their firm is underperforming (Bebchuk et al., 2009).
Following the takeover boom of the 1980s in the US, managers started creating new mechanisms to oppose the takeover threats they are facing to protect their position in the company. Therefore, several antitakeover provisions were created and became widely spread among US firms during the 1990s. There is a wide dispute among researchers as to the main motive behind adopting takeover defences. One group of researchers propose the interest alignment hypothesis where managers adopt takeover defences in order to increase their bargaining power in case of a takeover, which is in the shareholders’ best interest. Other researchers suggest the entrenchment hypothesis where managers influence the adoption of takeover defences in an attempt to block any takeover attempt even if it has a positive effect for shareholders.

Antitakeover provisions can take a variety of forms (Gompers et al., 2003). Some of these provisions make a takeover more costly for the bidder while other provisions increase the legal requirements (such as voting percentage to approve a merger) for a takeover to take place. Another type of takeover defences can delay a takeover making it less interesting for bidders to launch a takeover attempt against firms having such provisions. Gompers et al. (2003) highlights the importance of studying antitakeover provisions because they can act as an indicator for either managerial power or shareholder rights. Being able to adopt various takeover defences is an indicator of high managerial power and low shareholder rights since the managers take away the right of the shareholder of having a takeover take place. Accordingly, following Gompers et al. (2003), various researchers have been using indices of takeover defences as a proxy for shareholder rights and soundness of a firm’s governance structure (Harford et al., 2008; Kaplan and Minton, 2006; Masulis et al., 2007).
1.2 Research Motivation

Different researchers study different types of antitakeover provisions throughout the literature. Whether the study is addressing the determinants of antitakeover provisions or their effect on firm performance, randomly selected takeover provisions dominate most of the previous studies. Researchers have used single provisions such as poison pills (Comment and Schwert, 1995; Davis, 1991), golden parachutes (Cochran et al., 1985; Singh and Harianto, 1989) or other randomly selected indices of provisions (Danielson and Karpoff, 1998). More recently, Bebchuk et al. (2009) create the E-index out of six provisions that were found to be the only provisions with a significantly negative effect on firm performance. However, up to my knowledge, none of these studies takes into consideration why do managers support or oppose the adoption of certain takeover defences. In other words, it is expected that there is a behavioral differences by CEOs and directors towards the adoption of different types of antitakeover provisions. For example, opportunistic CEOs might be supportive to the adoption of antitakeover provisions that provide them with more room to gain private benefits. On the other hand, independent directors are said to be more concerned with monitoring opportunistic behaviors by managers. Therefore, independent directors are expected to oppose takeover defences that provide CEOs with private benefits. This new way of classifying antitakeover provisions based on whether they provide CEOs with private benefits or not inspires more research to be done on the determinants of takeover defences.

In addition to the determinants of takeover defences, this study also addresses the effect of takeover defences on firm value in different ways. It addresses the direct relationship between adopting takeover defences and firm value as well as the
indirect relationship of the effect of takeover defences on the relationship between other governance mechanisms and firm performance. Even though antitakeover provisions are thought to be entrenching for managers (Bebchuk et al., 2009) and take away the shareholders’ rights of having a takeover without incurring huge costs (Gompers et al., 2003), empirical evidences have not been conclusive. Some researchers argue that takeover defences are beneficial to shareholders because they result in a higher bid premium (Comment and Schwert, 1995; Harris, 1990; Stein, 1988). On the other hand, more recent researches supports the entrenchment hypothesis by finding that antitakeover provisions are used to entrench managers in their positions at the company (Bebchuk et al., 2009; Gompers et al., 2003; Sundaramurthy, 1998). These researchers find that the presence of antitakeover provisions lowers the probability of a takeover taking place while also lowering the value of the respective firm.

Furthermore, empirical evidences have also been inconsistent for the other governance mechanisms included in this study (CEO Duality, CEO ownership and board independence). Agency theory predicts that increasing board independence and increasing CEO ownership both enhance a manager’s motivation to work in maximizing shareholder value. However, results in the literature have been highly inconsistent. Although some researchers find results consistent with the assumptions of the agency theory (Cotter et al., 1997), others find the opposite (Bhagat and Bolton, 2008; Brick et al., 2006; Ryngaert, 1988). In addition, a large number of researchers also find that the aforementioned governance mechanisms do not have a significant effect on firm performance (Abdullah, 2004; Baliga et al., 1996; Bhagat and Black, 2000; Hermalin and Weisbach, 1991). All of these contradicting results
encourage more research to be done in this field in an attempt to find more definitive results and to explain the reasons behind the contradictory results in previous studies.

1.3 Research Methodology and Expected Contribution

In order to test the validity of the above arguments, this research starts by studying the determinants of an index of antitakeover provisions. Studying the determinants of antitakeover provisions gives more insights on the motives behind adopting these provisions. The index that will be used in this study is the E-Index, which consists of six antitakeover provisions that previous researchers, such as Bebchuk et al. (2009), found to be negatively correlated with firm value.

In addition to studying the determinants of the E-Index, this research provides a new way to study and group antitakeover provisions. The majority of previous studies show that all of these antitakeover provisions have an entrenching effect for managers and negatively affect firm value. Many of these studies observe the determinants of single antitakeover provisions or randomly selected indices of provisions (Davis, 1991; Danielson and Karpoff, 1998; Harris, 1990; Singh and Harianto, 1989;). However, very little has been said about the managerial preferences when choosing which antitakeover provision to adopt and why managers could support the adoption of a certain provision over another. It is expected that managerial preferences could differ between one provision and another. Therefore, this study groups antitakeover provisions in a new way that, up to my own knowledge, has never been used in previous literature.

1.3.1 The Grouping Process

Danielson and Karpoff (1998) argue that managers as well as directors prefer specific antitakeover provisions or another. Becker-Blease (2011) suggests that, in
many cases, managers and directors play an active role in the process of voting for these provisions and enacting them. In the same sense, this study hypothesizes that CEOs and independent directors each have preferences for certain provisions and each would try to adopt the provisions of their preference.

According to the grouping process of this study, there are two characteristics of antitakeover provisions. The first characteristic, which is common for all antitakeover provisions is that they make a takeover process harder. However, the second characteristics of takeover defences, which is valid only for some provisions, is the monetary benefit received by a CEO if a takeover successfully takes place. Opportunistic CEOs who are seeking private benefits more than they are trying to maximize shareholder wealth will choose antitakeover provisions that also provide them with a monetary outcome even if these provisions lead to a worse effect on firm performance. The provisions of the E-Index will be grouped into two categories. The first category or provisions, Category A, are the provisions that are favourable to CEOs and that provide with CEOs with a monetary benefit along with takeover protection. The second category of provisions, Category B, includes the provisions that only provide CEOs with a takeover defence without providing them with any monetary outcome if a takeover takes place. In addition to directly affecting firm performance, such provisions might worsen a firm’s governance structure and the relationship between other governance mechanisms and firm performance.

Thus, this study contributes to the previous literature on antitakeover provisions and other governance mechanisms in several ways. First, the research studies the determinants of the E-index as well as the determinants of the individual provisions. The E-index is then split into Categories A and B to study if there are any difference in the determinants of these two indexes. By studying the determinants of individual
provisions, results will confirm the validity of the grouping process used in this study. In other words, results will show if powerful CEOs support the adoption of the three provisions of Category A more than they support the other three provisions of Category B. The research gives particular attention to CEO duality as a significant determinant of the aforementioned categories of provisions to check if CEOs act in an opportunistic way and try to influence provisions that provide them with personal benefits. Empirical tests support the hypotheses of this model, indicating that CEOs with a role duality support the adoption of all Category A provisions and oppose the adoption of all Category B provisions.

Second, this study tests the effect of both categories A and B on firm value in the presence and absence of CEO Duality. This will check if CEOs, who also act as chairmen of the board, feel safer in the presence of Category A provisions and lose the motivation to work in the shareholders’ best interest. Moreover, such an interaction variable will also indicate the relationship between CEO duality and firm performance in the absence of takeover defences. In such a case, a firm is enjoying a high level of shareholder rights. Such firms could benefit from the leadership of a CEO with a role duality knowing that there is a high level of governance and no room for opportunistic behavior. Results designate that the type of antitakeover provisions adopted by a firm moderate the duality-performance relationship. In the presence (absence) of Category A provisions, CEO duality has a negative (positive) effect on firm performance. On the other hand, the presence/absence of Category B provisions does not significantly affect the relationship between CEO duality and firm performance. This shows that the combination of Category A provisions and CEO duality gives CEOs too much power leading to the worst effect on firm performance.
In addition, another important variable when studying the determinants of takeover defences is the percentage of independent directors. If, as hypothesized, Category A provisions prove to be the worse type of provisions, then it is expected that independent directors show greater opposition against Category A provisions than against Category B provisions. Empirical evidence from this model provides partial support to this hypothesis. In contrast to CEO preferences, independent directors seem to favour the adoption of most Category B provisions and oppose the adoption of the other Category A provisions.

Third, in an attempt to explain the previous contradicting results with the propositions of agency theory, interaction variables will be introduced between the different antitakeover provision indices used and the other governance mechanisms. Cremers and Nair (2005) highlight the importance of the interaction between internal and external governance mechanisms. However, very few researchers study the interaction among these mechanisms and how does their interaction affect firm value. Therefore, this study provides a better insight about the cases where the assumptions of the agency theory are valid and the others where they are not.

As the core variable of this study is the entrenchment effect caused by the presence of antitakeover provisions, this research gives special attention to the effect of antitakeover protection on the relationship between each of the other two mechanisms (ownership structure and board composition) and firm value. Each mechanism is studied on its own, as well as two interaction variables (one between antitakeover provisions and ownership and the other between antitakeover provisions and board composition) and their effect on shareholders’ wealth. First, the E-Index will be used as a proxy for the level of antitakeover provisions and shareholder rights available at the respective company. The E-Index will then be split into Category A
and Category B provisions and interaction variables between both categories of provisions and the other governance mechanisms will be introduced. Following the previous hypothesis that Category A provisions lead to a more entrenching effect for managers, it is expected that the interaction of Category A provisions with the other governance mechanisms also leads to a worse firm performance. As it is the case with CEO duality, findings indicate that the level of antitakeover provisions, as a proxy for external governance and shareholder rights, moderate the independence-performance and ownership-performance relationships. Figure I below summarizes the finding of the second model of this research. As the number of antitakeover provisions increase, managers have more protection from the takeover market and cannot be disciplined by it. In such a case, CEOs will have more room to extract private benefits and, therefore, more monitoring of managers is needed. Thus, in the presence of a high (low) number of takeover defences, increasing the percentage of independent directors has a positive (negative) effect on firm performance. Similarly, when the number of antitakeover provisions adopted is high, a significant increase in CEO ownership provides CEOs with excessive power that could prove detrimental to firm performance.
1.4 Research Questions

By creating a new way to group antitakeover provisions, and by introducing the aforementioned interaction variables, this research will address the following questions:

- Do powerful CEOs (CEOs with a role duality) act in an opportunistic manner and influence the adoption of Category A provisions that provide them with more benefits than Category B provisions?
- Do independent directors oppose the adoption of Category A provisions more than they do for the adoption of Category B provisions?
- In the presence of CEO duality, will the adoption of Category A provisions lead to a worse effect on firm value than the adoption of Category B provisions?
- In the absence of takeover defences, indicating a sound governance structure, will CEO duality have a positive effect on firm performance?
Will the presence of antitakeover provisions trigger an alarm for independent directors that a more strict monitoring process should be implemented?

Will the absence of antitakeover provisions, reduce the negative entrenchment effect of high levels CEO ownership on firm value?

1.5 Thesis Structure

The thesis consists of two models comprising seven chapters. The first chapter serves as an introduction for the two models in this research highlighting the importance of the contribution in this study. The introduction also defines the motivation for conducting this study as well as the research questions that this research strives to answer. This chapter concludes by showing a brief summary of the findings of this study as well as outlining the structure of the whole thesis.

The second chapter talks about the evolution of antitakeover provisions in the United States and how they spread rapidly during the late 1980s and early 1990s. It is essential to know the history of antitakeover provisions in order to know how and why do managers adopt these provisions. This section is also important to justify the use of data from the United States industries due to the takeover boom that took place in the 1980s and the rapid spread of takeover defences directly after it.

The third chapter is the literature review and it is divided into two major parts. The first part of this chapter attempts to make a comprehensive summary of previous researchers who studied the determinants of antitakeover provisions. The second part of this chapter comprises a literature review for studies addressing the relationship between the governance mechanisms used in this study (board independence and CEO ownership) and firm performance.
The fourth chapter sets a theoretical framework for both models to rely on. It shows the theories that are most commonly employed in corporate governance studies such as agency, stewardship and stakeholder theories. A detailed explanation is given for the uses of each theory separately along with a small conclusion highlighting the relevance/irrelevance of each theory to this study. A theoretical framework is essential to understand how certain variables are correlated and the reasons behind such a correlation.

The fifth chapter develops the methodological approach to tackle the research questions of both models. Thus, this chapter is divided into two sections; the first section discusses the methodological framework of the first model (determinants of antitakeover provisions) while the second section indicates the methodological framework of the second model (relationship between governance mechanisms and firm performance). In each section of this chapter, the dependent, independent and control variables are defined along with their measures. Following each independent variable, an empirical argument is put forward for the relationship between the explanatory variable and the dependent variable followed by the relative hypothesis. This chapter also includes a detailed discussion of the data source, sample data and the new grouping process of antitakeover provisions that is proposed in this study.

The sixth chapter is the first empirical analysis chapter in this study. This chapter discusses the results for the determinants of antitakeover provisions as well their interaction with CEO duality in affecting firm performance. The chapter starts with descriptive statistics and figures that would allow researchers to visualize the relationships between the explanatory variables and the dependent variable. The descriptive statistics are followed by regressions in order to test the research hypothesis. Regressions are made for the determinants of the E-index provisions as
well as the determinants of single provisions to check if the results for the single provisions support the grouping process developed in this study. In additions, interaction variables are introduced between the different indices of takeover defences and CEO duality to check how powerful CEOs act in the presence/absence of each type of antitakeover provisions.

The seventh chapter is the second empirical analysis chapter and it tests the research hypotheses of the second model of this study. Specifically, this chapter examines the relationship between governance mechanisms (such as board independence and CEO ownership) on the one hand and firm performance on the other. The importance of this chapter is that it re-examines several relationships found in previous literature in a new way. For example, previous literature provides lots of inconsistent results for the relationship between board independence and firm performance. This study proposes that antitakeover provisions, as a proxy for shareholder rights, moderate the independence-performance relationship and that the failure to control for such interactions was the main reason for the inconsistent results in previous literature. Consistent with the first empirical chapter, this chapter starts by displaying descriptive statistics and figures that would make it easier for researchers to understand the interaction between takeover defences and other governance mechanisms. Following the descriptive statistics, regression analysis is implemented to test each of the relative research hypotheses. Additional robustness tests are also employed to provide additional support for the results of this chapter.

Chapter eight is the last chapter of this thesis and it provides a summary of the whole study. It highlights the importance of this study and its contribution as well as a brief discussion of the results of both models. Moreover, this chapter stresses on the
importance of this study for future researchers and practitioners. Potential limitations as well as future research ideas are also included at the end of the conclusion.
Chapter 2

Evolution of Takeovers
2.1 Introduction

This chapter provides a historical background on the evolution of antitakeover provisions in the United States. Studying the history of antitakeover provisions and their evolution provides possible explanations of the reasons why some managers are still adopting takeover defences in the modern world. Thus, it is essential to check the real motives behind the creation of antitakeover provisions.

This chapter also highlights the importance of using the US market as the sample data in the study since the takeover booms and the subsequent creation of antitakeover provisions took place in the US in the 1980s. Following the takeover boom of the 1980s, managers started creating new ways to protect their firms from being taken over since most takeovers result in a management change (Shleifer and Vishny, 1991).

Finally, this chapter illuminates the significance of the timeframe of the sample data in this study. Following the takeover boom of the 1980s, antitakeover provisions were created and started spreading in the US market in the early 1990s (Danielson and Karpoff, 1998).

2.2 Evolution of Takeovers and Governance in the United States:

Shleifer and Vishny (1991) report that the U.S. market has experienced two major takeover trends recently. The first takeover wave took place in the 1960s while the second one took place in the 1980s.

Prior to the takeover boom of the 1960s, most of the mergers were friendly ones where managers of both firms reach a mutual agreement on the terms of the takeover
(Weston et al., 2003). Thus, managers did not feel any need to adopt takeover defences that would protect them from unwanted takeover attempts.

2.2.1 Takeover boom of the 1960s

Shleifer and Vishny (1991) state that firms with large cash flows preferred to use their money for investments, such as mergers and acquisitions, rather than having to pay them as dividends in order to maintain the company’s wealth.

They claim that the takeovers of the 1960s were mainly conglomerate mergers made for diversification purposes. Most of the takeovers were characterized by a large firm acquiring a smaller firm from a different industry. This is consistent with Rumelt (1974) who finds that from 1959 until 1969, the percentage of firms that were associated with a single industry dropped from 22.8 percent to 14.8 percent respectively. Meanwhile, the percentage of conglomerate businesses increased from 7.3 percent to 18.7 percent during the same time frame.

Shleifer and Vishny (1991) provide several reasons of why this takeover wave was mainly associated with conglomerate mergers. One significant reason could be the antitrust enforcement which prohibited mergers of companies of the same business line during the 1960s and 1970s. Consistent with the scientific management theories, another explanation might be due to the perception that small companies do not have a wide knowledge in management. Therefore, large companies believe that by providing their managerial skills to small firms, they would be able to increase the value of the small firms and their own wealth respectively. Other reasons of the boom in conglomerate mergers implemented by managers might be to decrease their risk, decrease the cash flow cycle or aiding managers to protect their jobs by entrenching them in the company.
Matsusaka (1993) studies the reasons why firms were heavily engaged with conglomerate mergers in the 1960s. In contrast with the managerial entrenchment hypothesis, the author provides evidence that the conglomerate mergers had a significant and positive impact on the bidding company’s stock price. On average, a conglomerate acquisition increased the value of the bidding firm by $11 million. Matsusaka (1993) explains that shareholders, at that time, saw opportunities for expansion and creating more value in conglomerate acquisitions than in the within industry acquisitions.

In addition, Matsusaka (1993) finds out that the conglomerate mergers where the management of the target firm remained in business received the highest amounts of return. This shows that managers of the bidding firm were not after disciplining the management team of the acquired company; the reason behind the mergers was to benefit from the combined value of both firms (consistent with the synergy hypothesis).

Shleifer and Vishny (1991) also suggest that some firms were engaging in conglomerate mergers because there was no room for additional growth within their own industry. Therefore, companies were seeking to expand into different industries in which they could achieve more growth. Matsusaka (1993) provides evidence supporting this argument by showing that the stock price of the acquiring firm increased as the growth potential of the target firm increased. Therefore, shareholders were in favour of having their managers engage in conglomerate managers where there the target company is growing or in a growing industry. Surprisingly, the value of the target companies did not improve after the takeovers (Shleifer and Vishny, 1991; Ravenscraft and Scherer, 1987) and almost half of the
conglomerate takeovers that occurred during this period were divested later on (Porter, 1987).

2.2.2 The Williams Act of 1968

The takeover boom of the 1960s stimulated several adjustments to previous acts concerning firm regulations (Straska and Waller, 2012). The Williams Act was enacted in 1968 as a modification to the previous Securities Exchange Act of 1934. Among the objectives of the Williams Act was ensuring that managers and stockholders should receive early information about takeover attempts (Straska and Waller, 2012). This would allow the management team to better assess the takeover attempt. In additions, The Williams Act provides managers with the right to sue the bidding company in case the procedures of the takeover were unfair to the target firm.

2.2.3 Pre-Takeover Boom of the 1980s

Previous researches suggest that prior to the takeover boom that took place in the 1980s, the interests of managers and shareholders were not well aligned (Donaldson and Lorsch, 1983; Jensen, 1988). Holmstrom and Kaplan (2001) believe that the governance structures, at that period, did not stimulate the managers to work in the shareholders’ best interest. They state that external disciplinary mechanisms, such as the market for corporate control or proxy contests, were limited and ineffective while the internal mechanisms, such as the board of directors, were tolerant with their monitoring.

Jackson (2010) shows the composition of the board of directors from 1950 till 2005. From 1950 till 1975, boards had a majority of insider directors. It was unusual for
insiders to reject or make major changes to decisions taken by the CEO. The main function of insiders was to provide advice to the CEOs (Mace, 1971). On the other hand, there was a relatively low level of board independence where the percentage of independent directors was at a maximum of 30 percent throughout the period. Jackson (2010) argues that even these outside directors did not have the monitoring role that is associated with outsiders nowadays.

The 1970s, however, began witnessing some governance restructuring and legal requirements being imposed on US firms. Gordon (2006) reports that in 1974, the Securities and Exchange Commission (SEC) started to require from US companies to disclose whether or not an audit committee is present. Four years later, in 1978 the SEC issued guidelines to specify the job of the audit committee. Gordon (2006) also reports that in 1977 the New York Stock Exchange (NYSE) required the presence of an audit committee with independent directors as part of its listing requirements. After 2 years, almost all of the firms enlisted in the NYSE had audit committees with a majority of independent directors. Following the NYSE, the Amex and the NASDAQ also required the presence of an audit committee during the late 1980s.

During this period, Jackson (2010) reports that there were no guidelines for assigning executive compensation. Executives’ pay was mainly comprised of the fixed annual salary payment and the bonuses that an executive receives for the firm’s performance throughout the year. However, Jensen et al. (2004) argue that the salaries at that period were unaffected by the company’s current performance or its long term expected performance. They were rather dependent on the magnitude of the firm’s revenues.
Hall and Liebman (1998) suggest that the motivation to work in the shareholder’s interest, provided to the managers in the form of stock ownership and stock options, was also weak in the early 1980s. Hall and Liebman (1998) study the pay performance sensitivity of CEOs from 1980 to 1994 and find that only 20 percent of a CEO’s compensation package was tied to the performance of the company’s respective stock.

2.2.4 Takeover boom of the 1980s

Holmstrom and Kaplan (2001) state that this negligence of working in the shareholders’ interests led to a significant increase in the amount of hostile takeovers and governance restructuring in the 1980s. This takeover threatened the supremacy of managers of US corporations (Jackson, 2010).

Davis (1991) and Shleifer and Vishny (1991) report that the takeover boom of the 1980s had several different characteristics than that of the 1960s. Shleifer and Vishny (1991) claim that takeovers were more hostile in the 1980s, while Davis (1991) states that the size of the acquired firms in general was significantly larger. Davis and Greve (1997) add that the removal of the state corporate laws in 1982 that protected companies form having a hostile takeover threat also played an important role in increasing the number of hostile takeovers in the 1980s. Consistent with Davis and Greve (1997), Shleifer and Vishny (1991) also report that takeovers within the same industry emerged in the 1980. They believe that the increase in the number of within-industry takeovers was due to the antitrust policies in 1982 that lowered the previously set governing barriers for merging companies in the same line of business. Therefore, companies seeking mergers had options other than diversifying into other industries.
The 1980s also saw the emergence of new types of takeovers that were not used frequently before. Many companies started engaging in bust-up takeovers or leveraged buyouts. Both strategies include buying the target company through debt financing and then selling part of the target’s assets to other firms within the same industry in order to partially cover their leveraged position (Bhagat et al. 1990). Davis et al. (1994) and Davis and Greve (1997) state that, if each part of a conglomerate is sold to another firm within the same line of business, the separate values of the different parts/divisions would exceed the share value of the combined firm. Therefore it would be beneficial for firms to engage in taking over a conglomerate firm and selling its parts to other firms within the same industry (Davis et al. 1994).

Morck et al. (1990) show that, unlike the 1960s, shareholders started favouring the acquisition of firms in the same industry. The stock prices of companies taking over other firms within the same line of business increased while stock prices of companies engaging in conglomerate takeovers declined.

The previous corporate governance system was known for separating ownership from management and control (Berle and Means, 1932), where the shareholders are small, weak and dispersed, while the managers were powerful and not subject to a heavy monitoring process (Davis and Greve, 1997).

Facing another takeover wave, managers and executives had to create governance mechanisms that would protect them from a takeover threat (Davis and Greve, 1997). One of the solutions to a takeover threat was the golden parachute. A golden parachute is implemented by a company’s board of directors and would provide the firm’s CEO, and sometimes other directors, with a considerable amount of
compensation in case they lose their job after a successful takeover (Davis and Greve, 1997). Hammermill Paper was the first company to adopt a golden parachute among the firms enlisted in the Fortune 500, however, Davis and Greve (1997) report that golden parachutes only became popular in the 1980s.

Davis and Greve (1997) argue that another takeover defence mechanism that became popular in the 1980s is the poison pill (also known as the Shareholder Rights Plan). Unlike golden parachutes which are designed to provide managers with compensation in case a takeover takes place, poison pills are made to make a hostile takeover much more costly and therefore put pressure on the bidding firm to negotiate a deal with the management team instead of going for a hostile takeover.

Following the takeover boom of the 1980s, Holmstrom and Kaplan (2001) report that the number of takeovers and the hostility of takeovers started to decrease in the 1990s. Danielson and Karpoff (1998) report the rate of recurrence of 20 governance provisions among 513 US firms from 1984 till 1989. In 1984, the firms in the sample had an average of 2.07 provisions. Five years later, the average number of provisions increased to reach 5.93. This increase in the number of corporate governance provisions played a key role in the decrease in takeover activity that took place in the beginning of the 1990s (Coffee, 1991; Pound, 1992).

Jackson and Miyajima (2007) provide evidence supporting the aforementioned claims. The authors show that the average number of hostile takeover attempts in the 1980s in the United States was 52 attempts per year. This number decreased significantly in the following years, reaching an average of 32 attempts in the 1990s and then reaching a minimum of around 7 attempts in the 2000s period.
Managers responded to the increase in takeover threat in the 1980s by promoting state governments to legislate antitakeover regulations that hugely increased the expense of hostiletakeovers (Useem, 1993).

Jackson (2010) provides three possible explanations for the decrease in the number of hostile takeovers in the 1990s. Consistent with Useem (1993), Jackson (2010) suggests that antitakeover defences had a key role in decreasing the number of hostile takeovers. As stated before, Jackson (2010) argues that antitakeover provisions, such as staggered boards, poison pills and golden parachutes, made the transaction cost too high for some companies and thus demotivated them from engaging in a hostile takeover attempt.

Jackson and Miyajima (2007) also report that the adoption of a poison pill reduces the chance that a hostile takeover attempt will be a successful one roughly from 50% to 33%. These results indicate that a poison pill might decrease the probability of a takeover or provide /the management with a better bargaining power, but a pill does not remove the presence of a takeover threat on its own.

Adams (2003) states that U.S. law courts permitted the usage of some antitakeover provisions, such as poison pills, by managers to reduce the likelihood of a takeover threat. The author states that these actions were taken by the U.S. courts although, from an economic perspective, they were against the stockholders’ interest. Norton (1991) believes that the wide authority given to the managers exceeded the level of suitable power that a manager should hold. Protecting managers from a takeover threat, while neglecting the shareholders’ interests, is against several state corporation laws which emphasize on maximizing the shareholders’ value (Adams, 2003).
2.3 Enron 2001

The following period was marked with an increase in shareholder activism, increase in the percentage of independent directors, and an increase of performance based compensations for managers to help align their interests with those of the shareholders (Jackson, 2010). Jackson (2010) also states that auditors were monitoring the information submitted by the board of directors and the corporate governance of the modern US economy seemed to be in good shape until 2001.

In a well-developed governance system, like the US market, there must be a flow of information between shareholders and managers (Healy and Palepu, 2003). Incentive contracts should be available to motivate the managers to work in the shareholders’ best interest and governance bodies (such as auditor or the board of directors) should be available to monitor the managerial behaviour and performance. These governing bodies are also subject to regulation (from the SEC and other institutions) to prevent further agency problems. Yet, in the presence of all of these regulatory mechanisms, Enron’s case exploits several weaknesses of the capital market in the United States (Healy and Palepu, 2003; Gordon, 2002). Enron, thought to be one of the leading and highly innovative corporations in the United States, had to file for bankruptcy in 2001 (Agrawal and Chadha, 2005; Jackson, 2010).

2.3.1 Consequences of Enron

Agrawal and Chadha (2005) report that the Enron scandal, along with the other scandals that followed (Tyco, Worldcom) led to significant changes in corporate governance. Arthur Andersen, one of the big 5 audit firms back then, went out of business because they were auditing Enron and as a result lost all of their reputation. In 2002, the Sarbanes Oxley Act was legislated setting more guidelines on the
publicly traded firms in the US. In 2003, NYSE, NASDAQ and AMEX all implemented more rules to govern companies that are listed on their respective markets.

2.3.2 Sarbanes Oxley Act

While the internal and external governance mechanisms discussed do help in lowering the agency costs and decrease fraudulent activities, recent scandals, such as Enron, WorldCom and other famous US companies, prove that these instruments might not be enough to guarantee a safe and sound corporate structure (Jain and Rezaee, 2006). As a result, the Sarbanes-Oxley Act (SOX) was legislated by the U.S congress in 2002 to re-establish public assurance and prevent more scandals by making the executives such as CEOs and CFOs more responsible for the managerial decisions that they make. This is established by raising the legal responsibilities that they face and putting penalties on those who do not comply with the existing rules.

Many studies attempt to find a relation between stock returns and the enacting of the Sarbanes Oxley Act. Li et al. (2008) show that there is a positive and statistically significant relation between the returns on stock and the proceedings that resolved the doubt about the final provisions of the SOX. However, Choi et al. (2008) suggest that these studies fail to take into consideration the firms’ prior governance structure and the balance of power between managers and shareholders. The passage of the SOX might be beneficial to firms that had a low level shareholder rights and that would benefit from more monitoring. However, firms with a high level of shareholder rights and that were already enjoying an efficient governance structure might experience an adverse effect due to the costs associated for complying with the SOX and that might seem to the firm as “redundant monitoring”.
Choi et al. (2008) compare the market’s response to the SOX legislation between firms with low shareholder rights and those with high shareholder rights. The results show a positive and significant change in stock price for firms with low shareholder rights in the Post-SOX period. This is likely due to the fact that the SOX provides the shareholders with more protection, which is associated with a higher stock return. On the other hand, there is no significant change in the stock price for firms with high levels shareholder rights. This indicates that these firms already had a decent level of shareholder rights and good governance structures, and therefore the SOX legislation did not provide substantial marginal protection for shareholders. Choi et al. (2008) also studied the risk sensitivity of the firms with low and high shareholder rights during the Pre and Post SOX periods. The results indicate that the firms with low shareholder rights are becoming less risk averse after the SOX was enacted, while recording no significant change in the risk taking decisions for firms with high shareholder protection. This is consistent with John et al. (2008) who demonstrate that when shareholder rights increase, a manager’s likeliness of dodging a risky project that might be value appreciating decreases.

Choi et al. (2008) also find that, according to the G-Index, firms with high shareholder protection tried to lower their shareholder protection (rights) after SOX, indicating that some of these firms thought that the changes in monitoring required by the SOX is unnecessary. As a result, the overall monitoring level for these companies remained unchanged. On the other hand, no change in shareholder protection was noted in firms with low prior shareholder protection.

However, Chang et al. (2012) doubt the effectiveness of SOX in increasing a firms’ corporate governance. Surprisingly, Chang et al. (2012) find that the Sarbanes Oxley Act weakens the alignment of incentives between CEOs and shareholders. Upon
increasing the CEO’s responsibilities, the CEO will feel that his position at the company is insecure and will therefore tend to become more risk averse in his investments and decision making. Bargeron et al. (2010) reach the same conclusion, stating that in the post-SOX period, companies tend to decrease their spending on risky projects resulting in an increase in cash holdings.

In addition to the weaker incentive alignment, Chang et al. (2012) find that stock ownership also decreases in the post-SOX period due to several factors. First, consistent with Demsetz and Lehn, (1985) and Booth et al. (2002), governance legislations can offer subsidized monitoring of managerial performance. Thus, companies don’t have to depend on management ownership to increase the level of their respective governance. Chang et al. (2012) argue that another reason might be due to the fact that the managers feel that their decision making power has decreased due to the regulations. Therefore, managers lower their stock ownership since they cannot influence the success or failure of the firm the same way they used to do.

2.4 Conclusion

Ever since the takeover boom of the 1980s, antitakeover provisions have become widely spread throughout the US market. After a successful takeover, it is highly likely that the bidder firm changes the management of the target firm. Therefore, managers influenced the creation of different types of takeover defences to protect their positions at their firms by decreasing the possibility of a takeover taking place. These provisions became widely spread in the US market in the early 1990s. Knowing so, the sample data of this study starts in 1992 in an attempt to cover the determinants and effects of antitakeover provisions when they first became widespread in the US market.
Following this takeover boom and the wide adoption of takeover defences, the governance of US firms was stable until the collapse of Enron in 2001. Before its collapse, Enron was considered as one of the leading and promising companies in the US market. However, Enron’s sudden collapse due to its fraudulent activities brought the governance policies implemented at that time into question. Consequently, the Sarbanes Oxley Act was enacted in 2002 in an attempt to improve US corporate governance. The regulations of the Sarbanes Oxley Act tackled important governance mechanisms such as board independence. It was believed that requiring a majority of independent directors serving on a company’s board of directors will improve the overall governance of the market. However, empirical results for the effects of the Sarbanes Oxley Act on firm performance have been inconsistent. This second empirical model of this research revisits the independence section of the Sarbanes Oxley Act and attempts to explain the independence-performance relationship by introducing the level of shareholder rights as a moderating variable. All of these mixed results highlight the necessity to have continuous governance studies and reforms that can stay up-to-date with the changing environment.
Chapter 3

Literature Review
3.1 Introduction

This chapter surveys previous literature addressing the determinants of antitakeover provisions and their effect, along with other governance mechanisms, on firm performance. This chapter is divided into two main sections.

The first section of this chapter provides a literature review for the determinants of takeover defences. Since the rapid spread of antitakeover provisions in the early 1990s, researchers have been trying to identify the reasons behind adopting takeover defences. Therefore, this section provides a critical assessment of the studies addressing the determinants of antitakeover provisions.

The second section of this chapter reviews the literature for the relationship between governance mechanisms and firm performance. Specifically, it covers studies addressing the relationship between CEO ownership, CEO duality, board independence, and antitakeover provisions on one hand and firm performance on the other hand. Although all of these governance mechanisms are hypothesized by agency theorists to reduce agency conflicts, empirical evidence is not consistent. Therefore, a critical analysis of the literature could highlight any flaws in previous studies and the reasons for the inconsistent results in previous literature.

3.2 Determinants of Antitakeover Provisions:

Becker-Blease (2011) reports that there are two types of antitakeover provisions: firm-specific provisions and state-level provisions. State-level provisions are adopted by the state and they cover all of the companies that are incorporated within the respective state. In most cases, firms are automatically offered the protection from these provisions without having to take any further action. Firms can, however, ask
the state to waive their protection from any state-level takeover defence. On the other hand, firm-specific provisions only provide the protection for the company that adopted them. Becker-Blease (2011) believes that adopting such provisions sends a signal that the firm is changing its response towards the takeover market and any possible acquirers. This study focuses on firm-specific provisions in order to determine why firms adopt certain provisions and what are the consequences of such decisions.

Different studies have tried to identify the determinants of antitakeover provisions and their effect on firm performance. However, although some of these studies use the same methodologies and time frames, the evidence provided shows several contradicting results. DeAngelo and Rice (1983) argue that there are two opposing hypotheses that might explain the adoption of antitakeover amendments. The first one is the managerial entrenchment hypothesis which was previously suggested by Cary (1969) and Williamson (1975). This theory believes that takeover defences are implemented by the managers who wish to protect their position at the expense of shareholders.

In addition to the protection from takeover attempts, supporters of the entrenchment hypothesis also argue that antitakeover provisions help managers engage in empire building. Humphery-Jenner and Powell (2011) report a significant difference between takeovers that take place in the United States and takeovers that take place in Australia1. The authors report that managers of firms in the United States, with a high number of antitakeover provisions, engage in poor acquisitions for empire building purposes. On the other hand, Humphery-Jenner and Powell (2011) report

1 Antitakeover provisions are common and widely used in the US market. On the other hand, adopting antitakeover provisions is prohibited in Australia.
significant positive returns to Australian acquiring firm. This is consistent with other recent researches that argue that antitakeover provisions drive bad acquisitions that are value destroying for the company (Bauguess and Stegemoller, 2008; Harford et al., 2010; Masulis et al., 2007). The authors conclude by claiming that the absence of takeover provisions lowers the probability of bad acquisitions and encourages value-enhancing takeovers.

The second hypothesis suggested by DeAngelo and Rice (1983) is concerned with the interests of the shareholders. The hypothesis suggests that the net effect of adopting antitakeover provisions is positive for shareholders. Grossman and Hart (1980) also claim that antitakeover provisions are a reply by shareholders to a free rider problem related to tender offers.

### 3.2.1 Determinants of Individual Antitakeover Provisions

#### 3.2.1.1 Golden Parachutes

Gompers et al. (2003) describe golden parachutes as compensations paid to managers and executives in case they are fired from their position or in case a takeover took place and resulted in a management change. Golden parachutes take away the right of shareholders to replace the management team without experiencing heavy costs. Since golden parachutes do not necessitate the approval of shareholders, Gompers et al. (2003) argue that adopting these parachutes reduces shareholder rights. Other researchers describe such compensation as beneficial for shareholders (Lamberet and Larcker, 1985; Harris, 1990). Lamberet and Larcker (1985) provide evidence that the presence of golden parachutes enhance a manager’s response to the presence of a takeover attempt, which is usually in the shareholders’ best interest.
Therefore, the literature provides two arguments for the adoption of golden parachutes. On one hand, a golden parachute decreases the likelihood that an entrenched manager will try to block a takeover attempt that is in the shareholders’ interest. This finding is consistent with Walkling and Long (1984) who provide evidence that there is a direct relation between takeover resistance and the effect of the takeover on the management’s own wealth. Baron (1983) also reports an inverse relationship between the willingness of the management team of the target firm to maintain control and their relative percentage of stock ownership. The second argument suggests that a CEO may try to implement antitakeover provisions, including golden parachutes, in order to entrench himself in the company or to obtain a high compensation in cases he loses his job after a successful takeover takes place (Gompers et al., 2003; Bebchuk et al., 2009).

Cochran et al. (1985) study how the board structure and other firm specific aspects affect the rate of adoption of golden parachutes. Some researchers claim that firms adopt golden parachutes in order to be able to attract high quality managers to come to their firm, or to promote a feeling of loyalty and security among current managers. Others argue that golden parachutes are a proof of the managers’ wealth maximizing behaviour regardless if the actions are in the shareholders’ best interest. Others believe that golden parachutes are just a legal way for theft (Business Week, 1982:136).

Contrary to expectations, Cochran et al. (1985) found that there is a significant and negative relationship between the passage of golden parachutes and the percentage of inside directors. Other findings show that golden parachutes adoption is inversely related to firm size. This is consistent with Comment and Schwert (1995) who find that as the size of a firm increases, the probability of having a takeover threat
decreases. Thus, managers of large firms and firms that are performing well will feel that their position in their company is secure and do not need golden parachutes to guarantee their position.

Cochran et al. (1985) also report a negative relationship between the presence of golden parachutes and the firm’s financial performance. Malatesta and Walkling (1988) also report similar findings about the relation between a firm’s financial performance and another antitakeover measure (poison pills). Malatesta and Walkling (1988) find that, one year before poison pill adoption, the average profit of firms implementing poison pills is significantly less than that of the industry average. Heron and Lie (2005) report similar findings, suggesting that some firms adopt antitakeover provisions in response to poor performance by the company’s stock in the previous year, an event that would increase the possibility of a takeover event.

However, Cochran et al. (1985) report no significant relationship between adopting golden parachutes and measures for the percentage of stock owned by insiders and the firm’s leverage.

Consistent with Cochran et al. (1985), Singh and Harianto (1989) report that firms with golden parachutes already in place have a larger percentage of outsiders on their board of directors than firms who do not have golden parachutes.

Singh and Harianto (1989) also find out that firms are more likely to have a golden parachute when their boards have previously encountered a takeover attempt. The authors believe that it is due to the fact that board members will feel insecure when they experience previous takeover attempts and will therefore adopt golden parachutes.
In addition, Singh and Harianto (1989) show that there is a negative and significant relationship between the percentage of stock owned by the management team and the incidence of golden parachutes. This is consistent with the view that CEOs perceive golden parachutes as a substitute for stock ownership. When the CEOs own some stocks in the corporation, they will also be able to benefit from the premium obtained through the takeover process and might therefore accept having a takeover if it is in the shareholders’ interest.

Harris (1990) suggests that several firms have both adopted antitakeover mechanisms and golden parachutes. The author studied the reasons behind shareholders accepting to have antitakeover provisions embraced by their firm and why do shareholders also grant their managers golden parachutes. Consistent with Lambert and Larcker (1985), Harris suggests that golden parachutes can help in solving the agency problem between managers and shareholders. If a takeover takes place, the shareholders would benefit from the premium paid by the bidding firm. However, managers are usually unwilling to have a takeover threat because most takeovers result in a change of management and the manager will ultimately lose his job. Thus, a takeover threat will stimulate the manager to try and block the takeover even if it is in the shareholders’ interest. Therefore, by providing managers with a large payment (golden parachute), managers will have less reason to try and block a takeover and he might even be motivated to try and reach a successful takeover (Harris, 1990). In addition, Zhao (2013) talks about other benefits of golden parachutes and other severance packages. The author suggests that the presence of severance packages in a manager’s contract enhances the manager’s engagement in investments with a positive but risky net present value.
The author further explains why the shareholders would accept to have the provisions and the golden parachute in the first place as it might seem that shareholders are better off without both provisions. Harris (1990) suggests that a takeover threat will improve the bargaining power of the management when a takeover threat is imminent. The excess synergy gains that occur from the presence of antitakeover mechanisms might well exceed the costs of the golden parachute to be paid to the manager if the takeover successfully takes place. This is consistent with DeAngelo and Rice (1983) who suggest that the presence of an antitakeover provision will make the firms’ shareholders act in a unified way. This unification will result in a better bargaining position leading to more synergy gains than they would receive in the absence of antitakeover provisions.

Even though a CEO does not have official authority over the board of directors, he can try to exercise some of his “social influence” to help influence the decision-making process. Wade et al. (1990) study the rationale behind the implementation of golden parachutes. They hypothesize that the presence of golden parachutes might be due to the societal influence of the CEO or to an economically logical procedure.

In harmony with their expectations, and consistent with the previous literature, Wade et al. (1990) provide evidence that there is a strong and negative relationship between the three main economic variables used in their model (Firm size, owner control and takeover susceptibility measured by EXCESS) and the incidence of golden parachutes. Jensen, 1988 suggests that larger firms are more difficult to acquire than smaller firms due to the high cost needed to acquire them and due to their complex structure that will make the firm’s assets harder to integrate for the bidder.
In addition, Singh and Harianto (1989) argue that there is a negative relationship between ownership concentration and the presence of golden parachutes because it is hard for smaller shareholders to coordinate together in monitoring the management. Small shareholders have a small amount of capital at stake compared to institutional investors and large blockholders. Accordingly, it will be too costly for small shareholders to coordinate their efforts in monitoring management. Therefore, it is expected that CEOs of management-controlled firms will find it easier to adopt golden parachutes than CEOs of owner-controlled firms.

Consistent with Cochran et al. (1985), Wade et al. (1990) use an EXCESS ratio to calculate the takeover susceptibility. EXCESS is measured by calculating the difference between the market value and the book value of a firm’s assets. Both researchers find that the higher the susceptibility of a takeover (lower EXCESS value), the higher is the likelihood of adopting a golden parachute. Wade et al. suggest that this is due to the fact that a CEO under a threat of a takeover will try to provide himself with a compensation if the takeover was successful and he lost his position.

Results also show that CEO tenure is negatively correlated with the presence of golden parachutes. Wade et al. (1990) believe that his is due to the fact that golden parachutes, at the time, was still a modern invention and therefore will be used more by new CEOs who use their bargaining leverage upon their appointment.

Moving on to the social influence of CEOs, Wade et al. (1990) find that the higher the number of boards the CEO is on, the higher is the probability of adopting a golden parachute. This indicates that CEOs who are have a good reputation and are aware of golden parachutes are more likely to influence its adoption at their firm.
CEOs with a higher average tenure than that of board members are also more likely to have a golden parachute. CEOs with a high relative tenure are expected to have played a role in assigning several other directors on the board who may feel loyal to the CEO and influence a decision to grant him a golden parachute.

3.2.1.2 Poison Pills

Bebchuk et al. (2009) explain that poison pills are usually activated when a hostile takeover takes place. They describe the poison pill as a right that allows its holders to reduce the voting power of acquiring firm. When a poison pill is triggered, the stockholders of the acquired firm, different from the bidder, have the right to buy stocks in one of the two merged companies, the bidder or the target firms, at a great discount price (Gompers et al., 2003). Ryngaert (1988) states that poison pills adoption does not require the acceptance of a firm’s shareholders, and can be redeemed by the board of the target firm. Therefore, pills do not necessarily remove the threat of a takeover; pills exert a pressure on the bidding firm to engage in negotiations with the board of directors of the target firm.

Comment and Schwert (1995) argue that adopting a poison pill results in a higher premium for shareholders and also does not affect the likelihood of a takeover attempt. On the other hand, Field and Karpoff (2002) suggest that antitakeover provisions, including poison pills, reduce the probability of a takeover while not having a significant impact on the takeover premium. Coffee (1991) and Pound (1992) claim that this reduction in the probability of a possible takeover attempt taking place is due to the high costs associated with taking over a firm with antitakeover provisions.
Facing a takeover threat, a manager will feel that his prestige, power and human capital are all at stake. In such a case, the manager will be willing to implement certain governance mechanisms (such as poison pills) to decrease the takeover risk even if it is not in the shareholders’ interest. Malatesta and Walkling (1988) argue that poison pills significantly reduce the disciplinary threat of the market for corporate control. In turn, this will decrease a manager’s motivation to act in the interest of shareholders.

Others argue that poison pills might be beneficial for the shareholders because they promote managers to engage in long term investments (DeAngelo and Rice, 1983, Stein, 1988). DeAngelo and Rice (1983) state that when long term investments are first implemented, they are undervalued. Thus, managers working under the threat of a takeover will not invest in long term projects since it would make the firm seem more undervalued and subject to a takeover at a low price. Managers would prefer to invest in short term projects that would enhance the firm’s performance on the short run only. Adopting poison pills would decrease the likelihood of a possible takeover, and the managers will feel free to take long term projects since their position at the company is partially guaranteed to stay until the investment is finished.

However, Mallette (1991) indicates that there is no significant difference in long term investments between firms with antitakeover provision and those without ones.

Davis (1991) studies the factors that affected the wide spread adoption of poison pills in the 1980s. The author explores the influence of the inter-organizational structure of large firms and its role in reproducing the intra-organizational corporate control.
Davis (1991) finds out that high managerial ownership decreases the management’s resistance to antitakeover attempts because of the premium they will receive from the takeover bid. High ownership concentrations were also found to have a negative effect on the adoption of poison pills due to the better monitoring provided by large blockholders.

Surprisingly, the author reports that the percentage of inside directors on the board is negatively correlated to the implementation of poison pills. In addition, Davis (1991) finds that the presence of golden parachutes increases the probability of adopting a poison pill.

The author suggests that one of the important flaws of the agency theory is that it fails to take into consideration the inter-corporate environment that affects the decisions of the manager. The social setting and background of a firm should be expected to affect the manager’s decision making process. Many managers tend to imitate the behavior of other successful management teams regardless of the rationale behind their decisions. The environment surrounding the organization is also expected to affect the decision making process by managers due to the accessibility of resources. Therefore, Davis (1991) suggests that it is important to test the effects of ownership structure and incentives as well as inter-corporate factors in order to get a broader view of the elements that affect an organization’s control.

Davis (1991) further reinforced his suggestions and found that board centrality, the presence of board members in several other boards, is positively related to the adoption of poison pills. Davis (1991) suggests that normative inventions, such as the poison pills, are implemented more rapidly by central firms than by others. The
author also finds evidence that interlocks with corporations that already have a poison pill in place will increase the rate at which the firm adopts a poison pill.

Mallete and Fowler (1992) study the relationship between several board and ownership characteristics and the passage of poison pills by industrial manufacturing companies in the United States.

Mallete and Fowler (1992) find that several different governance elements play an important role in the passage of pills. CEO duality increases the likelihood of adopting a poison pill. The authors also report that as the percentage of independent directors increases, the magnitude of the relationship between CEO duality and poison pill adoption increases. However, board independence was not a significant factor on its own.

The CEO’s tenure and the independent director’s tenure were not found to be significant factors on their own. However, for firms with a low-tenure CEO, the likelihood of passing a poison pill decreases significantly as the average tenure of independent directors rises.

Regarding the ownership structure, firms with low insider ownership and firms with high institutional ownership tend to have a high probability of adopting poison pills. This is consistent with the idea that insiders with low equity will feel that a takeover will harm them more since they cannot gain much from the takeover premiums and therefore will tend to adopt poison pills to lower its risk. Also, CEOs of firms with high institutional ownership will feel more pressure due to the increased monitoring and will tend to adopt takeover protections to guarantee their place at the company.
Other researchers claim that in order to study the real motivation behind poison pills and other antitakeover amendments, one has to study its effect on the wealth of the CEO and his compensation packages. Borokhovich et al. (1997) believe that studying the CEOs’ pay and compensation packages would help in understanding the real motives behind adoption antitakeover amendments. Borokhovich et al. (1997) find out that the compensation packages of CEOs at firms that adopt antitakeover amendments include greater amounts of salary and bonus than those who are at firms without antitakeover amendments. They report these results as a supporting evidence for the entrenchment hypothesis and claim that the CEOs use antitakeover amendments to secure their position at the company regardless of shareholders’ wealth. Borokhovich et.al (1997) also find out that firms with takeover defences receive fewer takeover bids in the 3 years following the antitakeover adoption than the other firms in their industry. This further suggests that antitakeover amendments might be against the shareholders’ interests by reducing the probability of takeovers.

Bizjak and Marquette (1998) extend the work of Borokhovich et.al (1997) and look at things from a different perspective. Unlike Borokhovich et.al (1997), Bizjak and Marquette (1998) include the option part of the compensation in the year after adoption as well as study the pay performance sensitivity to gain a better look at the motives behind adopting antitakeover amendments. Bizjak and Marquette (1998) test the two hypotheses concerning the adoption of poison pills (Managerial entrenchment and interests alignment hypotheses) using a different approach. The authors find results contradicting the previous work of Borokhovich et al. (1997), indicating that antitakeover amendments increase the efficiency of the CEO’s compensation package.
Bizjak and Marquette (1998) argue that if the managers influence the adoption of pills in order to entrench themselves in the firm, one would expect that the compensation packages would be less sensitive to the stock price and firm performance in the post-pill adoption period. However, results suggest that the compensation packages of CEOs become more sensitive to the firm’s performance after adopting a poison pill.

Therefore, Bizjak and Marquette (1998) suggest that their result support the interest alignment hypothesis and that the poison pills improve the effectiveness of the compensation contracts given to CEOs. In turn, this is supposed reduce the agency conflicts between shareholders and managers.

Heron and Lie (2005) identify poison pills as being more controversial than the antitakeover charter amendments because the pills can be adopted without the approval of shareholders while the charter amendments cannot. The authors study the effect of adopting antitakeover provisions on the outcome of the takeover attempts as well as studying several factors (such as ownership, governance, financial and offer characteristics) to determine which of them might affect the implementation decision of these provisions. The authors find that higher insider ownership decreases the likelihood of adopting a poison pill. Heron and Lie (2005) explain that a high percentage of insider ownership might be powerful enough to block a takeover attempt without needing to adopt antitakeover provisions. The authors further reinforce their suggestion by showing that none of the firms in their sample with 50% or more insider ownership (a level of ownership that would remove the likelihood of having a hostile takeover attempt) had a defensive payout or a poison pill in place. Other findings also show that firms with poison pills usually have a low level of cash.
Previous studies have also found that firms that have already adopted pills have a low level of managerial ownership with respect to their peers that do not have pills (Malatesta and Walkling, 1988; Ryngaert, 1988). Boyle et al. (1998) also addresses the relation between adopting antitakeover provisions and the level of managerial ownership. However, unlike previous studies done by Malatesta and Walkling (1988) and Ryngaert (1988), Boyle et al. (1998) suggest that there might be an insider tradeoff between insiders’ stock ownership and antitakeover provisions.

The findings of Boyle et al. (1998) support their claims. Results show that there is a tradeoff at an insider ownership level of 10.3%. Below this cutoff point, there is a negative relationship between equity ownership and antitakeover provisions. However, after the 10.3% ownership level, there is no association between ownership and adopting antitakeover provisions. Boyle et al. (1998) believe that these results are consistent with the entrenchment hypothesis. Managers can entrench themselves by either having high ownership in the corporation or by adopting antitakeover provisions. Boyle et al. (1998) state that at low levels of ownership, managers adopt antitakeover provisions to protect themselves from a possible takeover threat. At higher levels of ownership, no significant relationship is found because a high ownership level could act as a substitute for the adoption of antitakeover provisions in entrenching managers.

Heron and Lie (2005) suggest two possible explanations for the negative relationship between poison pill adoption and the levels of cash holdings and insider ownership. On one hand, low levels of cash holding and insider ownership will decrease the bargaining power of managers in case a takeover attempt is present. Therefore, managers of these firms might tend to adopt poison pills to increase their bargaining power. On the other hand, managers might be adopting antitakeover provisions to
entrench themselves in the company because their low ownership will not provide them with a high amount of the premium paid to shareholders and thus they would want to block a takeover attempt even if it is beneficial for the shareholders.

Consistent with Comment and Schwert (1995), Heron and Lie (2005) argue that poison pills in particular are beneficial for shareholders because pills result in a higher premium being paid to the shareholder without decreasing the probability that a takeover will take place. These results support the increased bargaining power explanation for adopting poison pills when levels of insider ownership are low.

Arikawa and Mitsusada (2011) study the passage of poison pills in Japan and its indicators for managerial preferences. They argue that since poison pills can be adopted at any time, even after a hostile takeover attempt is launched (Coates, 2000; Gompers et al. (2003), adopting poison pills can reveal specific signs about managerial behaviour. Arikawa and Mitsusada (2011) claim that the market response after adopting poison pills is due to the fact that managers are giving out signals that they wish to entrench themselves in the company (they call this the “private information revelation hypothesis”)

Arikawa and Mitsusada (2011) find that firms with longer-tenured managers are likely to have poison pills. They believe that a manager with a long tenure will be more powerful (dictator) and will therefore be able to make independent choices. In addition, they argue that these powerful managers tend to have poison pills only if the financial performance of their respective company is poor.
3.2.1.3 Staggered Boards

Gompers et al. (2003) categorize staggered boards (also called classified boards) in the delay provisions category. A staggered board is a board in which its members are split into different and overlapping classes for re-election (usually 3 classes). This separation makes it impossible for the bidder to replace a majority of the board members in one single year, even if the bidder has support from a majority of the shareholders (Bebchuk et al., 2009). Therefore, in order for a bidding firm to gain full control of the board, they have to wait for several years (at least 2 election periods).

Sokolyk (2014) presents evidence that CEOs of firms with takeover defences are less likely to get disciplined by the board of directors or the market for corporate control for making bad acquisitions. Sokolyk (2014) maintains that these results are especially strong and significant for companies having staggered boards. Even though bad acquisitions cause negative returns for the acquirer, CEOs of these firms have a lower to be removed from their positions than their counterparts and their firms are less likely to be taken over.

Bebchuk et al. (2002) argue about the importance of studying the interaction between poison pills and staggered boards. Since the board of directors of the firm facing a takeover threat is the entity that can redeem a poison pill, pills should be more effective for a firm with a staggered board in place too. Accordingly, Heron and Lie (2005) find that firms with a staggered board provision in place are more likely to adopt a poison pill than those who do not. This is consistent with Bebchuk et al. (2002) who claimed that staggered boards and poison pills are complementary antitakeover provisions. Consistent with these arguments, Sokolyk (2011) finds that
the combination of a staggered board and a poison pill is one of the most effective antitakeover mechanisms in resisting takeover attempts.

### 3.2.1.4 Supermajority Requirement for Mergers

Gompers et al. (2003) state that a supermajority requirement for mergers is a provision that necessitates a percentage of voting that is higher than that of the state law in order to approve a merger. State laws usually require a minimum of 50 or 66.7 percent of the stockholder voting power to approve a merger (Jarrell et al., 1988). However, the adoption such a provision increases the minimum percentage of votes required to approve a merger to 66.7 percent. Gompers et al., reports other commonly used percentages of supermajority requirements to be 66.7, 75, or 85 percent. Jarrell and Poulsen (1987) report that firms that adopt supermajority requirements have a higher insider ownership and lower institutional ownership than other firms. This explains how do these provisions get adopted although they decrease shareholder rights.

Bebchuk et al. (2009) report that having a supermajority requirement to approve a merger will give an insider a much better chance in obstructing a takeover attempt. Even if inside directors lose their control over the board, a supermajority requirement will still allow them to oppose a merger if they have a good amount of equity holdings. Therefore, Bebchuk et al. (2009) argue that such a provision will discourage bidders looking to obtain blocks of stock in order to gain control over the firm.
3.2.1.5 Limitations on Bylaws and Charter Amendments

The remaining provisions included in the E-Index by Bebchuk et al. (2009) are limitations on bylaws amendments and limitations on charter amendments. Bebchuk et al. (2009) state that these limitations, along with the supermajority requirement for mergers, are strongly disapproved by shareholders. This opposition is due to the fact that these provisions limit the ability of shareholders to make changes in the documents that govern the corporation or to approve a merger.

Researchers suggest that stockholders can amend a company’s charter or bylaws in order to “frustrate the incumbent board and force an early settlement” (Hochmang and Folger, 1979, p.p. 543). The authors argue that such amendments can take various forms that would diminish the power of directors. For example, stockholders can increase the number of directors, require that the chairman of the board of directors be elected by stockholders instead of board members or even necessitate the approval of all board members in board decisions. Thus, if stockholders are able to appoint only one member on the board of directors, they can have the power to veto all of the decisions that are taken by the board.

Therefore, some management teams adopt limitations on bylaw and charter amendments to limit the power of shareholders over the board of directors. Gompers et al. (2003) argue that the limitations on bylaws and charter amendments can take several forms. The limitations can range from requiring a supermajority of shareholders to vote in order to approve bylaws and charter amendments to eliminating the shareholders’ capacity to make changes in the bylaws and charter or even give the directors the right to make amendments to the charter and bylaws without having the shareholders’ consent.
3.2.2 Determinants of previously used indices

Danielson and Karpoff (1998) inspect the frequency and combinations of the usage of a firm’s governance provisions. They also observe the effect of the ownership and board structures on the adoption of the provisions. Their study contains 20 different types of internal and external provisions.

Danielson and Karpoff (1998) suggest that previous studies assumed that the usage of governance provisions is independent of whether a firm has other provisions and therefore study the determinants of single provisions one at a time. Although this might be the case with some provisions (poison pills) results show that several provisions (such as supermajority voting requirements, shareholders meeting requirements and staggered boards) are used jointly. Thus, there might be an interaction between the usage of governance provisions and it is important to have a wider view for studying these provisions.

Danielson and Karpoff (1998) also find that several governance provisions were spread at a much faster rate after an official court pronouncement cleared the doubt regarding their lawful status. An example of such resolutions is the Delaware Supreme Court in 1985 which cleared the ambiguity regarding poison pills. The next year, there was a significant increase in the number of firms adopting poison pills (Ryngaert, 1988).

The findings suggest that there is a significantly positive correlation between the number of internal and external governance provisions.
Danielson and Karpoff (1998) find that only three of the provisions (poison pills, confidential voting and blank checks) under study are significantly related to the ownership and board structures.

Firms adopting poison pills are found to have a higher institutional ownership and a lower managerial ownership than the averages of the respective firms in their industries.

Both low managerial ownership and high institutional ownership increase the risk of a takeover threat. Therefore, managers might resort to adopting poison pills in order to decrease the likelihood of a takeover taking place. Also, adoption of poison pills at firms with lower outside blockholders is more common than in firms with a significant amount of outside blockholders. This is consistent with the view that large outside blockholders might have enough power to prevent managers from adopting such provisions. Surprisingly, firms with poison pills tend to have a lower proportion of insider directors and a higher proportion of independent outside directors.

Sundaramurthy (1998) offers a longitudinal study of the governance factors that precede the implementation of antitakeover provisions. Unlike several previous studies, Sundaramurthy (1998) distinguishes between the antitakeover provisions that require the approval of shareholders, and those provisions that do not.

Previous researches suggest that there is a significant correlation between board structure and characteristics, institutional ownership and executives ownership on one hand and an increase in governance effectiveness on the other (Jensen and Warner, 1988). Therefore, Sundaramurthy (1998) suggests that it would be important to test the influence of these factors on the adoption of 6 antitakeover provisions.
Five of these provisions do require shareholder’s approval (Supermajority requirements, elimination of cumulative voting, fair price requirements, classified boards and unequal voting rights) and 1 provision that do not require shareholder’s approval (Poison pills).

Sundaramurthy (1998) states that previous studies were limited due to the fact that many researchers have tried to measure a firm’s governance using individual antitakeover measures (Mallette and Fowler (1992) study poison pills only; Kosnik (1987) studies the greenmail problem only). A wide index of antitakeover provisions will give a broader view of understanding the effect of governance factors on the adoption of antitakeover provisions. Another flaw is that several previous studies stressed on the provisions that do not need the approval of shareholders, giving little importance to the other provisions.

Sundaramurthy (1998) finds that high levels of institutional ownership are negatively related to the adoption of antitakeover provisions. Moreover, institutional ownership will have a larger effect on the provisions that do require shareholders’ voting. This is consistent with the view that institutional investors are better at monitoring management due to their better ability to obtain information and since they have more capital at stake.

Consistent with the managerial entrenchment hypothesis, Sundaramurthy (1998) finds that managerial ownership has a curvilinear relationship with the adoption of provisions. This relationship has a larger curvilinear effect on the provisions that do not require the shareholders’ consent since the entrenchment effect will be larger.

Moving on to board structure and characteristics, Sundaramurthy (1998) finds no significant relationship between any of the board variables in the study (percentage
of outside directors, average outside directors’ stock ownership, board leadership) and the adoption of antitakeover provisions.

However, a positive correlation is found between outside directors who are loyal to the CEO and the adoption of antitakeover provisions. Although independent directors are assumed to be more independent of a firm’s managements, the members who have been appointed during the current CEO’s tenure will have a feeling of loyalty towards the CEO and tend to have some biased decisions.

Sundaramurthy (1998) provides some other findings obtained from the control variables regarding the adoption of antitakeover provisions. Firm size was found to have a significant and negative correlation with the rate of adopting antitakeover provisions (consistent with Davis, 1991, Mallette and Fowler, 1992). In addition, the higher the number of provisions already implemented by the firm, the lower is the rate of adopting new antitakeover provisions.

In a recent paper that studies why are antitakeover provisions adopted, Straska and Waller (2010) also check the characteristic of firms that adopt these antitakeover provisions. Straska and Waller (2010) show that firms with low bargaining power (characterized by low ownership concentration, low managerial ownership and low P/E ratio relative to competitors in the industry) do actually have a significantly higher amount of provisions in both of their governance indexes than the firms with high bargaining power. This effect is found to be statistically significant for all three characteristics of low bargaining power for the G-Index. Using the E-Index, the characteristics were also found to be statistically significant in affecting the implementation of antitakeover provisions except for the P/E ratio.
Straska and Waller (2010) also tested the joint effect of the aforementioned three characteristics on the adoption of antitakeover provisions using a “Bargaining Power” variable. The results also demonstrate a negative relationship between the Bargaining Power variable and both governance indexes (E-Index and G-Index), further reinforcing the previous results.

Straska and Waller (2010) also report a curvilinear relationship between firm size and the antitakeover governance indexes. The relationship is positive at first when growing firms could benefit from an increase in bargaining power. However, at a certain point where the firm is large enough, firms become hard to takeover due to their complexity and high costs. This suggests that for large firms, their size becomes a substitute for the need of having takeover defences.

Similarly, Straska and Waller (2010) find a curvilinear relationship between a firm’s leverage and the presence of antitakeover provisions. Other results suggest that there is a positive correlation between the governance indexes and a firm’s age and a negative correlation between R&D expenditure and the governance indexes. Finally, they report profitability has a negative but weak relationship with the G-Index while not having a significant effect on the E-Index.

3.3 Conclusion

Although several researchers study the determinants of antitakeover provisions, the gaps left in the literature indicate that more work should be done in this field. First, a significant amount of the literature focuses on the determinants of single takeover defences (Cochran et al., 1985; Harris, 1990; Singh and Harianto, 1990). These studies fail to control for the presence of other antitakeover provisions adopted by the firm and that could act as substitutes to the provisions under study. Furthermore,
many researchers focus only on the determinants of poison pills or golden parachutes, giving little attention to the determinants of other provisions.

In addition to the focus on a small number of provisions, these studies also fail to control for a comprehensive list of variables while studying the determinants of takeover defences. Some studies focus on the relationship between firm or board characteristics on the adoption of takeover defences while other studies focus on the effect of a firm’s ownership structure on adopting antitakeover provisions. By failing to control for a combination of board, ownership and firm characteristics, studies fail to control for significant variables that play an important role in the adoption of takeover defences.

3.4 Corporate Governance and Shareholder Wealth: Interest Alignment Hypothesis Revisited

3.4.1 Ownership Structure and Compensation

Too little monitoring of managerial performance could provide executives with massive unrestricted power, which could lead to an increase in agency problems. Ownership concentration will help alleviate these agency problems and with time it is expected to improve firm performance. As explained by the efficient monitoring hypothesis, large shareholders will be more motivated than small shareholders to monitor management because they have more capital at stake and they will be able to do so at a lower cost (Hu and Izumida, 2008). The methods used by shareholders to monitor management can vary from informal discussions to formal ones and proxy contests.
Burkart et al. (1997) also indicate that the presence of large shareholders helps mitigate the agency problem between managers and shareholders since monitoring the management is too costly for small and individual shareholders. However, large shareholders will have more resources to monitor managerial behavior and decisions. The literature states that the probability of a manager getting caught engaging in fraudulent activities increases when there is an increase in monitoring (Dalton et al., 2007).

However, Burkart et al. (1997) argue that too much monitoring could have an adverse effect on the managerial motivation and incentives. Managers working under a huge amount of continuous monitoring will feel that they are at danger of losing their jobs and tend to become more risk averse. Also, large shareholders might be tempted to pursue their own interests which can be different than that of other shareholders (Hu and Izumida, 2008). This conflict of interest between large shareholders and small shareholders is referred to in the literature as the “expropriation of minority shareholders hypothesis” (Hu and Izumida, 2008, p.p. 73).

Therefore, further empirical tests should be implemented to test if the benefits of monitoring and improved firm performance can offset the costs of expropriating minority shareholders and the costs associated with more risk averse managerial decisions.

Several authors studied the effect of ownership concentration on accounting profit in U.S. companies and found no significant relationship (Holderness and Sheehan, 1988). On the other hand, studies made in East Asian economies and Europe imply that firm performance is positively affected by large ownership concentrations due to superior monitoring (Earle et al., 2005).
3.4.2 CEO and managerial ownership

The literature suggests that one of the main solutions for the agency theory is CEO or managerial ownership (Jensen and Meckling, 1976; Dalton et al., 2007). However, Researchers have not been able to identify a fixed relationship between CEO ownership and firm value. Moreover empirical evidence has provided contradicting evidence about the correlation between CEO ownership (or executives ownership) and firm value and performance ((Demsetz, 1983; Griffith, 1999; Hermalin and Weisbach, 1991; Jensen and Meckling, 1976; McConnell and Servaes, 1990; Morcket al., 1988; Stulz, 1988).

Jensen and Meckling (1976) try to explain the positive impact of managerial ownership on firm performance by proposing the interest alignment hypothesis. If the manager owns a significant amount of the company’s shares, he will have more incentive and motivation to work to maximize firm value. Therefore, by maximizing the value of his own shares, the manager will also be maximizing shareholder wealth. Jensen and Meckling (1976) suggest that this convergence of interest hypothesis anticipates a uniform and positive correlation between managerial ownership and firm value

On the other hand, Demsetz (1983) and Fama and Jensen (1983) suggest the managerial entrenchment hypothesis and state that too much managerial ownership can be detrimental to firm value. They argue that when a manager has too much power and authority, he can entrench himself in the company and thus lower the probability of threats such as takeovers. By doing so, the manager will guarantee not to lose his place at the company even if he was seeking some private benefits and the firm was under-performing.
Morck et al. (1988) explore the correlation between managerial ownership and firm value according to the aforementioned two hypotheses (convergence of interest and managerial entrenchment hypotheses). The results show that the relation between ownership and Tobin’s Q is a volatile and non-monotonic relationship. Morck et al. (1988) find that firm value increases when managerial ownership is between 0 and 5%, then starts decreasing as managerial ownership ranges between 5 and 25%, then increases back again, but at a much slower rate, when managerial ownership surpasses 25%.

McConnell and Servaes (1990) argue that the relation between firm value and the portion of stocks owned by insiders is a curvilinear relationship. They find out that managerial ownership increases firm value until the level of ownership reaches 40-50% (convergence of interest hypothesis). After this cutoff point, the slope turns into a negative one and managerial ownership causes a slight decrease in firm value (entrenchment hypothesis). They describe this relation as an “inverted-U” shaped relationship between firm value and ownership. This is consistent with both aforementioned hypotheses. At low levels of ownership the convergence of interest outweighs the managerial entrenchment hypothesis and the managers’ interests are aligned with the interests of shareholders as the managers try to maximize shareholders’ wealth. When ownership exceeds the cutoff point, managers will become more entrenched and might engage in activities that would serve their personal objectives, regardless if these activities have a negative effect on the shareholders’ wealth and firm value.

Griffith (1999) studied the relationship between CEO ownership and firm value. Griffith (1999) argues that CEO ownership is the variable that dictates the relation between managerial ownership and firm value while other managers’ and insiders’
ownership are considered insignificant. Griffith (1999) also finds evidence consistent with both the convergence with the convergence of interest and entrenchment hypothesis. Due to several market discipline arrangements at low levels of managerial ownership, the managers of the firm will want to maximize their own wealth and firm value by increasing the share price. However, at a certain point of CEO ownership, the relationship with Tobin’s Q turns into a negative one. This is because the manager will have too much control and will become “self-indulgent”. This is consistent with the findings of Stulz (1988) who argues that at a certain point of CEO managerial ownership, the probability of a takeover decreases, which causes the value of the firm to decrease. Stulz suggests that at 50% managerial ownership, the likelihood of a takeover is 0, and therefore the value of the respective firm will be at its minimum.

CEOs can gain ownership in their organizations in several different ways. CEOs can simply buy some of the firms’ stocks if they believe that the company has a positive potential on the long run. Another way could be the performance and equity based compensations and stock option grants that the managers receive as a yearly payment or as reward if the firm is performing positively. Jensen and Murphy (1990) argue that in order to give a manager the right type of motivation to maximize shareholder wealth and firm value, the annual compensation must be in the form of equity compensation and not cash based compensation. Equity based compensation gives the manager ownership in the company and he will have more incentive to exert more effort to increase firm value.

Therefore, it might be useful to check the determinants of executive compensation which is directly related to ownership. Fama and Jensen (1983) state that the directors, who are elected by shareholders to manage the firm, put the structure and
the level of compensation for executives. This shows that the board structure can have a direct impact on the structure of compensation. Many researchers believe that outside and independent directors have a positive effect on stock price and that they are better at representing shareholders than insiders since they are more independent of the firm’s management (Rosenstein and Wyatt, 1990).

Shleifer and Vishny (1986) argue that there are factors other than the board structure that can affect executive compensation structure. They believe that large independent blockholders can significantly influence management’s decisions and that the presence of large shareholders will increase the percentage of compensation that is equity based. White (1990) provides an example of how the opposition of large blockholders to an increase in pension plans for executives at General Motors prevented the management from moving on with their plan.

Mehran (1995) finds that performance is positively correlated to executive compensation when the compensation is in equity based form and is also positively correlated with the managers’ equity holdings. These results show that the form of compensation is what incentivizes the manager to improve firm performance and not the level of compensation. The literature shows that managers are usually considered to be risk-averse (Harris and Raviv, 1979) while shareholders are risk neutral because they have their portfolios diversified over several companies. Therefore, managers prefer to receive cash compensations instead of equity based compensation, which is related to the stocks’ performance and beyond the manager’s direct control (Jensen and Meckling, 1976;). Accordingly, Amihud and Lev (1981) report that some managers pursue conglomerate mergers in order to decrease their undiversifiable risk. On the other hand, shareholders want the objectives of the managers to be aligned with their objectives and prefer the compensation to be
performance based. Tying the manager’s compensation to the performance of the firm is one of the main solutions to reduce this conflict of risk (Harris and Raviv, 1979) which will motivate the manager to take on more risky decisions (Hirshleifer and Suh, 1992)

This is consistent with the dynamic change in the amounts of reserve that U.S. firms assign for compensation. In 1997, large U.S. firms had 13% of their common stocks reserved to be distributed as compensation, while eight years earlier this number was lower than 7% (Morgenson, 1998).

Ofek and Yermack (2000) argue that this change is due to the belief held by board members that equity based compensation can motivate the executives and make them more dedicated to their work. However, managers are not expected to think the same way. Managers already have their human capital at stake in the company and its related to firm performance, they do not want their compensation to bear the same company-specific risk as well. Therefore, one would expect that the manager’s behavioral response to equity based compensation would be influenced by his previous stock ownership. In their study, Ofek and Yermack (2000) divided their sample into two parts; low and high prior managerial ownership, and studied the executives’ response to equity based compensation based on the yearly inflow (receiving equity compensation and stock options) and outflow (selling) of stocks.

The results show that managers with low ownership are much more motivated than those with high ownership after receiving stock options. The managers with low prior ownership will have the incentive to work more in order to increase shareholder wealth and firm value because they are now owners in the company. On the other hand, managers with high prior ownership will feel that they have too much
at stake when they receive the new stock options and they will tend to sell a part of
the shares they already own in order to lower their unsystematic risk.

These results show that a manager will accept receiving stock options and holding
part of the company’s stocks up to a certain level of ownership. After this point is
reached, the manager will tend to sell some of the equity he has in order to keep his
portfolio well-diversified and reduce the firm-specific risk. The findings also suggest
that the board can use equity based compensation with executives with low prior
ownership (more than high ownership executives).

Sanders (2001) argues that there is a significant difference in the CEOs’ behavioral
response with respect to stock ownership and stock option pay. Previous researches
used to combine stock ownership and stock options under one single measure of
incentives assuming that these two incentives have the same effect (Jensen and
Murphy, 1990; Mehran, 1995). Sanders (2001) suggests that this assumption is
correct if the stock’s price increases, with both cases leading to an increase in the
CEOs’ capital. However, Sanders (2001) believes that the difference in the CEOs’
behavioral response happens when there is a decrease in stock price. If a CEO has
previous stock ownership in the organization, he will incur losses just as he gained
profits when the stock’s price appreciated. On the other hand, if the manager has a
stock option, he will simply opt not to exercise his option and therefore prevent
himself from suffering any losses.

This difference has a major implication on the behavioral responses of CEOs to
different types of incentives. Knowing that stock options do not result in a decrease
in capital, a CEO holding a stock option tends to engage in more risky investments
and activities than a CEO who is afraid that the price of the stocks he already owns will depreciate.

These results cast serious doubts among previous researches who suspected that the incentives might not have enough power to change the behavioral action of CEOs and other top executives (Finkelstein, et al., 1996).

### 3.4.3 Entrenchment

The second measure of corporate governance that has been receiving lots of attention in modern research is managerial entrenchment (measured by the presence of antitakeover defences indicating the level of shareholder rights). Berger et al. (1997) define entrenchment as “the extent to which managers fail to experience discipline from the full range of corporate governance and control mechanisms. It is widely believed that takeovers improve firm performance by increasing the collective value of the acquiring and target firms together (Jensen and Ruback, 1983). The literature shows that poorly performing firms are the ones subject to takeovers more than the well-established ones (Morck et al., 1990). Underperforming managers can be disciplined either internally (by the board of directors) or externally (market for corporate control). As a result, managers of these poorly performing firms tend to adopt antitakeover provisions in order to reduce the likelihood of a takeover taking place.

The impact of adopting antitakeover provisions on shareholders’ wealth and firm value has been the subject of a long dispute among researchers.

Manne (1965) first argued that entrenchment will insulate the managers and weaken shareholder rights. By entrenching themselves in the company, managers will lower
the probability of a takeover and thereby lower the threat of being removed from their position. In turn, this could lead to managers engaging in empire building and misuse of the company’s resources.

On the contrary, several researchers believe that entrenchment can also have positive consequences. For example, the managerial myopia hypothesis suggests that takeover defences benefit shareholders by lowering the degree to which a takeover threat distorts managers from engaging in long-term project investments (Bebchuk and Stole, 1994; Stein, 1988). Unlike short-term investments which can generate cash inflows rather quickly, long-term investments target long-term growth and could take several years before being able to cover their costs (Stein, 1988). Due to information asymmetry between shareholders and the management team, shareholders are not able to value long-term investments correctly causing a devaluation in the firm’s share price. Such firms could become underpriced and therefore become takeover targets. Therefore, Stein (1988) suggests that providing managers with a protection is one of the solutions to this problem. When managers feel that their position at the company is secure enough, they will focus on long term investments without having to engage in ineffective actions that would decrease the probability of a takeover (Arlen and Talley, 2003).

Chakraborty et al. (2014) study the effect of antitakeover provisions on innovation to tests whether firms adopt takeover defences based on the entrenchment hypothesis or the managerial myopia hypothesis. Results indicate that managers of firms with a higher number of antitakeover provisions have relatively lower number of patents as well as lower citations to patents. Chakraborty et al. (2014) believe that their results also provide an explanation for the negative relation between antitakeover provisions and firm performance found in the literature. The results provide support to the
entrenchment hypothesis and are in contrast to the managerial myopia hypothesis since managers who are more protected from the takeover market innovate less than those who are not protected. The authors argue that increasing the number of antitakeover provisions has a negative effect on firm performance through its adverse effect on innovation.

Ryngaert (1988) study the relation between antitakeover provisions and firm value and find out that the adoption of antitakeover provisions lead to an increase in share price. Mahoney and Mahoney (1993) perform a longitudinal study and find out that there is no correlation between the adoption of antitakeover provisions and share price between years 1974 and 1979. However, this relation turns into a negative and significant relation from 1980 and 1988. Comment and Schwert (1995) study the relation between the implementation of poison pills and other antitakeover provisions on one hand and the firms’ wealth on the other. Comment and Schwert (1995) find out that these provisions improve the bargaining position of the target firm leading to an increase in takeover premiums while not having a significant effect in preventing takeovers from taking place.

On the other hand, McWilliams and Sen (1997) find that there is an inverse relation between adopting antitakeover provisions and share price. This is consistent with recent studies (Bebchuk and Cohen, 2005; Bebchuk et al., 2009; Gompers et al., 2003). Some researchers debate that the threat of a takeover will increase a manager’s efficiency at work and make him more disciplined (Scharfstein, 1988). Others believe that a manager working under the threat of a takeover will feel insecure and that any work he is going to do can be lost at any moment if the takeover takes place (Haan and Riyanto, 2006). This threat will demotivate the
manager and decrease the effort he is willing to put at work and in analyzing projects.

When there is a takeover threat, there are two possible scenarios. Haan and Riyanto (2006) argue that, for the reasons mentioned above, in some cases shareholders may be reluctant to have a takeover threat if the premium is low. If a takeover doesn’t take place, the overall wealth of the shareholders might decline because the managers are less motivated to do their job and maximize shareholder wealth. However, if the premium is high enough and a takeover takes place, shareholders will benefit from the additional premium they receive for their shares from the bidder.

As it is the case with CEO ownership, the adoption of antitakeover provisions by a firm is expected to have opposite effects on firm valuation. On one hand, antitakeover provisions help the managers become more entrenched at the company and increase their managerial power and authority, and thus aid them in the extraction of private benefits from the company. The free cash flow hypothesis suggests that managers of firms with large amounts of cash flows but limited investment opportunities have a higher probability to engage in value destroying acquisitions (Jensen, 1986). These activities provide managers with large amounts of profit on the expense of the shareholders’ wealth. Further studies investigated Jensen’s hypothesis and provided supporting evidence. Morck et al. (1990) pointed out different types of acquisitions (high growth targets acquisition and diversifying acquisitions) that are expected to provide the managers with a significant amount of return while negatively affecting the shareholders’ wealth at the same time.
On the other hand, the presence of antitakeover provisions might benefit the firm by increasing its bargaining power in case a takeover becomes imminent. The literature shows that firms with antitakeover provisions in place usually receive higher bids than those which do not have these provisions (Stulz, 1988). However, Bebchuk (2002) casts doubt about the benefits of the protecting managers claiming that the managers could have strong bargaining power and get a high premium without the need of adopting antitakeover provisions. Also, managers might use the authority they get from the antitakeover provisions to obtain side payments that would benefit them instead of negotiating for a higher premium for the shareholders (Bebchuk, 2002; Hartzell et al., 2008).

The Investor Responsibility Research Center (IRRC) put out 24 anti-takeover governance provisions that would help to measure managerial entrenchment and shareholder rights. Gompers et al. (2003) constructed a government index (G-Index) out of these 24 provisions to study the relationship between shareholder rights and corporate performance. The construction of the index is fairly simple: for every antitakeover provision adopted by the company that helps the manager become more entrenched in the firm, one point is added to the company except for cumulative voting and secret ballots. These two provisions each adds one point to the government index if they are absent because evidence shows that the shareholders are often the ones who propose that these provisions be adopted by the company while the managers refuse to do so. Gompers et al. (2003) divided their sample into several deciles and find that firms with the least amount of antitakeover provisions (democracy firms) outperformed those with the highest amount of antitakeover provisions (dictatorship firms) by 8.5% annually. This indicates that firms with higher shareholder rights perform better than their peers with low shareholder rights.
Following Gompers et al. (2003), several researchers use the GIM index of provisions as a proxy for a firm’s governance and/or managerial power. Kaplan and Minton (2006) study the effect of governance provisions on the relationship between firm performance and CEO turnover. Using the GIM index as an indicator of a firm’s governance, findings fail to support the entrenchment hypothesis of antitakeover provisions. The results do not show a significant effect for the presence/absence of takeover defences on the performance-turnover relationship. In addition, Jagannathan et al. (2007) find no significant difference in CEO turnover between US states that have the highest number of takeover defences and those that have the lowest number of takeover defences. Therefore, the authors suggest that the presence of antitakeover provisions does not necessarily lead to managerial entrenchment.

However, Sokolyk (2014) claims that previous studies addressing the effect of governance provisions on the performance-turnover relationship fail to control for CEO turnover following value-reducing decisions such as mergers and acquisitions. Masulis et al. (2007) suggests that CEOs engage in value reducing acquisitions when they are protected by takeover defences. Harford et al. (2008) adds that firms with takeover defences have fewer cash reserves than their counterparts. Such firms opt to use their excess cash to engage in acquisitions instead of increasing the dividend given to shareholders. These acquisition decisions lead to a reduction in the acquirer firm’s profitability and valuation. Therefore, it is essential to control for acquisition decisions in such studies. Sokolyk (2014) finds that CEOs of firms with a high number of antitakeover provisions are less likely to be disciplined by the board of directors or the market for corporate control for engaging in value-decreasing mergers and acquisitions. Consistent with the entrenchment hypothesis of
antitakeover provisions, the author concludes that the adoption of antitakeover provisions weakens a firm’s governance and its disciplinary mechanisms.

Gompers et al. (2003) use takeover vulnerability, an external governance mechanism, as a measure for firm governance and shareholder rights. However, some researchers cast doubts about the validity of this approach arguing that both internal and external governance mechanisms interact together in shaping a firms’ governance structure (Cremers and Nair, 2005).

Previous studies attempting to study the interaction between internal and external governance mechanisms used top-management turnover to measure the efficacy of internal governance (Huson et al., 2004). (Cremers and Nair, 2005) believe that the problem associated with this measurement is that it is vulnerable to a selection bias since the study will only include the cases where the firms actually dismissed their top managers.

Cremers and Nair (2005) use the percentage of shares owned by institutional blockholders and the percentage of shares owned by public pension funds to measure the level of internal governance. The presence of large shareholders is expected to reduce the firms’ agency costs. Large shareholders have more resources than small shareholders to monitor management and are expected to do so more efficiently and effectively (Shleifer and Vishny, 1986; Zerni et al., 2010). Also, large shareholders are expected to help the firm overcome the free-rider problem and to simplify the takeover process (Shleifer and Vishny, 1986). Cremers and Nair (2005) claim that the existence of large shareholders is essential for a successful takeover to take place and that the absence of large shareholders reduces the probability of a firm being taken over even if they do not have antitakeover provisions. This shows that both
internal and external mechanisms may interact together in affecting the governance of a firm.

Consistent with Gompers et al. (2003), Cremers and Nair (2005) use the vulnerability to takeovers as a measure of external governance. They use the 24 provisions of the G-index and also construct their own alternative takeover index (ATI) based on only 3 of the 24 provisions made by the IRRC that they considered crucial to takeovers. Cremers and Nair (2005) show that a portfolio with high takeover vulnerability and high blockholders ownership produces significantly higher returns than a portfolio with high takeover vulnerability and low blockholders ownership. These findings add to the previous literature by showing the important role of internal governance to reinforce the relation between the G-index (external governance) and firm performance.

However, they fail to provide evidence on whether or not the other provisions in the G-index are correlated with Tobin’s Q. They also fail to test whether each one of the provisions they chose in their index is statistically significant by itself.

Bebchuk and Cohen (2005) narrowed their research even more to include only one of the IRRC provisions. The authors claimed the negative correlation between the G-index and firm performance is most likely to be associated with only a small subset of the 24 governance provisions included in the G-Index by Gompers et al. (2003). They study the relationship between staggered boards and firm value, which is one of the main provisions used to protect managers from removal in U.S. companies. Staggered boards are adopted by most publicly traded companies in the U.S and they inhibit shareholders to change a significant number of directors in one annual election. Bebchuk and Cohen (2005) claim that staggered boards have faced an
increasing amount of opposition from institutional investors in recent periods and are most likely to be one of the key driving factors for the pre-established relationship between the G-index and firm performance. Controlling for all other IRRC provision, staggered boards was found to have a significant and negative effect on firm performance. The impact of the staggered boards on firm value is found to be much more than the average impact of the other controlled for provisions. However, this paper also did not identify if any of the other provisions is significant by itself or not.

This is consistent with Faleye (2007) who shows evidence that the announcement of adopting a staggered board results in a decrease in stock price. These results are further reinforced by Guo et al. (2008) who demonstrate how removing a staggered board leads to an increase in stock price. More recently, Sokolyk (2014) finds that the adoption of antitakeover provisions, especially staggered boards, weakens a firm’s internal and external disciplinary mechanisms.

The gap in finding which provisions are the ones that really matter encouraged an increasing amount of research to be made in this field. In a recent study, Bebchuk, et al. (2009) study which of the provisions are the ones that play a key role for the relationship between corporate governance and firm value. They believe that only a small amount of the provisions are the driving force behind the correlation between antitakeover provisions and firm value. Therefore, they argue that including a huge amount of provisions in indexes that measure corporate governance, which many of the famous shareholder advisory firms actually do (ISS has 61 provisions in its index while Metric International includes more than 600 elements in its index), distorts shareholders more than it actually guides them. The addition of a large amount of
irrelevant provision will give a lower weight for the provisions that actually count and therefore add more noise to the results.

Bebchuk et al. (2009) observe which of the provisions stimulated a significant amount of opposition from institutional investors’ voting on precatory resolution. They put together an entrenchment index (E-index) based on 6 provisions from the G-index which were found to have the most opposition from institutional investors. Four of these provisions help in delaying provisions and limit the shareholders’ voting power while the other two are considered as “takeover readiness” provisions used to prepare for hostile takeovers. The purpose of the construction of this index was to show that only a small amount of provisions is responsible for the correlation between the G-Index and firm value and that the other provisions did not have any significant correlation with Tobin’s Q. The results showed that an increase in the E-index is significantly related to a decrease in firm value and abnormal negative returns for the period. Results also showed that the other 18 provisions included in the G-index are not negatively correlated with firm value neither on an individual basis nor in aggregate. This indicates that the other 18 provisions that were used in previous studies did not help in the empirical tests. On the contrary, these provisions added noise factors to the previous tests that used them.

Brown and Caylor (2006) use the data provided by the Institutional Shareholder Services (ISS) to study the relationship between corporate governance and firm valuation. They created their own index, Gov-Score, using 51 internal and external governance provisions. The construction is simple; if the specific provision provides acceptable governance it adds 1 point to the index, otherwise nothing will be added. Therefore, the higher the Gov-Score index, the higher is the governance of the relative firm.
Previous research inspects the relation between single internal governance provision and firm value. For example, Hermalin and Weisbach (1991) study the effect of board structure on firm value while Yermack (1996) studies the relationship between board size and firm value. Recently, many governance studies started using the G-index although it is not a broad index and only shows information about antitakeover provisions (Cremers and Nair, 2005; Larcker et al., 2007). Knowing so, Brown and Caylor (2006) aimed to provide a more dynamic governance measure than the G-index which includes both internal and external governance provisions and also includes a greater number of firms.

The authors argue with the claim that both internal and external governance are significantly related to firm value (Cremers and Nair, 2005). Cremers and Nair (2005) used only shareholder activism as a measure of a firms’ internal governance. However, Cremers and Nair (2005) did not observe if any of the other internal governance provisions do matter when valuing firms. Therefore, Brown and Caylor identified which ones of the 51 provisions in the Gov-Score index are the ones that drive the relationship between Gov-Score and firm value and designed a smaller index out of these provisions, Gov-7.

The new index is made out of 7 provisions, which included 5 internal governance provisions which have not been considered in previous studies and 2 of the internal governance provisions used in the E-index (Staggered boards and poison pills).

Consistent with previous findings, the results indicated that the Gov-Score index is significantly and positively related to firm value. Further tests also showed that the provisions of Gov-7 are the ones fully responsible for the relation between Gov-Score and Tobin’s Q. These results support the findings of Bebchuk and Cohen.
(2005) which stated that a small amount of the numerous marketed provisions on corporate governance are the ones that are correlated with firm value.

Straska and Waller (2010) revisit the previous literature regarding the relationship between antitakeover provisions and firm value. Specifically, they take a closer look at the inverse relationship between Tobin’s Q as a proxy for firm value and the indexes used for takeover provisions by Gompers et. al (2003) and Bebchuk et. al (2009) (G-Index and E-Index respectively).

Straska and Waller (2010) believe that the negative relationship between antitakeover provisions and firm value is not universal and thus cannot be generalized for all firms. They choose firms that have low bargaining power and at the same time high agency cost as the focus of their study. These firms are characterized in the literature to have low shareholder concentration, a small amount of managerial ownership and a lower price to equity ratio with respect to their industry competitors.

Straska and Waller (2010) believe that firms with low bargaining power are particularly important for their study. On one hand, if the takeover defences improve the manager’s bargaining power, an increase in antitakeover provisions should have a positive impact on firm value. On the other hand, if these antitakeover provisions help increase managerial entrenchment inside corporations, the relation between firm value and adopting takeover defences would be expected to be a negative.

In contrast to previous studies favouring the entrenchment hypothesis, Straska and Waller (2010) show that, for firms with low bargaining power, a higher value in the E and G-Indexes will yield a higher value of Tobin’s Q. This indicates that, in some cases, antitakeover provisions are in fact beneficial for shareholders and help in
increasing the manager’s bargaining power. Therefore, Straska and Waller (2010) suggest that there is no optimal level of antitakeover provisions that can be applied to all firms.

In another study, Larcker et al. (2007) explore the different scopes of corporate governance while developing a reliable measure different from the ones previously used in the literature. Previous studies about corporate governance and its implications provide several conflicting outcomes. Larcker et al. (2007) believe that the variation in previous results is due to the absence of a unified and reliable measure that includes all the important aspects of corporate governance.

Although the G-index is widely used as an indicator for a firm’s governance, it only measures the market for corporate control while neglecting the importance of board structure, ownership and other important aspects in the formulation of the entire corporate governance of an organization.

Therefore, Larcker et al. (2007) take an initiative in studying 39 governance indices and construct a 14 multi-indicator indices to measure corporate governance. These indices are found to be strongly correlated with “future operating performance and excess stock returns”. On the other hand, the relation between these indices and abnormal accruals and accounting restatements is negligible, indicating that more work needs to be done to make this index more robust. Also, Larcker et al. (2007) mention that their study examines the data for only one year, and thus the results found cannot be used to make a generalization for other years.
3.4.4 Board Independence

The objectives of the board of directors can be summarized into two major activities: The monitoring process and the advisory process (Linck et al., 2008).

According to the agency theory, increasing the percentage of independent directors would enhance the monitoring process of managerial activities (Fama and Jensen, 1983; Weisbach, 1988). Weisbach (1988) argues that, in most cases, insider directors are loyal to the management team. Therefore, insiders are less likely to oppose any actions taken by the managers even if these actions might have a negative effect on the shareholders’ wealth. Contrary to insiders, outside directors are independent of the top management and their main function is to prevent the managers from extracting private benefits and ensure that the managers are acting in the shareholders’ best interest (Linck et al., 2008).

On the other hand, researchers suggest that independent directors are not as good as insiders in their advisory roles. (Linck et al., 2008) and Maug (1997) argue that there is an information asymmetry cost associated with independent directors. Fama and Jensen (1983) claim that independent directors do not have the same firm specific information about projects that insiders have. Due to this information asymmetry cost associated with independent directors, insiders are considered to be better advisors for the firm (Raheja, 2005).

Therefore, the presence of both insiders and independent directors is essential for the firm. However, researchers have thrived to find the ultimate combination of insiders and outsiders on the board of directors that would maximize shareholder wealth and firm value.
To test the impact of board composition on firm performance, researchers have studied the correlation between the percentage of outside directors and different measures of a firm’s performance.

Consistent with the agency theory, several researchers find that increasing a board’s independence can actually increase firm value in specific cases (Brickley et al., 1994; Cotter et al., 1997, Weisbach, 1988).

Weisbach (1988) demonstrates how independent directors can be beneficial to the firm indirectly through their monitoring process. Weisbach (1988) presents evidence that CEO turnover is negatively related to firm performance especially when the board of directors is dominated by outsiders. Resignations of CEOs of poorly performing firms have a positive impact on performance when the board of directors consists of a majority of outsiders.

Brickley et al. (1994) study the effect of poison pills on firm value with respect to the percentage of outside directors. They believe that if the assumptions of outside directors being better monitors of managerial decisions and are more aligned with the shareholders’ interests, then the likelihood of using a poison pill to harm the shareholders would be significantly lower when the board is dominated by outsiders. On the other hand, if the interests of independent directors are not well aligned with those of the shareholders, then the percentage of independent directors would have no significant impact on the relation between the adoption of poison pills and firm value.

Consistent with the agency theory, Brickley et al. (1994) find results supporting the interest alignment hypothesis between independent directors and shareholders. The results indicate a positive and significant change in the stock price to the adoption of
poison pills when the board of directors is controlled by outsiders. In the absence of a majority of independent directors, the relationship between firm value and the adoption of a poison pill provision turns into a significantly negative relation.

Cotter et al. (1997) present similar results to Brickley et al. (1994), indicating that the presence of a majority of outside directors is beneficial to the shareholders. Cotter et al. (1997) study the effect of independent directors on the shareholders’ wealth during tender offers. The authors believe that since tender offers and takeovers might reflect a conflict of interest between a company’s shareholders and the management team, studying the role of independent directors can provide insights about the effectiveness of independent directors in their monitoring process.

Cotter et al. (1997) find that the overall shareholders’ gains, resulting from the initial and bid premiums, from a tender offer are significantly larger for firms with a majority of outsider directors. Consistent with Brickley et al. (1994), Cotter et al. (1997) find that in the presence of a poison pill, the gains that shareholders extract from a successful takeover process are higher when the majority of the board consists of outside directors.

Contrary to the aforementioned studies, Bhagat and Bolton (2008) find a negative relationship between board independence and a firm’s performance. Bhagat and Bolton (2008) study seven measures of a firm’s governance mechanisms and their impact on firm performance. Although several of these mechanisms were positively correlated with firm performance, board independence provides some striking results. Assuming that increasing board independence leads to a better monitoring process and a better governance structure, recent governance regulations in 2002-2003 (SOX, NYSE and NASDAQ) have require from companies to have a majority
of independent directors on their boards. On the positive side, board independence was found to be positively correlated with management turnover in poorly performing firms. Therefore, Bhagat and Bolton (2008) conclude that independent directors are successful at disciplining poorly performing management teams, but fail in improving a firm’s performance.

Brick et al. (2006) argue that there is a “mutual back scratching” (Brick et al., 2006, p.403) between outside directors and CEOs. They find that there is a positive association between a CEO’s compensation and directors’ compensation. In addition, excess values for both of these compensations were found to lead to poor firm performance. Brick et al. (2006) conclude that the occurrence of excess compensation is due to the mutual back scratching process, also referred to as cronyism, where both parties benefit from increasing each other’s compensation regardless of the effect on firm value.

A CEO typically plays an important role in appointing outside directors (Crystal, 1991). When outside directors are hired by the company and retained for a long period, the directors will have a feeling of loyalty and devotion towards the current CEO (Dalton et al., 2007). Crystal (1991) further reinforces this point by finding that outsiders chosen by the CEO have a lower probability of voting against a CEO’s decisions. Sutton (2004) suggests that all directors lose their independency after serving on a board for five years.

Bhagat and Black (1999) find that different U.S. firms with a majority of independent directors act in different ways. The impact of this difference in behavior is random; positive in some cases and negative in others. Therefore, Bhagat and Black (1999) argue against the notion that firms should have a supermajority of
independent directors on their boards (with only one or two inside directors). On the contrary, the authors provide some evidence that firms with a supermajority of independent directors are actually less profitable than other firms with more diverse boards. They suggest that for optimal firm performance, a company should have a reasonable amount of inside directors (3→5 out of 11) while also keeping a good amount of outside directors.

On the other hand, Hermalin and Weisbach (1991) and Bhagat and Black (2000) report no such correlations as their results failed to show any significant impact of the percentages of outside directors on firm performance.

Hermalin and Weisbach (1991) provide several explanations for their results. They believe that, consistent with the argument that management teams play a key role in the selection of board members, there is no significant difference between the presence of insiders and outsiders in representing the shareholders’ interests. Hermalin and Weisbach (1991) add that although the tests showed insignificant results, the coefficient of board composition in the regression was negative. This negative coefficient might be due to the necessary trade-off between the monitoring process of outsiders and the advisory process of insiders, indicating that too much outside directors (the lack of insider directors) will adversely affect the decision making process.

Consistent with the notion that increasing the number of independent directors can have a positive impact on firm performance, Bhagat and Black (2000) report that firms tend to move towards increasing board independence after a poorly profitable year. However, contrary to expectations, Bhagat and Black (2000) report no
significant increase in the performance of these firms, suggesting that greater board independence does not necessarily improve a firm’s profitability.

Although various researchers have addressed the board composition and whether it has a significant effect on firm value, results are still inconsistent. (Linck et al., 2008) describes the ideal board composition as a tradeoff between the expenses and revenues associated with increasing the monitoring and advising functions of the company. They claim that there is no optimal board composition for all firms. For complex firms whose operations are widely distributed over different geographical locations it might not be wise to have a huge amount of independent directors because of the costs of transferring information (Linck et al., 2008). Maug (1997) adds that when a firm has a high information asymmetry due to its complex nature, it is very likely that the asymmetry costs offset the benefits of increased monitoring.

3.4.5 CEO Duality

The last governance mechanism used in this model is concerned with the role duality of CEOs. Firms can be governed using a single or dual leadership structure. A single leadership structure implies that one person serves as both the CEO and chairman of the board of directors. On the other hand, a dual leadership structure implies that two independent persons are serving as CEO and chairman of the board. From a theoretical perspective, the effect of CEO duality on board independence has witnessed a long dispute among researchers.

Agency theorists argue that CEO duality gives too much power to one individual allowing the CEO to act opportunistically in order to extract private benefits. Levy (1981) and Dayton (1984) suggest that role duality allows the CEO to dominate the decisions of the board of directors, which is one of the main mechanisms to monitor
managerial behavior. In other words, in the case of CEO duality, CEOs will be dominating the entity that is supposed to monitor their performance (Rhoades et al., 2001). Therefore, supporters of the agency theory believe that the presence of CEO duality increases agency problems.

On the other hand, supporters of the stewardship theory believe that role duality provides managers with the power needed to take value enhancing decisions. Advocates of this theory believe that managers are already motivated to work in the shareholders’ best interest but could sometimes lack the necessary power and freedom. Therefore, role duality solves this problem and provides managers with the necessary power and unity of command.

Numerous empirical studies have been implemented to test the two aforementioned arguments. However, empirical findings have not reached a clear argument concerning the relationship between role duality and firm performance.

Several studies report that CEO duality leads to a decrease in shareholder wealth (Rechner and Dalton, 1991; Pi and Timme, 1993). Aside from the direct relationship between CEO duality and firm performance, combining the roles of CEO and chairman of the board is also linked with weaker board control increased CEO entrenchment (Brick et al., 2006) and increased CEO compensation (Core et al., 1999).

Rechner and Dalton (1991) study the direct impact of CEO duality on firm performance for a sample of 141 US companies that had a stable governance structure between 1978 and 1983. The authors find that firms with independent leadership structure had significantly higher accounting returns than firms with CEO duality. Pi and Timme (1993) also find that US banks with no role duality had
significantly higher return on asset ratios than other US banks with CEO duality during the 1988-1990 period.

Core et al. (1999) test the relationship between several governance mechanisms and CEO compensation on a sample of 495 observations. Results indicate that CEOs in firms with role duality receive, on average, $152,577 extra CEO compensation than their counterparts in firms with no role duality. The authors suggest that this is due to the weaker governance structure inspired by the presence of CEO duality. Further results indicate that firms in which CEOs receive excess compensation perform worse than firms with lower CEO compensation.

Using a large sample of US firms between 1992 and 2001, Brick et al. (2006) report evidence of cronyism. The authors suggest an act of “mutual back scratching” (Brick et al., 2006; p.p. 403) between managers and directors where both parties increase each other’s compensation for mutual benefits. Consistent with Core et al. (1999), Brick et al. (2006) also report that excess director compensation and cronyism is more apparent in the presence of CEO duality. They believe that this is due to managerial entrenchment, where a CEO with role duality has higher power and is more entrenched than a CEO with no role duality. These results maintain that this mutual back scratching process has an adverse effect on firm value.

Goyal and Park (2002) also find that CEO duality affects the sensitivity of CEO turnover to firm performance. The authors use a sample of firms between 1992 and 1996 and find that CEO duality decreases the probability of CEO turnover resulting from poor firm performance. A decrease of one standard deviation in firm performance increases the probability of CEO turnover by 5.3% in non-duality firms
and 2.5% in duality firms. The authors explain that role duality reduces the effectiveness of boards of directors in monitoring CEOs.

Although theories (agency and stewardship) suggest that CEO duality significantly affects firm performance, yet a large group of researchers fail to find such a relationship. Several researchers provide empirical evidence of no significant relationship between CEO duality and firm performance (Abdullah, 2004; Baliga et al., 1996; Chagnati et al., 1985)

Chaganti et al. (1985) study the relationship between board characteristics and corporate failure for US retailing firms in the 1970s. Using pair-wise analysis techniques, the authors match 21 failing firms with 21 non-failing firms with similar characteristics. Chaganti et al. (1985) control for industry-specific and economic factors, such as recession or the level of market competition, in order to measure the associations between firm-specific factors on the likelihood of failure. Results suggest that chairmen holding multiple offices, mainly chairman of the board and CEO, are not associated with a higher probability of corporate failure.

Baliga et al. (1996) suggest that CEO duality has been blamed for weakening governance structure and firm performance without conclusive empirical evidence. The authors test the announcement effect of firms changing their leadership status, as well as the operating and long term performance of such changes. Results suggest that the announcement effect of changing leadership structure from duality to non-duality, and vice versa, is insignificant². Results also provide insignificant results for changing a firm’s leadership structure on operating and long-term performance. Baliga et al. (1996) argue that their results are in contrast with previous studies due

² The results are consistent for different announcement effect time periods. The authors test 2-day, 5-day, 10-day and 60-day announcement returns.
to different methodologies. Some studies fail to control for variables that could affect firm performance (such as Rechner and Dalton, 1991) while others focus on a single industry (Pi and Timme (1993) only study firms in the banking industry).

Abdullah (2004) tests the effect of CEO duality on firm performance for the companies listed in the Kuala Lampur Stock Exchange between 1994 and 1996. Although various performance measures were used (ROA, ROE, profit margin ratio, earnings per share), results suggest that CEO duality does not have any significant effect on firm performance. Abdullah (2004) also finds no significant interaction between CEO duality and the percentage of independent directors serving on a company’s board.

On the other hand, Donaldson and Davis (1991) provide evidence supporting the stewardship theory. The authors find that the return on equity for firms with CEO duality (14.75%) is significantly higher than the return on equity for firms with independent persons serving as CEO and chairman of the board (11.49%). However, the same tests were insignificant when a financial market measure of performance was used. The authors conclude that although their results provide only partial support for the stewardship theory, both of their profitability measures do not support the propositions of the agency theory.

Boyd (1995) believes that the contradicting evidence in previous literature can be explained by integrating the arguments of both agency and stewardship theories. The author argues that neither one of these theories can explain the different aspects of corporate governance on its own. Results suggest that CEO duality improves performance for firms with a high degree of complexity and for firms with a scarce amount of resources. However, for firms with a low degree of complexity and wide
availability of resources, a role duality provides CEOs with unnecessary power that would adversely affect firm performance. Findings also indicate a positive relationship between duality and firm performance after controlling for the uncertainty of a firm’s environment.

Therefore, Boyd (1995) believes that assessing the advantages and disadvantages of providing a CEO with a role duality should be done on a case by case basis due to the specific characteristics of different firms. Boyd (1995) concludes by claiming that “unilateral governance reform on this issue may adversely affect some firms” (Boyd, 1995; p.p. 309). Other researchers also provide support for this argument. Elsayed (2007) finds that the relationship between CEO duality and firm performance for Egyptian firms depends on the industry under study. Certain industries benefit from having a single leadership structure while other industries benefit from an independent leadership structure. Lam and Lee (2008) also find that non-family controlled firms in Hong Kong enjoy an increase in firm performance in the presence of CEO duality. On the other hand, family-controlled firms perform better in the absence of CEO duality.

Consistent with this argument, Faleye (2007) claims that the benefits and costs of CEO duality vary from one firm to another depending on different CEO and firm characteristics. The author starts by studying the determinants of CEO duality. Specifically Faleye (2007) proposes that CEO ownership, CEO reputation, and firm complexity moderate the relationship between CEO duality and firm performance.

Consistent with Boyd (1995), Faleye (2007) maintains that for complex firms, there is a high cost of transferring firm-specific information from the CEO to the chairman of the board. Therefore, such companies should benefit from CEO duality since the
benefits of decreased information asymmetry outweigh the costs of decreased board monitoring.

Faleye’s (2007) second hypothesis posits that CEOs with high reputation do not risk losing their reputation in order to engage in opportunistic activities. Therefore, CEOs with high reputation could benefit from the extra power given to them, rather than extra monitoring provided by an independent chairman of the board.

Consistent with previous studies (Jensen and Meckling, 1976), Faleye (2007) also suggests the interest alignment hypothesis of CEO ownership. By working hard to maximize shareholder wealth, CEOs with a high level of ownership are maximizing their own wealth as well. In the same sense, Faleye (2007) believes that as CEO ownership increases, agency conflicts decrease. Therefore, a non-duality structure would provide a needless cost for firms with high CEO ownership. Consistent with his hypothesis, Faleye (2007) finds that firm complexity, CEO ownership and CEO reputation increase the likelihood of appointing a CEO as chairman of the board. In addition, the author reports that, in these specific cases, a firm with a role duality outperforms its counterpart with no role duality.

Aside from studying the direct relationship between duality and performance, researchers test the effect of CEO duality on a wide variety of governance variables. Studies address the effect of role duality on CEO compensation (Brick et al., 2006; Core, Holthausen and Larcker, 1999; Wang et al., 2011), CEO turnover (Goyal and park, 2002), earnings management (Davidson et al., 2004; Klein, 2002) and the adoption of antitakeover provisions (Mallette and Fowler, 1992; Sundaramurthy, 1996; Sundaramurthy et al., 1996). All of these aspects provide a better insight on
whether the presence of CEO duality inspires a better or weaker governance structure.

### 3.5 Conclusion

One of the main reasons of corporate governance studies is to test the effect of different internal and external governance mechanisms on firm performance. Researchers suggest that a firm’s board and ownership structures (internal governance mechanisms) have a significant effect on firm performance. Ownership and compensation schemes as well as a majority of independent directors are assumed to reduce the agency conflicts and, therefore, increase firm value. In addition, having an independent leadership structure provides managers with less room for opportunistic behavior.

Empirical studies have been made throughout the literature to provide support for the aforementioned suggestions. However, the results have been largely inconsistent. A significant amount of researchers find board independence and CEO duality do not have a significant effect on firm performance (Bhagat and Black, 2000; Hermalin and Weisbach, 1991; Rechner and Dalton, 1991). Other studies suggest that these mechanisms can be positive in some cases and negative in others (Boyd, 1995; Elsayed, 2007). Regarding the ownership-performance relationship, researchers report an inverted U relationship. However, the cutoff point during which any additional CEO ownership will become detrimental to firm performance differs from one study to another. Although there is a large amount of literature covering the relationship between internal governance mechanisms and firm performance, most of these studies fail to control for the interaction between internal and external governance mechanisms.
Cremers and Nair (2005) claim that internal and external governance mechanisms interact in affecting firm performance. The market for corporate control is one of the main external governance mechanism used to reduce agency conflicts and discipline opportunistic managers. By adopting antitakeover provisions, managers are deactivating one of the mechanisms to discipline them. As such, takeover defences are assumed to increase agency conflicts and have a negative effect on firm performance. Therefore, a firm’s optimal ownership and board structures could differ based on its level of external governance. Failing to control for such interaction effects will provide inconsistent results similar to the ones found in the literature.
Chapter 4

Theory Chapter
4.1 Introduction

The theoretical framework of this study focuses on the managerial motives for choosing certain antitakeover provisions over others. The study also gives particular attention to the interaction between takeover defences and other governance mechanisms in affecting firm value. Recent financial scandals and crises prove that corporate governance mechanisms and theories cannot ensure a world free of manipulations and fraud. However, the importance of building a theoretical framework for a research is to establish a basis for setting the hypotheses as well as guiding the interpretation of the results. In addition, a theoretical framework helps the researcher consider several theories which will widen the researcher’s knowledge and help explain complex scenarios where more than one theory can be applicable.

Previous researchers use different theoretical approaches when studying the complex aspects of corporate governance. Some of the most prominent theories used in the literature are the agency theory (Eisenhardt, 1989; Jensen and Meckling, 1976; Fama, 1980; Fama and Jensen, 1983), stewardship theory (Donaldson, 1990; Donaldson and Davis, 1991), stakeholder theory (Donaldson and Preston, 1995; Freeman, 1984) and the resource dependence theory (Christopher, 2010; Hillman et al., 2009; Pfeffer and Salancik, 1978).

The agency theory is concerned with the principal agent relationship and the conflicts of interest that could occur due to the opportunistic behavior of managers (Jensen and Meckling, 1976). Agency theorists believe that a high level of board independence could reduce agency conflicts by increasing the monitoring process of managers and thus decreasing CEO power. Unlike agency theory, the stewardship theory suggests that CEOs are good stewards and are self-motivated to increase firm
value without the need of a high level of board independence. Therefore, shareholders should empower CEOs by providing them with a role duality and surround them with more insider directors that have high firm specific expertise (Donaldson and Davis, 1991). On the other hand, the stakeholder theory believes that too much focus is given to the principal-agent relationship with little focus on the other stakeholders. Proponents of this theory believe that all stakeholders are equally important and, therefore, should be treated with equal importance (Freeman, 1984). Finally, the resource dependence theory focuses on the interdependence between a firm and its external environment (Pfeffer and Salancik, 1978). Supporters of this theory suggest that powerful independent directors with interlocks are beneficial to firms since they can reduce the firm’s dependence on its external environment. More recently, researchers have been suggesting that a single theory cannot explain the various aspects of corporate governance (Elsayed, 2007). Therefore, several studies adopt a multi-theoretical approach that integrates more than one theory in an attempt to cover wider aspects of corporate governance (Christopher, 2010; Elsayed, 2007; Hillman and Daziel, 2003; Kiel and Nicholson, 2003)

4.2 Theories of Corporate Governance

4.2.1 Agency Theory

Agency theory has been subject to a significant amount of debate among scholars, researchers and practitioners. The agency theory concept was introduced to the public by Berle and Means in 1932 who talked about the conflict of interest that might occur between managers and shareholders.

Adolph Berle and Gardiner Means issued a book named “The Modern Corporation and Private Property” in year 1932. The authors describe that, prior to the publishing
of their book, large ownership concentrations had been significantly reduced which led to a more diversified structure of ownership in large firms. The ownership of private firms was spread more among smaller shareholders and formed what is known today as market ownership (Coffee, 2001). As the ownership became more diverse, owners started losing their supervisory role over the firm and qualified managers took over this position. However, these managers might have their own interests and goals that would adversely affect shareholders’ wealth. This evolution in the ownership structure laid the foundation for the establishment of the agency theory.

After Berle and Means (1932), many researchers studied the agency theory and the divergence of interest between managers and shareholders. However it was Jensen and Meckling (1976) who formalized the previous work on agency theory. Jensen and Meckling (1976) state that, in some cases, the interests of shareholders and managers might diverge. In such a case, managers pursue personal goals and interests that are not in line with their main objective: maximizing shareholders’ wealth. This lack of interest alignment between principals (shareholders) and agents (managers) could lead to managerial abuse of power or engaging in activities that are value enhancing for the manager and not the shareholders such as empire building or shirking (Fama and Jensen, 1983; Jensen and Meckling, 1976). In addition to its significant contribution to corporate governance literatures, the agency theory can be extended to any framework involving a party (the principal) delegating its work to another party (the agent). It explains the conflicts that could occur between these two parties due to conflicts of interest or lack of trust.
4.2.1.1 Agency Conflicts:

Heath and Norman (2004) state that the principle-agent relationship becomes of significant importance when there is an information asymmetry between both parties. This information asymmetry could lead to several types of agency conflicts between managers and shareholders.

4.2.1.1.1 Moral Hazard

The moral hazard problem occurs when a manager takes a decision whose outcome is to be incurred by the shareholders (Heath and Norman, 2004). In such a case, managers might not exert their full effort to increase shareholder wealth since the benefit of this extra effort is to be gained by the shareholders and not by the managers. Moreover, managers might engage in risky investments because the shareholders are the ones to endure the burdens of such a decision.

4.2.1.1.2 Adverse Selection

Another possible conflict of interest between managers and shareholders stems from the fact that managers do not have a residual claim on firm performance (Graves and Waddock, 1994). Managers might spend a significant amount of money on non-profit activities since they are not bearing the expenses of such activities. Spending on environmental issues would enhance a manager’s image and guarantee that they stay in their position while not providing any direct benefit to shareholders (Halme and Huse, 1997; Wang and Coffey, 1992).

4.2.1.2 Agency Costs:

An agency cost is an internal cost incurred due to the fact that shareholders are not in complete control of the firm. According to the agency theory, different types of
agency costs could be incurred in order to decrease the divergence of interest between managers and shareholders and therefore reduce agency conflicts (Hill and Jones, 1992; Jensen and Meckling, 1976).

4.2.1.2.1 Monitoring Cost:

Shareholders are expected to sustain monitoring costs in order to monitor managerial behavior (Jensen and Meckling, 1976). Some managers could have personal goals to achieve private benefits and, therefore, monitoring costs are incurred to prevent such behavior. Monitoring costs could take various forms such as the cost of performing audit which should be able to limit a manager’s suspicious actions. Another type of a monitoring cost is represented by the board of directors. Aside from the advisory role, boards of directors help in monitoring managerial behavior. Accordingly, part of the salary for directors is considered as a monitoring cost incurred by shareholders to reduce agency conflicts.

4.2.1.2.2 Bonding Cost:

The second type of agency costs is the bonding cost (Jensen and Meckling, 1976). The bonding cost is incurred by managers as a pledge that they would not act engage in self-profitable activities at the expense of the shareholders. If the managers break their promise and engage in such activities, they might have to pay the shareholders as compensation. Bonding costs can also be in the form of contractual obligations that serve to restrict a manager’s actions. For example, a manager may commit to staying with the firm for a certain period of time or to stay with the firm following a successful takeover attempt. Such an obligation will cause managers to forfeit any possible employment opportunities and are considered as a bonding cost for managers.
4.2.1.2.3 Residual Loss:
Finally, and even after the monitoring and bonding costs are incurred, there would still be some divergence of interest between the two parties (Hill and Jones, 1992). The decisions taken by the management team could not be the optimal decisions that the shareholders desire and other alternatives might have been available that would increase the shareholders’ wealth. The difference in the dollar amount between the best alternative and the decision taken by the manager is called the residual loss (Jensen and Mecklin, 1976).

Thus, even if these solutions are implemented, evidence shows that the interests of managers and shareholders are still not perfectly aligned.

The need to find a solution for the agency problems stimulated a huge amount of studies addressing the agency theory. Almost 80 years have passed on Berle and Means’ famous book and researchers are still thoroughly studying the agency theory and looking for new ways to decrease its associated costs as much as possible

4.2.1.3 Mitigating Agency Problems:

One of the recent studies summarizes the previous work done on the agency theory, suggesting that there are three ways that would help in the monitoring and compensation processes discussed previously (Dalton et al., 2007).

The first way is to increase board independence. It is widely accepted that increasing the percentage of outside directors would enhance the monitoring process of managers (Jensen and Meckling, 1976; Fama and Jensen, 1983). However, several researchers have argued that directors can never be fully independent (Hermalin and Weisbach, 1988; Shivdasani and Yermack, 1999). A CEO typically plays an important role in appointing outside directors. When outside directors are hired by
the company and retained for a long period, the directors will have a feeling of loyalty and devotion towards the current CEO (Dalton et al., 2007). Sutton (2004) suggests that all directors lose their independency after serving on a board for five years.

Moreover, even though independent directors provide better monitoring of managerial performance (Borokhovich et. al, 1996; Fama and Jensen, 1983, Weisbach, 1988), their lack of company-specific information could prove costly. Maug (1997) believes that for firms with relatively high information asymmetry, increasing the percentage of independent directors could prove detrimental for the firm as the coordination and asymmetry costs could be greater than the benefits of increased monitoring. Therefore, Bhagat and Black (1999) believe that the optimal combination of directors is a small majority of independent directors while keeping a reasonable amount of insiders (3 → 5 out of 11).

The second mechanism to alleviate the agency conflicts is providing equity ownership and compensation for managers, which will allow the managers to share ownership with the shareholders (Jensen and Meckling, 1976; Dalton et al., 2007). In such a case, managers will be more motivated in increasing the shareholders’ wealth in order to increase their own wealth as well.

According to Jensen and Meckling (1976), there might be a significant gap in the risk taking behavior of managers and the risk preference that shareholders are willing to have. On one hand, managers might sometimes act in a risk-averse manner. Managers already have their human capital at stake to lose, and therefore would not want a significant amount of additional risk. On the other hand, shareholders have their portfolios well diversified in different investments and as a result would be
subject to little company-specific risk. Based on this low unsystematic risk, shareholders would prefer if the managers are willing to take a moderate amount of risk. Jensen and Meckling (1976) argue that by increasing the managerial ownership, the interests of managers and shareholders will converge and the gap in risk taking preferences will decrease.

However, it should be noted that if the incentives given to the CEOs are not well structured, they can have an adverse and unintended effect on the firm (Kerr, 1975). Vroom (1964) suggests that the individual performance is usually driven by two factors: motivation and ability. By granting the CEOs certain types of ownership compensations and incentives, the directors are giving CEO the motivation required to improve their performance without taking into consideration their abilities. Sanders and Hambrick (2007) provide evidence that although stock options incentivize the managers to take on more risky decisions, these risky decisions are not always successful ones.

Even if the CEO has a good ability, he is still vulnerable to systematic decision biases (Bazerman and Moore, 2008). The ill-ability of the CEO to take a certain decision, or taking a biased decision, could prove to be too costly for the company given the CEO’s wide level of authority in decision making (Nyberg et al., 2010).

Dalton et al. (2007) claim that if the aforementioned two governance mechanisms fail to solve the agency problems inside a firm, the third mechanism becomes active: the market for corporate control. Manne (1965) argues that the market for corporate control will lower the number of “wasteful bankruptcy proceedings” (Manne, 1965, p.p. 119) In addition, the presence of an active market for corporate control is
expected to increase the efficiency of the management team as well as offer reasonable protection for firms with dispersed ownership (Manne, 1965).

The presence of the market for corporate control is an important disciplinary mechanism for inefficient managers, or for managers who are extracting private benefits on the expense of shareholders (Masulis et al., 2007). If the managers are engaging in activities that would increase their own wealth but at the same time are value-destroying for the firm, the stock price is likely to decrease and become underpriced which will make the company an attractive target for bidders.

However, management teams have started heavily adopting antitakeover provisions since the late 1980s. Many types of antitakeover provisions are used, some of which make the takeover more costly while other could cause the takeover process to be delayed for a certain period of time (Gompers et al., 2003). Bebchuk et al. (2009) find that six of these antitakeover provisions (combined to form the E-index) are adopted by managers to entrench themselves in the company and have a significantly negative effect on firm value.

Although the aforementioned mechanisms seem to provide logical solutions to reduce agency problems, many researchers cast doubt about their effectiveness in the real world and have been criticized to have some disadvantages of their own (Dalton et al., 2007). Moreover, empirical research fails to provide a definite support for the suggestions of the agency theory (Daily et al., 2003). Ghoshal (2005) indicates that fifty four studies find no significant relationship between increasing the percentage of independent directors and firm performance. Consistently, thirty one other researches show that removing CEO duality (assigning two separate individuals to work as CEO and chairman of the board respectively) does not affect firm
performance. Ghoshal (2005) states that these studies have been made in different countries and using different measures of corporate performance, yet they still fail to provide support for agency theory suggestions.

Accordingly, agency theory assumptions have received criticism for being excessively simplistic. That is, the assumptions of the agency theory do not replicate the real business environment and do not have enough evidence to support them as well. For example, Williamson (1985) criticizes the assumption of a definite conflict of interest between managers and shareholders. Although this could be a valid assumption for many firms, it cannot be generalized for a universal theory of corporate governance. Hill (1990) suggests that even if managers had lots of room to extract private benefits, not all managers engage in opportunistic activities. Some managers prefer to work ethically in order to gain the trust of their shareholders and environment.

These criticisms of the assumptions of agency theory, along with the lack of significant empirical support for its suggestions triggered the need to search for alternatives or substitutes for this theory. Brickley et al. (1997) and Elsayed (2007) provide evidence that CEO duality could be beneficial for firms in some cases and detrimental in others. Muth and Donaldson (1998) also provides partial support for agency and stewardship theory suggestions regarding the independence-performance relationship. Accordingly, researchers claim that one theory on its own cannot solely explain the various characteristics of corporate governance. Therefore, several researchers claim that integrating more than one theory in a multi-theoretical approach can cover a wider aspect of corporate governance than any single theory would do (Daily et al., 2003).
All of these complications require more work to be done in order to address agency theory and how to reduce its respective costs. Understanding the key governance mechanisms that are associated with agency problems is crucial in resolving the conflict of interest between managers and shareholders.

This study focuses on the conflicts of interest in the principal-agent relationship and, therefore, relies heavily on the foundations of the agency theory. It speaks directly to the agency costs associated with monitoring managers and the costs to the shareholders’ wealth when managers engage in opportunistic activities. The study also tests the cases where the governance mechanisms suggested by agency theorists are valid and the cases in which they are not. In doing so, this research provides an explanation for the inconsistent results found in previous literature on corporate governance. In addition, by highlighting the cases in which agency theory suggestions are not valid, this research opens the door for a multi-theoretical approach that integrates the agency theory with other theories of corporate governance.

4.2.2 Stewardship Theory:

Unlike the agency theory, which is built on an economic model, the stewardship theory has its roots in the literature of sociology and psychology (Albrecht et al., 2004). The managers, also known as stewards, in this theory are motivated factors other than their own self-interest. The psychological satisfaction obtained from successfully completing jobs and overcoming challenges plays an important role in the stewardship theory (Albrecht et al., 2004). Managers are also motivated by the fact that they want to have a superior performance to achieve self-esteem and their achievements would be well recognized from their board of directors (Donaldson
and Davis, 1991). Moreover, the role of the board of directors in the stakeholder theory is completely different than the monitoring role provided by the agency theory. Here, the board of directors is available to help the manager in effectively completing his job (Albrecht et al., 2004).

Another major difference between the agency theory and stewardship theory is the issue of CEO duality. Agency theorists argue that the interests of managers and shareholders are not well-aligned, which causes several agency problems (Jensen and Meckling, 1976). Moreover, CEO duality gives a CEO more power and authority, leading to empire building and an increase in agency conflicts. On the other hand, unlike agency theorists, proponents of the stewardship theory support CEO duality.

Donaldson (1985) states that the difference in executives’ performances among firms is due to the organizational structure of the firm. In other words, the more power and trust given to a CEO, the better the performance should be. To achieve this superior performance, stakeholder theorists argue that the leadership of the firm should be given to one person (Donaldson and Davis, 1991). They believe that if two persons where to hold the positions of CEO and chairman of the board, conflicts might occur as to which person has the authority over a specific matter. On the other hand, CEO duality provides a sense of unity and strong leadership. In addition, a CEO serving as the chairman of the board would have a better understanding of firm-specific matters. This would provide the CEO with better chances at maximizing shareholder value than an outside directors serving as the chairman of the board would do. The function of the
Davis et al. (1997) state that the stewardship theory perceives managers as good agents whose interests are already aligned with that of the shareholders. The fact that a CEO actually works for the owners of the corporation and that his future job and cash inflows are tied to the corporation is enough to align the interests of managers and shareholders (Donaldson and Davis, 1991).

However, as it is the case with agency theory, empirical evidence on the propositions of the stewardship theory is still inconclusive. Rechner and Dalton (1991) perform a longitudinal study and find out that firms with independent leadership structures outperform their counterparts with single leadership structures. Others find that the presence of CEO duality increases the adoption of poison pills (Mallette and Fowler, 1992), which in turn has a negative effect on firm value (Bebchuk et al., 2009). On the other hand, Donaldson and Davis (1991) find that firms with CEO duality have a higher return on equity than non-duality firms. Daily and Dalton (1994) find that CEO duality does not directly affect firm performance, however, it enhances the relationship between board independence and firm performance. Others find that CEO duality can act as a double edged sword having a positive effect on firm performance in some cases and a negative effect in others (Brickley et al., 1997; Elsayed, 2007; Krause and Semadeni, 2013; Muth and Donaldson, 1998).

An interesting fact that contradicts with the arguments of the stewardship theory is the presence of CEO duality in several firms were huge scandals occurred. Albrecht et al. (2004) report that eight out of ten firms that recently witnessed major scandals had a CEO that was also serving as the chairman of the board of directors (e.g Enron and Tyco). Beasley et al. (2000) also report that out of all of the fraud cases in their study of financial statements, 72% of the times the CEOs were involved in these fraudulent activities. These facts suggest that treating managers as stewards whose
first priority is maximizing shareholder wealth, and not personal interest, could have several flaws.

Given the large amount of inconsistent results in previous literature, with some studies supporting the agency theory while others support the stewardship theory, this study undertakes that both theories have to be valid in some cases. Certain firms should have the ability to benefit from the leadership role of CEOs with a role duality as well as the expertise of insider directors. Therefore, this study assumes that the suggestions of the stewardship theory are valid for firms that are already enjoying high levels of shareholder rights. The superior quality of governance available at such firms is capable of ensuring that the principal-agent conflicts are kept at a minimum. Accordingly, this research adopts a multi-theoretical approach that follows the suggestions of the stewardship theory (agency theory) in the presence of high (low) levels of governance and shareholder rights.
Table Summarizing the differences between the Agency Theory and the Stewardship Theories (Davis et al., 1997)

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<th><strong>Stewardship Theory</strong></th>
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<td>Model of Man</td>
<td>Economic Man</td>
<td>Self-actualizing Man</td>
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<td>Behaviour</td>
<td>Self-Serving</td>
<td>Collective Serving</td>
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<tr>
<td>Motivation</td>
<td>Extrinsic: Lower order/economic needs (physiological, security, economic)</td>
<td>Intrinsic: Higher order needs (growth, achievement, self-actualization)</td>
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<td>Social Comparison</td>
<td>Other Managers</td>
<td>Principal</td>
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<td>Identification</td>
<td>Low Value Commitment</td>
<td>High Value Commitment</td>
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<td>Power</td>
<td>Institutional (legitimate, coercive, reward)</td>
<td>Personal (expert, referent)</td>
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<td>Management Philosophy</td>
<td>Control Oriented</td>
<td>Involvement Oriented</td>
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<td>Risk Orientation</td>
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<td>Cultural</td>
<td>Individualism; High Power Distance</td>
<td>Collectivism; Low Power Distance</td>
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**4.2.3 Stakeholder Theory:**

Apart from agency and stewardship theories, other theories have also been used to explain the governance of corporations around the world. Another dominant theory that covers a wider aspect of corporate governance is the stakeholder theory. Unlike the agency and stewardship theories, which focus on the principal-agent relationship, the stakeholder theory suggests that all stakeholders are essential for a firm’s success (Donaldson and Preston, 1995; Freeman, 1984).

Freeman (1984) was the first researcher to provide a complete framework for the stakeholder theory. In addition to shareholders, other interest groups such as customers, employees, suppliers, financial institutions and communities share a stake
in the corporation (Heath and Norman, 2004). All of these groups provide the company with various services or resources, and they expect to receive personal benefits in return (Hill and Jones, 1992). Freeman (1984) argues that a successful manager should be able to see a common path where the interests of all stakeholders go through without neglecting any group of stakeholders. This approach won the support of several researchers seeking a more socially responsible environment (Laplume et al., 2008).

Throughout its evolution, researchers have struggled to have a definite view of the stakeholder theory and its characteristics. Who is considered a stakeholder of the firm? How can a firm rank categorize its stakeholder? Which stakeholder group is more important to the firm? Friedman and Miles (2006) claim that from years 1963 to 2003, researchers have used fifty five different definitions for stakeholders. Some researchers use a narrow view of a firm’s stakeholders claiming that an entity is considered as a stakeholder if they have share in in the firm or if they have a mutual interest with it (Carroll, 1993). On the other hand, Starik (1993) adopts a very broad view of stakeholders. The author believes that any person or organization that can affect or be affected by the firm should be considered as a stakeholder.

Hinings and Greenwood (2003)/Stern and Barley (1995) argue that the importance of the stakeholder theory lies in addressing the effect of corporations on their surrounding environment and society. Weick (1999) adds that the emergence of the stakeholder theory is due to its emotional character and humanitarian virtues. Heath and Norman (2004) claim that proponents of the stakeholder theory give little attention to shareholder rights because shareholders already have enough authority to influence some managerial decisions. Therefore, stakeholder theorists believe that more attention and power should be directed from shareholders to other stakeholders.
A company is expected to gain the support of all of its stakeholders through several ways. Jones (1995) believes that a firm should simply treat its stakeholders equally in order to achieve a two-way trust between both parties. Others believe that each stakeholder should be given special treatment based on their specific needs. For example, employees could be given stock options as a bonus or compensation for their hard work (Maren and Wicks, 1999). Brammer and Millington (2004) also suggest that firms could please some stakeholders by showing environmental concerns and donating a small percentage of their profit for charity work.

Donaldson and Preston (1995) argues that there are three different approaches for the stakeholder theory. These approaches are: The descriptive approach, the instrumental approach and the normative approach. The descriptive approach is used to describe a firm’s characteristics and its behavior. For example, stakeholder theory has been used to explain the nature of firms and the way firms are being managed (Brenner and Cochran, 1991; Clarkson, 1991). The instrumental approach identifies the connections between managing stakeholders and achieving business targets (such as profitability) using empirical data. From a firms’ point of view, stakeholders are in control of valuable resources that are essential for running the business (Pfeffer and Salancik, 1978). Therefore, by managing the concerns of its stakeholder, a firm decreases the likelihood of having stakeholders hinder managers from achieving their goals. Instrumental studies can be made either using statistical methodologies or using interviews and direct observations. Regardless of the methodology, instrumental stakeholder studies maintain that the ability to manage various stakeholders leads to achieving business and profitability targets as well as outperforming other competitors. Therefore, this approach is referred to as a mean to an end (Donaldson and Preston, 1995). In other words, it is a hypothetical approach
in which managers search for the optimal strategies to achieve their business goals and targets.

Finally, the normative approach observes the function of firms and detects the “moral or philosophical guidelines for the operation and management of the corporation.” (Donaldson and Preston, 1995). Researchers identify the normative approach as the fundamental approach in the stakeholder theory (Donaldson and Preston, 1995). Unlike the instrumental approach, the normative approach is a categorical approach that recognizes ethical guidelines for managing firms and their decision making processes. Instead of setting strategies to achieve certain business goals, the normative approach thinks of a firm’s actions in a scope that is independent of a firm’s performance. It maintains that for firms to set certain strategies, the actions involved in implementing this strategy should be ethical.

Kotter and Heskett (1992) suggest that most successful firms, even if they are from different industries, have one thing in common; these firms treat all of their stakeholders with ultimate respect in order to achieve their objectives. Different researchers have tried to classify a firm’s stakeholders into different groups. Clarkson (1995) suggests that there are two types of stakeholders: primary and secondary stakeholders. Primary stakeholders, such as customers or employees, are those stakeholders whose presence is necessary for a firm to survive. On the other hand, secondary stakeholders, such as the media or a firm’s competitors, are stakeholders that are not involved in official transactions with the firm. Secondary stakeholders are not as crucial as primary stakeholders for a firm’s survival, but their actions can have a significant effect on firms. Other researchers group stakeholders into different categories. For example, Mitchell et al. (1997) suggest that the
importance of stakeholders to the firm should be ranked according to three attributes: urgency, legitimacy and power.

4.2.3.1 Critics of the Stakeholder Theory

However, the quick emergence of the stakeholder theory led to a number of criticisms from advocates of other theories (Laplume et al., 2008). Sundaram and Inkpen (2004) believe that such an approach will further increase the complexity of governing firms. Jensen (2002) believes that the stakeholder theory challenges the concept of maximizing shareholder wealth, which is the main objective of most modern corporations. The author adds that maximizing shareholder wealth is the factor required to maximize the well-being of the society.

Laplume et al. (2008) also mentions some vague concepts in the stakeholder theory. The stakeholder theory does not provide a clear definition of which stakeholders the firm should pay attention to. Kaler (2006) adds that the stakeholder theory fails to provide a clear solution when a firm is faced with two different stakeholders with conflicting interests.


From another perspective, Kaler (2006) and Kochan and Rubenstein (2000) believe that the stakeholder theory is too complex to be implemented in real life. The foundations of the theory might have some positive virtues, but focusing on a large
number of stakeholders would be hard to achieve. Kline (2006) adds that the stakeholder theory is very broad.

Concerning this study, the research is focused on one aspect of the stakeholder theory, which is the principle-agent problems that occur when managers try to entrench themselves in their jobs. Therefore, it is more logical to follow the philosophy of the agency theory, which Shankman (1999) labels as “a narrow form of stakeholder theory” (Shankman, 1999 p.p. 320).

Table Summarizing the differences between shareholder firms (Agency Theory) and Stakeholder firms (Kochan and Rubinstein, 2000)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Shareholder Firm</th>
<th>Stakeholder Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>Maximizing shareholder wealth</td>
<td>Pursue multiple objectives of parties with different interests</td>
</tr>
<tr>
<td>Governance Structure and Key Processes</td>
<td>Principal-Agent Model: Managers are agents of shareholders. Control is the key task</td>
<td>Team Production Model: Coordination, cooperation, and conflict resolution are the key tasks</td>
</tr>
<tr>
<td>Performance Metrics</td>
<td>Shareholder value sufficient to maintain investor commitment</td>
<td>Fair distribution of value created to maintain commitment of multiple stakeholders</td>
</tr>
<tr>
<td>Residual Risk Holders</td>
<td>Shareholders</td>
<td>All stakeholders</td>
</tr>
<tr>
<td>Stakeholder Salience/Influence</td>
<td>Finance/investor/owners only stakeholder with sufficient power and legitimacy to achieve &quot;definitive&quot; status in governance processes</td>
<td>More than one stakeholder with sufficient power and legitimacy to achieve &quot;definitive&quot; status in governance processes</td>
</tr>
</tbody>
</table>

4.2.4 Resource Dependence Theory:

Resource dependence theory focuses on the relationship between a firm’s external environment and resources on one hand and organizational behavior on the other hand (Pfeffer and Salancik, 1978). This theory recognizes a firm’s risk and uncertainty due to its dependence on other organizations and resources, and attempts to reduce this dependence (Hillman et al., 2009). This highlights the importance of the board of directors as providers of resources and professional expertise.
Large boards would provide the firm with wider interlocks and a wider access to resources. Early resource dependence theorists focused on the importance of having a large board size in order to provide the firm with the necessary resources (Hillman et al., 2009). Pfeffer (1972) and Sanders and Carpenter (1998) find that board size increases as the level of a firm’s interdependence increases. However, this argument is refuted by researchers claiming that the board size depends on several other factors (such as a firm’s strategy or a firm’s previous performance) other than a firm’s external environment only (Pearce and Zahra, 1992). Boyd (1990) also criticizes the focus on board size and suggests that researchers should focus on the type of directors instead.

Independent directors who have interlocks with law firms could provide their organization with legal services (Daily et al., 2003). Furthermore, other independent directors who work in financial institutions can help their firm in acquiring favourable lines of credit that could be costly otherwise. Mizruchi and Stearns (1988) provide results supporting the latter argument. Findings show that firms with liquidity problems hire new directors who have interlocks with financial institutions due to their skill and wide access to resources/funding. Thus, powerful independent directors with a wide range of interlocks are beneficial to firms due to their access to critical resources (Ulrich and Barney, 1984). Supporting this argument, Provan (1980) finds that companies that hire powerful directors on their boards enjoy better access to vital resources than their counterparts.

Daily (1995) provides further support for the resource dependence theory by studying the relationship between board characteristics and firms that successfully re-emerged from bankruptcy. Firms on the verge of bankruptcy usually experience a decrease in the availability of resources and, therefore, the presence of independent
directors should help these firms obtain the necessary resources (Cameron et al., 1987). Consistent with expectations, Daily (1995) finds that as the number of independent directors on company’s board increases, the probability of re-emerging from bankruptcy increases as well.

In addition to the presence of powerful independent directors, resource dependence theorists claim that firms also engage in mergers and acquisitions in order to reduce the uncertainty of their external environment (Pfeffer, 1976). One way for a firm to do so is to acquire a direct competitor and, therefore, reduce the competitiveness in the market. Another way could be acquiring one of the firm’s main suppliers of raw material. In such a case, the acquiring firm will reduce its level of dependence on the supplier and therefore reduce its risk and uncertainty (Pfeffer, 1976). Galbraith and Stiles (1984) provide empirical evidence supporting Pfeffer’s (1976) assumptions. Results show that mergers and acquisitions decrease the interdependency between sellers and buyers. However, critics of the resource dependence theory argue that there are other determinants for mergers and acquisitions that are as important as the interdependency between buyers and sellers (Hillman et al., 2009). For example, Finkelstein (1997) recreates a similar sample to that of Pfeffer (1976) and finds that the historical context of the firm is an important determinant of mergers and acquisitions.

Similar to mergers and acquisitions, Pfeffer and Nowak (1976) argue that buyers and suppliers form joint ventures in order to decrease the interdependency between them. Goes and Park (1997) find that such joint ventures successfully alleviate environmental risks and provide firms with better access to resources.
While the resource dependence theory addresses the importance of independent directors in acquiring critical resources, it neglects the significant role that independent directors in monitoring managerial actions. Governance regulations, such as the Nasdaq and NYSE standards, require companies to have a majority of independent directors on their boards due to the importance of the monitoring function of independent directors. The resource dependence theory, however, does not address the role of independent directors in monitoring and disciplining managers, adopting takeover defences and protecting the firm’s shareholders. This study is more focused on the balance of power between independent directors and managers and how does their interaction with takeover defences affect shareholder wealth. Therefore, it would be more reasonable to adopt a theoretical framework that stresses on the role of independent directors and CEOs in the principal-agent relationship rather than the ability of independent directors to obtain valuable resources.

4.2.5 Multi-theoretical Approaches:

Daily et al. (2003) state “A multi-theoretic approach to corporate governance is essential for recognizing the many mechanisms and structures that might reasonably enhance organizational functioning.” (Daily et al., 2004, p.p 372)

The large amount of conflicting evidence in the corporate governance literature stimulated modern researchers to integrate several theories in their research. For example, Brickley et al. (1997) argue that CEO duality could be beneficial for some firms and harmful for others. Their results provide partial support for the contrasting points of views on role duality that are adopted by the agency theory and stewardship theory. In the same sense, Elsayed (2007) presents mixed results for the effect of
CEO duality on firm performance. Findings suggest that the relationship between CEO duality on firm performance, for Egyptian firms, depends on the industry type of the firm. Elsayed (2007) concludes that no single theory could explain the different and complex aspects of corporate governance. In addition, Muth and Donaldson (1998) provide partial support for both agency and stewardship theories regarding the effect of board independence on firm performance suggesting that both theories can be used as alternatives. Similarly, Lam and Lee (2008) find that CEO duality is beneficial for non-family controlled companies in Hong Kong while an independent leadership structure is beneficial for family controlled companies.

Daily et al. (2003) add that too much focus is being placed on the monitoring and oversight functions of the board of directors while paying minimal attention to other board functions\(^3\). Such studies fail to control for the dynamic nature of board characteristics that may differ with firm characteristics and, therefore, fail to find any significant result. Daily et al. (2003) believe that this is one of the main reasons that previous researchers fail to find any significant relationship between board characteristics and firm performance\(^4\). Therefore, adopting a multi-theoretical approach could provide a solution and explain the large amount of contradicting evidence found in the literature.

Hillman and Dcelain (2003) also provide an example of how researchers should benefit from integrating different theories of corporate governance. The authors state that a multi-theoretical approach combining agency and resource dependence theories could better explain the roles of the board of directors. Agency theorists

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\(^3\) Daily, Dalton and Cannella (2003) state that aside from the monitoring function, the board of directors provides important strategic roles and services for the company as well as being a main provider of resources.

\(^4\) Such as the meta analysis by Dalton et al. (1998), Dalton et al. (2003), Rhoades et al. (2001)
focus on the monitoring function of independent directors while resource dependence theorists focus on the independent directors’ interlocks and their ability to obtain resources. However, both frameworks fail to consider that the monitoring and the provision of resources functions are not mutually exclusive and can both affect a firm’s performance simultaneously.

Christopher (2010) criticizes the over-dependence on agency theory in corporate governance literature and suggests that other theories should be incorporated with the agency theory to form a multi-theoretical approach. Notwithstanding the importance of agency theory, Christopher (2010) claims that the agency theory is based on an economic model and, therefore, fails to account for other forces that could affect a firm’s governance structure. As a result, the author states that other corporate governance theories, such as stakeholder theory, resource dependence theory and stewardship theory, should be incorporated with the agency theory to form a better theoretical framework of corporate governance.

Kiel and Nicholson (2003) conclude that “it is not a matter of agency theory or stewardship theory or resource dependence theory. Rather each theory has a contribution to make to the governance debate.”
4.3 Framework for this study

- **High Governance and Shareholder Rights**
  - No Extra Monitoring is Needed
  - No Room for CEOs to Extract Private Benefits
  - Stewardship Theory Suggestions (CEO Duality and Increasing Insider Directors) Increase Firm Performance

- **Low Governance and Shareholder Rights**
  - Extra Monitoring is Needed
  - CEOs have Room to Extract Private Benefits
  - Agency Theory Suggestions (No CEO Duality and Increasing Independent Directors) Increase Firm Performance
4.4 Conclusion

This study is concerned with the divergence of interest between managers and shareholder in the process of adopting takeover defences. Specifically, it tackles how managers adopt certain takeover defences to achieve private benefits even though they have an adverse effect on firm value. In addition, the research will also address how other governance mechanisms, such as CEO ownership and board characteristics, affect firm performance in the presence/absence of different types of takeover defences. Therefore, the agency theory will be the core foundation of this research due to its focus on the principal-agent relationship. However, the literature provides inconsistent results regarding the relationship between the aforementioned governance mechanisms and firm performance.

Although several studies find that the suggestions of agency theorists (increasing board independence, increasing CEO ownership and removing role duality) does reduce agency costs, other studies report the opposite or provide insignificant results. This suggests that certain variables moderate the relationship between these governance mechanisms and firm performance. This study proposes that the presence of takeover defences, as a proxy for shareholder rights and managerial entrenchment, moderate the relationship between governance mechanisms and firm performance. In other words, the level of takeover defences available at a certain company will direct the governance-performance relationship and failing to control for the presence of antitakeover provisions will provide insignificant results.

It is expected that the suggestions of the agency theory are valid for specific cases only. For example, increasing board independence is beneficial for companies with powerful managers and low shareholder rights (high number of takeover defences).
In addition, assigning a role duality for a CEO who is already highly entrenched in the company by a large number of takeover defences will most likely have an adverse effect on firm performance.

On the other hand, if the company is enjoying a high level of governance and shareholder rights are high (low number of takeover defences), increasing board independence will provide the company with additional and unnecessary monitoring. Instead, such companies would benefit more from the firm-specific expertise of insider directors. This is in line with the suggestions of the stewardship theory which supports the expert role of insider directors more than the monitoring role of outsiders. In the same sense, firms with good governance and high shareholder rights could benefit from the leadership role of CEOs having a role duality. As a result, this study adopts a multi-theoretical approach integrating both agency and stewardship theories based on the level and type of antitakeover provisions adopted by firms.
Chapter 5

Research Methodology
5.1 Introduction

The objective of this chapter is to set the hypotheses to be tested as well as the research methodologies used to test the research hypotheses. This chapter is split into two main sections. The first section sets the research methodology for the determinants of antitakeover provisions. Fixed effect regressions will be used when studying the determinants of the E-index since it is a categorical variable. On the other hand, probit regressions will be used when addressing the determinants of individual takeover defences since the dependent variable will be a dummy variable. The main independent variables in this model are CEO duality and the percentage of independent directors serving on a firm’s board of directors. These two variables are particularly important in addressing the determinants of antitakeover provisions due to the conflicts of interests between managers and shareholders. CEO duality is used as a proxy for powerful CEOs who might have more power to influence the adoption of takeover defences that would protect their positions. On the other hand, the monitoring role of independent directors should limit the adoption of any unnecessary takeover defences. Other important board, ownership and firm characteristic explanatory variables are also included in this model. In addition to studying the determinants of the E-index, this section provides a novel way of grouping antitakeover provisions as they relate to CEO monetary benefits. That is, the provisions are split into two groups based on whether the provision under study provides a firm’s CEO with private benefits or not. The importance of this new way of grouping provisions is that it helps in identifying which provisions are CEOs expected to support over other provisions.

The second section of this chapter sets the research hypotheses and methodology for the effect of governance mechanisms on firm performance. Following previous
researchers, Tobin’s Q, the dependent variable, is used as a proxy for firm value. For the explanatory variables, a combination of board, ownership and firm characteristics is used as independent and control variables. The main independent variables in this model are: antitakeover provisions adoption, board independence and CEO ownership. However, the importance of this model is in the interaction variables created among these governance mechanisms. Interaction variables are created between antitakeover provision indices (external governance mechanism) on the one hand and CEO ownership and board independence on the other hand. These variables will capture the effect of CEO ownership and board independence on firm performance in the presence/absence of takeover defences.

5.2 Model One: Determinants of Antitakeover Provisions

5.2.1 Dependent Variable

5.2.1.1 Entrenchment

Previous research uses the 24 governance provisions by the IRRC (Investor Responsibility Research Center) to construct the G-index for shareholder rights (Gompers et al., 2003).

Bebchuk et al. (2009) construct the “E-index” out of the 6 of the 24 previously used provisions that they hypothesized and found to be negatively related to firm value. These provisions were found to be the driving factor behind the G-Index and supposedly help the managers to entrench themselves in the company and reduce the likelihood of a takeover. The six provisions are: poison pills, golden parachutes, staggered boards, limits to shareholder bylaw amendments and supermajority requirements for charter and merger amendments.
As mentioned earlier, Bebchuk et al. (2009) showed that all six provisions of the E-index are associated with a negative effect on firm value. However, several researches study the determinants of two provisions of the E-index; poison pills (Davis, 1991; Mallette and Fowler, 1992) and golden parachutes (Cochran et al., 1985; Singh and Harianto, 1989; Wade et al., 1990) while giving little attention to the other provisions. This research studies the determinants of the E-index as a whole, as well as studying the determinants of each provision of the E-index individually.

The E-index is a scale variable where the presence of each provision adds a point to the E-index. Thus, the E-index can have any value between zero and six, where a value of zero indicates a low entrenchment level and the absence of all antitakeover provisions of the E-index. On the other hand, a value of six indicates a high level of entrenchment with the presence of all six antitakeover provisions.

Since the IRRC does not put out data on antitakeover provisions every year, we follow previous literature and use a filling method to fill in the missing data (Bebchuk et al., 2009; Gompers et al., 2003). We assume that, for a missing year, the antitakeover provisions present at a certain company are the same as the ones reported in the previous year. Other filling methods do not significantly affect our results.

As mentioned before, the E-Index will be split into two categories of provisions based on the monetary outcome provided to a manager.
5.2.1.2 The Grouping Process

Sokolyk (2011) argues that different antitakeover provisions have different effects on the firm adopting them. Building up on this argument, we hypothesize that managers and independent directors have different preferences for different antitakeover provisions. Antitakeover provisions could serve as a one-line defence or as a two-line defence for managers. The first line of defence, which is common among all antitakeover provisions, is that these provisions do make a takeover process harder. The second line of defence, which is only applicable to certain provisions, is that even if a takeover successfully takes place, a manager would receive a monetary compensation. The provisions of the E-Index are split into two categories based on the monetary benefits acquired by a manager after a successful takeover takes place. The two categories of provisions are as follows:

5.2.1.2.1 Category A Provisions

Category A provisions are the provisions that are expected to provide, or help in providing, a manager with a two-line defence facing a takeover threat. One of the assumptions of agency theory is that the interests of managers and shareholders could diverge due to the self-interested human behaviour (Eisenhardt, 1989). Therefore, managers may prefer some provisions over others based on the monetary outcome provided to the manager. In other words, we expect managers to prefer having two lines of defence against takeover rather than the non-monetary compensating one line defence.

The provisions included in this category are: Poison pills, golden parachutes and staggered boards. Poison pills and golden parachutes are included because they directly provide managers with monetary benefits when a takeover takes place. On
the other hand, staggered boards are included because the presence of a staggered board is crucial for a poison pill to be effective (Bebchuk and Cohen, 2005). Although staggered boards do not provide a direct monetary benefit to managers, they help in providing the monetary benefit from poison pills and, therefore, are included in the Category A provision.

### 5.2.1.2.2 Category B Provisions

Category B provisions are the remaining provisions of the E-Index which only provide the first line of defence for managers. These provisions simply make a takeover process harder without providing any benefit for a manager in case a takeover takes place. The provisions included in this category are: Supermajority requirement to approve a merger, limits to bylaw amendments and limits to charter amendments.

### 5.2.2 Independent Variables

Different studies have tried to find a relationship between board composition, stock ownership and firm characteristics on one hand and adopting antitakeover provisions on the other (Cochran al., 1985; Danielson and Karpoff, 1998; Davis, 1991; Singh and Harianto. 1989; Sundaramurthy, 1998; Mallette and Fowler, 1992; Straska and Waller, 2010; Wade et al., 1990). Some studies have been using a single antitakeover provision as their dependent variable (Cochran et al. (1985) studies the effect of different firm characteristics on the adoption of golden parachutes) while others have constructed indexes out of a set of antitakeover provisions (Danielson and Karpoff (1998) and Sundaramurthy (1998) test the effect of different ownership structures and board characteristics on the adoption of a set of antitakeover provisions).
5.2.3 Board Characteristics

Since the board of directors is the body responsible for approving and adopting antitakeover provisions, it is reasonable to expect that several board characteristics might play an important role in whether or not a firm chooses to implement takeover defences (Rechner et al., 1993).

5.2.3.1 CEO Duality

A firm’s leadership can be controlled in two possible ways: single leadership or dual leadership. Single leadership, also referred to as CEO duality, is when a single person serves as the CEO and the chairman of the board of directors as well. On the other hand, dual leadership occurs when two different directors are appointed; one as a CEO and the other as a chairman of the board.

Researchers claim that one of the main reasons behind recent scandals and governance problems is the presence of CEO duality, which leads to a weak governance structure (Jackling and Johl, 2009).

According to agency theory, researchers believe that CEO duality gives too much power to one individual, allowing him to dominate the board of directors and making the boards’ governance functions inefficient (Boyd, 1994; Dayton, 1984; Mallette and Fowler, 1992). In addition, using his power, this individual might influence certain decisions to extract private benefits or to adopt takeover defences in order to safeguard his position at the company (Sundaramurthy, 1998). Therefore, the usage of a dual leadership structures is recommended to increase board independence and thus enhance the alignment of interest between managers and stockholders (Coles et al., 2001).
These assumptions were further reinforced by Mallette and Fowler (1992), finding significant results that a dual leadership structure decreases the passage of poison pills. However, Sundaramurthy (1998) did not get the same results, as tests showed an insignificant relationship between CEO duality and a set of antitakeover provisions under study.

Accordingly, this study tests the following hypothesis:

**Hypothesis 1-a:** There is a positive relationship between CEO duality and the adoption of antitakeover provisions

When the E-Index is split into categories A and B, a significant difference in the relationship between these categories and CEO duality is expected. Powerful CEOs act in an opportunistic way to increase their wealth (Lewellyn and Muller-Kahle, 2012). Core et al. (1999) find that CEOs acting as chairmen of the board abuse the power given to them by seeking to maximize their own personal wealth. Building up on these arguments, CEOs are expected to influence the adoption of Category A provisions, which provide them with a financial benefit in the case of a takeover.

Consistent with previous findings, this study tests the following hypothesis:

**Hypothesis 1-b:** There is a positive relationship between CEO duality and the adoption of Category A provisions.

CEOs already have structural power due to their position in their firm, which could also be enhanced if they serve as chairmen of the board (Lewellyn and Muller-Kahle, 2012). However, the monitoring of independent directors attempts to control the power given to a CEO (Beatty and Zajac, 1994; Brickley et al., 1994; Combs et al., 2007). This creates a fair balance of power at some firms and, therefore, we expect
that a CEO could only influence the adoption of a limited amount of takeover provisions. As a result, we investigate if an opportunistic CEO opposes the adoption of Category B provisions in order to have a higher probability of adopting Category A provisions.

**Hypothesis 1-c:** There is a negative relationship between CEO duality and the adoption of Category B provisions.

**Measurement of Board Leadership**

CEO duality is a dummy variable (Mallette and Fowler, 1992; Sundaramurthy, 1998) where it will have a value of 1 if one person serves as both the CEO and the chairman of the board or 0 otherwise.

**5.2.3.2 Board Independence**

The composition of the board of directors is expected to have a significant impact on the adoption of antitakeover defences. A company’s board of directors is considered one of the main instruments used in corporate governance to monitor managers (Fama and Jensen, 1983) and, therefore, align the interests of managers and shareholders (Kang et al., 2007). From an agency theory perspective, independent directors are more independent of top management than insiders. Therefore, independent directors are considered to be better monitors of the managerial performance and their presence is expected to lead to better shareholder rights and protection (Dalton et al., 2007; Jensen and Meckling). This can be clearly seen in governance reforms such as the Sarbanes Oxley Act of 2002. Following several corporate governance scandals, the Sarbanes Oxley Act was enacted requiring firms
to have at least half of the members serving on the firm’s board to be independent directors.

Mallette and Fowler (1992) argue that, according to agency theory, increasing the percentage of independent directors on the board would lead to better governance over the decisions taken by the board of directors. This is because, unlike insiders, outside directors are more independent of the top management, and thus would represent the shareholders’ best interest without any bias. Empirical tests support the aforementioned claim by providing evidence that increasing the percentage of independent directors has been linked with an increase in firm value (Setia-Atmaja, 2009), higher CEO turnover when a firm is underperforming (Weisbach, 1988) and a higher degree of transparency (Chiang and He, 2010).

Knowing that antitakeover provisions lead to lower shareholder rights (Gompers et al., 2003), many researchers hypothesized that an increase in the percentage of independent directors would be inversely related to the adoption of antitakeover provisions (Danielson and Karpoff, 1998; Mallette and Fowler, 1992; Singh and Harianto, 1989; Sundaramurthy, 1998). On the other hand, since antitakeover provisions provide the management team with a higher bargaining power (Comment and Schwert, 1995; Heron and Lie, 2005), researchers claim that independent directors should favour the adoption of some takeover defences (Evans and Hefner, 2009; Harris, 1990).

Although Singh and Harianto (1989) believed that independent directors will try to repel a managers’ attempts to influence managerial compensation arrangements (such as golden parachutes), results showed the opposite. Their findings indicate that as the percentage of independent directors increases, the probability of adopting a
golden parachute increases. Cochran et al. (1985) found similar results indicating that the percentage of insider directors is negative related to the incidence of golden parachutes (in other words, a positive relation between outsiders and the adoption of golden parachutes).

Regarding other antitakeover defences, Davis (1991) also shows that there is a positive association between the percentage of independent directors and the adoption of poison pills. On the other hand, Mallette and Fowler (1992) provide results showing an insignificant effect of the percentage of outside directors on poison pills. Sundaramurthy (1998) provide results consistent with Mallette and Fowler (1992), indicating that the percentage of outside directors has little to do with the adoption of a set of 6 different provisions.

Consistent with the agency theory and the monitoring role of independent directors, and consistent with the hypotheses of the previous literature, the following hypothesis will be tested:

**Hypothesis 2-a:** There is a negative and significant relationship between the percentage of independent directors and the adoption of antitakeover provisions.

Upon splitting the E-index into categories A and B, we also expect a behavioral difference from independent directors towards the two sub-indices. Since Category A provisions are hypothesized to be more entrenching to managers due to the private benefit received, it is expected that independent directors will strongly oppose the adoption of such provisions. In addition, since the literature provides two different explanations for the adoption of takeover defences (interest alignment and entrenchment hypotheses), this study suggests that the monetary benefit received by managers moderates the relationship between independent directors and the adoption
of antitakeover provisions. In other words, the interest alignment hypothesis is valid for the adoption of provisions that do not provide managers with private benefits (Category B provisions) while the entrenchment hypothesis will be valid for the provisions that provide managers with private benefits (Category A provisions)

Accordingly, this study tests the following hypotheses:

**Hypothesis 2-b:** There is a negative relationship between the percentage of independent directors and the adoption of Category A provisions.

**Hypothesis 2-c:** Independent directors prefer the adoption of Category B provisions rather than the adoption of Category A provisions.

**Measurement of Board Composition**

Director independence is measured as the ratio of directors that are independent of top management to that of the total number of directors (Mallette and Fowler, 1992; Sundaramurthy, 1998). This study uses the definition of independent directors as provided by the RiskMetrics database. According to the RiskMetrics database, independent directors are those who are independent of top management, are not ex-employees and do not have any business relationship with the company.

**5.2.3 Control Variables**

**5.2.3.1 Board Size**

Another important variable related to a firm’s board characteristics is the board size. As Yermack (1996) claims, many researchers emphasize the importance of the composition of the board of directors while giving little importance to the size of the
board. Few researchers have studied whether the board size is a key determinant in whether a firm adopts antitakeover provisions or not.

Hermalin and Weisbach (2001) suggest that as the size of the board increases, agency problems tend to increase as well. They believe that a large board can lose its effectiveness as an efficient governing body and become more of a symbol.

Jensen (1993) argues that the additional costs of adding more directors to the board (such as coordination costs) are higher than the benefits that they could provide through additional monitoring. Consistent with Jensen (1993), Yermack (1996) finds a negative relationship between a firm’s value and the size of its board of directors.

Yermack (1996) adds that the governance of the firm improves when the boards are smaller. The author shows that firms with larger boards tend to use their assets in a less efficient way than firms with smaller boards. Yermack (1996) also show that the likelihood of CEO dismissal for poorly performing firms is higher when the board of directors is smaller. Finally, Yermack (1996) shows that compensations to motivate CEOs are stronger in firms that have smaller boards of directors.

All of these findings suggest that the board size can be a key determinant of a firm’s governance structure. Results show that companies with smaller boards have a better governance structure. Consequently, a smaller board might be more active in fighting managerial entrenchment and opposing the adoption of antitakeover provisions.

**Measurement**

The board size is measured as the number of directors serving on the board (Singh and Harianto, 1989).
5.2.3.2 *Ownership Structure*

The ownership structure has been extensively used in the literature as a significant determinant of antitakeover provisions (Boyle et al., 1998; Cochran et al., 1985; Heron and Lie, 2005; Mallette and Fowler, 1992; Singh and Harianto, 1989; Sundaramurthy, 1998).

From an agency theory perspective, Jensen and Meckling (1976) claim that the interests of managers and stockholders converge as the ownership level of managers increases. Therefore, Singh and Harianto (1989) maintain that in the case of high managerial ownership, managers, as well as shareholders, would benefit from the premium paid by the bidding firm if a takeover successfully takes place. Thus, high ownership levels can act as a substitute for golden parachutes or other antitakeover provisions (Singh and Harianto, 1989; Walkling and Long, 1984). Consequently, Singh and Harianto (1989) hypothesized and found a negative relationship between ownership levels and the adoption of golden parachutes. Similarly, Malatesta and Walkling (1988) and Mallette and Fowler (1992) find a negative relationship between managerial ownership and the adoption of poison pills.

However, Demsetz (1983) and Fama and Jensen (1983) argue that too much managerial ownership could lead to managerial entrenchment and empire building and could therefore have an adverse effect on the interest alignment between managers and shareholders. As a result, Sundaramurthy (1998) believes that the negative relationship found in the previous literature between antitakeover provisions and managerial ownership is valid for low levels of ownership. At higher levels of ownership the relationship, Sundaramurthy (1998) suggests that this relationship would become positive as the managers would seek the extraction of private benefits and entrenching themselves in the company by adopting more
antitakeover provisions. The results found by Sundaramurthy (1998) reinforce her suggestions, as the results show a U-shaped relationship between a set of antitakeover provisions and managerial ownership, with a cutoff point of 30% ownership. This is consistent with other views that also find a curvilinear impact of insiders ownership on firm value (Griffith, 1999; Morck, et al., 1988). These results show that the linear relationships found by previous researchers (such as Davis (1991) and Singh and Harianto (1989)) could in fact be deceptive.

Boyle et al. (1998) also provide evidence that partially supports Sundaramurthy’s (1998) findings. Boyle et al. (1998) find that the number of extraordinary antitakeover provisions is inversely related to managerial ownership at low levels of ownership (less than 10.3% ownership). However, there is no significant relationship between extraordinary antitakeover provisions and insiders ownership for ownership levels above 10.3%.

**Measurement of ownership**

Various measures have been used for ownership throughout the literature. Some researchers measure ownership as the percentage of shares owned the top officers and executives combined (Danielson and Karpoff, 1998; Davis, 1991 Mallette and Fowler, 1992; Singh and Harianto, 1989). However, this thesis is more concerned with CEOs and their power to adopt takeover defences. Therefore, CEO ownership will be used to account for the power given to CEOs through share ownership as well as the interest alignment caused by this ownership. Consistent with Walkling and Long (1984), Davis (1991) argues that ownership should be measured without including stock options since stock options were found not to have a significant effect on a manager’s resistance to a takeover threat. Accordingly, this study will use the percentage of CEO ownership excluding stock options.
5.2.3.3 *Firm Characteristics*

Several firm characteristics can play a major role in whether or not a firm would adopt antitakeover provisions (Cochran et al., 1985; Mallette and Fowler, 1992; Straska and Waller, 2010; Wade et al., 1990).

Among these different studies, some study the effect of different firm characteristics, such as firm size, leverage, financial performance, on the adoption of a single antitakeover provision or an index of provisions taken as a whole. For example, Cochran et al. (1985) study the effect of different firm characteristics on the adoption of a golden parachute while Straska and Waller (2010) study the effect of some firm characteristics on a set of governance provisions (G and E indexes).

5.2.3.3.1 *Firm Performance*

Another important firm characteristic when studying the determinants of firms that adopt antitakeover provisions would be the company’s profitability and performance.

This variable is particularly important because it could provide some insights about the reasons why firms adopt these provisions. Mallette and Fowler (1992) believe that it is important to study the prior performance of a company because it would show if the adoption of these takeover defences was triggered by managers because of their poor performance in the past years. Firms whose managers have been underperforming are expected to be undervalued and therefore have a relatively low market to book ratio (Davis, 1991). Accordingly, poorly performing companies would be more attractive takeover targets (Jensen, 1988) and their management teams would feel that there is more need to adopt takeover defences in order to secure their jobs (Cochran et al., 1985).
Previous researchers have reached different conclusions when studying the effect of the performance on the adoption of takeover defences (Davis, 1991; Heron and Lie, 2005; Mallette and Fowler, 1992; Straska and Waller, 2010; Wade et al., 1990). While Davis (1991) and Mallette and Fowler (1992) find no significant relation between their measures of a firm’s performance and the adoption of poison pills, Heron and Lie (2005) find a negative and significant relation between a company’s prior performance and the incidence of poison pills. Regarding other provisions, Cochran et al. (1985) and Wade et al. (1990) find a negative correlation between a firm’s performance and the adoption of golden parachutes.

**Measurement for Performance**

One reason for the inconsistency of previous researchers might be due to the measurement used for firm performance. Previously used measures include: Return on assets (ROA) (Cochran et al., 1985; Straska and Waller, 2010), total market return and market to book ratio of the previous year (Davis, 1991), the average return on equity (ROE) of the previous three years (Mallette and Fowler, 1992), and a measure for performance called EXCESS (Cochran et al., 1985; Wade et al., 1990). Consistent with Cochran et al. (1985) and Straska and Waller (2010), the performance will be measured by calculating the ROA. Also consistent with Mallette and Fowler (1992), the performance of the previous year will be used to check if the prior poor performance caused the adoption of antitakeover provisions.

**5.2.3.3.2 Firm Size**

Many studies have used firm size to monitor its effect on the adoption of antitakeover provisions (Cochran et al., 1985; Davis, 1991; Straska and Waller, 2010; Wade et al., 1990). Although different researchers study the effect of the firm
size on different antitakeover provisions, most of the results were found to be consistent.

Consistent with their expectations, most researchers have found a negative relationship between firm size and the adoption of different types of takeover defences. For example, Cochran et al. (1985) and Wade et al. (1990) report an inverse relationship between firm size and the presence of golden parachutes while Davis (1991) and Mallette and Fowler (1992) find a negative relationship between firm size and the adoption of poison pills. Sundaramurthy (1998) also provides evidence of a negative correlation between firm size and a group of antitakeover provisions.

However, a recent study by Straska and Waller (2010) hypothesizes and finds a curvilinear relationship between firm size and antitakeover indexed where the relationship is positive for slightly large firms and then becomes negative for firms with a relatively large size.

**Measurement of Firm Size**

Although the previous literature shows consistent results regarding firm size, different studies have used different approaches to measure the size of a firm. These measurements include the book value of total assets and the sales volume (Cochran et al., 1985); net sales (Mallette and Fowler, 1992); total market value (Davis, 1991); number of employees (Singh and Harianto, 1989; Sundaramurthy, 1998); log sales (Wade et al., 1990); market value of equity (Straska and Waller, 2010). The measure of firm size for this paper will be the natural logarithm of the total assets.
5.2.3.3 Capital Structure

Another factor that might affect a company’s likelihood of facing a takeover threat is its capital structure. Cochran et al. (1985) believe that as the amount of leverage increases, companies will less likely face a takeover threat as their high liabilities will make the bidders lose interest in the company.

Therefore, researchers have hypothesized that there will be an inverse relation between a firm’s debt positions and its probability of adopting a poison pill (Mallette and Fowler, 1992) or a golden parachute (Cochran et al., 1985). Surprisingly, results have shown that both tests were insignificant as the debt position had little to do with the presence of takeover defences. Bizjak and Marquette (1998) and Arikawa and Mitsusada (2011) have also reported no significant difference in the leveraged position between companies that have already adopted a poison pill and those that have not.

**Measurement for Capital Structure:** Most of the previous studies have measured debt as the ratio of debt to total assets (Arikawa and Mitsusada, 2011; Bizjak and Marquette, 1998; Cochran et al., 1985). Others have preferred to use the debt ratio compared to the firm’s common equity (Mallette and Fowler, 1992). Following Arikawa and Mitsusada (2011), Bizjak and Marquette (1998) and Cochran et al. (1985), this study uses the ratio of debt to total assets as a measure of a firm’s capital structure.

5.2.3.3.4 Long-term Investments

Stein (1988) argues that the presence of a takeover threat could lead to managerial myopia. When managers engage in long term investments, which could provide the
company with minimal amounts of profits on the short run, the company’s performance might seem poor to some investors and the stock price might decrease and become undervalued. A company with an undervalued stock price might be an attractive investment for corporate bidders and would therefore increase the probability of a takeover. Therefore, the managerial myopia hypothesis states that, fearing a possible takeover threat, managers might focus on short-term investments to boost their current profit and give little attention to long-term investments (Stein, 1988).

Stein (1988) suggests that one of the possible solutions to solve the managerial myopia problem is to adopt antitakeover provisions that would decrease the likelihood of a takeover threat. Managers acting in the absence of a takeover threat will be free to invest in long-term projects that could provide the company with growth opportunities.

To test if managers who invest in long-term projects, and thus have high R&D expenditures, adopt antitakeover provisions to protect themselves from managerial myopia, this research controls for the R&D expenditure. A positive relation between the E-index and R&D expenditures would support the managerial myopia hypothesis, indicating that managers who invest in long term projects tend to adopt antitakeover provisions to protect themselves.

**Measurement for Long-term Investments**

Consistent with previous researches (Arikawa and Mitsusada, 2011; Straska and Waller, 2010), R&D expenditure will be used to test a manager’s investment in long term projects.
Accordingly, the first model of this research will be as follows

\[ E = \beta_0 + \beta_1 BC_t + \beta_2 Dual_t + \beta_3 OWN_t + \beta_4 BS + \beta_5 ROA_{t-1} + \beta_6 R&D_t + \beta_7 FS_t + \beta_8 LEV_t + \epsilon \]

In addition to studying the determinants of antitakeover provisions, the first model of this research tests the effect of CEO duality on firm performance in the presence/absence of different types of antitakeover provisions. Since CEO duality is used as a proxy of CEO power and the ability to influence the adoption of antitakeover provisions, it is particularly important to study the interaction between antitakeover provisions and CEO duality in affecting firm performance.
5.3 Antitakeover Provisions and CEO Duality

Although many researchers argue against the presence of a role duality in firms, the literature fails to reach a clear consensus on the effect of CEO duality on firm performance. Supporters of the agency theory claim that a role duality provides a company’s CEO with too much power, leading to empire building and the extraction of private benefits. Thus, agency theorists argue that there is a negative relationship between role duality and firm performance. On the other hand, supporters of the stewardship theory argue that assigning one person as both a CEO and chairman of the board will provide the firm and its employees with a sense of leadership and unity. This would allow the company’s executives to have clear strategic goals and enhance firm performance. However, empirical tests fail to provide clear support for either of the two competing theories. The inability of several tests to provide a certain relationship between CEO duality and firm performance suggests that certain variables moderate this relationship. This study proposes that both theories could be valid depending on a firm’s governance structure. Firms that are enjoying a good governance structure and high shareholder rights should benefit from the presence of a role duality. In such firms CEOs are well monitored and they are motivated by the presence of their role duality. On the other hand, a CEO acting as a chairman of the board in a firm with poor governance structure and weak shareholder rights has more room for the extraction of private benefits and would negatively affect firm performance.

Since the provisions of categories A and B were constructed based on CEO monetary benefits, it would be interesting to find how the presence/absence of CEO duality affects the relationship between each of the two sub-indices and firm value. Therefore, two interaction variables are constructed (one between CEO duality and
Category A provisions while the other between CEO duality and Category B provisions) to test the credibility of the aforementioned claims. CEOs with a role duality already have structural power at their corporation. Providing such CEOs with Category A provisions could further increase their power leading to high levels of entrenchment and empire building. Therefore, the presence of Category A provisions is expected to worsen the relationship between CEO duality and firm value. Thus, this study tests the following hypothesis:

**Hypothesis 3-a:** The presence (absence) of Category A provisions will have a negative (positive) effect on the relationship between CEO duality and firm performance

On the other hand, CEOs with a role duality will not have a significant additional power in the presence of Category B provisions since these provision do not lead to any private benefits. Category B provisions just make a takeover process harder and could be used to provide the management team with a higher bargaining power in case of a takeover threat. Therefore, although Category B provisions are expected to have a negative effect on firm performance, the presence of a role duality in this case should not worsen this relationship.

**Hypothesis 3-b:** There is no significant effect for the presence/absence of Category B provisions on the relationship between CEO duality and firm performance
5.4 Model Two: Corporate Governance and Shareholder Wealth

5.4.1 Dependent Variable

5.4.1.1 Firm Value

The primary goal of managers is to maximize the shareholders’ wealth and therefore maximize firm value. However, according to the agency theory, conflicts of interest might occur between managers and shareholders that would have an adverse effect on firm value. This could occur when managers pursue their own goals and interests which might not be consistent with maximizing firm value. Among the solutions provided by Dalton et al. (2007) to solve these agency conflicts are: increasing board independence, increasing managerial ownership and the activity of the market for corporate control.

Various researchers study the effect of the aforementioned governance mechanism on firm value. For example, Griffith (1999) and Hu and Izumida (2008) study the effect of CEO and managerial ownership on firm value; Gompers et al. (2003) and Bebchuk et al. (2009) study the effect of different antitakeover provisions on firm value; Rosenstein and Wyatt (1990) study the effect of outsider directors on firm performance.

Measuring firm value has been fairly consistent throughout the literature. Although other measures can be taken as alternatives (Mehran (1995) measures firm value using both Tobin’s Q and ROA), Tobin’s Q has been extensively used in the literature to measure firm performance. Chung and Pruitt (1994) suggest that the previous measures of Tobin’s Q were not used extensively due to their complex calculations and the difficulty of obtaining their relative data. Therefore, Chung and
Pruitt (1994) construct a simpler version of Tobin’s Q and claim that the simpler versions are highly correlated with the original ones and are easily calculated. Consistent with recent studies (Bebchuk and Cohen, 2005; Bebchuk et al., 2009; Brown and Caylor, 2006; Gompers et al., 2003; Straska and Waller, 2010), this research follows Kaplan and Zingales (1997) in calculating the value of Tobin’s Q. Tobin’s Q is calculated as follows:

\[
Q = \frac{\text{Market Value (MV) of Assets}}{\text{Book Value (BV) of Assets}}
\]

\[
MV \text{ of Assets} = BV \text{ of assets} + MV \text{ of common stock} - (BV \text{ of common stock} + \text{Balance sheet deferred tax})
\]

5.4.2 Independent Variables

Although all three governance mechanisms mentioned before are expected to affect a firm’s performance, very few have talked about the interaction between these governance mechanisms and how does their interaction affect firm value. In particular, this research gives special attention to the effect of antitakeover protection on the relationship between each of the other two mechanisms (ownership structure and board composition) and firm value. Each mechanism is studied on its own, as well as the interaction among these mechanisms. Specifically, interaction variables will be constructed to measure the effect of the takeover provisions indices on the relationship between CEO ownership and firm value on one hand and board independence and firm value on the other.

5.4.2.1 Entrenchment

Bebchuk et al. (2009) label the antitakeover provisions in their study as “entrenching provisions” (Bebchuk et al., 2009, p.p. 785). The market for corporate control is one
of the main mechanisms used to discipline under-performing managers. Therefore, trying to deactivate the market for corporate control, by using antitakeover provisions to fight off takeover threats will help managers secure their jobs and entrench themselves in the company.

Gompers et al. (2003) constructed an index for measuring shareholder rights called the G-index. This index was made out of 24 provisions corporate governance provisions put out by the Investor Responsibility Research Center. These governance provisions are considered as takeover deterrents and Gompers et al. (2003) believe that they are adopted by the management teams in order to entrench themselves in the company. Therefore as the G-index increases, the number of antitakeover provisions adopted increase and the shareholders’ rights decrease. To further reinforce their claims, Gompers et al. (2003) find a negative correlation between the G-index and firm value. That is, as the number of antitakeover provisions increase, the value of the firm, as well as its sales and profit, decrease.

Bebchuk et al. (2009) argue that testing all of the provisions in the G-index might be misleading because only a small subset of the provisions might be behind the relation. Accordingly, Bebchuk et al. (2009) test the significance of each provision on its own while controlling for the other provisions in the G-index. Results show a negative significant correlation between firm value and six of the provisions used in the G-index. Bebchuk et al. (2009) therefore claim that these six provisions are the driving force behind the correlation between the G-index and firm value. They group these provisions to form the entrenchment index (E-index). Therefore, this study will use antitakeover provisions, specifically the provisions used in the E-index, as a sign that managers seek to entrench their position in the company.
Previous researchers present mixed evidence regarding the impact of antitakeover provisions on firm value. While Ryngaert (1988) finds a positive relation between poison pills and firm value, Malatesta and Walkling (1988) report a negative correlation between the adoption of poison pills and firm value. Other studies, such as Mahoney and Mahoney (1993) perform a longitudinal study from 1974 to 1988. Results show an insignificant relationship between 1974 and 1979. However, after 1979, this relationship turns into a significantly negative relationship between antitakeover provisions and firm value. However, most of the recent studies report a negative relationship between firm value and the presence of several antitakeover provisions (Bebchuk and Cohen, 2005; Bebchuk et al., 2009; Faleye, 2007; Gompers et al., 2003). Accordingly, this research will test the following hypothesis:

**Hypothesis 4:** There is a negative and significant relationship between all antitakeover provision indices and firm value.

**Measurement:** Different studies have used different types of antitakeover provisions to test their relative effect on firm value. Some of the previous studies have used a single antitakeover provision such as poison pills (Ryngaert, 1988) or staggered boards (Bebchuk and Cohen, 2005) while others have designed a set of provisions to test their combined effect on firm value (Bebchuk et al., 2009; Gompers et al., 2003). As mentioned before, the antitakeover provisions of the E-index will be the focal point of this study since they were found to be the ones negatively related to firm value. In addition to studying the E-index, two sub-indices (Categories A and B) will be constructed from the provisions of the E-index based on whether the provision provides the CEO/managers with a monetary benefit or not.
5.4.2.2 Antitakeover Provisions and Board Independence

The second major corporate governance mechanism in resolving the conflict of interest between managers and shareholders is increasing the independence of the board of directors (Dalton et al., 2007). Although the agency theory predicts a positive relationship between the percentage of insider directors and firm value, results are still inconsistent. Consistent with the agency theory, researchers show that increasing the percentage of independent directors increases the CEO turnover rate of poorly performing firms (Weisbach, 1988), enhances the stock market reaction to the adoption of poison pills (Brickley, 1994) and increase the gains achieved from tender offers (Cotter et al., 1997).

On the other hand, Bhagat and Bolton (2008) report that the percentage of independent directors serving on a firm’s board is negatively related to firm value. Brick et al. (2006) argue that in some cases CEOs and directors increase each other’s compensation seeking private benefits while having an adverse effect on firm value.

Given the inconsistency of the relationship between board independence and firm performance, this study suggests that a firm’s governance structure moderates this relationship.

Researchers argue that internal governance mechanisms and external governance mechanisms interact in affecting firm performance (Cremers and Nair, 2005). Cremers and Nair (2005) show that a decrease in antitakeover provisions (high external governance) leads to a larger positive impact on firm performance in the presence of large blockholders (high internal governance). Another study shows that increasing the percentage of independent directors has a positive effect on firm performance for firms with powerful CEOs and a negative relationship otherwise.
(Combs et al., 2007). In addition, Brickley et al. (1994) find that adopting poison pills leads to a positive stock market reaction when the majority of the board consists of independent directors and a negative reaction otherwise.

In a similar sense, this study argues that the presence/absence of antitakeover provisions, as a proxy for the wellness of a firm’s governance structure and the level of shareholder rights, moderate the board independence-firm performance relationship. In other words, in the presence of takeover defences, shareholder rights are low and the firm’s governance structure is weak. Therefore, in such a case, a firm could benefit from increasing the percentage of independent directors and thus increasing the monitoring of managers. On the other hand, in the absence of takeover defences, there is no need for such strict monitoring. Therefore, increasing board independence when the firm is already enjoying a good level of governance is expected to have an adverse effect on firm value. Such firms should find the advisory role of insider directors to be more beneficial than the monitoring role of independent directors.

To test the aforementioned hypotheses, interaction variables will be created between the different indices of antitakeover provisions and the percentage of independent directors. The first part of this model will test the following hypothesis:

**Hypothesis 5-a:** There is a positive (negative) relationship between the percentage of independent directors and firm value in the presence (absence) of antitakeover provisions (E-Index).

In this hypothesis, it is important to differentiate between Category A and Category B provisions.
The presence of Category A provisions signals weaker shareholder rights and higher managerial entrenchment. In such a case, a firm could benefit more from increasing the percentage of independent directors in order to monitor managerial behavior more efficiently and effectively.

On the other hand, the presence of independent directors is expected to be less useful for firms having Category B provisions. Since Category B provisions provide managers with a lower level of entrenchment than Category A provisions, the effect of independent directors on firm value in the presence of Category B provision is expected to be less significant than that where Category A provisions are present. Accordingly, this study also tests the following hypotheses:

**Hypothesis 5-b:** There is a positive (negative) relationship between the percentage of independent directors and firm value in the presence (absence) of Category A provisions

**Hypothesis 5-c:** There is an insignificant relationship between the percentage of independent directors and firm value in the presence (absence) of Category B provisions

**Measurement of Board Independence**

Board independence is measured as the ratio of independent directors to the total number of directors on the board. This study utilizes the classification of independent directors as mentioned in the RiskMetrics database. According to the RiskMetrics database, independent directors are those who are independent of top management, are not ex-employees and do not have any business relationship with the company.
5.4.2.3 Antitakeover Provisions and CEO Ownership

The interest alignment hypothesis suggests that providing managers with ownership in their corporation would alleviate agency conflicts and motivate managers to work harder (Jensen and Meckling, 1976). On the other hand, the managerial entrenchment hypothesis suggests that excessive levels of ownership lead to managers being entrenched in their position (Demsetz, 1983). Managers with excessive ownership levels have a sufficient level of voting power that would guarantee their position at the company and therefore protect themselves from the disciplinary market forces such as the market for corporate control (Hu and Izumida, 2008). Such managers feel that their position at the company is guaranteed and might therefore engage in activities that would provide them with personal benefits, regardless of its effect on firm value.

McConnell and Servaes (1990) find evidence consistent with both the interest alignment hypothesis and managerial entrenchment hypothesis. They report that the interest alignment hypothesis is dominant and there is a positive relation between ownership and performance for low levels of insiders’ ownership. However, as the ownership levels of insiders reaches the 40-50% level, the entrenchment effect becomes the dominant effect, and a slight inverse relationship can be found between insiders’ ownership and firm value. Griffith (1999) presents evidence of a negative correlation between firm value and CEO ownership for ownership levels between 15 and 50% and positive otherwise. Hermalin and Weisbach (1991) also find results indicating a positive relationship between CEO ownership and firm value for ownership level of 0 → 1 percent and 5 → 20 percent; the relationship is negative otherwise. Accordingly, this section starts by testing the following hypothesis:
**Hypothesis 6-a:** There is a positive and significant relationship between CEO ownership and firm value at low levels of ownership

**Hypothesis 6-b:** There is a negative and significant relationship between CEO ownership and firm value at high levels of ownership

Both antitakeover provisions and managerial ownership can act as a double edged sword and lead to managerial entrenchment. As mentioned earlier, high levels of ownership provide managers with too much power leading to managerial entrenchment (McConnell and Servaes, 1990). Also the presence of antitakeover provisions can either increase manager’s bargaining power or relieve the manager from the disciplinary force of the market for corporate control (Straska and Waller, 2013). This would lower the need for managers to work effectively because his position in the company is guaranteed and therefore can lead to more managerial entrenchment. As such, it is interesting to test the interaction between these two variables and how can their interaction affect firm value. It is expected that the combination of high ownership levels and a high number of takeover defences is detrimental to firm value. On the other hand, the absence of takeover defences signaling high shareholder rights is expected to decrease the entrenchment effect of ownership on firm value. As a result, interaction variables are generated to test how the interaction between the indices of antitakeover provisions and managerial ownership affects firm value. Specifically, the following hypothesis is tested:

**Hypothesis 6-c:** Low (high) shareholder rights, signalled by a high (low) value from the E-index, increases (decreases) the entrenchment effect of ownership on firm value.
This model also controls for the type of provision present at companies. Since Category A provisions provide a higher level of entrenchment for managers than Category B provisions, it is expected that the presence of Category A provisions would lead to a worse effect of ownership on firm value than the presence of Category B provisions would do.

**Hypothesis 6-d:** Category A provisions would increase the entrenchment effect of ownership on firm value in a more negative and significant way than Category B provisions.

**Measurement of ownership**

The literature contains several studies using different methods of calculating data regarding the ownership structure. These different measures include: Board ownership (Morck et al., 1988), CEO ownership (Griffith, 1999) and top management and insiders’ ownership (Hermalin and Weisbach, 1991; McConnell and Servaes, 1990). Since the splitting of the E-index is made according to CEO monetary benefits, the main concern in this model is the ownership of a firm’s CEO. Thus, ownership is measured as the ownership of a firm’s CEO excluding stock options.

**5.4.3 Control Variables**

In addition to the independent variables mentioned above, this study controls for several other variables used in previous literature, and that are expected to affect firm value.
5.4.3.1 Long-term Investments

We can find a considerable amount of researches controlling for long-term investments, through R&D expenditures, when studying the effect of different variables on firm value. For example, Bebchuk and Cohen (2005) and Gompers et al. (2003) control for R&D expenditure when studying the effect of antitakeover provisions on firm value while Hermalin and Weisbach (1991) and McConnell and Servaes (1990) R&D expenditures when studying the effect of ownership structure on firm value. Most of these previous studies find a positive and significant relationship between R&D expenditures and firm value (Hermalin and Weisbach, 1991; McConnell and Servaes, 1990; Morck et al., 1988). However, Bebchuk and Cohen (2005) find that spending on research and development activities does not have a significant effect on firm value.

**Measurement for Long-term Investments** Consistent with the aforementioned studies, this research will control for long-term investments using R&D expenditures.

5.4.3.2 Advertising Expenditure

Similarly, most studies that use R&D expenditure in their models also include advertising expenses as a control variable (Hermalin and Weisbach, 1991; McConnell and Servaes, 1990; Morck et al., 1988). Likewise, Hermalin and Weisbach (1991) and McConnell and Servaes (1990) find a positive and significant relationship between advertising expenses and firm value while Morck et al. (1988) reports an insignificant relationship.
Measurement

The measurement will be equal to the dollar amount of money spent on advertising divided by total assets.

5.4.3.3 Firm Size:

Another control variable used extensively in the literature is the size of the firm. Bebchuk and Cohen (2005), Hermalin and Weisbach (1991) and McConnell and Servaes (1990) all control for firm size and find a negative and significant relationship between size and firm value. On the other hand, Faleye (2007) and Morck et al. (1988) include firm size in their models and find that its effect on firm value is insignificant.

Measurement of Firm Size

Following Bebchuk et al. (2009) and Gompers et al. (2003), the measure of firm size in this study will be the natural logarithm of a firm’s total assets.

5.4.3.4 Leverage

According to the agency theory, debt can help resolve conflicts of interest between managers and shareholders due to free cash flow (Jensen, 1986). Managers with excess free cash flow might invest in projects that negatively affect the shareholders’ wealth.

Bebchuk et al. (2009), Faleye (2007) and Morck et al. (1988) all include leverage in their models and find a negative and significant relationship between leverage and firm value. On the contrary, McConnell and Servaes (1990) report a positive and significant relationship between leverage and firm value.
Measurement of Leverage

Following Morck et al. (1988) and Faley (2007), this study uses the long-term debt to total assets ratio as the measure for leverage.

5.4.3.5 Profitability

Several studies in the literature control for a company’s accounting performance when studying the effects of several variables on firm value. Bebchuk and Cohen (2005) and Bebchuk et al. (2009) use the return on assets in their model and find that its effect on firm value is insignificant. However, Faley (2007) finds a positive relationship between ROA and firm value.

Measurement of profitability

Consistent with the previous literature (Bebchuk and Cohen, 2005; Bebchuk et al., 2009; Faley, 2007), ROA will be used to control for a firm’s current profitability.

5.4.3.6 Firm Age

Studies by Bebchuk and Cohen (2005), Bebchuk et al. (2009) and Gompers et al. (2003) control for firm age to isolate the effect of antitakeover provisions on firm value. Bebchuk and Cohen (2005) find that a company’s age is inversely related to its firm value. Bebchuk et al. (2009) find similar results. However, after controlling for firm fixed effects, Bebchuk et al. (2009) report that the relationship remained negative but insignificant.

Measurement for Firm Age

Consistent with the previously mentioned researches, this study uses the natural logarithm of age as a measure for a firm’s age.
5.4.3.7 Capital Expenditures

Bebchuk and Cohen (2005), Bebchuk et al. (2009) and Faleye (2007) also include a firm’s capital expenditure in their models while studying the effect of antitakeover provisions on firm value. Notably, all three studies find a positive and significant relationship between their measures of capital expenditure and firm value.

Measurement for Capital Expenditures

Consistent with Bebchuk and Cohen (2005), Bebchuk et al. (2009) and Faleye (2007), the ratio of capital expenditure to total assets will be used to control for capital expenditure.

5.4.3.8 Board Size

Yermack (1996) finds a negative and significant relationship between board size and firm value. Yermack (1996) also provides evidence that a smaller board enhances the overall governance structure of the firm by increasing the CEO turnover for poorly performing firms and using the assets more efficiently. Faleye (2007) further reinforces this point by finding a negative and significant relationship between board size and firm value.

Measurement for Board Size

Consistent with the afore-mentioned studies, board size will be measured as the number of directors serving on a company’s board.

5.4.3.9 Board Leadership

Goyal and Park (2002) report that CEO duality weakens a firm’s governance structure by finding that CEO turnover is less sensitive to performance in the case of
a unitary board leadership. Therefore, Faleye (2007) includes CEO duality in his model when studying the effect of staggered boards on firm value. However, results were insignificant.

**Measurement for Board Leadership**

CEO duality is a dummy variable which takes a value of 1 if the same person serves as a CEO and chairman of the board and 0 otherwise.

The overall models are as follows:

\[
Q = \beta_0 + \beta_1 \text{En}_t + \beta_2 \text{OWN}_t + \beta_3 \text{BC}_t + \beta_4 E^*\text{BC}_t + \beta_5 \text{R&D}_t + \beta_6 \text{ADV}_t + \beta_7 \text{FS}_t + \beta_8 \text{LEV}_t + \\
\beta_9 \text{ROA}_t + \beta_{10} \text{AGE}_t + \beta_{11} \text{CAPX}_t + \beta_{12} \text{BS}_t + \beta_{13} \text{DUAL}_t + \epsilon
\]

\[
Q = \beta_0 + \beta_1 \text{En}_t + \beta_2 \text{OWN}_t + \beta_3 \text{BC}_t + \beta_4 E^*\text{OWN}_t + \beta_5 \text{R&D}_t + \beta_6 \text{ADV}_t + \beta_7 \text{FS}_t + \beta_8 \text{LEV}_t + \\
\beta_9 \text{ROA}_t + \beta_{10} \text{AGE}_t + \beta_{11} \text{CAPX}_t + \beta_{12} \text{BS}_t + \beta_{13} \text{DUAL}_t + \epsilon
\]
<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
<th>Previous studies using the same measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Value</td>
<td>Tobin’s Q</td>
<td>Bebchuk et al. (2009); Brown and Caylor (2006); Gompers et al. (2003); Straska and Waller (2010)</td>
</tr>
<tr>
<td>Entrenchment</td>
<td>E-Index</td>
<td>Bebchuk et al. (2009)</td>
</tr>
<tr>
<td>Ownership</td>
<td>CEO Ownership</td>
<td>Hermalin and Weisbach (1991); McConnell and Servaes (1990)</td>
</tr>
<tr>
<td>Board Composition</td>
<td>Percentage of Independent Directors</td>
<td>Bhagat and Bolton (2008); Cotter et al. (1997)</td>
</tr>
<tr>
<td>Entrenchment *</td>
<td>Entrenchment * Independence</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>Entrenchment * Ownership</td>
<td></td>
</tr>
<tr>
<td>Long-term Investments</td>
<td>R&amp;D Expenditure</td>
<td>Bebchuk and Cohen (2005); Gompers et al. (2003); McConnell and Servaes (1990); Morck et al. (1988)</td>
</tr>
<tr>
<td>Advertising Expenses</td>
<td>Advertising Expenses</td>
<td>Hermalin and Weisbach (1991); McConnell and Servaes (1990); Morck et al. (1988)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>Natural Logarithm of Total Assets</td>
<td>Bebchuk and Cohen (2005); Bebchuk et al. (2009); Gompers et al. (2003)</td>
</tr>
<tr>
<td>Leverage</td>
<td>Ratio of Long-term debt to Total Assets</td>
<td>Faleye (2007); Morck et al. (1988)</td>
</tr>
<tr>
<td>Profitability</td>
<td>Return on Assets (ROA)</td>
<td>Bebchuk and Cohen (2005); Bebchuk et al. (2009); Faleye (2007)</td>
</tr>
<tr>
<td>Firm Age</td>
<td>Natural Logarithm of a Firm’s Age</td>
<td>Bebchuk and Cohen (2005); Bebchuk et al. (2009); Gompers et al. (2003)</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>CAPEX/Total Assets</td>
<td>Bebchuk and Cohen (2005); Bebchuk et al. (2009); Faleye (2007)</td>
</tr>
</tbody>
</table>
5.5 Conclusion

As mentioned previously, this study is composed of two empirical models. The first empirical model is concerned with the determinants of antitakeover provisions. The importance of this model is the differentiation between the provisions that provide managers with a monetary benefit and those that do not. In addition to identifying these provisions and splitting them into two different categories, the determinants of the individual antitakeover provisions are studied. Studying the determinants of individual takeover defenses confirms the validity of the previous grouping method of takeover defenses.

After establishing the base for the two categories of provisions, this study attempts to explain the mixed evidence found in previous literature for the effect of different corporate governance mechanisms on firm performance. Following previous researchers, the number of antitakeover provisions adopted by a company is used as a proxy for a firm’s governance and shareholder rights levels (Gompers et al., 2003). However, unlike previous literature, this research also takes into consideration the type of antitakeover provision adopted by a company and not just the number of provisions adopted.

Various statistical tools are employed in the empirical chapters in order to test the validity of the aforementioned assumptions. First, chapter six uses various regression techniques to confirm the validity of the grouping process used in this research. Second, chapter seven builds on the results of chapter six and attempts to explain the mixed results found in previous literature using interaction variables between the categories of provisions and mechanisms used to reduce agency conflicts.
Chapter 6

Determinants of Antitakeover Provisions
6.1 Introduction

This chapter is the first of two empirical chapters in this research and it is divided into three sections. The first section starts by providing descriptive statistics that help explain the nature of the data. Although descriptive statistics cannot be used to draw conclusions, they deliver a better visualization of the data and some relationships among the variables.

The second section addresses the determinants of antitakeover provisions. Regression tests are implemented to study the determinants of the E-index as well as the determinants of the individual provisions. This is done in order to check if the relationship between CEO duality and adopting individual takeover defences supports our grouping process. In other words, CEO duality should be positively related to all three Category A provisions and negatively related to the other three Category B provisions. Probit regressions are implemented when investigating the determinants of individual provisions since the dependent variable is a dummy variable (Gujarati, 2003).

Finally, the third section of this chapter studies the effect of antitakeover provisions on the relationship between CEO duality and firm performance. Since powerful CEOs are hypothesized to be a significant determinant of antitakeover provisions, it is important to study how does the presence/absence of powerful CEOs and antitakeover provisions affect firm performance. Industry fixed-effect regressions are applied and all three indices of takeover defences are used in these regressions. It is expected that the presence of takeover defences moderates the duality-performance relationship. Accordingly interaction variables are created between the indices of
provisions and CEO duality to check the effect of duality on firm value in the presence/absence of antitakeover provisions.

6.2 Descriptive Statistics

Table 1: Descriptive Statistics for the sample data

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Index</td>
<td>2.45</td>
<td>1.34</td>
<td>0.00</td>
<td>6.00</td>
<td>0.10</td>
<td>2.64</td>
</tr>
<tr>
<td>Golden Parachute</td>
<td>0.66</td>
<td>0.47</td>
<td>0.00</td>
<td>1.00</td>
<td>-0.67</td>
<td>1.45</td>
</tr>
<tr>
<td>Poison Pill</td>
<td>0.46</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
<td>0.15</td>
<td>1.02</td>
</tr>
<tr>
<td>Staggered Board</td>
<td>0.57</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
<td>-0.27</td>
<td>1.07</td>
</tr>
<tr>
<td>Supermajority Req.</td>
<td>0.57</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
<td>-0.27</td>
<td>1.07</td>
</tr>
<tr>
<td>Bylaw Amendment</td>
<td>0.18</td>
<td>0.38</td>
<td>0.00</td>
<td>1.00</td>
<td>1.71</td>
<td>3.92</td>
</tr>
<tr>
<td>Charter Amendment</td>
<td>0.28</td>
<td>0.45</td>
<td>0.00</td>
<td>1.00</td>
<td>0.99</td>
<td>1.97</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td>61.28</td>
<td>27.28</td>
<td>0.00</td>
<td>100.00</td>
<td>-1.18</td>
<td>3.39</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.35</td>
<td>0.48</td>
<td>0.00</td>
<td>1.00</td>
<td>0.61</td>
<td>1.37</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>2.40</td>
<td>5.63</td>
<td>0.00</td>
<td>32.92</td>
<td>3.59</td>
<td>16.50</td>
</tr>
<tr>
<td>Board Size</td>
<td>8.52</td>
<td>3.78</td>
<td>1.00</td>
<td>39.00</td>
<td>-0.13</td>
<td>4.19</td>
</tr>
<tr>
<td>Lag ROA</td>
<td>0.12</td>
<td>0.24</td>
<td>-28.40</td>
<td>1.39</td>
<td>-64.61</td>
<td>6814.37</td>
</tr>
<tr>
<td>Firm Size</td>
<td>7.53</td>
<td>1.80</td>
<td>-6.21</td>
<td>14.99</td>
<td>0.31</td>
<td>3.57</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.24</td>
<td>0.81</td>
<td>0.00</td>
<td>120.94</td>
<td>119.01</td>
<td>16284.58</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>0.03</td>
<td>0.12</td>
<td>-0.81</td>
<td>14.86</td>
<td>74.03</td>
<td>8649.61</td>
</tr>
</tbody>
</table>

Table 1 shows the summary statistics for the variables to be used in this model. It can be seen that, on average, companies have around two or three of the takeover defences comprising the E-index (2.45). Among the six antitakeover provisions, the golden parachute provision has the highest level of adoption in this sample (66%) while the limitations on Bylaw amendment provision has the lowest level of adoption (18%). The last two columns in Table 1 display the skewness and kurtosis for each variable to test whether the data is normally distributed or not. For a data to be normally distributed, all variables in the model should have a skewness value
ranging from -1.96 to +1.96. In addition, variables should also have a kurtosis value ranging from -3 to +3 (Gujarati, 2003). The importance of knowing whether the data is normally distributed or not is to know what kind of tests should be used in the other result sections. If the data not normally distributed, non-parametric tests should be used.

Referring to the skewness of the variables, it is clear that several variables have values that lie outside the normality ranges (such as CEO ownership having a value of 3.59). In addition, several variables, such as board size, CEO ownership and the percentage of independent directors, have a kurtosis value higher than the normality value of three (Such as board size (4.19), firm size (3.57), percentage of independent directors (3.39)). This indicates that the data used in this model is not normally distributed and, therefore, non-parametric tests should be used in the next section.
### Table 2: Spearman’s Correlation Matrix

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E INDEX</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category A</td>
<td></td>
<td>0.723</td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category B</td>
<td>0.678</td>
<td></td>
<td>0.016</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Indep. Directors</td>
<td>0.214</td>
<td></td>
<td>0.100</td>
<td>0.216</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Duality</td>
<td></td>
<td>-0.102</td>
<td></td>
<td>-0.270</td>
<td>-0.207</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Ownership</td>
<td></td>
<td>-0.046</td>
<td></td>
<td>-0.001</td>
<td>-0.154</td>
<td>0.010</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>0.111</td>
<td></td>
<td>0.060</td>
<td>0.101</td>
<td>0.413</td>
<td>-0.060</td>
<td>-0.197</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lag ROA</td>
<td></td>
<td>-0.042</td>
<td></td>
<td>-0.026</td>
<td>-0.031</td>
<td>-0.045</td>
<td>0.042</td>
<td>0.013</td>
<td>-0.038</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>0.047</td>
<td></td>
<td>0.039</td>
<td>0.111</td>
<td>0.197</td>
<td>0.008</td>
<td>-0.345</td>
<td>0.476</td>
<td>-0.118</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>0.072</td>
<td></td>
<td>0.102</td>
<td>0.003</td>
<td>0.029</td>
<td>0.127</td>
<td>-0.089</td>
<td>0.154</td>
<td>-0.089</td>
<td>0.288</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D Exp.</td>
<td></td>
<td>-0.013</td>
<td></td>
<td>-0.067</td>
<td>0.056</td>
<td>0.028</td>
<td>-0.099</td>
<td>-0.157</td>
<td>0.055</td>
<td>-0.211</td>
<td>-0.233</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquidity</td>
<td></td>
<td>-0.041</td>
<td></td>
<td>-0.085</td>
<td>0.028</td>
<td>0.057</td>
<td>-0.159</td>
<td>0.041</td>
<td>-0.174</td>
<td>0.091</td>
<td>-0.281</td>
<td>-0.439</td>
<td>0.405</td>
<td>1.000</td>
</tr>
<tr>
<td>Adv. Exp.</td>
<td></td>
<td>-0.048</td>
<td></td>
<td>-0.085</td>
<td>0.018</td>
<td>0.003</td>
<td>-0.054</td>
<td>0.023</td>
<td>0.021</td>
<td>0.125</td>
<td>-0.018</td>
<td>-0.108</td>
<td>0.033</td>
<td>0.162</td>
</tr>
<tr>
<td>Capital Exp.</td>
<td></td>
<td>-0.057</td>
<td></td>
<td>-0.104</td>
<td>-0.114</td>
<td>0.131</td>
<td>-0.027</td>
<td>-0.074</td>
<td>0.437</td>
<td>-0.110</td>
<td>0.102</td>
<td>-0.045</td>
<td>-0.109</td>
<td>0.003</td>
</tr>
</tbody>
</table>
To test for multicollinearity, we run spearman’s rank correlation and find that the correlation coefficient of all variables is well below 0.8. Gujarati (2003) states that for a multicollinearity problem to exist between two variables, the correlation coefficient should be greater than or equal to 0.8. Results for Spearman’s rank correlation are displayed in table 2. The highest correlation coefficient in this model is between firm size and board size (0.476). As the size of a firm increases, its complexity increases as well. Therefore, more board members are needed to manage the different and complex aspects of the firm.

Although the correlation coefficients of the E-Index on one hand and provisions of categories A and B on the other hand are 0.723 and 0.678 respectively, little attention should be given to these correlations. Categories A and B are subsets of the E-Index and, therefore, a high correlation is expected between them. However, the different indices of provisions are used in different regression tests, which means that correlation between them is not a concern.
Table 3: Variance Inflation Factor (VIF)

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A*Duality</td>
<td>4.980</td>
<td>0.201</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>4.510</td>
<td>0.222</td>
</tr>
<tr>
<td>E*Duality</td>
<td>4.310</td>
<td>0.232</td>
</tr>
<tr>
<td>Board Size</td>
<td>2.200</td>
<td>0.455</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td>2.050</td>
<td>0.488</td>
</tr>
<tr>
<td>Category A</td>
<td>1.570</td>
<td>0.636</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>1.570</td>
<td>0.638</td>
</tr>
<tr>
<td>Category B*Duality</td>
<td>1.510</td>
<td>0.662</td>
</tr>
<tr>
<td>E Index</td>
<td>1.460</td>
<td>0.683</td>
</tr>
<tr>
<td>Firm Size</td>
<td>1.440</td>
<td>0.693</td>
</tr>
<tr>
<td>Liquidity</td>
<td>1.420</td>
<td>0.705</td>
</tr>
<tr>
<td>Advertising Expenditure</td>
<td>1.320</td>
<td>0.760</td>
</tr>
<tr>
<td>ROA</td>
<td>1.220</td>
<td>0.822</td>
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<tr>
<td>Leverage</td>
<td>1.190</td>
<td>0.843</td>
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<tr>
<td>Capital Expenditure</td>
<td>1.150</td>
<td>0.871</td>
</tr>
<tr>
<td>Category B</td>
<td>1.120</td>
<td>0.892</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>1.110</td>
<td>0.904</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>2.010</td>
<td></td>
</tr>
</tbody>
</table>

In addition to Spearman’s correlation matrix, the variance inflation factor (VIF) is calculated for each variable in this model. Gujarati (2003) states that for collinearity problems to be present, variables should have a VIF value greater than 10. Table 3 shows that the mean VIF for all the variables is 2.01. Concerning individual variables, the highest VIF is for the interaction variable between Category A provisions and CEO duality (4.98). Therefore, it is safe to assume that no multicollinearity problems are expected between the variables.
### Table 4: Hausman Test

<table>
<thead>
<tr>
<th></th>
<th>Fixed (b)</th>
<th>Random (B)</th>
<th>Difference (b-B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Independent Directors</td>
<td>0.009</td>
<td>0.009</td>
<td>0.000</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>-0.234</td>
<td>-0.235</td>
<td>0.001</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>-0.035</td>
<td>-0.035</td>
<td>0.000</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.023</td>
<td>-0.023</td>
<td>0.000</td>
</tr>
<tr>
<td>Lag ROA</td>
<td>-0.313</td>
<td>-0.334</td>
<td>0.020</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.039</td>
<td>-0.040</td>
<td>0.000</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.285</td>
<td>0.274</td>
<td>0.011</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>-1.857</td>
<td>-1.876</td>
<td>0.019</td>
</tr>
</tbody>
</table>

b = consistent under Ho and Ha  
B = inconsistent under Ha, efficient under Ho  
Test: Ho: difference in coefficients not systematic

\[
\text{Chi (2)} = (b-B)'[(V_{b}-V_{B})^{-1}](b-B) = 35.50
\]

\[
\text{Prob > chi (2)} = 0.0000
\]

(V_{b}-V_{B} is not positive definite)

A Hausman test is implemented to check whether a fixed effect model or a random effect model should be used in the regression analysis. The null hypothesis states that the difference between the coefficients of the fixed effect model and the random effect model is not systematic. Gujarati (2003) states that fixed effect regressions should be used if the null hypothesis is rejected (p-value is significant). However, if the null hypothesis cannot be rejected, the usage of random effect models is supported. Table 4 reports the results for the Hausmen test. Results reveal a significant p-value indicating that the null hypothesis is rejected and, therefore, fixed effect models should be used.
Figure 1: Percentage of Category A provisions by CEO Duality

Figure 2: Percentage of Category B provisions by CEO Duality
Figures 1 and 2 demonstrate how the percentages of Category A and Category B provisions vary across firms in the presence or absence of CEO duality. Figure 1 shows that the probability of having all 3 provisions from Category A increases in the presence of CEO duality (30.71% in the presence of CEO Duality; 20.96% otherwise). On the other hand, Figure 2 indicates that 63.23% of the firms with CEO duality do not have any provision from Category B. In the absence of CEO duality, this percentage decreases to 42.01%. These preliminary findings tend to support our trade-off hypothesis between the two categories of provisions. Powerful CEOs seem to favour the adoption of Category A provisions and oppose the adoption of Category B provisions.

**Figure 3: Relationship Between Category A provisions and Firm Value by CEO Duality**
Regarding the other hypotheses, Figures 3 and 4 display how the interaction between the two categories of provisions and CEO duality affects firm performance. Figure 3 designates that firms with no role duality outperform their counterparts with role duality in the presence of Category A provisions. Figure 3 also shows that as the number of Category A provisions increases, the difference in performance increases as well. However, in the absence of all Category A provisions, firms with CEO duality outperform the other firms with no role duality. This indicates that a role duality could be beneficial for firms as long as the firm has a good governance structure and the ability of a manager to extract private benefits is limited.

On the other hand, Figure 4 illustrates that firms with no role duality outperform the firms with a role duality except when a firm has all Category B provisions. The
results presented in Figure 4 are in contrast with the ones in Figure 3. This confirms that there are major differences between the two categories of provisions and that it is beneficial to divide the E-Index according to CEO monetary benefits. One explanation could be that Category B provisions support the interest alignment hypothesis and should be provided to a CEO in order to have a bargaining power when the firm is passing through a takeover. On the other hand, Category A provisions support the interest alignment hypothesis due to the private benefits received by CEOs and managers.

**Figure 5:** Sub-graphs for the Relationship Between CEO Duality and Firm Performance for each Level of Category A provisions
In order to have a deeper look at this interaction, Figures 5 and 6 display how each specific number of takeover defences, for both categories of provisions, interacts with CEO duality in affecting firm performance. The results of Figures 5 and 6 confirm our previous findings. Figure 5 reveals that CEO duality worsens the effect of Category A provisions on firm value. However, as previously mentioned, when Category A provisions equal to zero, the graph has a positive slope indicating a positive effect of CEO duality on firm performance. On the other hand, Figure 6 shows that CEO duality worsens the effect of Category B provisions on firm performance except for the case where all Category B provisions are present. The results provided by figures 5 and 6 provide support to our previous results and confirm the need to split the E-Index into two categories of provisions.
6.3 Hypothesis Testing

6.3.1 Studying the determinants of the E-index

This section starts by studying the provisions of the E-Index. Then we split the E-Index into Categories A and B and the determinants of each category of provisions are tested. This will test if there are any significant differences between the determinants of the E-index and the determinants of the two categories of provisions.

Table 5: Industry Fixed Effect Regression for the Determinants of the E-Index

<table>
<thead>
<tr>
<th></th>
<th>E-Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Independent Directors</td>
<td>0.009***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>-0.233***</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>-0.035***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.022***</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
</tr>
<tr>
<td>Lag ROA</td>
<td>-0.299***</td>
</tr>
<tr>
<td></td>
<td>(0.096)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.044***</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.272***</td>
</tr>
<tr>
<td></td>
<td>(0.058)</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>-1.870***</td>
</tr>
<tr>
<td></td>
<td>(0.226)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.228***</td>
</tr>
<tr>
<td></td>
<td>(0.112)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.1261</td>
</tr>
<tr>
<td>N</td>
<td>19971</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.
Table 5 investigates the determinants of antitakeover provisions. Contrary to agency theory suggestions, the percentage of independent directors is positively related to the adoption of antitakeover provisions. In addition, CEO duality has a negative relationship with the E-index. Although antitakeover provisions entrench managers in their position, the results show that independent directors favour the adoption of these entrenching provisions. On the other hand, powerful CEOs oppose the adoption of takeover defences that would provide them with a protection from the market for corporate control. These striking results indicate that, contrary to agency theory, antitakeover provisions increase with board independence and decrease with CEO duality. However, as shown below, the division of the anti-takeover provisions into categories A and B helps explain these surprising and unanticipated results.

6.3.2 Studying the determinants of individual provisions

In this section, the provisions of the E-Index are split into the two aforementioned categories (Category A and Category B provisions). We run probit regressions for each provision to test if the individual provisions support our method of grouping the takeover defences. In any given regression, we also control for the presence of the other five provisions. Two different indices are used when controlling for the remaining provisions. When studying the determinants of a provision from Category A, an index of the other two Category A provisions will be created as a control variable along with the index for Category B provisions. This grouping process is chosen since the provisions of each category could act as substitutes to one another. For example, the compensation obtained from having a poison pill may replace the need of having a golden parachute to obtain another kind of compensation. In the

---

5 Probit regressions are also run where we control for each provision on its own. The results are qualitatively similar.
same sense, the entrenching effect of one Category B provision acts as a substitute for the entrenching effect of another Category B provision.

**Table 6: Probit regressions for individual Category A provisions while controlling for the remaining Category A and Category B provisions.**

<table>
<thead>
<tr>
<th></th>
<th>Golden Parachutes</th>
<th>Poison Pills</th>
<th>Staggered Boards</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Independent Directors</td>
<td>0.009***</td>
<td>-0.001</td>
<td>-0.005***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.137***</td>
<td>0.458***</td>
<td>0.106***</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.022)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>-0.042***</td>
<td>-0.033***</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.022***</td>
<td>0.005</td>
<td>0.038***</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Lag ROA</td>
<td>-0.541***</td>
<td>0.140</td>
<td>-0.046</td>
</tr>
<tr>
<td></td>
<td>(0.103)</td>
<td>(0.104)</td>
<td>(0.099)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.030***</td>
<td>-0.076***</td>
<td>-0.095***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.007)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.394***</td>
<td>0.412***</td>
<td>-0.095</td>
</tr>
<tr>
<td></td>
<td>(0.063)</td>
<td>(0.061)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>-1.645***</td>
<td>1.482***</td>
<td>-1.608***</td>
</tr>
<tr>
<td></td>
<td>(0.242)</td>
<td>(0.278)</td>
<td>(0.238)</td>
</tr>
<tr>
<td>Category B</td>
<td>-0.154***</td>
<td>-0.081***</td>
<td>0.213***</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Remaining Cat. A provisions</td>
<td>0.328***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remaining Cat. A provisions</td>
<td></td>
<td>0.481***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.014)</td>
<td></td>
</tr>
<tr>
<td>Remaining Cat. A provisions</td>
<td></td>
<td></td>
<td>0.413***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.013)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.002</td>
<td>-0.392***</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td>(0.140)</td>
<td>(0.135)</td>
<td>(0.128)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.1098</td>
<td>0.1051</td>
<td>0.0583</td>
</tr>
<tr>
<td>N</td>
<td>19971</td>
<td>19971</td>
<td>19971</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.
Table 6 shows that the three Category A provisions (poison pills, golden parachutes and classified boards) support hypothesis 1-b. As expected, there is a positive relationship between CEO duality and each of the three provisions. CEOs with a role duality influence the adoption of takeover defences that provide them with a two line defence against a takeover threat. We also demonstrate that as the percentage of independent directors increases, the probability of adopting a poison pill or a staggered board decreases. This confirms our previous assumption that a powerful CEO is more likely to favour the adoption of these provisions than independent directors. However, surprisingly, the relationship between independent directors and golden parachutes is significantly positive. We will address this result later on in the paper.
Table 7: Probit regressions for individual Category B provisions while controlling for the remaining Category B and Category A provisions.

<table>
<thead>
<tr>
<th></th>
<th>Supermajority Req.</th>
<th>Bylaw Amendments</th>
<th>Charter Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Independent Directors</td>
<td>0.005***</td>
<td>0.001</td>
<td>0.009***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>-0.474***</td>
<td>-0.205***</td>
<td>-0.790***</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.024)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>0.001</td>
<td>-0.003</td>
<td>-0.007**</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.013***</td>
<td>-0.008**</td>
<td>-0.060***</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Lag ROA</td>
<td>0.070</td>
<td>-0.118</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>(0.110)</td>
<td>(0.104)</td>
<td>(0.133)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>0.041***</td>
<td>0.018**</td>
<td>0.035***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.216***</td>
<td>0.151**</td>
<td>0.135*</td>
</tr>
<tr>
<td></td>
<td>(0.063)</td>
<td>(0.063)</td>
<td>(0.079)</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>-2.418***</td>
<td>0.039</td>
<td>0.059</td>
</tr>
<tr>
<td></td>
<td>(0.343)</td>
<td>(0.260)</td>
<td>(0.298)</td>
</tr>
<tr>
<td>Category A</td>
<td>0.099***</td>
<td>0.101***</td>
<td>-0.251***</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.011)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>Remaining Cat. B provisions</td>
<td>0.148***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remaining Cat. B provisions</td>
<td>0.861***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remaining Cat. B provisions</td>
<td>1.263***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.420***</td>
<td>-1.684***</td>
<td>-1.614***</td>
</tr>
<tr>
<td></td>
<td>(0.146)</td>
<td>(0.154)</td>
<td>(0.176)</td>
</tr>
<tr>
<td>N</td>
<td>19971</td>
<td>19971</td>
<td>19971</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>0.0769</td>
<td>0.1447</td>
<td>0.3092</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.

Moving on to the next set of provisions, Table 7 shows the determinants of the individual category B provisions. Consistent with hypothesis 1-c, results suggest a negative relationship between CEO duality and the adoption of Category B provisions. Moreover, there is a positive relationship between the percentage of
independent directors and two of the Category B takeover defences (Supermajority Requirements and Limits on Charter Amendments). This is in compliance with our findings regarding the determinants of the E-index in table 5 and seems to be the driving factor behind it.

Independent directors seem to favour the adoption of these provisions while a CEO who is also the chairman of the board does not support their adoption. Although these three provisions do make a takeover process harder for a bidder firm, the negative sign of the CEO duality coefficient could indicate that CEOs do not have the power to influence the adoption of numerous takeover defences. As a result, CEOs oppose the adoption of Category B defences in order to have a higher probability or more power in influencing the adoption of Category A defences.

To confirm the validity of this assumption, we observe the coefficient estimates of the Category B Index in table 6. Specifically, we check if there is a trade-off between the provisions that yield a monetary benefit to a CEO in case of a takeover and those that do not. As expected, table 6 highlights a negative relationship between poison pills and golden parachutes on the one hand and Category B provisions on the other. That is, the adoption of category B provisions reduces the likelihood of adopting a poison pill or a golden parachute. On the other hand, staggered boards increase with the adoption of both Category A and Category B provisions. This explains the negative relationship between CEO duality and Category B provisions. Although Category B provisions do help in entrenching a CEO in his company by making a takeover process harder, a CEO would be better off by adopting an entrenching provision that would also provide him with a monetary compensation in case a takeover attempt is successful. Therefore, a CEO opposes the adoption of Category B provisions in order to have a higher probability of adopting a poison pill or a
golden parachute. These results confirm the validity of grouping takeover defences based on the monetary outcome provided to managers in case a takeover takes place. Powerful CEOs support the adoption of all Category A provisions and oppose the adoption of all Category B provisions.

6.3.3 The Case of Golden Parachutes

Most of the results presented in tables 6 and 7 support the aforementioned hypotheses. Managers of firms with a single leadership structure tend to oppose the adoption of Category B provisions in order to support the adoption of Category A provisions. On the other hand, independent directors support the adoption of Category B defences and oppose Category A defences (except for golden parachutes). The only puzzling provision that is supported by both independent directors and a CEO with a role duality is the golden parachute.

A recent article by Evans and Hefner (2009) helps explain the unanimous support for golden parachutes. They state that a golden parachute “is a recruitment tool that attracts a new management team that can return a financially risky firm to a satisfactory level of profitability” (Evans and Hefner, 2009; p.p. 66). Their results show that firms hiring new CEOs have a higher probability of adopting a golden parachute than firms that do not, thus confirming the argument that golden parachutes are given to attract new managers. Other findings also indicate that the adoption of golden parachutes significantly reduces the threat of internal control contests such as proxy fights or bankruptcy. The presence of a golden parachute eases the occurrence of value enhancing takeovers rather than the value destroying internal control contests (Evans and Hefner, 2009). The authors conclude by arguing that the presence of a golden parachute is an ethical process that should be supported.
by directors as well as managers. In addition, Zhao (2013) suggests that the presence of severance packages (such as golden parachutes) in a manager’s contract will enhance the manager’s engagement in investments with a positive but risky net present value.

Another possible explanation for supporting golden parachutes can be observed by studying the compensation schemes of newly hired executives. Agrawal and Knoeber (1998) report that a golden parachute acts as a substitute for extra compensation for senior executives. Poorly performing firms cannot afford to pay excessive compensation packages to attract high quality managers in order to enhance the profitability of their firms. Therefore, by providing managers with a golden parachute, directors are transferring the liability of paying executive compensation from the shareholders to the bidding firm (by paying a higher premium) in case a takeover takes place (Choi, 2004). Studies show that there is a positive relationship between the size of a golden parachute and the premium paid to shareholders when a takeover takes place (Harris, 1990; Machlin et al., 1993). Harris (1990) also suggests that, in most cases, the additional premium paid to shareholders when a golden parachute is present exceeds the value of the parachute itself. Therefore, despite its entrenching effect for a firm’s manager (Bebchuk et al., 2009), both managers and independent directors favour their adoption. Table 1 provides support for this argument by showing that golden parachutes are the most common antitakeover provisions in our sample⁶. Accordingly, golden parachutes could be similar to other necessary costs incurred by firms⁷.

⁶ 65.7% of the firms in our sample have golden parachutes
⁷ Such as compensation plans for manager, independent directors and auditors
6.3.4 Further Implications on Firm Value

In a meta-analysis conducted to find the effect of CEO duality on firm performance, Rhoades et al. (2001) conclude that the relationship between CEO duality and firm performance depends on the focus of the study. Their findings provide partial support for both supporters and opponents of CEO duality. In the same sense, we expect to find different effects of CEO duality on firm value based on the levels of CEO entrenchment.

According to agency theory, CEO duality further increase agency problems at companies as CEOs abuse the power given to them and look to extract private benefits (Dayton 1984). Therefore, when a CEO with a role duality adopts certain provisions for his own benefit (Category A provisions), the impact on firm value might be even worse.

In order to test the following assumption, two interaction variables will be introduced. Interaction variables between each of the two indices (Category A and Category B) and CEO duality will be generated to test for the marginal impact of adopting these provisions in the presence of CEO duality.
Table 8: Industry fixed effect regressions measuring the effect of the interaction between antitakeover provisions and CEO Duality on firm value.

<table>
<thead>
<tr>
<th></th>
<th>model1</th>
<th>model2</th>
<th>model3</th>
<th>model4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category A</strong></td>
<td>-0.043***</td>
<td>-0.021**</td>
<td>-0.043***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.010)</td>
<td>(0.009)</td>
<td></td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td>-0.114***</td>
<td>-0.112***</td>
<td>-0.110***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.008)</td>
<td></td>
</tr>
<tr>
<td><strong>E INDEX</strong></td>
<td></td>
<td></td>
<td></td>
<td>-0.068***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.007)</td>
</tr>
<tr>
<td><strong>Category A*duality</strong></td>
<td></td>
<td></td>
<td></td>
<td>-0.069***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.019)</td>
</tr>
<tr>
<td><strong>Category B*duality</strong></td>
<td></td>
<td></td>
<td></td>
<td>-0.024</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.020)</td>
</tr>
<tr>
<td><strong>E*duality</strong></td>
<td></td>
<td></td>
<td></td>
<td>-0.033**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.014)</td>
</tr>
<tr>
<td><strong>CEO Duality</strong></td>
<td>0.021</td>
<td>0.146***</td>
<td>0.032</td>
<td>0.124***</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.044)</td>
<td>(0.024)</td>
<td>(0.043)</td>
</tr>
<tr>
<td><strong>% Independent Directors</strong></td>
<td>-0.001</td>
<td>-0.000</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>CEO Ownership</strong></td>
<td>0.009***</td>
<td>0.009***</td>
<td>0.009***</td>
<td>0.008***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td><strong>Board Size</strong></td>
<td>0.009***</td>
<td>0.008***</td>
<td>0.009***</td>
<td>0.010***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td><strong>Firm Size</strong></td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.007)</td>
</tr>
<tr>
<td><strong>Leverage</strong></td>
<td>0.024</td>
<td>0.025</td>
<td>0.025</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td>(0.069)</td>
<td>(0.069)</td>
<td>(0.069)</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>1.464***</td>
<td>1.460***</td>
<td>1.462***</td>
<td>1.435***</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.147)</td>
<td>(0.147)</td>
<td>(0.147)</td>
</tr>
<tr>
<td><strong>ROA</strong></td>
<td>5.913***</td>
<td>5.916***</td>
<td>5.913***</td>
<td>5.921***</td>
</tr>
<tr>
<td></td>
<td>(0.219)</td>
<td>(0.219)</td>
<td>(0.219)</td>
<td>(0.219)</td>
</tr>
<tr>
<td></td>
<td>(0.390)</td>
<td>(0.389)</td>
<td>(0.390)</td>
<td>(0.389)</td>
</tr>
<tr>
<td><strong>Advertising Expenditure</strong></td>
<td>1.053***</td>
<td>1.060***</td>
<td>1.047***</td>
<td>1.027***</td>
</tr>
<tr>
<td></td>
<td>(0.376)</td>
<td>(0.376)</td>
<td>(0.376)</td>
<td>(0.377)</td>
</tr>
<tr>
<td><strong>Capital Expenditure</strong></td>
<td>1.516***</td>
<td>1.523***</td>
<td>1.513***</td>
<td>1.505***</td>
</tr>
<tr>
<td></td>
<td>(0.262)</td>
<td>(0.262)</td>
<td>(0.262)</td>
<td>(0.261)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>0.082</td>
<td>0.047</td>
<td>0.080</td>
<td>0.128</td>
</tr>
<tr>
<td></td>
<td>(0.118)</td>
<td>(0.118)</td>
<td>(0.118)</td>
<td>(0.117)</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>19971</td>
<td>19971</td>
<td>19971</td>
<td>19971</td>
</tr>
<tr>
<td><strong>Adjusted R²</strong></td>
<td>0.3615</td>
<td>0.3627</td>
<td>0.3616</td>
<td>0.3622</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.
Table 8 displays the interaction between CEO Duality and different indices of antitakeover provisions\(^8\). Following recent literature (Gompers et al., 2003; Bebchuk et al., 2009) Tobin’s Q is used as a proxy for firm value. Moreover, advertising and capital expenditures and liquidity are added to control for their effect on firm value (Faleye, 2007; Hermelin and Weisbach, 1991; McConnel and Servaes, 1991).

Results show that, consistent with the previous literature, both Category A and Category B provisions have a negative effect on firm value (Bebchuk and Cohen, 2005; Faleye, 2007). However, the coefficient estimate of the interaction variable between Category A and CEO duality is significantly negative. This implies that when a CEO acting as the chairman of the board adopts provisions from Category A, the effect on firm value is significantly worse than when a CEO with no role duality does so.

Another important finding in table 8 is the coefficient of CEO duality. The coefficient estimate of CEO duality shows the impact of CEO duality on firm performance in the absence of all Category A provisions. Unlike the propositions of agency theory, CEO duality increases firm value in this case\(^9\). The absence of all Category A provisions could imply that this firm has a high level of shareholder rights and is enjoying a good governance level. In such firms, consistent with the stewardship theory, CEOs are motivated to achieve superior performance and act as stewards whose primary role is to maximize shareholder value (Donaldson and Davis, 1991). Introducing an interaction variable between the E-Index and CEO duality yields similar results. The interaction coefficient between the E-Index and

---

\(^8\) OLS regressions are run for the interactions between Category A, Category B, and the E-Index provisions on one hand and CEO duality on the other.

\(^9\) The first column of table 8 shows that CEO duality has an insignificant effect on firm value when no interaction variable is introduced.
CEO duality negatively affects firm value. In addition, the absence of all the E-Index provisions enhances the relationship between CEO duality and firm value. This is consistent with researchers who claim that a single theory (agency theory or stewardship theory) cannot fully explain the relationship between CEO duality and firm value on its own (Boyd, 1995; Brickley et al., 1997; Elsayed, 2007). Brickley (1997) concludes that both leadership structures have their advantages and disadvantages. Therefore, a single leadership structure could be beneficial to a firm while a dual leadership structure could be beneficial to another. On the other hand, table 8 shows that there is no significant marginal impact of adopting provisions from Category B on firm value in the presence of CEO duality. The coefficient of CEO duality on its own is also insignificant, indicating that the presence or absence of all Category B provisions does not affect the relationship between CEO duality and firm value. This confirms our previous suggestions that CEOs with a role duality are affected by the presence/absence of Category A provisions more than they are affected by the presence/absence of Category B provisions. CEO duality can be beneficial for a firm with a high level of shareholder rights and a high level of governance (absence of Category A provisions).

Although both sets of provisions adversely affect firm value, the results above show that the presence of CEO duality leads to a further decrease in firm value for Category A provisions. This could imply that, in the presence of CEO duality, a CEO with category A provisions may not be motivated to work in the shareholders’ best interest leading to a decrease in firm value. Providing a CEO with a role duality job, along with provisions that provide him with a monetary benefit in case the firm was taken over, gives a CEO too much power. This leads to the ultimate expropriation of shareholders’ rights, where a CEO can freely extract private benefits.
from a company. In such a case, a CEO does not fear the occurrence of a takeover, since the takeover will also provide the CEO with monetary benefits.

6.4 Conclusion

Comparing the results for the determinants of the E-Index and the determinants of single provisions, it can be noted that the E-Index determinants may be easily misinterpreted. While the determinants of individual antitakeover provisions suggest that CEOs with a role duality support (oppose) the adoption of all three Category A provisions (Category B provisions), the E-Index findings show a significantly negative relationship between CEO duality and takeover defences. This could be due to a significantly high and negative correlation between one of the E-Index provisions and CEO duality, which makes this provision drive the relationship between the whole index and CEO duality. Therefore, previous studies testing the effect of randomly selected takeover defences on a firm’s governance structure or performance could be better off by grouping takeover defences based on CEO’s preferences and monetary benefits. The results also indicate that even powerful CEOs can only influence a limited amount of takeover defences. Therefore, a CEO may oppose the adoption of Category B provisions in order to have a higher probability of influencing the adoption of Category A provisions.

Further tests also show that, in the presence of CEO duality, the relationship between Category A provisions and firm value worsens. On the other hand, the relationship between Category B provisions and firm value is unaffected by the presence of CEO duality. This indicates that CEOs with a role duality feel safe after adopting Category A provisions because of the monetary outcome provided if the firm was taken over. Therefore, CEOs acting as chairmen of the board are not motivated to work hard to
increase shareholder wealth in the presence of Category A provisions, which leads to a worse effect on firm value than when Category B provisions are present.

All of these results indicate that the entrenching effect differs from one provision to another. CEOs having Category B provisions still feel the need to continue working hard in order to protect their firm from a takeover and thus protect their position in their company. On the other hand, CEOs with Category A provisions are highly entrenched in their company and have their position backed up with a monetary compensation if they are removed from the company.

The results of this empirical model lay the foundation for the next empirical chapter. After confirming the validity of the grouping process of takeover defenses, this research attempts to use this ideology to explain contradicting effect of governance mechanisms on firm performance. In other words, failing to control for the presence of antitakeover provisions could be one of the main reasons why the literature provides lots of conflicting evidence. This study, however, controls for both the number and type of takeover protection adopted by the company as a proxy for the soundness of the firm’s governance structure and shareholder rights. Thus, the next chapter uses the two categories of provisions, as well as the E-index, to create various interaction variables between the indices of provisions and governance mechanisms. Interacting different indices of provisions with governance mechanisms provides valuable insights regarding the effect of each type of provisions on the relationship between governance mechanisms and firm performance.
Chapter 7

Corporate Governance and
Shareholder Wealth: Interest
Alignment Hypothesis Revisited
MODEL 2: Corporate Governance and Shareholder Wealth

7.1 Introduction

This is the second and final empirical chapter of this research and it is divided into four sections. The first chapter provides descriptive statistics and figures for the regression tests that are implemented in the second and third sections of this chapter. Descriptive statistics are particularly important in this chapter because they provide a simple way to visualize interaction effects that can be difficult to do using only regression tables. The descriptive statistics include two different sets of figures; one for the effect of antitakeover provisions on the independence-performance relationship and the other for the effect of antitakeover provisions on the ownership-performance relationship. The figures display the relationship between governance mechanisms and firm performance for each level of E-index provisions separately. Other figures display the relationship between the aforementioned governance mechanisms and firm performance according to the number of Category A or Category B provisions adopted by the firm.

The second and third sections of this chapter test the effect of antitakeover provisions on the independence-performance and ownership-performance relationships respectively. Following the descriptive statistics, interaction variables between the governance mechanisms and antitakeover provision indices are created. Interaction variables are created for all three indices in each model and fixed-effect regressions are implemented. Previous researchers argue that internal and external governance mechanisms interact in affecting firm performance (Cremers and Nair, 2005). Consistently, these regression tests check whether the level of antitakeover provisions (external governance mechanism), used as a proxy for shareholder rights,
moderates the relationship between other internal governance mechanisms and firm performance.

The last section of this chapter provides additional robustness analysis tests to address any causality concerns that might arise in this model. Endogeneity is always a concern in corporate governance studies. Therefore, further correlation and regression tests are made to test whether the relationship runs from the governance mechanisms to firm performance or the other way around. The same tests done in sections two and three are repeated in section four using the lagged value of all explanatory variables. This will confirm if the explanatory variables are the cause for the relationship found in previous sections between governance mechanisms and firm performance.
7.2 Descriptive Statistics

Figure 7: Sub-graphs for the Relationship Between Board Independence and Firm Performance for each Level of the E-Index

Figure 7 illustrates the effect of antitakeover provisions on the relationship between the percentage of independent directors and firm performance. For each level of the E-Index, a separate graph is presented in order to check the marginal impact of the E-Index provisions on the independence-performance relationship. It can be seen that for low levels of takeover defences (E-Index less than four), increasing the percentage of independent directors has an adverse effect on firm performance. This is consistent with hypothesis 5-a, indicating that firms with a low number of
antitakeover provisions already have high shareholder rights. Increasing the percentage of independent directors isn’t beneficial for such firms since they are already enjoying a good governance structure and no extra monitoring is needed.

However, for high levels of antitakeover provisions (E-Index greater than four), increasing the percentage of independent directors has a positive effect on firm performance. As the number of takeover defences starts to increase, a firm’s governance structure becomes weaker and there is more room for managers to extract private benefits. Therefore, such firms benefit from increasing the monitoring process of managers by increasing the percentage of independent directors.

**Figure 8: Independence-Performance relationship by Category A Provisions**

![Predictive Margins of Category A Provisions](image)
In figures 8 and 9, the E-Index provisions are split into Category A and Category B provisions to test the impact of each on the independence-performance relationship. These figures show the impact of three different levels of independent directors on firm performance for all levels of Category A and Category B provisions. It can be seen in Figure 8 that in the absence of all Category A provisions, firms with the least percentage of independent directors outperform their competitors. On the contrary, for firms with all three Category A provisions adopted, results are reversed. In such a case, firms with the highest percentage of independent directors outperform those with lower percentages of independent directors. These results are consistent with the results provided in figure 7 and hypothesis 5-b.

On the other hand, Figure 9 does not provide consistent results for the presence (or absence) of Category B provisions. Although firms with lower percentages of
independent directors slightly outperform other firms with higher percentages in the presence of one or two Category B provisions, results are not consistent in the presence or absence of all Category B provisions. Figure 9 shows that for firms with Category B provisions equal to zero or three, firm performance is not affected by the percentage of independent directors. This could indicate that Category B provisions are not as entrenching as Category A provisions, and the presence of all Category B provisions does not necessitate an increase in the percentage of independent directors as it is the case with Category A provisions.

Figure 10: Sub-graphs for the Relationship Between CEO Ownership and Firm Performance for each Level of the E-Index
The next set of figures illustrates the effect of antitakeover provisions on the ownership-performance relationship. Although CEO ownership is said to have a positive effect on firm performance, excessive ownership levels combines with takeover defences could lead to excessive CEO power and entrenchment. Figure 10 shows that for low levels of takeover defences (E-Index less than three), CEO ownership has a strictly positive effect on firm performance. As the number of takeover defences increases, the positive effect of CEO ownership on firm performance decreases. As displayed in Figure 10, when all six E-Index provisions are present, increasing CEO ownership barely increases firm performance. This is consistent with hypothesis 6-c which states that the presence of antitakeover provisions increases the entrenchment effect of CEO ownership on firm value rather than the interest alignment effect.

Figure 11: Ownership-Performance relationship by Category A Provisions
The provisions of the E-Index are then split into Categories A and B. Figure 5 illustrates that in the absence of all Category A provisions, firms with CEO ownership equal to five percent outperform those with no CEO ownership by a significant margin. As the number of Category A provisions increases, the difference in performance between different high and low CEO ownership levels diminishes. This difference keeps diminishing until firms with no CEO ownership have almost the same performance as those with high CEO ownership levels (five percent CEO ownership) in the presence of all Category A provisions.

Similar to Category A provisions, Figure 12 demonstrates that, in the absence of all Category B provisions, firms with high CEO ownership levels outperform other firms with no CEO ownership. However, the difference in performance between these firms is larger in the absence of Category A provisions than it is in the absence of Category B provisions. Figure 12 also shows that the difference diminishes as the
number of Category B provisions increases until it reaches a very slight difference in the presence of all Category B provisions.

Although the presence of both Category A and Category B provisions decrease the effect of CEO ownership on firm performance, Category A provisions seem to have a larger impact. This provides support to the argument that Category A provisions are the more entrenching than Category B provisions. Although both categories lead to an adverse effect on firm performance, Category A provisions seem to have a larger impact on other governance mechanisms than Category B provisions. It is important to note that the results provided in this section are descriptive results that can provide preliminary results for the hypotheses. Descriptive statistics provide researchers with insights about the direction of the results and the research but cannot be used as final results because they fail to control for other important variables that could affect the relationships under study. Therefore, regression tests are used in the upcoming sections to test the research hypotheses.
Table 9: Variance Inflation Factor (VIF)

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>E * Independence</td>
<td>7.990</td>
<td>0.200</td>
</tr>
<tr>
<td>Category A * Independence</td>
<td>6.910</td>
<td>0.212</td>
</tr>
<tr>
<td>Category B * Independence</td>
<td>6.150</td>
<td>0.223</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>2.640</td>
<td>0.379</td>
</tr>
<tr>
<td>E * Ownership</td>
<td>2.550</td>
<td>0.392</td>
</tr>
<tr>
<td>Category A * Ownership</td>
<td>2.300</td>
<td>0.434</td>
</tr>
<tr>
<td>Board Size</td>
<td>2.180</td>
<td>0.459</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td>2.030</td>
<td>0.493</td>
</tr>
<tr>
<td>Category B * Independence</td>
<td>1.640</td>
<td>0.609</td>
</tr>
<tr>
<td>Liquidity</td>
<td>1.410</td>
<td>0.709</td>
</tr>
<tr>
<td>Firm Size</td>
<td>1.390</td>
<td>0.718</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>1.310</td>
<td>0.761</td>
</tr>
<tr>
<td>E-Index</td>
<td>1.230</td>
<td>0.811</td>
</tr>
<tr>
<td>ROA</td>
<td>1.190</td>
<td>0.844</td>
</tr>
<tr>
<td>Leverage</td>
<td>1.180</td>
<td>0.848</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>1.140</td>
<td>0.880</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>1.090</td>
<td>0.914</td>
</tr>
<tr>
<td>Advertising Expenditure</td>
<td>1.040</td>
<td>0.960</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>2.521</td>
<td></td>
</tr>
</tbody>
</table>

Before starting the regression analysis, additional descriptive statistics are made. Similar to the first model, a variance inflation factor test is implemented to test whether any multicollinearity problems exist using this data. Table 9 shows that the variable with the highest VIF value is the interaction between the E-index and board independence (7.990) while the VIF value for the whole model is 2.521. Since all of the VIF values are below the normality value of ten which was suggested by Gujarati (2003), it is safe to assume that no collinearity problems exist in this model.
Table 10: Hausman Test

<table>
<thead>
<tr>
<th></th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>fe</td>
<td>re</td>
<td>Difference</td>
</tr>
<tr>
<td>E Index</td>
<td>-0.076</td>
<td>-0.076</td>
<td>0.000</td>
</tr>
<tr>
<td>% Indep. Directors</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.000</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>0.015</td>
<td>0.014</td>
<td>0.000</td>
</tr>
<tr>
<td>own_squared</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.047</td>
<td>0.047</td>
<td>0.000</td>
</tr>
<tr>
<td>Board Size</td>
<td>0.010</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.005</td>
<td>-0.004</td>
<td>-0.001</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.025</td>
<td>0.025</td>
<td>0.000</td>
</tr>
<tr>
<td>Liquidity</td>
<td>1.451</td>
<td>1.461</td>
<td>-0.010</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>6.930</td>
<td>6.960</td>
<td>-0.029</td>
</tr>
<tr>
<td>Adv. Expenditure</td>
<td>1.060</td>
<td>1.081</td>
<td>-0.021</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>1.521</td>
<td>1.520</td>
<td>0.000</td>
</tr>
<tr>
<td>ROA</td>
<td>5.928</td>
<td>5.930</td>
<td>-0.002</td>
</tr>
</tbody>
</table>

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic
chi2(9) = 26.56
Prob>chi2 = 0.0220

In addition to the VIF test, a Hausman test is also employed to test whether fixed or random effect models should be used in the upcoming regressions. Table 10 shows that the p-value of the Hausman test is positive significant. Therefore, using a fixed effect regression is recommended in the next section.
7.3 Hypothesis Testing

7.3.1 Governance Mechanisms and Firm Performance

Table 11: Fixed Effect Regression for the effect of corporate governance variables on firm value

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>E Index</td>
<td>-0.089***</td>
<td>(0.008)</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td>-0.001</td>
<td>(0.001)</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>0.022***</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Ownership Squared</td>
<td>-0.000***</td>
<td>(0.000)</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.037</td>
<td>(0.029)</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.002</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.005</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.054</td>
<td>(0.088)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>1.696***</td>
<td>(0.178)</td>
</tr>
<tr>
<td>R&amp;D Expenditure</td>
<td>6.674***</td>
<td>(0.471)</td>
</tr>
<tr>
<td>Advertising Expenditure</td>
<td>0.683</td>
<td>(0.453)</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>2.100***</td>
<td>(0.339)</td>
</tr>
<tr>
<td>ROA</td>
<td>5.488***</td>
<td>(0.262)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.159</td>
<td>(0.141)</td>
</tr>
</tbody>
</table>

| N                         | 19,006      |
| Adjusted R-Squared        | 0.3848      |

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.

Table 11 displays the results of an industry fixed effect regression before introducing any interaction variable and before splitting the provisions of the E-Index into Category A and Category B provisions. Consistent with hypothesis 4 and with
previous studies, there is a negative relationship between the E-Index and firm value (Bebchuk et al., 2009). The results are also consistent for both Category A and Category B provisions throughout the different models used in this study. Table 11 also shows a positive relationship between the number of shares owned by a CEO and firm value. This is consistent with the interest alignment hypothesis where a CEO becomes more motivated to increase firm value when he shares a certain part of the ownership with the firm’s shareholders. We also add the squared value of the ownership to control for the curvilinear relationship between CEO ownership and firm value. However, the percentage of independent directors does not seem to have a significant effect on the respective firm’s value. Other board characteristics such as board size and CEO duality also seem to have an insignificant effect on firm performance. Further tests are made to explain how the presence/absence of antitakeover provisions could affect the relationship between the other governance mechanisms and firm value. The tests also split the provisions of the E-Index into Category A and Category B provisions.
### 7.3.2 Antitakeover Provisions and Board Independence

**Table 12:** Fixed Effect Regression for the interaction of antitakeover provisions and board independence in affecting firm value

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E Index</strong></td>
<td>-0.130***</td>
<td>-0.162***</td>
<td>-0.071***</td>
</tr>
<tr>
<td></td>
<td>(0.022)</td>
<td>(0.032)</td>
<td>(0.012)</td>
</tr>
<tr>
<td><strong>Category A</strong></td>
<td></td>
<td>-0.105***</td>
<td>-0.107***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.010)</td>
<td>(0.027)</td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td>-0.002*</td>
<td>-0.003**</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td></td>
<td>0.001***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td></td>
</tr>
<tr>
<td><strong>A * % Indep. Directors</strong></td>
<td>0.001**</td>
<td></td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>E * % Indep. Directors</strong></td>
<td></td>
<td>0.002***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td><strong>CEO Ownership</strong></td>
<td>0.022***</td>
<td>0.022***</td>
<td>0.023***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Ownership Squared</td>
<td>-0.000***</td>
<td>-0.000***</td>
<td>-0.000***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>CEO Duality</strong></td>
<td>0.037</td>
<td>0.023</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.030)</td>
<td>(0.030)</td>
</tr>
<tr>
<td><strong>Board Size</strong></td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td><strong>Firm Size</strong></td>
<td>-0.005</td>
<td>-0.001</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.011)</td>
</tr>
<tr>
<td><strong>Leverage</strong></td>
<td>0.055</td>
<td>0.050</td>
<td>0.049</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.088)</td>
<td>(0.088)</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>1.697***</td>
<td>1.710***</td>
<td>1.705***</td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
<td>(0.179)</td>
<td>(0.179)</td>
</tr>
<tr>
<td><strong>R&amp;D Expenditure</strong></td>
<td>6.672***</td>
<td>6.686***</td>
<td>6.674***</td>
</tr>
<tr>
<td></td>
<td>(0.471)</td>
<td>(0.472)</td>
<td>(0.472)</td>
</tr>
<tr>
<td><strong>Advertising Expenditure</strong></td>
<td>0.681</td>
<td>0.702</td>
<td>0.699</td>
</tr>
<tr>
<td></td>
<td>(0.453)</td>
<td>(0.452)</td>
<td>(0.453)</td>
</tr>
<tr>
<td><strong>Capital Expenditure</strong></td>
<td>2.090***</td>
<td>2.087***</td>
<td>2.104***</td>
</tr>
<tr>
<td></td>
<td>(0.338)</td>
<td>(0.338)</td>
<td>(0.339)</td>
</tr>
<tr>
<td><strong>ROA</strong></td>
<td>5.491***</td>
<td>5.486***</td>
<td>5.484***</td>
</tr>
<tr>
<td></td>
<td>(0.262)</td>
<td>(0.262)</td>
<td>(0.262)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>0.252*</td>
<td>0.266*</td>
<td>0.122</td>
</tr>
<tr>
<td></td>
<td>(0.152)</td>
<td>(0.155)</td>
<td>(0.146)</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>19,006</td>
<td>19,006</td>
<td>19,006</td>
</tr>
<tr>
<td><strong>Adjusted R-Squared</strong></td>
<td>0.3848</td>
<td>0.3862</td>
<td>0.3859</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.
The first column of table 12 introduces the first interaction variable between board independence and antitakeover provisions (E-Index). In this test, we give special attention to the coefficient of independent directors and the coefficient of the interaction variable. The coefficient of independent directors indicates the effect of board independence on firm value in the absence of all E-Index provisions (E-Index equals to zero). Table 12 shows a negative coefficient for independent directors. This indicates that, in the absence of all antitakeover provisions, increasing the percentage of independent directors reduces firm value. The absence of takeover defences signals a high level of shareholder rights and a high level of external governance from the market for corporate control. An active market for corporate control disciplines poorly performing managers and can act as a substitute for the monitoring role for independent directors. Therefore, in the absence of antitakeover provisions, firms could benefit more from the advisory role of insider directors than the monitoring role of independent directors.

On the other hand, the coefficient of the interaction variable demonstrates the effect of increasing board independence on firm value as the number of E-Index provisions increases. In this case, the coefficient of the interaction variable becomes significantly positive, indicating that as the level of antitakeover provisions increase, the relationship between board independence and firm value becomes increasingly positive. An increase in the level of antitakeover provisions signals weak shareholder rights and reduces the disciplinary effect of the market for corporate control on managers. Therefore, firms with a high number of antitakeover provisions could benefit from the monitoring role of independent directors more than firms with a low number of antitakeover provisions.
The next step is to split the provisions of the E-Index into Category A and Category B provisions to check if independent directors have any behavioral differences towards each of the two categories of provisions. As mentioned previously, Category A provisions are those that help CEOs in receiving a monetary outcome when a takeover takes place. Therefore, these provisions have a higher entrenching effect for CEOs and could demotivate CEOs because of the financial gains that they receive even if they were removed from their position following a takeover.

The second column of Table 12 illustrates the interaction between Category A provisions and board independence. The results are similar to the interaction between the E-Index and board independence. The relationship between board independence and firm value is enhanced (worsened) in the presence (absence) of Category A takeover defences.

On the other hand, the third column of Table 12 shows that the results are not consistent when an interaction variable between Category B provisions and board independence is introduced. In this model, the coefficients of both independent directors and the interaction variable become insignificant. This indicates that the presence or absence of Category B provisions does not significantly affect the relationship between board independence and firm value.

The results from splitting the E-Index into Categories A and B support the previous descriptive results and the assumptions behind the grouping process. Consistent with the research hypothesis, the E-Index provisions moderate the independence-performance relationship. In the presence of takeover defences, firms could benefit from increasing the monitoring process of their entrenched managers. However, when a company is already enjoying a good governance structure and no takeover
defences are adopted, increasing the percentage of independent directors adds unnecessary monitoring that can have an adverse effect on firm performance. Moreover, Category A provisions seem to be the driving factor behind the results of the E-Index and lead to a lower level of shareholder rights and a weaker governance structure than Category B provisions. Therefore, firms could benefit from increasing the percentage of independent directors in the presence of Category A provisions more than they would do in the presence of Category B provisions.
7.3.3 Antitakeover Provisions and CEO Ownership

Table 13: Fixed Effect Regression for the interaction of antitakeover provisions and CEO ownership in affecting firm value

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E Index</td>
<td>-0.065***</td>
<td></td>
<td>-0.069***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td></td>
<td>(0.012)</td>
</tr>
<tr>
<td>Category A</td>
<td>-0.038***</td>
<td>-0.069***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.010)</td>
<td></td>
</tr>
<tr>
<td>Category B</td>
<td>-0.105***</td>
<td>-0.088***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.010)</td>
<td></td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>0.037***</td>
<td>0.038***</td>
<td>0.026***</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>E * Ownership</td>
<td>-0.007***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A * Ownership</td>
<td></td>
<td>-0.009***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>B * Ownership</td>
<td></td>
<td></td>
<td>-0.006***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>Ownership Squared</td>
<td>-0.001***</td>
<td>-0.001***</td>
<td>-0.000***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.038</td>
<td>0.025</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.030)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td>-0.000</td>
<td>-0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.002</td>
<td>-0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.007</td>
<td>-0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.062</td>
<td>0.057</td>
<td>0.051</td>
</tr>
<tr>
<td></td>
<td>(0.089)</td>
<td>(0.089)</td>
<td>(0.088)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>1.702***</td>
<td>1.713***</td>
<td>1.705***</td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
<td>(0.179)</td>
<td>(0.179)</td>
</tr>
<tr>
<td></td>
<td>(0.471)</td>
<td>(0.472)</td>
<td>(0.471)</td>
</tr>
<tr>
<td>Advertising Expenditure</td>
<td>0.634</td>
<td>0.669</td>
<td>0.675</td>
</tr>
<tr>
<td></td>
<td>(0.449)</td>
<td>(0.448)</td>
<td>(0.451)</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>2.098***</td>
<td>2.111***</td>
<td>2.097***</td>
</tr>
<tr>
<td></td>
<td>(0.340)</td>
<td>(0.339)</td>
<td>(0.339)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.059</td>
<td>0.025</td>
<td>0.092</td>
</tr>
<tr>
<td></td>
<td>(0.149)</td>
<td>(0.150)</td>
<td>(0.148)</td>
</tr>
<tr>
<td>N</td>
<td>19,006</td>
<td>19,006</td>
<td>19,006</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.3864</td>
<td>0.3873</td>
<td>0.3865</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.
Table 13 displays the interaction between CEO ownership and the different indexes of antitakeover provisions. The effect of antitakeover provisions is consistently negative for all three regressions using the three different indexes. As it was the case with the previous interaction, the coefficient of CEO ownership in the interaction models demonstrates the effect of CEO ownership on firm performance when the interaction term equals to zero (that is when the number of takeover defences equals to zero). Table 13 indicates that the coefficient of CEO ownership is consistently positive for all three regressions. This shows that, in the absence of antitakeover provisions, firms could motivate CEOs by granting them ownership in their corporation.

Consistent with hypothesis 6-c, the first column of table 13 shows that the interaction coefficient between the E-Index and CEO ownership is negative and significant. This designates that the presence of antitakeover provisions worsens the relationship between CEO ownership and firm value. The results are also consistent for the other categories of provisions. Columns 2 and 3 shows that the interaction of CEO ownership with Categories A and B respectively negatively affects firm value. The results, however, fail to support hypothesis 6-d, indicating no significant difference between the effects of Category A or Category B on the relationship between CEO ownership and firm value.

Several studies in the literature report an inverted “U” shaped or a positive but decreasing relationship between managerial ownership and firm performance (Griffith, 1999; Hermalin and Weisbach, 1991; McConnell and Servaes, 1990; Morck, Schleifer, and Vishney, 1988). However, each study finds a different cut-off point where the effect of CEO or managerial ownership starts on firm value to decrease. This suggests that certain variables moderate the ownership-performance
relationship and their presence (or absence) affects this relationship as well as the cut-off points for which additional ownership becomes detrimental to firm performance. The results provided in this research suggest that the presence (absence) of antitakeover provisions as proxies of managerial entrenchment (shareholder rights) moderate the relationship between CEO ownership and firm performance. The presence of both takeover defences and high ownership levels together lead to an excessive level of CEO power. In such cases, CEOs abuse the power given to them leading to a high level of managerial entrenchment and to a worse effect on firm value. On the other hand, CEO ownership has a significantly positive effect when shareholder rights are high and CEOs are not protected from the market for corporate control by takeover defences.

7.3.4 Additional Robustness Analysis

While the dominant approach in the literature supports the idea that causality runs from the E-index and other governance mechanisms to firm value, there is a still a need to address matters of endogeneity and reverse causality. Chi (2005) states that there are two cases for which antitakeover provisions can be endogenous when studying their effect on firm performance.

The first case of endogeneity could happen if managers adopt takeover defences after experiencing periods of poor performance. In such firms, shareholders will be looking to discipline managers for their poor performance, and managers react by adopting antitakeover provisions that can limit shareholder rights. This will also protect managers from a possible takeover attempt since their firm is underperforming and could become undervalued. In this case, the relationship runs from firm performance to takeover defences and not the other way around.
Table 14: Correlations between the Current Difference in E-Index Provisions and Other Past and Future Differences in Firm Performance.

<table>
<thead>
<tr>
<th>Current Change in E</th>
<th>Previous Change in Tobin's Q</th>
<th>Future Change in Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change in Q last 3 years</td>
<td>Change in Q last 2 years</td>
</tr>
<tr>
<td></td>
<td>Change in Q Next Year</td>
<td>Change in Q Next 2 Years</td>
</tr>
<tr>
<td>-0.0173</td>
<td>-0.0293</td>
<td>-0.0001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.

In order to address the causality issue, table 14 displays the correlations between a firm’s current change in takeover defences and the previous and future changes in firm performance. If the current change in takeover defences is significantly correlated with previous changes in firm performance, then causality runs from performance to antitakeover provisions. On the other hand, if the current change in takeover defences is significantly correlated with future changes in firm performance, then causality runs from antitakeover provisions to firm performance.

Results in table 14 show that current changes in the number of E-index provisions is significantly correlated with changes in future firm performance only.
**Table 15:** Fixed Effect Regression for the effect of antitakeover provisions on the independence-performance using lag variables for all independent variables

<table>
<thead>
<tr>
<th></th>
<th>(1) model1</th>
<th>(2) model2</th>
<th>(3) model3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E Index</strong></td>
<td>-0.103***</td>
<td>-0.090***</td>
<td>-0.038**</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.028)</td>
<td>(0.015)</td>
</tr>
<tr>
<td><strong>Category A</strong></td>
<td></td>
<td>-0.108***</td>
<td>-0.137***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.021)</td>
<td>(0.032)</td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td>-0.002**</td>
<td>-0.003**</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td><strong>% Independent Directors</strong></td>
<td>0.000*</td>
<td>0.001***</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>E * Independence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A * Independence</strong></td>
<td>0.015***</td>
<td>0.014**</td>
<td>0.014**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td><strong>B * Independence</strong></td>
<td>0.013</td>
<td>0.014</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.011)</td>
</tr>
<tr>
<td><strong>CEO Ownership</strong></td>
<td>-0.000</td>
<td>-0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>Ownership Squared</strong></td>
<td>0.025</td>
<td>-0.002</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.028)</td>
<td>(0.028)</td>
</tr>
<tr>
<td><strong>CEO Duality</strong></td>
<td>0.144</td>
<td>0.131</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td>(0.125)</td>
<td>(0.124)</td>
<td>(0.125)</td>
</tr>
<tr>
<td><strong>Board Size</strong></td>
<td>0.015***</td>
<td>0.014**</td>
<td>0.014**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td><strong>Firm Size</strong></td>
<td>-0.019</td>
<td>-0.014</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.018)</td>
<td>(0.018)</td>
</tr>
<tr>
<td><strong>Leverage</strong></td>
<td>0.144</td>
<td>0.131</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td>(0.125)</td>
<td>(0.124)</td>
<td>(0.125)</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>1.490***</td>
<td>1.518***</td>
<td>1.518***</td>
</tr>
<tr>
<td></td>
<td>(0.322)</td>
<td>(0.321)</td>
<td>(0.322)</td>
</tr>
<tr>
<td><strong>R&amp;D Expenditure</strong></td>
<td>8.133***</td>
<td>8.122***</td>
<td>8.111***</td>
</tr>
<tr>
<td></td>
<td>(1.620)</td>
<td>(1.623)</td>
<td>(1.627)</td>
</tr>
<tr>
<td><strong>Advertising Expenditure</strong></td>
<td>1.107</td>
<td>1.134</td>
<td>1.137</td>
</tr>
<tr>
<td></td>
<td>(0.775)</td>
<td>(0.770)</td>
<td>(0.775)</td>
</tr>
<tr>
<td><strong>Capital Expenditure</strong></td>
<td>0.998*</td>
<td>1.006*</td>
<td>1.009*</td>
</tr>
<tr>
<td></td>
<td>(0.522)</td>
<td>(0.525)</td>
<td>(0.522)</td>
</tr>
<tr>
<td><strong>ROA</strong></td>
<td>4.963***</td>
<td>4.955***</td>
<td>4.954***</td>
</tr>
<tr>
<td></td>
<td>(0.458)</td>
<td>(0.460)</td>
<td>(0.461)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>0.481***</td>
<td>0.438***</td>
<td>0.369**</td>
</tr>
<tr>
<td></td>
<td>(0.161)</td>
<td>(0.159)</td>
<td>(0.155)</td>
</tr>
<tr>
<td><strong>Number of observations</strong></td>
<td>16728</td>
<td>16728</td>
<td>16728</td>
</tr>
<tr>
<td><strong>Adjusted R-squared</strong></td>
<td>0.2373</td>
<td>0.2389</td>
<td>0.2386</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.

In addition to the correlations, tables 15 and 16 provide additional fixed effect regressions similar to tables 12 and 13 but using the lagged values for all
independent variables. This is done in order to rule out the possibility of the dependent variable having an effect on the explanatory variables since the current year’s firm performance could not have affected last year’s governance mechanisms. Thus, in order for the previous results presented in this study to be valid, tables 15 and 16 should provide qualitatively similar results.

Table 15 shows that hypotheses 2-a, 2-b and 2-c are still supported while using the lag values for all independent variables. Results suggest that, in the presence (absence) of E-index takeover defences, increasing the percentage of independent of independent directors has a positive (negative) effect on a firm’s performance in the coming year. Results are also consistent for provisions of categories A and B. Category A provisions are the driving factor behind the effect of E-Index provisions and the independence-performance relationship. On the other hand, the presence or absence of Category B provisions does not have a significant effect on the relationship between board independence and firm performance.
Table 16: Fixed Effect Regression for the effect of antitakeover provisions on the ownership-performance relationship using lag variables for all independent variables

<table>
<thead>
<tr>
<th></th>
<th>(1) model1</th>
<th>(2) model2</th>
<th>(3) model3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Index</td>
<td>-0.061***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category A</td>
<td>-0.023</td>
<td>-0.038**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.015)</td>
<td></td>
</tr>
<tr>
<td>Category B</td>
<td>-0.109***</td>
<td>-0.100***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.019)</td>
<td></td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>0.026*</td>
<td>0.028*</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.015)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>E * Ownership</td>
<td>-0.006**</td>
<td></td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td></td>
<td>(0.004)</td>
</tr>
<tr>
<td>A * Ownership</td>
<td></td>
<td>-0.008*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td>B * Ownership</td>
<td></td>
<td></td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.004)</td>
</tr>
<tr>
<td>Ownership Squared</td>
<td>-0.000</td>
<td>-0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.026</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.028)</td>
<td>(0.027)</td>
</tr>
<tr>
<td>% Independent Directors</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Board Size</td>
<td>0.015***</td>
<td>0.014**</td>
<td>0.014**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.019</td>
<td>-0.014</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.018)</td>
<td>(0.018)</td>
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<tr>
<td>Leverage</td>
<td>0.146</td>
<td>0.135</td>
<td>0.133</td>
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<tr>
<td></td>
<td>(0.126)</td>
<td>(0.126)</td>
<td>(0.125)</td>
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<tr>
<td>Liquidity</td>
<td>1.494***</td>
<td>1.521***</td>
<td>1.518***</td>
</tr>
<tr>
<td></td>
<td>(0.324)</td>
<td>(0.322)</td>
<td>(0.324)</td>
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<tr>
<td>R&amp;D Expenditure</td>
<td>8.150***</td>
<td>8.130***</td>
<td>8.121***</td>
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<tr>
<td></td>
<td>(1.622)</td>
<td>(1.627)</td>
<td>(1.629)</td>
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<tr>
<td>Advertising Expenditure</td>
<td>1.104</td>
<td>1.129</td>
<td>1.137</td>
</tr>
<tr>
<td></td>
<td>(0.766)</td>
<td>(0.765)</td>
<td>(0.772)</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>0.992*</td>
<td>1.008*</td>
<td>1.002*</td>
</tr>
<tr>
<td></td>
<td>(0.519)</td>
<td>(0.518)</td>
<td>(0.523)</td>
</tr>
<tr>
<td>ROA</td>
<td>4.963***</td>
<td>4.955***</td>
<td>4.954***</td>
</tr>
<tr>
<td></td>
<td>(0.461)</td>
<td>(0.463)</td>
<td>(0.462)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.376**</td>
<td>0.318*</td>
<td>0.343**</td>
</tr>
<tr>
<td></td>
<td>(0.163)</td>
<td>(0.166)</td>
<td>(0.156)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>16728</td>
<td>16728</td>
<td>16728</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.2382</td>
<td>0.2395</td>
<td>0.2389</td>
</tr>
</tbody>
</table>

The asterisks ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.
Table 16 also provides results supporting hypotheses 4-a, 4-b, 4-c. Results indicate that all three indices of provisions have a negative effect on future firm performance. In addition, in the presence of Category A provisions, increasing CEO ownership has a negative impact on future firm performance due to the high entrenching effect of Category A provisions. Moreover, the last column of table 16 shows that the presence of Category B provisions does not have a significant negative impact on the relationship between CEO ownership and firm performance. Thus, the results of table 16 also support hypothesis 6-d which was not supported in the previous tests.

The results of tables 15 and 16 provide additional support for the results of table 14, further indicating that the causation runs from takeover defences and the other explanatory variables to firm performance. Therefore, it is safe to assume that the causality runs from takeover defences to firm performance and not the other way around.

The second case where takeover defences can be endogenous when studying their effect on firm performance is the case of unobservable firm heterogeneity. There is a possibility that the relationship between the explanatory variables and the dependent variable in this study is driven by another omitted variable that the study fails to control for (Chi, 2005). In order to address this issue, Chi (2005) states that “When some firm heterogeneity is unobservable, a fixed effects specification helps capture the effect of the unobservable variable and therefore alleviates the endogeneity problem caused by the omitted variable.” (Chi, 2005, p.p. 66). Therefore this study uses fixed effect specifications, as well as a list of control variables, in order to account for any unobserved firm heterogeneity. All of the tests are made with a fixed effect specification and provide consistent results, indicating that endogeneity due to omitted variables is not a concern in this study.
7.4 Conclusion

The findings in this research confirm that the level of antitakeover provisions moderates the relationship between other governance mechanisms and firm performance. The presence of antitakeover provisions increases the entrenchment effect of CEO ownership on firm value, leading to higher levels of entrenchment and demotivation for CEOs. These results are consistent for all indexes of provisions used in our study (Category A, Category B and the E-Index), confirming that the presence of all types of antitakeover provisions worsens the relationship between CEO ownership and firm value. Additional robustness tests reveal that the results are consistent when using the lag values for all of the explanatory variables except for the interaction between Category B provisions and CEO ownership. This coefficient becomes insignificant which also confirms that Category A provisions have a higher entrenching effect for managers than Category B provisions.

On the other hand, the interaction variables between antitakeover provisions and board independence provide interesting results. The presence of provisions from the Category A index trigger an alarm for independent directors that CEOs have room to extract some private benefits. In such a case, more monitoring should be implemented and therefore more independent directors should be present at the company. Consistently, results demonstrate that, in the presence of Category A provisions, as the percentage of independent directors increases, firm value increases as well. Moreover, in the absence of all Category A provisions, results suggest that independent directors negatively affect firm value. In such firms with high shareholder rights, management teams could benefit more from the expertise provided by insider directors than the monitoring function of independent directors. On the other hand, the presence or absence of Category B provisions does not affect
the relationship between the percentage of independent directors and firm value. These significant findings help in explaining the mixed evidence regarding the relationship between independent directors. We conclude that the role of independent directors in agency theory, as better monitors of managerial behavior, is valid for powerful CEOs who have the potential for opportunistic behavior.
Chapter 8

Conclusion
8.1 Introduction

This chapter summarizes the whole work done in the thesis. It highlights the importance of contribution of this thesis for future researchers by identifying gaps found in previous work and literature. By providing a new perception of antitakeover provisions as they relate to CEO monetary benefits, this research provides room to re-investigate all of the previous work done on antitakeover provisions using the new grouping method. In addition, the second model offers an explanation for the largely inconsistent results of corporate governance mechanisms on firm performance. The interaction between external governance mechanisms and internal governance mechanisms helps identify the cases in which these mechanisms have a positive effect on firm performance and other cases where the relationship is negative.

This chapter also includes a summary of the theoretical framework designed to develop this research. This framework also contributes to previous literature that relies solely on a single theory to explain the various aspects of corporate governance. By integrating the work of both agency and stewardship theories, this research provides a multi-theoretical framework that covers a wider aspect than each theory on its own. The theoretical framework is followed by a summary of the research findings for both models. The empirical tests for both models are based on the aforementioned framework and the results provide further support for adopting a multi-theoretical approach.

Finally, the conclusion also includes sections for the implications and limitations of this research. The implications section stresses on the importance of this research in the real world. This includes how managers or independent directors should perceive antitakeover provisions based on the new grouping method. Following the
implication section, a limitations section is included. Limitations do not undermine the importance of this research, however, they stress the need for more work to be done in the area of corporate governance.

8.2 Theoretical Framework

Researchers use different theories to explain different aspects of corporate governance. These theories include: Agency theory (Jensen and Meckling, 1976), stewardship theory (Donaldson, 1990), stakeholder theory (Freeman, 1984) and resource dependence theory (Pfeffer and Salancik, 1978). However, researchers have not been able to find consistent relationships for corporate governance mechanisms using these theories.

Due to the lack of consistent empirical results, this research proposes a multi-theoretical framework where the agency and stewardship theories act as substitutes based on the level of external governance and shareholder rights. For example, if a firm is already enjoying a high level of governance, increasing board independence adds unnecessary monitoring to the board of directors. In other words, the asymmetry cost associated with independent directors exceeds the benefit from having more independent directors to monitor managers. Moreover, CEOs serving as chairmen of the board will provide such firms with a sense of unity that improves the decision making process. On the other hand, for firms with low levels of governance, managers have lots of room for opportunistic behavior. Therefore the benefit from having more independent directors monitoring managers exceeds the asymmetry cost associated with them. In addition, CEOs serving as chairmen of the board in such firms provides managers with excessive power due to the absence of monitoring and
disciplinary mechanisms. This leads to further CEO entrenchment and a detrimental effect on firm performance.

8.3 Results and Findings

Empirical evidence from the first model provides surprising results regarding the determinants of the E-Index. Contrary to agency theory suggestions, independent directors seem to favour the adoption of the E-index provisions while CEOs acting as chairmen of the board are against the adoption of such provisions. However, upon splitting the provisions into Category A and Category B, and studying the determinants of individual provisions, the results become more consistent with expectations. CEOs acting as chairmen of the board support the adoption of all Category A provisions and oppose the adoption of all Category B provisions. This indicates that the results for the determinants of the E-Index could be misinterpreted and, therefore, highlights the importance of splitting takeover defences based on CEO’s monetary benefits. Further tests also show a trade-off between the adoption of Category A and Category B provisions. In other words, the number of Category A provisions adopted increases as the number of Category B provisions adopted decreases. This explains the CEO’s behaviour of opposing Category B provisions in order to adopt provisions that provide them with personal benefits (Category A).

Moreover, in the presence of CEO duality, the relationship between Category A provisions and firm value worsens significantly. On the other hand, the relationship between Category B provisions and firm value is unaffected by the presence of CEO duality. This indicates that CEOs acting as chairmen of the board feel demotivated in the presence of Category A provisions, which leads to a further deterioration in firm value. Other findings show that independent directors generally oppose the adoption
of Category A provisions and favour the adoption of Category B provisions. This indicates that Category B provisions could be more beneficial to shareholders than Category A provisions and, therefore, are supported by independent directors.

Findings also indicate that the relationship between CEO duality and firm performance depends on the levels of governance and shareholder rights. In companies with high (low) levels of governance and shareholder rights, CEO duality has a positive (negative) effect on firm performance. This finding is in contrast with arguments that strictly support or oppose the presence of CEO duality. In other words, providing the manager with higher levels of control and authority as a means to boost his/her motivation and efficiency enhances firm performances in firms with high shareholder rights. Otherwise, when shareholder rights are low, a duality role seems to induce managers to consume more private benefits and, thus, reduces firm value.

The results for the determinants of takeover defences provide partial support for both agency and stewardship theories. Thus, this study proposes that one theory on its own cannot explain the complex aspects of corporate governance. Studying the determinants of antitakeover provisions without accounting for their monetary implications for CEOs may be misleading. In other words, there is a need to account for the relation between antitakeover provisions and CEO’s/monetary benefits when investigating the determinants of these provisions. This indicates that studies addressing the impact of antitakeover provisions on corporate governance could come to different conclusions depending on the type of provision under study.

Building on the results from the first model, the results of the second model of this research suggest that the monitoring role of independent directors and the
disciplinary role of the market for corporate control act as substitutes. When the market for corporate control is weak due to the presence of takeover defences, increasing board independence has a positive effect on firm value. On the other hand, in the absence of takeover defences, increasing the percentage of independent directors has an adverse effect on firm value. In such a case, firms are already benefitting from the disciplinary function of the market for corporate control, and thus do not need additional monitoring by independent directors.

Further tests reveal that the results for interacting Category A provisions with board independence are consistent with the results of the E-Index. On the other hand, the interaction between Category B provisions and board independence has no significant impact on firm value. These results provide additional support for the grouping method of antitakeover provisions based on CEO and independent directors’ preferences. Independent directors perceive that Category A provisions lead to a higher level of entrenchment and a weaker governance structure than Category B provisions. Therefore, increasing board independence is beneficial in the presence of Category A provisions, and does not have any impact in the presence of Category B provisions.

Other findings indicate that the presence of antitakeover provisions increases the negative entrenchment effect of high levels of CEO ownership on firm performance. The results are consistent for all three indices of provisions (Category A, Category B and E-Index). This indicates that, in the presence of takeover defenses, the entrenchment hypothesis of CEO ownership prevails over the interest alignment hypothesis.
8.4 Implications and Suggestions

The results of this research have particular importance for firms, managers and directors. Previous researchers provide two different hypotheses for adopting antitakeover provisions. Supporters of the entrenchment hypothesis claim that managers adopt takeover mechanisms in order to protect their positions in the company regardless of the effect on firm value. On the other hand, supporters of the bargaining power hypothesis suggest that managers adopt takeover defences in order to bargain for a higher bid premium when facing a takeover. Therefore, the bargaining power hypothesis assumes that takeover defences are in the shareholders’ best interest.

The new grouping method developed in this research could help differentiate between the provisions that provide support for the entrenchment hypothesis and the provisions that provide support for the bargaining power hypothesis. Since Category A provisions provide managers with a monetary benefit and are supported by CEOs with a role duality, Category A provisions provide more support for the entrenchment hypothesis. On the other hand, Category B provisions do not provide managers with any private benefits and are opposed by CEOs with a role duality. Additional evidence for this suggestion is provided in this research showing that Category A provisions worsen the relationship between governance mechanisms and firm performance more than Category B provisions. Therefore, firms could be better off adopting Category B provisions in order to provide themselves with a higher bargaining power.

The results of the second model also have important consequences for the decision making process of firms. Instead of having reforms that support increasing the
percentage of independent directors or removing CEO duality, managers should look on the overall governance of their firm before taking such decisions. As mentioned previously, firms with a high level of governance benefit from having CEO duality and increasing the number of insider directors while firms with low levels of governance benefit from removing CEO duality and increasing the number of independent directors. Accordingly, this research assumes that corporate governance is not a one-hat-fits-all. Firms should study their overall governance before taking decisions on which corporate governance mechanisms to adopt.

8.5 Limitations and Future Research

Although this research attempts to provide comprehensive work regarding the determinants and effects of antitakeover provisions, more work can still be done on this topic. The new grouping process of antitakeover provisions suggested in this study opens a wide variety of topics for future researches. The six provisions of the E-index are found to be the most significant antitakeover provisions. However, there are several other provisions adopted by firms in the market. Future studies could address the determinants of other antitakeover provisions according to this study’s grouping process to provide further support for the grouping process.

While this research stresses on the importance of the US market in the evolution of antitakeover provisions, it does not address the determinants and/or effects of antitakeover provisions in other markets. It is interesting for future researchers to test if takeover defenses are treated the same way in other important or emerging markets.

Researchers could also address how the two categories of provisions interact with other governance in affecting firm performance. Furthermore, due to the mixed
evidence in the literature on takeover defences, studies can empirically test whether one category of provisions serves the interest alignment hypotheses while the other category serves the entrenchment hypothesis. For example, studies can investigate the effect of both categories of provisions on long term investments. This would test whether managers adopt takeover defences to freely engage in research and development activities or to entrench themselves in their position. In addition, since the grouping process is based on CEO preferences and monetary benefits, studies may investigate the effect of both categories of provisions on CEO compensation plans.

8.6 Conclusion

This research attempts to provide a comprehensive study of antitakeover provisions in a new and dynamic manner. The importance of this research is highlighted in its ability to provide a new grouping method for categorizing antitakeover provisions. This method in its turn is used to explain the mixed evidence found in previous literature for the relationship between different governance mechanisms and firm performance. This is done by creating interaction variables between the different categories of provisions and governance mechanisms. Such interaction variables offer a deeper understanding of the governance mechanisms-firm performance relationship in the presence/absence of takeover defenses.

This chapter also delivers important suggestions for firms, managers and directors. Instead of having a one-hat-fits-all mentality in setting a firm’s governance structure, this study supports the ideology of setting the governance structure on a case by case basis. Empirical evidence provide support for this argument by indicating that CEO duality could be beneficial (detrimental) to firms with a high (low) level of
governance. Moreover, other results show that increasing the percentage of independent directors leads to a positive (negative) effect on firm performance in firm’s with low (high) levels of shareholder rights. This is explained by the notion that managers of firms with low shareholder rights have more room to extract private benefits. Therefore, more strict monitoring by independent directors can discipline the opportunistic managerial behaviour. On the other hand, any extra monitoring for firms that are already enjoying a high level of governance and shareholder rights is considered as extra monitoring that only provides more cost for its firm. Instead, such firms would benefit more from the expertise of insider directors since managers do not have room to extract private benefits.
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## Appendix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Advertising Expenditure</td>
<td>The annual dollar amount spent by the company on advertising.</td>
</tr>
<tr>
<td>Board Size</td>
<td>The total number of directors serving on a company’s board</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>The annual dollar amount spent by a company to acquire or upgrade its tangible assets</td>
</tr>
<tr>
<td>Category A Provisions</td>
<td>Categorical variable ranging from 0 to 3. It includes the provisions that provide, or help in providing, a monetary compensation to a CEO in case a takeover occurs.</td>
</tr>
<tr>
<td>Category B Provisions</td>
<td>Categorical variable ranging from 0 to 3. It includes the provisions that simply make a takeover process harder without providing manager with any monetary compensation in the case of a takeover.</td>
</tr>
<tr>
<td>CEO Age</td>
<td>The age of a firm’s CEO</td>
</tr>
<tr>
<td>CEO Ownership</td>
<td>The percentage of stocks owned by a CEO excluding stock options</td>
</tr>
<tr>
<td>Duality t-1</td>
<td>A dummy variable equal to 0 if two independent people serve as the CEO and COB and 1 otherwise</td>
</tr>
<tr>
<td>E-Index</td>
<td>Categorical variable ranging from 0 to 6. The presence of each of the six antitakeover provisions adds a value of 1 to the E-Index</td>
</tr>
<tr>
<td>Firm Size</td>
<td>The value of a firm’s Total Assets</td>
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<td>Independent Directors</td>
<td>The percentage of independent directors serving on a company’s board. This study uses the definition of independent directors as provided by the RiskMetrics. Consistent with the NASDAQ listing rule 5605 (2), independent directors are those who are independent of top management, are not ex-employees, and do not have any business relationship with the company.</td>
</tr>
<tr>
<td>Leverage</td>
<td>The ratio of a firm’s Debt to Total Assets.</td>
</tr>
<tr>
<td>Liquidity</td>
<td>The ratio of a firm’s cash to Total Assets.</td>
</tr>
<tr>
<td>R&amp;D Exp.</td>
<td>The annual dollar amount spent by a company on research in order to create future opportunities for investments or invention of new products.</td>
</tr>
<tr>
<td>ROA t-1</td>
<td>Return on Assets at time t-1.</td>
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## Provisions Definitions

<table>
<thead>
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<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Golden Parachutes</strong></td>
<td>Golden parachutes are compensations paid to senior managers in case they resign, or they are fired from their position, after a successful takeover. They suggest that golden parachutes take away the right of shareholders to replace the management team without experiencing heavy costs.</td>
</tr>
<tr>
<td><strong>Poison Pills</strong></td>
<td>Poison pills give stockholders of the acquired firm, different from the bidder, the right to buy stocks in one of the two merged companies at a great discount price.</td>
</tr>
<tr>
<td><strong>Staggered Boards</strong></td>
<td>A staggered board is a board in which its members are split into different and overlapping classes for re-election (usually 3 classes). This separation makes it impossible for the bidder to replace a majority of the board members in one single year, even if the bidder has support from the majority of shareholders. Therefore, in order for a bidding firm to gain full control of the board, they have to wait for several years (at least 2 election periods).</td>
</tr>
<tr>
<td><strong>Supermajority Requirement to Approve a Merger</strong></td>
<td>A supermajority requirement for mergers is a provision that necessitates a percentage of voting that is higher than that of the state law in order to approve a merger (common used percentages are 66.7, 75, or 85 percent).</td>
</tr>
<tr>
<td><strong>Limitations on Bylaw and Charter Amendments</strong></td>
<td>These provisions limit the ability of shareholders to make changes in the documents that govern the corporation. The limitations can range from requiring a supermajority of shareholders to vote in order to approve bylaws and charter amendments to eliminating the shareholders’ capacity to make changes in the bylaws and charter or even give the directors the right to make amendments to the charter and bylaws without having the shareholders’ consent.</td>
</tr>
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</table>