# **Lebanese American University**

# Excessive Managerial Entrenchment, Corporate Governance, and Firm Performance

By

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# Excessive Managerial Entrenchment, Corporate Governance, and Firm Performance

#### Christelle Antounian

### **Abstract**

This paper investigates the impact of excessive managerial entrenchment on the CEO turnover-performance sensitivity, CEO compensation, and firm value. We measure the degree of managerial entrenchment based on the E-index presented by Bebchuck et al. (2006). Our main focus is on firms' excess managerial entrenchment, which is calculated by finding the difference between firm's E-index and its industry median in a given year. Our findings suggest that an increase in excess CEO entrenchment reduces the likelihood of CEO turnover due to poor performance. We also show a positive correlation between excessive entrenchment and CEO compensation as managers gain more power and authority when they are entrenched. On the other hand, excess CEO entrenchment has an inverse correlation with firm value. We propose that excessive managerial entrenchment has a converse impact on board monitoring and firm performance. Also, we suggest that a sound corporate protects the shareholders' interests as it prevents CEOs from over entrenchment.

Keywords: Managerial Entrenchment, CEO Turnover, Compensation, Firm Value, Corporate Governance.

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# **Chapter One**

## Introduction

Would firms face a high or low CEO turnover if they're prone to higher managerial entrenchment levels? Do entrenched managers generate higher compensation levels? How does excess in managerial entrenchment impact CEO pay? This research paper attempts to answer these questions by investigating the effect of excess entrenchment on the CEO turnover- performance sensitivity, executive compensation, and firm value.

An extensive research describes the notion of managerial entrenchment, explores the relationship between managerial entrenchment and corporate governance, and presents theoretical models to explain the effect that entrenched managers have on firms' value. Gompers, Ishii, and Metrick (2003) and Bebchuk, Cohen, & Ferrell (2009) construct the G-Index and E-Index, respectively. They analyze the governance provisions that stimulate managers to protect themselves from the prospect of replacement and, consequently, investigate how these provisions affect firm value.

Managers are said to be entrenched when they impose their power and control over the firms' shareholders. Berger et al. (1997) define entrenchment as failure of management to experience discipline from the assigned corporate governance codes, thus stimulating entrenched managers to pursue their own interests instead of the interests of the firm. In our research, we focus on the provisions presented in the E-index in order to evaluate the impact of managerial entrenchment on corporate governance and firm value. For instance, staggered board, one of the anti-takeover provisions of the E-index, is associated with a

reduction in the effectiveness of the boards as it entrenches management (Faleye, 2007). The golden parachute is another example of anti-takeover provisions adopted to protect managers from the prospect of replacement.

In general, the board tends to replace a CEO when the latter shows a poor performance during a given period. However, an increase in CEO power and authority might decrease this sensitivity. In previous studies, CEO turnover is classified due to internal and external factors, where internal turnover is driven by the board's decision and external turnover is due to takeover or bankruptcy. Jensen et al. (2004) find a significant relationship between internal turnover and firm performance. This paper adds to the existing body of literature by investigating the relationship between excessive managerial entrenchment and CEO turnover-performance sensitivity. Our findings show that as a CEO's entrenchment increases, the likelihood of CEO turnover due to poor performance decreases, where we measure firm performance by employing both Fama-French Abnormal Return and Buy and Hold Daily Return performance measures. The results are in line with previous literature as an increase in entrenchment is associated with a decline in CEO turnover (Hermalin and Weisbach (1998), Dikolli, Mayew, and Nanda (2014)). Thus, a good corporate governance code is crucial in order to mitigate the negative impact of managerial entrenchment on the firm.

The structure of managerial remuneration varies across firms; however, the basic components mainly include a basic salary, an annual bonus, stock and option grants, and long-term incentive payouts (Murphy, 1999). The author suggests that the pay for performance sensitivity is lower in large companies and this sensitivity is mainly driven by stock options compensation. According to Hermalin and Weisbach (2001), inflating

compensation and decreasing the board's independence are techniques adopted by a powerful CEO in order to enhance his well-being. Consequently, we expect highly entrenched managers to extract higher compensation levels as compared to low entrenched managers. Brick et al. (2006) show that the excess in CEO compensation is directly related to the excess in director compensation as a result of mutual backscratching. Dah and Frye (2017) also demonstrate the presence of an entrenched board environment. In this paper, we investigate the relation between CEO compensation and excess entrenchment. Our results show a positive association between excess entrenchment and CEO pay, thus being in conformity with previous literature. In other words, CEO remuneration increases as excessive entrenchment boosts the executive's power and authority over the company. Essen et al. (2002) argue that managerial power has a significant impact on CEO pay, specifically on core compensation components such as basic salary.

Lastly, we explore the effect of excess entrenchment on the value of the firm. It is worth noting that there is a bundle of factors affecting firm valuation. Prior body of literature documents that a strong corporate governance leads to higher firm valuation (e.g., Yermack, 1996, Gompers et al., 2003, Cremers and Nair, 2005, Core et al., 2006, or Bebchuck et al., 2009). In other words, firms with weak corporate governance have greater agency problems, and firms having greater agency problems underperform. Excess managerial compensation is also a main factor which worsens firm valuation (Brick et al., 2006). Faleye et al. (2006) shows the negative impact that a staggered board provision has on the firm's performance. Not surprisingly, our results indicate an inverse correlation between excessive entrenchment and firm value. In addition, we conclude that as board

size increases, the firm experiences underperformance. This is in line with Guest's (2009) findings where he shows a strong negative impact on firm's profitability.

This research is organized as follows: Section II presents the literature review. Section III presents the data and summary statistics. Section IV discusses the results and regression analysis. Section V concludes.

# **Chapter Two**

### **Literature Review**

### 2.1 Managerial Entrenchment

There is quite an established body of literature covering managerial entrenchment and analyzing the causal effect relationship affecting the company. For instance, Shleifer and Vishny (1989) define entrenched managers as "making themselves valuable to shareholders and costly to replace", whereby they indirectly impose their power on shareholders. Some studies suggest that managerial entrenchment may be associated with excess director compensation, while others measure entrenchment by evaluating the segregation of duties between CEO and chairman. Particularly, managerial entrenchment increases when the firm's CEO is also the Chairman of the board of directors (Brick, Palmon, and Wald, 2005).

The governance index (G index), developed by Gompers et al. (2003), comprises 24 antitakover provisions to study the impact of corporate governance on the firm's value. The provisions are grouped into five categories (Delay, Voting, Protection, State laws, Other), whereby each provision is coded as 0 or 1. A value of zero indicates a strong shareholder rights, while a value of one shows a solid antitakeover protection. On the other hand, Bebchuk, Cohen, and Ferrell (2009) further investigate the 24 provisions presented in the G-index demonstrate that six provisions in corporate governance, also known as the entrenching provisions, have an adverse effect on firm valuation. Accordingly, the construct of the E-index is based on these provisions. Of the six provisions put forth by

the entrenchment index (E index), four create limitations on the voting power of the shareholders and deprive them from fully imposing their will on management. They constitute staggered boards, limits to shareholder amendments of the bylaws, supermajority requirements for mergers, and supermajority requirements for charter amendments. The other two provisions, poison pills and golden parachute arrangements, are mainly adopted as a defense mechanism against hostile takeover.

The construction of the E index is built on the scores that companies mark, ranging from zero to six, based on the number of the six provisions that the company has adopted in a given time. According to Bebchuk, Cohen, and Ferrell (2009), an increase in the E index is significantly correlated with lower Tobin's Q values. Yet, no evidence has been found that the remaining eighteen provisions are also negatively correlated with Tobin's Q. When the company utilizes staggered board structure, directors are divided into distinct classes, usually three, and the annual elections are held for one class per year (Bates, Becher, and Lemmon, 2008). This way, shareholders are unable to replace the majority of the directors in a given year even if they unanimously agree on it. However, critics of the staggered board classification argue that the announcement of the adoption of the provision leads to negative stock returns (Faleye, 2007) and that firm's announcement of eliminating board classification is positively correlated with stock returns (Guo, Kruse, and Nohel, 2008). Another study shows the entrenchment of incumbent managers when adopting a staggered board provision and the stimulation of principal-agent problem (Faleye, 2007). In addition to the voting power for director removal, shareholders have the right to vote on charter amendments, merging arrangements, and bylaw amendments. The supermajority requirements necessitate the approval of more than a majority of shareholders on these provisions, aiming to act as a defense mechanism against a takeover. Poison pills, on the other hand, are rights that prevent a hostile bidder from buying the company's shares provided that the incumbents deny redeeming the pill (Bebchuk, Cohen, and Ferrell, 2009). Boards can utilize poison pills without shareholders' approval and may adopt it before or even after the emergence of a bid. Consequently, companies having no poison pill in place are still viewed as adopting a "shadow pill" strategy as it can be rolled out in case of a hostile bid (Coates, 2000). It should be noted that some studies show that the adoption of the poison pill strategy can have a positive relation with the stock market reaction only when the fraction of outside board members is high (Comment and Schwert, 1995). Finally, golden parachutes, another anti-takeover measure, are executive agreements that provide financial benefits to the top management in the event of replacement or demotion due to a change in control. Golden parachutes strive to decrease the likelihood of a hostile takeover by increasing the potential cost of the incumbents' compensation, thus the adoption of the provision protects them from the prospect of replacement. As a matter of fact, among the six provisions mentioned above, both golden parachutes and poison pills are the most commonly used tactics while the supermajority provisions are less pervasive (Bates, Becher, and Lemmon, 2008).

Not surprisingly, the agency problem rises with the firm's adoption of the entrenching provisions. The practice of such provisions empowers management to impose their will on the shareholders by limiting the latter's voting power and influence on the firm. Jensen and Murphy (1999a) believe that no solution can truly eliminate the principal-agent problem, however a good corporate governance structure plays a central role in mitigating the existing conflict of interest.

### 2.2 Managerial Compensation

The structure of the CEO pay packages varies across corporations in terms of company size, industry type, organizational culture, and other criteria. However, the basic components of CEO compensation mainly include a basic salary, an annual bonus based on past year's performance, stock and option grants, and long-term incentives (Murphy,1999). It is worth noting that the pay packages are also dependent on the CEO's personal traits and preferences, whereas some executives prefer a more assured and stable income, thus opt for a package that leans more on fixed salary, others who are less risk averse put more weight on stock options and other variable income.

The executive's basic salary is generally determined through a comparative Benchmark, where the data would be collected through conducting general industry surveys, followed by a detailed analysis of selected peer groups. For better accuracy, the surveys collected for the Benchmark analysis must be adjusted depending on the company size using several methods such as size grouping technique or log-linear regression (Murphy,1999). Noting that the company size was traditionally determined by the company's revenue, yet recent studies show more focus on market capitalization as a measuring tool. According to Jensen, Murphy, and Wruck (2004), risk averse executives tend to direct their negotiation towards basic salary since the latter is characterized as the "fixed component" of the executive pay. The formers also argue that cash compensation and general market movement are weakly correlated, but they find a strong correlation between CEO total compensation and stock market.

Moving on to the second component, the CEO's annual bonus has been a topic of considerable controversy in the field of accounting and finance. Some consider the annual

bonus as a tool to motivate the executives in reaching pre-specified goals and targets, while others argue that it could destroy the organizational value rather than enhancing it. Jensen, Murphy, and Wruck (2004) advocate the drawbacks of the annual bonus by studying the relation between cash remuneration and performance measures. They conclude that there is a non-linear pay to performance relation. In other words, managers who believe that they cannot meet the pre-specified targets can manipulate the situation by setting back and delaying the revenues for the following year. Another scenario stressing on the drawbacks of the annual plan is when managers stop performing at full pace as they reach the targeted goals. Therefore, this comes to show that the system is not foolproof since it is at the mercy of the CEO's managerial decisions who might in some cases put their own benefit before that of the company.

An extensive body of literature theorizes that equity-based compensation offers incentives to managers to invest in risky endeavors and projects (Jensen and Murphy, 1990a). Additionally, Merhan (1994) finds a positive relationship between equity-based compensation and firm performance. It is worth noting that as managers, like most individuals, are risk averse in nature, they prefer a compensation package with minimal stock options (Harris and Raviv, 1979). One valid reason is that stock options are beyond the manager's full control as they are directly tied to the company's stock return, thus making equity-based compensation less attractive and riskier (Merhan, 1994). On the other hand, shareholders may generally opt to diversify their own portfolio, so they are more prone to bear manageable risk.

Having said that, the formers prefer to employ managers with a risk tolerance attitude with the aim of maximizing firm's value. In order to reduce this conflict, studies show that tying the pay packages to the company's performance improves managers' motivation to make decisions that lead to firm's value maximization (Grossman and Hart, 1983). Other studies suggest that increasing the proportion of equity-based compensation is an abundant tool to tie pay to performance since the executives take part of the firm's ownership (Jensen and Murphy, 1990a).

The trend of the executive remuneration in the US has been oriented towards equity-based for the last couple of decades. The increase of the equity-based pay at an explosive rate could be explained though several studies. Murphy (1999) explains in his research that the board members perceive stock option pay as a low-cost incentive, thus they get encouraged to increase the fraction of equity-to-total pay. In addition, he believes that the new tax rules play an important role in boosting the equity-based pay as the shares get exempted from deductible remuneration. Bebchuk and Fried (2004) believe that this kind of remuneration provides the executives with desirable incentives to better perform.

Lastly, long term incentive plans can take several forms including restricted stocks, long term performance plans, and retirement plans (Jarrell, 1993). Restricted stocks are conditional stocks usually depending on employee longevity. Long term performance plan is a type of remuneration that is somehow similar to the annual bonus plan except that it is based on three to six years of accounting-based performance. Finally, an executive retirement plan comprises different arrangements such as benefits based on the number of years served in a company and/or company performance (Murphy, 1999).

An important notion that could be developed and analyzed is that of defining the process of setting the CEO remuneration. According to Jensen, Murphy, and Wruck (2004), the human resource department, with the assistance of external remuneration consultants, initiates the primary recommendation on executive pay. Then, the recommendations, before being sent to the compensation committee, are delivered to top level management

for review and approval. Once approved by the top managers, the compensation committee meets to discuss and review the proposed remuneration package in order to send the final recommendations to the board of directors and send back for amendment. However, since the remuneration committee only meets several times a year, it usually lacks adequate knowledge, expertise, and skills to efficiently negotiate and evaluate paysetting process (Jensen, Murphy, and Wruck, 2004). As a result, the incompetency of the committee could lead to designing poor pay packages and creating agency problems within the organization. Not surprisingly, the more the CEO has power over the remuneration committee, the more they boost the pay package above the optimal level (Smith, 2012). Thus, Smith (2012) acclaims that the character of the committee's members plays a crucial role in setting an optimal CEO pay package since the members should be able to better negotiate and resist hard-nosed contracts.

Measuring the degree of pay-performance correlation has always been the standard tool when it comes to testing the effect of remuneration contracts on agency problems. Early studies failed to find an adequate pay-to-performance relationship (Jensen and Murphy, 1990), whereas new studies conducted after the increase in equity-based compensation proves much stronger correlation (Hall and Liebman, 1998). For example, Murphy (1999) shows that as the level of pay increases, the pay-performance sensitivity decreases. He also documents that pay-performance sensitivities are higher in the US compared to any other country. The high sensitivity in the US can be mainly explained by the dramatic increase in the stock option compensation.

After tackling the main components of CEO compensation, it can be concluded that offering the optimal mix of executive pay is inevitable for the wellbeing of the firm as excess compensation is highly correlated with firm underperformance (Brick, Palmon, and

Wald, 2005). Moreover, since remuneration policies and corporate governance are interrelated, Core, Holthausen, and Larcker (1999) explore the consequences of a weak corporate governance, as it can lead to greater agency problems, excess in compensation, and deterioration in firm performance.

# **Chapter Three**

# **Data and Descriptive Variables**

#### 3.1 Data and Variable Definition

Data is constructed using Compustat, Institutional Shareholder Services (ISS), CRSP, and ExecuComp databases. Compustat provides financial and accounting data. ISS offers information concerning managerial entrenchment and characteristics of firms' board of directors. CRSP reports stock price information. Finally, ExecuComp provides data on executive characteristics. Our sample period spans the period 1998 to 2014.

In order to evaluate the effect of managerial entrenchment on the director's total compensation, we base our study on the Entrenchment Index (E index) put forth by Bebchuk, Cohen, & Ferrell (2009). Initially, Gompers et al. (2003) develop a governance index (G index) based on 24 anti-takover provisions as a measure to study the impact of corporate governance on the value of the firm. However, the E index accounts only for the provisions which have an adverse effect on firm valuation. The index, composed of 6 provisions, constitutes staggered boards, limits to shareholder amendments of the bylaws, supermajority requirements for mergers, supermajority requirements for charter amendments, poison pills and golden parachute arrangements. Each firm marks a score ranging from zero to six, based on the number of the above-mentioned provisions that the company has adopted at a given period. We specifically focus on firms' excess managerial entrenchment by calculating the difference between the firm's E-index and its industry median during a given year.

Next, we examine the impact of excess managerial entrenchment on the manager's turnover-performance sensitivity and total compensation. We identify turnover when the CEO in the following year is different from the current year's CEO. Firm Performance is measured using Fama-French Abnormal Return (ARFF) as well as Buy and Hold Daily Return. The performance of the firm is measured by calculating the risk-adjusted returns (ARFF) as well as the daily buy and hold return (BH Return). ARFF is measured based on the Fama-French (1993) 3-factor model. For a given firm i in year t, we employ the following regression model:

$$\mathbf{r}_{id} - \mathbf{r}_{fd} = \alpha_i + \beta(\mathbf{r}_{Md} - \mathbf{r}_{fd}) + \mathbf{sSMB}_d + \mathbf{hHML}_d + \epsilon_{id}$$
 (1)

where the intercept  $(\alpha_i)$  denotes the firm's abnormal return (ARFF),  $r_{id}$  is the return of firm i in day d in a certain year.  $r_{fd}$  is the simple daily T-bill rate.  $r_{Md}$ -  $r_{fd}$ , SMB<sub>d</sub>, and HML<sub>d</sub> represent the market risk premium, size factor, and book-to-market factor respectively. Daily data on these factors is extracted from Ken French's website. Furthermore, in a given year t, the daily buy-and-hold return (BH Daily Return) for firm t is given by:

BH Return<sub>it</sub> = 
$$\prod_{n=1}^{N} (1 + r_{in}) - 1$$
 (2)

where N is the number of trading days for firm i in a certain year t.

The CEO total compensation, obtained from ExecuComp, comprises director's basic salary, incentive plan compensation, stock and option awards, and all other compensation. Finally, we evaluate the effect of excess entrenchment on firm value. We utilize Tobin's Q as a measure of firm value. Tobin's Q is the ratio of the firm's total market value divided

by the firm's total assets. There is a quite well recognized literature that base its measure of firm value on Tobin's Q. It is worth noting that some provisions of corporate governance can trigger the value of the firm.

Our control variables set is winsorized at the 1% level and it is used in accordance with the related literature (Coles at al.2014; Dah et al. 2014; Linck et al. 2009). Dummy variables, such as industry and year, are also included in our data aiming to control for unobserved characteristics related to industry and year attributes, where the industry dummy variables are based on the 48-industry definitions constructed by Fama and French (1997). All variables used in this paper are defined in Table 1. Finally, we calculate robust standard errors following White (1980) as a method to account for any possible heteroscedasticity.

### 3.2 Descriptive Statistics

A summary statistic of the mean and the standard deviation of all the variables used throughout this research are presented in Table 2. Between 1998 and 2014, the average index is around 3.03. The table also shows that both CEOs and directors opt to be well experienced since the average ages are 56 and 61 years, respectively. In addition, the percentage of independent directors is 69%, dominating the structure of the board. Also, only 5% of the total directors are categorizes as female. Thus, it can be concluded that it is less likely for females to achieve executive positions in U.S. firms. Moreover, the average Return on Assets represents around 13%, which indicates that the corporations efficiently earn return when investing on their assets. On the other hand, the low leverage ratio as shown in the table (19%) stimulates the agency problem as the shareholders may not be able to primarily depend on debt in order to mitigate the problem (Jensen and Meckling, 1976).

## **Chapter Four**

# **Results and Analysis**

### 4.1 Turnover-Performance Sensitivity

The turnover-performance sensitivity observes the sensitivity of CEO replacement to the performance of the firm. An extensive body of literature suggests that poor performance increases the likelihood of CEO turnover (Coughlan and Schmidt ,1985; Warner et al.,1988; Weisbach, 1988; Parrino, 1997; Dah, Frye, and Hurst, 2014), thus there is an inverse relationship between company performance and CEO turnover. This research examines the impact of excess managerial entrenchment on the sensitivity of CEO turnover to firm performance.

We conduct the following probit model to study the effect of excess entrenchment on turnover performance sensitivity:

Turnover Dummy  $_{t+1} = \alpha_0 + \alpha_1 Excess E + \alpha_2 Performance_{t-1} + \alpha_3 (Excess E \times Performance_{t-1}) + Control Variables + \varepsilon.$ 

The control variables employed in all regressions are: Firm size t-1, ratio of capital expenditures to total assets t-1, leverage t-1, gender dummy (equal to 1 if the CEO is female and 0 otherwise), CEO age, board size t-1, percentage of independent directors, percentage of female directors, year dummy variables and 48 industry dummy variables to control for industry specific effects.

The results of the turnover-performance sensitivity are shown in tables 3 and 4, where table 3 employs the one period lagged value of Buy and Hold Daily Return as a market performance measure of the firm and table 4 utilizes the one period lagged value of the Fama-French Abnormal Return performance measure. An inverse relationship between managerial entrenchment and the probability of CEO turnover is explained in prior literature as entrenched CEOs gain more power and in return tend to use their authority for their own benefit (Hermalin and Weisbach, 2001). In table 3, the first column shows that the BH Daily Return performance measure is negatively correlated with CEO turnover. In other words, the likelihood of CEO turnover increases when the firm shows poor performance. The second column of table 3 reports that the interaction between excess entrenchment and performance measure is significantly positive. This implies that an increase in excess CEO entrenchment reduces the likelihood of CEO turnover due to poor performance. Executive turnover is generally associated with poor firm performance, however as managers experience entrenchment, the link between turnover and performance declines over time. In table 4, the results are similar to those reported in table 3. The coefficient estimate on the Fama-French abnormal returns is negatively related to managerial turnover. Moreover, in conformance with Table 3 results, the excess entrenchment/firm performance interaction variable is positive and significant.

Our findings in both tables also show that firm size, ratio of capital expenditures to total assets, and leverage have a positive relationship with managerial turnover. As for board related variables, the results show that CEO age, board size, and the percentage of independent directors are significantly and positively related to CEO turnover. On the

other hand, the percentage of female directors and average director age have an inverse relation with CEO turnover.

### **4.2 CEO Compensation**

Prior literature highlights the direct correlation between CEO compensation and CEO power inside a given firm. This means that CEOs have higher pay levels when their authority magnifies over the board of directors, leading to an excess in compensation. According to Brick et al. (2006), the excess compensation of both board members and the firm's manager are directly related. The authors also demonstrate that the excess in CEO compensation have a negative relation with firm future performance. Moreover, inflated CEO power results in weak corporate governance, which in turn, leads to excess compensation and a decline in firm value (Core et al., 1999). Dah and Frye (2017) propose a negative effect of managerial excessive compensation on the soundness of the firm's governance structure.

We conduct the following regression to explore the relation between CEO compensation and excess entrenchment:

CEO Compensation =  $\alpha_0 + \alpha_1$  Excess  $E + \alpha_2$  ROA <sub>t-1</sub>+ Control Variables +  $\varepsilon$ .

Table 5 shows the effect of excess entrenchment on the CEO's total compensation. There is a positive association between excess entrenchment and CEO pay. The results are in conformity with previous literature as excess entrenchment stimulates the executive's power, thus leading CEO remuneration to increase. As for gender related variables, we find that women executives receive higher remuneration when compared to men and that total CEO compensation increases as the percentage of female directors rises. The results also show that CEO compensation is positively correlated to ROA, firm size, leverage,

board size and percentage of independent directors. Moreover, CEO age and average director age have a negative relation with the executive total pay.

#### 4.3 Firm Value

Finally, we explore the effect of excess entrenchment on the value of the firm. Dah (2016) demonstrates a converse association between managerial entrenchment and firm value during both recessionary and normal economics conditions. Bebchuk et al. (2009) also imply that an increase in the E-index has a negative impact on the firm's performance. Faleye et al. (2006) argue that classified board, which constitutes a main component of the entrenchment index, destroys the firm's value. They believe that a classified board is in the advantage of management at the expense of firms' shareholders. It increases executive entrenchment and reduces effectiveness of director monitoring. Consequently, it causes a reduction in firm value. In addition, a sound corporate governance results in a better operating performance for the firm (Bhagat and Bolton, 2008). Thus, as the soundness of a firm's corporate governance may depend on the level of executive entrenchment employed, we utilize the below regression model to find the relation between excess entrenchment and firm value:

$$Q = \alpha_0 + \alpha_1 Excess E + \alpha_2 ROA_{t-1} + Control Variables + \varepsilon$$
.

We use Tobin's Q calculated following Chung and Pruitt (1994) to measure firm performance.

The results summarized in table 6 indicate that excessive entrenchment is inversely correlated with firm value. The finding is in line with the existing body of literature mentioned earlier. For instance, Gompers et al. (2003) develop the G-index in order to study the factors affecting the soundness of firm's corporate governance. In their research, they show that firms with weak shareholder rights underperform relative to firms with

stronger shareholder rights (i.e. weak shareholder right is associated with high values of G-index and strong shareholder right is associated with low values of G-index). At a later stage, as Bebchuck et al (2009) further investigate the G-index provisions and develop the E-index, they also show an inverse relation between entrenchment and firm value. In addition, firm size, board size, and the percentage of independent directors have a negative effect on the firm's performance. Company's leverage also reduces the value of the firm as high leverage is generally linked to the inability of the firm to finance growth.

Our findings also show a negative relationship between female directors and firm performance. Moreover, firm value decreases as CEO age and average director age rises. This implies that younger CEOs and directors improve the wellbeing of the company.

# **Chapter Five**

### **Conclusion**

This paper analyzes the effect of excessive entrenchment on the firm's corporate governance and performance. Accordingly, we study the effect of excessive managerial entrenchment on CEO turnover-performance sensitivity, CEO remuneration, and firm value. The anti-takeover provisions presented in the E-index are used as a tool to measure managerial entrenchment. We measure the excess entrenchment by calculating the difference between managerial entrenchment index and its industry median during a given year.

Our findings demonstrate that an increase in excess CEO entrenchment reduces the probability of CEO turnover due to poor performance. We find this result by employing BH Daily Return as well as ARFF measures to evaluate firm performance, where both measures show a negative correlation with CEO turnover. In addition, we highlight a direct relationship between the excess in managerial entrenchment and CEO compensation. Therefore, entrenched CEOs are compensated more since they may possess more control within the firm. Moreover, our results suggest excessive entrenchment is inversely correlated with firm future value. As executive entrenchment reduces director effectiveness, it leads to a reduction in firm value.

In conclusion, this paper suggests that entrenchment reduces the effectiveness of the board monitoring and deteriorates the firm valuation. CEOs gain more control as they get entrenched, and in turn use this power to extract their own interest rather than the interest of the shareholders. This research implies that excess managerial entrenchment levels has a negative effect on shareholders' welfare as it diminishes the efficiency of the board's monitoring function and, subsequently, decreases firm value. We propose that a sound governance structure should protect the shareholders' best interests by preventing CEOs from becoming overly entrenched.

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### **TABLES**

**Table 1: Variable Definition** 

Variable	Definition
E-Index	Entrenchment Index presented by Bebchuck et al (2009).
BH Daily Return t-1	The one period lagged of Buy and Hold Daily Return performance measure.
ARFF t-1	The one period lagged of Fama-French Abnormal Return performance measure.
Firm Size t-1	The one period lagged of the number of employees in the firm.
CAPX t-1/At t-1	The one period lagged ratio of firm's capital expenditure to Total Assets.
Leverage t-1	The one period lagged ratio of firm's long term dept divided by Total Assets.
Gender Dummy	Dummy variable equal to 1 if the CEO's gender is female and 0 otherwise.
Age	CEO's age.
Board Size	Total number of directors representing the board.
% Independent	Percentage of board directors who are independent.
% Female	Percentage of board directors who are female.
Average Director Age	Average age of the firm's directors.
ROA <sub>t-1</sub>	The one period lagged of Return on Assets.
Tobin's Q <sub>t+1</sub>	Firm value at t+1.
Log CEO Compensation	
t+1	CEO's annual pay at t+1 (salary, incentive payouts, bonus, etc)
Turnover Dummy t+1	Dummy variable equal to 1 if the firm faces a CEO replacement at t+1.

**Table 2: Descriptive Statistics** 

Table 2 presents the mean and standard deviation of entrenchment index, firm, CEO and board of directors variables for the years 1998 to 2014 of the companies listed in the S&P 1500 index.

Variables	Mean	Stand. Dev.
Firm related variables		
Firm Size	7.58	1.61
CAPX / At	0.05	0.04
ROA	0.13	0.08
Tobin' s Q	1.26	1.00
Leverage	0.19	0.17
CEO related variables		
Age	55.60	7.48
E Index	3.03	1.45
Gender Dummy	0.02	0.16
Turnover Dummy	0.11	0.31
CEO Compensation	5,199,901	9,793,954
<b>Board related variables</b>		
Board Size	9.25	3.03
% Independent	69.15	20.09
% Female	4.56	7.72
Average Director Age	60.64	4.39

Table 3: Effect of excess entrenchment on turnover performance sensitivity (BH Daily Return t-1)

Table 3 employs a probit model to investigate the impact of excess entrenchment, the market performance BH Daily Return t-1, and the interaction variable (Excess E x BH Daily Return t-1) on the CEO turnover  $_{t+1}$  performance sensitivity. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	Turnover Dummy t+1		
	(1)	(2)	
Excess E	0.019	0.012	
BH Daily Return t-1	-0.188***	-0.187**	
Excess E*BH Daily Return t-1		0.060*	
Firm Size t-1	0.018	0.018	
CAPX t-1/At t-1	1.029**	1.041**	
Leverage t-1	0.077	0.079	
Gender Dummy	-0.091	-0.092	
Age	0.054***	0.054***	
Board Size	0.015**	0.015**	
% Independent	0.001	0.001	
% Female	-0.003	-0.003	
Average Director Age	-0.046***	-0.046***	
Constant	-1.846***	-1.848***	
Industry Dummies	YES	YES	
Year Dummies	YES	YES	
Pseudo R2	0.074	0.075	
Number of Observation	17689	17689	

# Table 4: Effect of excess entrenchment on turnover performance sensitivity (ARFFt-1)

Table 4 employs a probit model to investigate the impact of excess entrenchment, the market performance ARFFt-1, and the interaction variable (Excess E x ARFFt-1) on the CEO turnover t+1 performance sensitivity. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	Turnover Dummy t+1		
	(1)	(2)	
Excess E	0.018	0.015	
ARFF <sub>t-1</sub>	-0.003***	-0.002***	
Excess E*ARFF t-1		0.001*	
Firm Size t-1	0.019	0.019	
CAPX t-1/At t-1	1.100**	1.128**	
Leverage t-1	0.064	0.063	
Gender Dummy	-0.093	-0.096	
Age	0.054***	0.054***	
Board Size	0.014*	0.014**	
% Independent	0.001	0.001	
% Female	-0.003	-0.003	
Average Director Age	-0.046***	-0.046***	
Constant	-1.907***	-1.912***	
Industry Dummies	YES	YES	
Year Dummies	YES	YES	
Pseudo R2	0.075	0.075	
Number of Observation	17687	17687	

### Table 5: Effect of excess entrenchment on the CEO's total compensation

Table 5 employs a regression of the CEO compensation  $_{t+1}$  dependent variable on excess entrenchment and control variables from year 1998 to 2014. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	Log (CEO Compensation t+1)
Excess E	0.046***
ROA t-1	1.873***
Firm Size t-1	0.422***
CAPX t-1/At t-1	-0.602***
Leverage t-1	0.022
Gender Dummy	0.007
Age	-0.002*
Board Size	0.017***
% Independent	0.006***
% Female	0.001
Average Director Age	-0.004*
Constant	11.138***
Industry Dummies	YES
Year Dummies	YES
R-squared	0.364
Number of Observation	17301

### Table 6: Effect of excess entrenchment on the firm's value

Table 6 employs a regression of the firm value  $_{t+1}$  dependent variable on excess entrenchment and control variables from year 1998 to 2014. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	Tobin's Q
Excess E	-0.044***
ROA t-1	5.705***
Firm Size t-1	-0.006
CAPX t-1/At t-1	0.099
Leverage t-1	-0.327***
Gender Dummy	-0.154***
Age	-0.005***
Board Size	-0.014***
% Independent	-0.001**
% Female	-0.001
Average Director Age	-0.014***
Constant	0.471***
Industry Dummies	Yes
Year Dummies	Yes
R-squared	0.406
Number of Observation	17422