

**LEBANESE AMERICAN UNIVERSITY**

Director Co-option and Monitoring Efficiency

By

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# Director Co-option and Monitoring Efficiency

Samira Ghassan Abi Dames

## ABSTRACT

This paper examines the impact of director co-option on the relationship between board structures and monitoring efficiency. We show that co-opted independent directors deflate the turnover-performance sensitivity, amplify CEO pay, and increase the likelihood of CEO duality. While non-co-opted independent directors enhance internal monitoring, co-opted independent board members are the worst monitors. We generally do not observe a substantial difference in the monitoring functionality of co-opted and non-co-opted inside board members. Our findings suggest that co-opted independent directors are the main driving factor behind the converse association between co-opted boards and internal monitoring. In addition, we suggest that independent directors appointed after the CEO resumes office are particularly costly to firms since they promote a non-efficient board monitoring environment.

Keywords: Co-option, Monitoring Efficiency, Independent Directors, Inside Directors, Grey Directors.

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# **Chapter One**

## **Introduction**

The significant and complex role of the board of directors in advising and monitoring firms' executives motivated researchers to analyze the effect of board composition on the soundness of firms' governance structures and performance (Weisbach 1988; Mace 1971; Fama and Jensen 1983; Borokhovich et al. 1996; Klein 1998; Huson et al. 2004; Raheja 2005; Adams et al. 2010; Dah et al. 2014). Coles et al. (2014) study the effect of director co-option on the effectiveness of firms' internal monitoring. In this paper, we present an analysis of the monitoring efficiency of the different types of co-opted directors. Specifically, our research studies the monitoring functionality of co-opted independent directors, co-opted inside directors, and co-opted grey directors. We further compare the efficacy of the different types of co-opted directors to their respective non-co-opted counterparts.

Adams et al. (2010) propose that board composition plays a significant role in the firm's internal monitoring. While independent directors enhance board monitoring, inside board members provide firm executives with better advice. Several studies suggest a positive impact of board independence on corporate governance (Fama and Jensen 1983; Borokhovich et al. 1996; Huson et al. 2004). The heightened monitoring provided by independent directors is generally attributed to their reputation concerns and their increased ability to confront the firm's management. However, improving board monitoring through increasing board independence is costly. Mainly, appointing

independent directors entails costs related to information asymmetry and free riding. Moreover, Dah and Frye (2017) suggest that overcompensating outside directors signals director entrenchment and, consequently, ineffective monitoring. On the other hand, due to their superiority in terms of firm-specific information, inside directors are said to be a valuable resource for corporate boards (Mobbs 2013). Klein (1998) demonstrates a positive relationship between the percentage of inside directors serving on the board and firm performance. Raheja (2005) suggest that insiders' inclusion on boards may lead to more effective decision making. Accordingly, the preference of the independent directors over the insiders varies with the cost of acquiring information (Duchin et al. 2008).

Coles et al. (2014) propose that, in measuring the CEO's control and capture of the board, it is not sufficient to consider the formal traditional classification of board members in terms of independent, inside, or grey directors. The informal association between directors and managers should also be taken into consideration. Accordingly, Coles et al. (2014) introduce the concept of co-opted boards in which a co-opted director is a director who is appointed after the CEO resumes office. Hwang and Kim (2009) suggest that director appointments are generally simulated and supported by the CEO who perceives common similar views and/or has social ties with the appointed director resulting in an alignment of incentives between the two parties. Such collusion or mutual back-scratching between managers and board members may eventually have a converse impact on internal monitoring (Shivdasani and Yermack, 1999). Coles et al. (2014) show that co-option significantly magnifies CEOs influence and authority over corporate board and, hence, reduces the monitoring intensity of the board.

This research adds to the existing literature by comparing the monitoring efficiency and effectiveness of each director type (Independent, inside and grey) while contemporaneously distinguishing between co-opted and non-co-opted directors. That is, since co-opted and non-co-opted directors are expected to behave and function dissimilarly, we examine the effect of co-option on the association between director classification and the soundness of the firm's governance structure. Thus, we categorize board members into the following six sub-groups: Co-opted independent, non-co-opted independent, co-opted inside, non-co-opted inside, co-opted grey, and non-co-opted grey.

Our findings highlight a substantial divergence in the monitoring efficiency of non-co-opted and co-opted independent directors. We observe that the presence of non-co-opted independent directors raises the turnover-performance sensitivity and diminishes the probability of CEO duality and, thus, amplifies internal monitoring. However, the participation of co-opted independent board members reduces the likelihood of managerial dismissal due to poor performance. Moreover, co-opted independent directors increases the probability of CEO duality as well as inflates managerial compensation. Therefore, independent directors appointed after the CEO takes office serve as to amplify CEO entrenchment and power. While non-co-opted independent directors amplify board monitoring effectiveness, co-opted independent directors induce a board environment predicated by collusion and mutual back-scratching between members of the board and the firm's manager.

As for insiders, whether co-opted or non-co-opted, results do not highlight any significant influence on the CEO turnover-performance sensitivity. Both co-opted and

non-co-opted insiders reduce CEO compensation. However, even though co-opted insiders increase the likelihood of duality, non-co-opted insiders decrease the probability of the CEO also serving as the chair of the board.

Overall, while non-co-opted independent directors are the best monitors, co-opted independent directors are the worst monitors. Thus, monitoring costs are substantially more pronounced and undesirable for co-opted independent directors. Moreover, in general, except for the effect on CEO duality, our findings do not demonstrate a substantial effect of co-option on the relationship between inside directors and board monitoring. As for grey directors, though weaker, results are generally similar to those of independent directors, especially in terms of their impact on CEO compensation and duality. The thesis is organized as follows: Section II discusses the motivation and literature review. Section III presents the data and summary statistics. Section IV presents the results and analysis. Section V concludes.

# Chapter Two

## Motivation and Literature Review

### 2.1 Board Structure and Internal Monitoring Efficiency

Conventionally, inside directors are regarded as poor monitors of the CEO's actions and decisions as a consequence to the direct reporting relationship between them. Oppositely, the independent directors are presumed to oversee the management and protect the shareholders' interests independently from the CEO's personal agenda (Dunn and Sainty 2009). This perspective is a corner stone in the governance provisions imposed by the Sarbanes Oxley Act which was legislated in 2002 aiming to prevent managerial misbehavior and accounting scandals through increased oversight and severe penalties of corporate malfeasance (Brickey 2003; Zhang 2007). This Act refines the definition of independent directors and mandates major governance provisions according to which some committees should consist of independent directors solely and some others should present a minimum quota of independent directors. In conjunction with these amendments, the NYSE and NASDAQ require having a majority of independent directors on the board which resulted in an alteration of the board composition of firms that satisfied this criterion at the time when this requirement was imposed (referred to as the compliant firms) and those that didn't (referred to as non-compliant firms) (Dah et al. 2014, Linck et al. 2009).<sup>1</sup>

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<sup>1</sup> Researchers have also studied the effect of board composition and gender diversity on social reporting and firm performance (Arayssi, Dah, and Jizi (2016); Jizi (2017)).

In contrast with the prevailing perception of independent director's superior monitoring abilities, Coles et al. (2014) study the impact of co-option on the independent director's monitoring efficiency and find a significant divergence between the two types of independent directors. The authors present a converse association between co-opted independent directors and the efficiency of internal monitoring and a direct relationship between the non-co-opted independent directors and the strength of the board's power to control the CEO's actions. Hence, opposite to the non-co-opted independent directors, the co-opted independent directors are sympathetic to the CEO and allow the latter to capture the board. This finding raises the concern that the trending alteration of board structure that favors the substitution of inside directors by independent directors is not a sign of proper monitoring but a tool to subtly increase co-option and board capture.

Previous literature also stresses on important characteristics of inside directors that would support his ability to monitor the CEO. Ma et al. (2014) argue that the independent directors are not as equipped as the inside directors to monitor the board as they are less informed about firm-specific information. According to Harris and Raviv (2006), it is costly for individual board members to obtain new information. We hypothesize that an inside director (co-opted or non-co-opted) is a better monitor than a co-opted independent director as the latter is a free-rider who is sympathetic to the CEO (Finkelstein and Hambrick 1989).

We measure the monitoring intensity of each director type by examining their effect on turnover-performance sensitivity, CEO chair duality, and the CEO's total compensation. In this section, we will discuss the related previous literature that motivates our research.

### **2.1.1 CEO Turnover-Performance Sensitivity**

According to Adams et al. (2010), when the CEO's performance is poor, the board might choose to dismiss the CEO and hire a replacement from the pool of replacement CEOs. In line with the Hermalin and Weisbach (2001) bargaining framework, as CEOs become more powerful they tend to use their power to improve their well-being. Hence, the stronger the level of corporate governance and monitoring efficiency of the board members, the weaker the ability of the CEO to preserve his personal benefits when the company is poorly performing (Dahya et al. 2002; Kang and Shivdasani 1995; and Kaplan and Minto 2008). According to Mobbs (2013), the fact that there's a significant likelihood for talented inside directors in becoming the future CEO implies that they are likely to perform their monitoring with due diligence and hence increase the CEO turnover-performance sensitivity.

### **2.1.2 CEO Chair Duality**

According to Faleye (2007), CEO chair duality is a common practice (exhibited in 80% of the firms in the United States in 2007) which is of high interest to organizational scholars and corporate activists (Monks and Minow 2001). Duality is viewed by many as giving CEOs greater control at the expense of other parties, including outside directors (Adams et al., 2010). According to the agency theory, duality reduces the quality of corporate governance and promotes CEO entrenchment (Finkelstein and D'aveni, 1994). Moreover, Goyal and Park (2002) find that CEO chair duality and CEO turnover are negatively correlated which signals that CEO chair duality could be a sign of CEO's capture of the board. Hence, we assume that when the board members are truly independent from the CEO, they will have a better ability to maintain

their strong position by keeping the CEO and chair positions separate. In other terms, the presence of directors who are efficient monitors of the CEO's actions and decisions should be negatively related to CEO chair duality, whereas the presence of sympathetic directors who allow the CEO to impose his power on the board's actions should be positively related to CEO chair duality.

### **2.1.3 CEO Compensation**

A large body of previous literature studied the various effects and implications of the executive's compensation level (Murphy 1999). One of the main functions of the board of directors is to decide on the executive's compensation. According to Hermalin and Weisbach's (2001) bargaining framework, a powerful CEO bargains to enhance his well-being either by inflating his compensation or by decreasing board's independence. The board is more willing to budge on independence than on compensation as an excessive pay to the CEO is considered as a first order loss whereas a budge on independence is considered as a second order loss (Adams et al. 2010). Parallel, Ryan and Wiggins (2002) find that the effect of equity performance on the CEO's pay decreases as his control over the board increases. Hence, managerial compensation reflects incentive-alignment (Linck et al. 2009) and an excessive CEO compensation is a sign of mutual backscratching between the CEO and the board of directors. For example, if the co-opted inside directors or the non-co-opted inside directors are better monitors than the co-opted independent directors, their presence on the board should be negatively related to the CEO's compensation whereas the presence of co-opted independent directors should have a positive effect on the level of the CEO's compensation. In other terms, we assume that the directors who exhibit a positive

influence on the CEO's compensation level are colluded with the CEO and those who prevent excessive compensation are truly independent from the CEO and seek solely the shareholder's benefits.

# Chapter Three

## Data and Descriptive Statistics

### 3.1 Data and Variables Definition

We construct our sample from COMPUSTAT, CRSP, RiskMetrics and Execucomp. The data is based on the firms listed in the S&P 1500 index for the year 1996 to the year 2014. Execucomp is the source of the executive's compensation and turnover data, COMPUSTAT is the source of accounting data, CRSP is the source of stock returns and RiskMetrics provides the board's related variables such as board size, number of board meetings, etc ...A brief definition of the variables used in the statistical analysis is provided in table 1.

A CEO turnover is identified if the CEO in the succeeding year is different from the CEO in the current year. The total CEO's compensation comprises of the salary, bonus, the Black-Scholes value of options granted, the value of restricted stock granted, long-term incentive payouts and any other compensation.

The non-co-option variables were computed as follows:

- Non-co-option is the number of non-co-opted directors divided by total board size;
- Independent non-co-option is the number of non-co-opted independent directors divided by the total board size;

- Inside non-co-option is the number of non-co-opted inside directors divided by the total board size and;
- Grey non-co-option is the number of non-co-opted grey directors divided by the total board size.

For the turnover-performance sensitivity probit model, we assume that the board of directors that takes the decision to dismiss the CEO is the board in place one year before the CEO dismissal. Hence, we study the relationship between the lead turnover (CEO turnover at time  $t+1$ ) and the board composition at time  $t$  based on the performance at time  $t$ .

For the CEO compensation and duality regressions, we assume that a poor internal monitoring and alignment of incentives with the CEO at time  $t$  would result in a duality or would inflate the CEO's compensation at time  $t+1$ . As a result, we regress the lead CEO compensation and lead CEO chair duality (at time  $t+1$ ) on the board composition at time  $t$ .

The market performance measure (Buy and Hold monthly return), the accounting performance measure (Earnings before interest and taxes), total CEO compensation and the various control variables are winsorized at the 1% level to prevent extreme observations from misguiding our results. The set of control variables used is in accordance with the related literature (Linck et al. 2009; Coles et al. 2014).

Similar to previous literature, we include 48 industry dummy variables in the model (similar to those defined in Fama and French 1997) to control for the unobserved

industry specific effects and 19 year dummy variables to control for each year's characteristics.

### **3.2 Descriptive Statistics**

Table 2 presents summary statistics (the number of observations, mean and standard deviation) of all the variables used throughout this research. The importance of internal monitoring by the board of directors is highlighted by the low leverage (Long term debt / total assets) which is equal to 19% as it implies that the shareholders cannot rely on debt as a discipline mechanism to contain agency problem (Jensen and Meckling, 1976). On average, CEOs are as old and experienced as directors and on average, each board of directors is composed of 9 members. The board of directors meets 7 times on average with a standard deviation equal to 3. This signals that in some companies, board members meet very frequently while in other firms they meet less frequently. Frequent board meetings could either reflect a significant workload and involvement of the board in the company or an attempt to hide actions that are unfavorable to the shareholders (Vafeas, 1999). The significant number of meetings per year could be interpreted by the increase in director workload following the enactment of the Sarbanes-Oxley Act (Linck et al., 2009). On average, each member of the board of a certain company serves in around 1 other board which implies that most of the directors are not busy directors (Busy directors serve in the board of 3 or more other companies). This fact signifies that they are less experienced and connected but not as distracted as busy directors are (Bar-Hava et al., 2013). The sample firms do not encourage diversity as only 2% of the CEOs are females and 4.56 % of the directors are females. The majority of directors satisfy the traditional definition of independence (the

average percentage of independent directors from the total board size is 70%) and the second most popular type is inside directors with a mean of 18% followed by grey directors with a mean of 10%. Nearly half of the board members are co-opted and are classified as follows: 34% of the board members are co-opted and independent, 7% are co-opted and insiders and 4% are co-opted and grey. Almost half of the independent directors, 34% of the inside directors and 35% of the grey directors are co-opted.

Figure 1 shows how the board composition evolved from the year 1996 to the year 2014. We find that the appointment of independent directors has been trending since 1996 on the expense of the inside and grey directors as firms seem to adopt the conventional perception that a board with a majority of independent directors is an effective monitor of the management (Fama and Jensen, 1983; Borokhovich et al., 1996). Moreover, the public opinion and pressure play a significant role in determining the corporate governance mechanisms and favors the appointment of independent directors (Zingales, 2000). In addition, the increased shareholder activism and the court decisions in favor of shareholder plaintiffs and public pressures lead to the enactment of the Sarbanes Oxley Act. Consequently, all listed firms were required to have a majority of independent directors on the board (i.e. more than 50% of the directors) (Linck et al., 2009).

Figure 2 shows how co-option is spread across the three different types of directors. Every bar represents the % of co-opted directors from the total board size and the first cluster on the top represents the percentage of grey and co-opted directors from the total board size, the middle cluster represents the percentage of inside and co-opted directors from the total board size and the third cluster represents the percentage of

independent and co-opted directors from the total board size. Every bin represents an interval of 3 years (we excluded the year 1996 to allow for equal bin intervals). The majority of the co-opted directors are independent especially in the last bin (year 2012 to 2014) where the cluster representing independent directors is larger than in any other bin. The percentage of co-opted and grey directors decreased steadily over time whereas the percentage of co-opted and inside directors doesn't follow a steady pattern.

Figure 3 shows how the board composition evolved from the year 1996 to the year 2014 in terms of co-option by director type. The percentage of independent co-opted directors from the independent directors (computed as the number of independent and co-opted directors / number of independent directors) decreased from around 60% in 1996 to 46% in 2014. This implies that in 2014, almost half (46%) of the independent directors were co-opted. Moreover, we find that the percentage of co-opted inside directors from the inside directors varies significantly as it fluctuates between 23% and 53% from 1996 to 2014. The percentage of co-opted grey directors from the grey directors varies between 35% and 48% from 1996 to 2014. Hence, an independent director has a higher chance of being co-opted than an insider or a grey director. There are almost equal chances for insiders and grey director to be co-opted.

# Chapter Four

## Results and Analysis

### 4.1 Turnover-Performance Sensitivity

We conduct the following 2 groups of probit models:

$$\text{Turnover dummy} = \alpha_0 + \alpha_1 \text{ Co-option variable} \times \text{Performance} + \alpha_2 \text{ Co-option variable} + \alpha_3 \text{ Performance} + f(\text{Controls}) + \varepsilon.$$

$$\text{Turnover dummy} = \beta_0 + \beta_1 \text{ Non-co-option variable} \times \text{Performance} + \beta_2 \text{ Non-co-option variable} + \beta_3 \text{ Performance} + f(\text{Controls}) + \varepsilon.$$

In each group, we conducted 2 subsets of equations. One where the proxy for accounting performance is the earnings before interest and taxes (EBIT) and the other where the proxy for market performance is the buy and hold monthly return (BHMR).

For each performance measure, we conduct a probit regression where co-option is the independent variable (Table 3) and six probit regressions, one for each of the following sub-groups of directors: Co-opted independent, non-co-opted independent, co-opted inside, non-co-opted inside, co-opted grey, and non-co-opted grey.

The effect of co-option and non-co-option by director type on the CEO turnover-performance sensitivity where market performance is measured by BHMR and accounting performance is measured by EBIT is demonstrated in tables 4 and 5 respectively.

We study the relationship between the lead turnover (CEO turnover at time  $t+1$ ) and the board composition at time  $t$  based on the performance at time  $t$ . The control variables employed in all the equations are: firm size, ratio of capital expenditures to total assets, gender dummy (equal to 1 if the CEO is a female and 0 otherwise), CEO's age, the number of directors serving on the board, the percentage of female directors from the total board size, and 48 industry dummy variables to control for industry specific effects.

An inverse relationship between the company's performance at a given year and the likelihood of CEO turnover in the following year is well-documented in the previous literature (Weisbach 1988, Warner et al. 1988, and Parrino 1997). Our results are in conformity with previous research as  $\alpha_3$  and  $\beta_3$  (the performance coefficients) are negative in almost all the probit regression equations conducted.

Huson et al. (2001) associate weak turnover-performance sensitivity with poor monitoring efficacy of corporate boards. Particularly, Ryan and Wiggins (2002) find that a CEO's pay becomes less linked to equity performance as his control over the board increases. In other terms, the director would be an efficient monitor of the management if he accentuates the negative relation between performance and turnover, otherwise he is entrenching the CEO (Coles et al. 2014). In other terms, a negative  $\alpha_1$  and  $\beta_1$  (coefficients of the interaction terms) would imply that the corresponding director type is an efficient monitor of the management. Inversely, a positive  $\alpha_1$  and  $\beta_1$  would project the strong CEO's influence and the collusion with the corresponding director type.

For both performance measures (EBIT and BHMR), when co-option is the independent variable (table 3), we find that  $\alpha_1$  is positive which implies that co-option attenuates turnover-performance sensitivity and empowers the CEO (similar findings to Coles et al. 2014).

In tables 4 and 5, the statistically significant coefficients of the interaction terms performance\*Independent co-option is positive and equal to 0.372 and 0.014 respectively which implies that a co-opted independent director decreases the likelihood of CEO turnover following poor performance. Hence, a co-opted independent director supports managerial entrenchment and magnifies the CEO's bargaining power.

On the other hand, the fourth equation in tables 4 and 5 yields negative statistically significant coefficients of the interaction terms performance \* Independent non- co-option equal to -0.421 and -0.013 respectively. This implies that a non-co-opted independent director increases the likelihood of CEO turnover following poor performance.

From the second, third, fifth and sixth equations presented in tables 4 and 5, we find no statistically significant relationship between turnover-performance sensitivity and the co-opted and non-co-opted inside and grey directors. Consequently, we conclude that the inside and grey directors do not affect the CEO's bargaining power on turnover following poor performance regardless if they were appointed before or after the CEO resumes office. In other terms, the co-opted inside and co-opted grey directors do not significantly differ in terms of monitoring efficiency from the non-co-opted inside and non-co-opted grey directors as the corresponding co-option and non-co-option interaction variables coefficients are similar. Consequently, we can conclude that the

positive relation between co-option and managerial entrenchment presented in table 3 is particularly driven by the collusion between the independent co-opted directors and the CEO and that the independent co-opted directors are the worst monitors of the management.

## 4.2 CEO Chair Duality

Baysinger and Hoskisson (1990) connote CEO chair duality to the lack of information of outsider dominated boards. Fama and Jensen (1983), explain CEO chair duality by the information asymmetries between the board and the CEO that undermines the capacity of the board to use its authority to prevent duality on the expense of effective monitoring. Hence, duality is likely to occur in boards captured by the CEO. To test for the relation of duality with co-option and non-co-option, we conduct the following probit model regressions:

$$\text{Lead duality} = \alpha_0 + \alpha_1 \text{ Co-option variable} + f(\text{Controls}) + \varepsilon.$$

$$\text{Lead duality} = \beta_0 + \beta_1 \text{ Non-co-option variable} + f(\text{Controls}) + \varepsilon.$$

The co-option variables are: Co-option (table 7), Independent co-option, Inside co-option and grey co-option (table 9).

The non-co-option variables are: Independent non-co-option, Inside non-co-option and grey non-co-option (table 9).

The control variables employed in all the equations are: firm size, gender dummy (equal to 1 if the CEO is a female and 0 otherwise), CEO's age, the percentage of female directors from the total board size, leverage, variables that

proxy for the board's involvement in the company and power (the number of directors serving on the board, average director age, average director tenure and the average number of other boards each director serves in), 19 years dummy variables and 48 industry dummy variables to control for year and industry specific effects.

According to the findings presented in table 7, the coefficient of co-option is equal to 0.709 and is statistically significant at the 1% significance level, which implies that co-option increases the likelihood of CEO chair duality (True for about 71% of the observations). This supports the notion that co-option allows the CEO to control the board and undermines its capacity to impose its authority on the management

According to the findings presented in table 9, all types of co-opted directors support CEO chair duality and all types of non-co-opted directors decrease the likelihood of the CEO duality.

### **4.3 CEO Compensation**

Berry et al. (2006) point out that CEO's compensation is inflated when the CEO's power replaces that of the board of directors. Brick et al. (2006) state that an excessive CEO compensation is symptomatic of weak protection of shareholder's interests and mutual back scratching referred to as cronyism. To test for the relation of the executive's pay with co-option and non-co-option, we conduct the following regressions:

$$\text{Lead CEO compensation} = \alpha 0 + \alpha 1 \text{ Co-option variable} + f(\text{Controls}) + \varepsilon.$$

$$\text{Lead CEO compensation} = \beta 0 + \beta 1 \text{ Non-co-option variable} + f(\text{Controls}) + \varepsilon.$$

The co-option variables are: Co-option (table 6), Independent co-option, Inside co-option and grey co-option (table 8).

The non-co-option variables are: Independent non-co-option, Inside non-co-option and grey non-co-option (table 8).

A negative  $\alpha I$  or  $\beta I$  signals an inverse relation between compensation and the corresponding director type, implying an attenuation of CEO bargaining power by the corresponding director type (Hermalin and Weisbach 2001). Inversely, a positive  $\alpha I$  or  $\beta I$  reflects the high CEO's power and influence over the corresponding director type that would allow the CEO to inflate his annual compensation.

The control variables employed in all the equations are: firm size, gender dummy (equal to 1 if the CEO is a female and 0 otherwise), CEO's age, the percentage of female directors from the total board size, CEO chair duality, variables that proxy for the board's involvement in the company and power (average director age, average director tenure and the average number of other boards a director serves in), the market to book ratio to proxy for the company's growth, 19 years dummy variables and 48 industry dummy variables to control for year and industry specific effects.

According to the findings presented in table 6, the coefficient of co-option is significant at the 1% level, which implies that co-option allows the CEO to inflate his annual pay. This supports the notion that co-option supports the CEO's

bargaining power over his personal benefits as measured by the CEO's compensation.

According to the findings presented in table 8, the coefficient of independent co-opted and grey co-opted directors is positive and whereas the coefficient of inside co-opted directors is negative. Non-co-opted independent directors do not have a statistically significant relationship with CEO compensation whereas the non-co-opted inside and grey directors negatively influence the CEO's pay.

We conclude that an independent or grey director who is co-opted amplifies director's pay, a non-co-opted independent director does not have a statistically significant influence on CEO's pay, and a non-co-opted inside or grey director will attenuate the CEO's bargaining power over high compensation. Moreover, we conclude that all inside directors exert pressure to reduce the CEO's compensation.

## **Chapter Five**

### **Conclusion**

This paper analyzes the effect of the CEO's influence over different director classifications on the soundness of board monitoring. Instead of classifying board members as independent, inside, and grey, we divide each classification based on whether the directors are co-opted or non-co-opted.

Consistent with Coles et al. (2014) we find that director co-option has a negative influence on boards' effectiveness. However, co-opted directors do not share an equal responsibility for the highlighted inefficient monitoring. We propose that co-opted independent directors are the primary sub-group of directors driving the converse association between co-option and internal monitoring. Whether inside directors are co-opted or non-co-opted does not seem to substantially affect their monitoring functionality. Therefore, analyzing co-option as a whole without taking into consideration the director type of each co-opted director may not be sufficient and adequate.

Specifically, our findings demonstrate that non-co-opted independent directors are the most efficient monitors. The participation of non-co-opted independent board members increases managerial turnover-performance sensitivity and decreases the likelihood of CEO duality. Insiders, both co-opted and non-co-opted, do not seem to noticeably entrench managers. Both co-opted and non-co-opted insiders reduce CEO pay. However, co-opted insiders' participation increases the probability of the CEO

serving a dual role. Regarding co-opted independent directors, we suggest that they represent the worst group of monitors among the different director classifications. Even co-opted insiders seem better for firm monitoring than co-opted independent directors. Their presence decreases the CEO turnover-performance sensitivity, inflates managerial pay, and increases CEO duality. As for grey directors, except for the non-significant effect on CEO turnover-performance sensitivity, results seem similar to those of independent directors in terms of both co-opted and non-co-opted members.

In conclusion, managers' influence over directors' elections leads to higher entrenchment and control over the board specifically when appointing independent, and to a lesser extent grey, directors. Even if the CEO influences the directors' appointments, the CEO is much more constrained to a smaller pool of individuals when picking insiders rather than outsiders. In addition, the advising and monitoring inefficiency of co-opted outsiders significantly exacerbates the costs, both monetary and non-monetary, associated with hiring these board members.

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# Figures

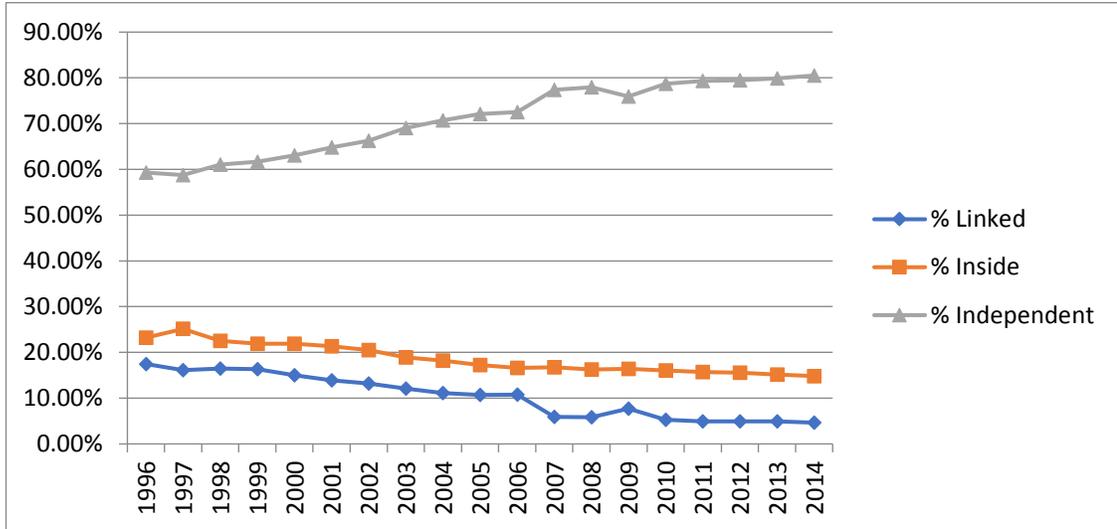


Figure 1: Board composition's evolution

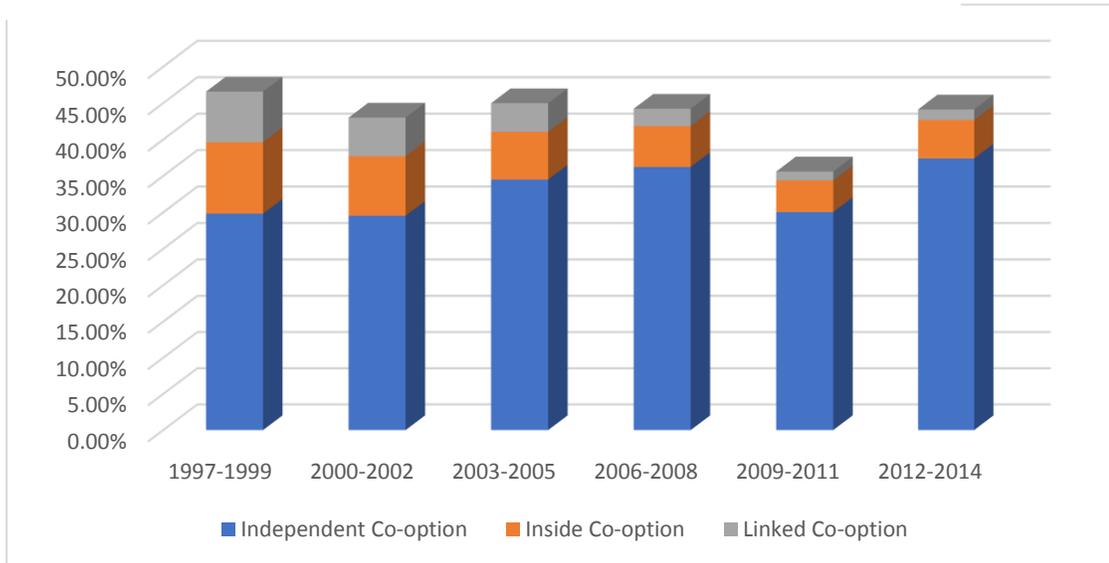


Figure 2: The evolution of the type of co-opted directors

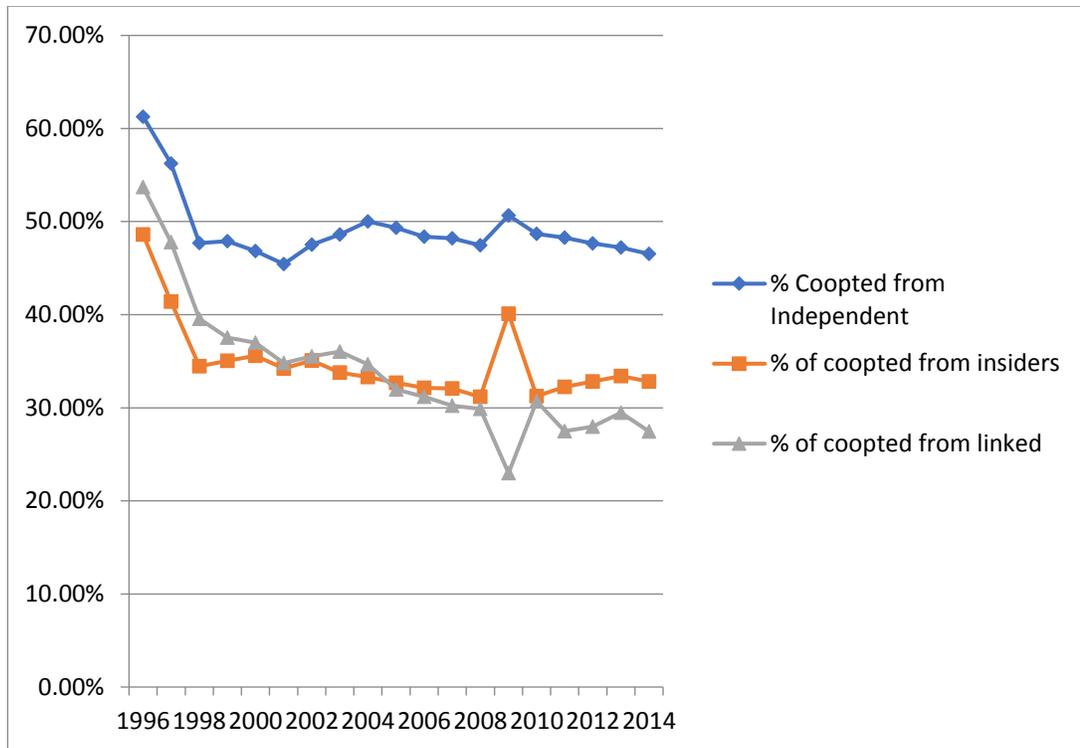


Figure 3: The evolution of the co-option percentage per director type

## Tables

Table 1: Variables definition

Variable	Variables definition
Firm size	The natural logarithm of sales.
Leverage	Long term debt divided by total assets.
CAPEX/TA	Capital expenditures to total assets.
EBIT	Earnings before interest and taxes.
BHRM	Buy and hold monthly returns.
Age	CEO's age.
CEO-Chair Duality	Dummy variable equal to 1 if the CEO serves as the board's chair and 0 otherwise.
CEO compensation	The natural logarithm of the total CEO's annual pay (bonus, incentive payouts,... )
Gender dummy	Dummy variable equal to 1 if the CEO is a female and 0 otherwise.
Turnover dummy	Dummy variable equal to 1 if CEO turnover occurs.
Board size	Total number of directors serving on the board.
Number of meetings	Number of times the board of directors meet per year.
Average number of other boards	Average number of other boards the director of each firm serves in.
Average director tenure	The average tenure of all directors in each firm.
Average director age	The average age of all directors in each firm.
% female	Number of female directors/ board size.
Co-option	% directors appointed after the CEO resumes office.
Independent co-option	% independent directors appointed after the CEO resumes office.
Inside co-option	% inside directors appointed after the CEO resumes office.
Grey co-option	% grey directors appointed after the CEO resumes office.
% Ind. co-opted	% co-opted independent directors from all independent directors.
% Inside co-opted	% co-opted inside directors from all inside directors.
% Grey co-opted	% co-opted grey directors from all grey directors.
Independent non-co-option	% ind. directors appointed before the CEO resumes office.
Inside non-co-option	% inside directors appointed before the CEO resumes office.
Grey non-co-option	% grey directors appointed before the CEO resumes office.

The table presents a definition of firm, CEO, board of directors and co-option related variables.

Table 2: Descriptive statistics

Variables	Num. of obs.	Mean	Б
<b>Firm related variables</b>			
Firm size	34,593	7.58	1.61
Leverage	34,468	0.19	0.17
CAPEX/TA	32,842	0.05	0.04
<b>CEO related variables</b>			
Age	33,801	55.6	7.48
CEO- Chair Duality	34,873	0.57	0.5
Ln (Compensation)	34,614	14.8	1.23
Gender dummy	34,873	0.02	0.16
<b>Board related variables</b>			
Board size	25,087	9.25	3.03
Number of meetings	16,669	7.42	3.37
Average number of other boards	22,123	0.82	0.57
Average director tenure	22,120	9.54	17.04
Average director age	24,348	60.6	4.39
% Independent	25,087	69.2	20.09
% Inside	25,087	18	10.85
% Grey	25,087	9.86	12.29
% Female	25,087	4.56	7.72
<b>Co-option related variables</b>			
Co-option	20,767	0.45	0.33
Independent co-option	19,698	0.34	0.27
Inside co-option	19,698	0.07	0.1
Grey co-option	19,698	0.04	0.08
% Ind. co-opted	19,520	0.48	0.37
% Inside co-opted	19,478	0.34	0.43
% Grey co-opted	10,559	0.35	0.44

The table presents the number of observations, mean, and standard deviation of firm, CEO, board of directors and co-option related variables for the years 1996 to 2014 of the companies listed in the S&P 1500 index.

Table 3: Effect of co-option on turnover performance sensitivity

	Lead turnover dummy	
	(1)	(2)
Co-option	0	-0.049
BHMR	-0.404***	
EBIT		-0.008***
Co-option*BHMR	0.333**	
Co-option*EBIT		0.011***
Firm size	0	0.013
CAPEX/TA	1.089*	1.235**
Gender dummy	0.054	0.047
Age	0.047***	0.046***
% female	-0.007**	-0.007***
Board size	0.016	0.020*
Constant	-4.104***	-4.186***
Industry Dummies	Yes	Yes
Pseudo R-squared	0.0687	0.0648
Number of observations	14185	14441

Table 3 employs a probit model to investigate the impact of co-option on the CEO turnover-performance sensitivity where the dependent variable is lead CEO turnover (Forced and voluntary). The accounting performance is measured by the earnings before interest and taxes and the market performance is measured by the buy and hold monthly returns for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition). The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 4: Effect of co-opted and non-co-opted directors on the sensitivity of CEO turnover to market performance by director type

	Lead turnover dummy					
	(1)	(2)	(3)	(4)	(5)	(6)
BHMR	-0.379***	-0.286***	-0.269***	-0.098	-0.158*	-0.252***
Ind. co-option	0.039					
Inside co-option		-0.149				
Grey co-option			-0.224			
Ind. non-co-option				0.019		
Inside non-co-option					0.069	
Grey non-co-option						-0.233
BHMR*Ind. co-option	0.372*					
BHMR*Inside co-option		0.553				
BHMR*Grey co-option			0.665			
BHMR*Ind. non-co-option				-0.421**		
BHMR*Inside non-co-opt.					-0.74	
BHMR*Grey non-co-option						0.153
Firm size	-0.001	-0.001	-0.002	0	-0.001	-0.002
CAPEX/TA	1.099*	1.099*	1.090*	1.075*	1.092*	1.101*
Gender dummy	0.054	0.052	0.05	0.055	0.051	0.048
Age	0.047***	0.048***	0.048***	0.047***	0.047***	0.047***
% female	-0.007**	-0.007**	-0.007**	-0.007**	-0.007**	-0.007**
Board size	0.016*	0.015	0.016	0.015	0.016	0.017*
Constant	-4.108***	-4.133***	-4.109***	-4.122***	-4.141***	-4.089***
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.0687	0.0681	0.0682	0.0687	0.0687	0.0682
Number of observations	14185	14185	14185	14185	14185	14185

Table 4 employs a probit model to investigate the impact of co-option and non-co-option by director type on the CEO turnover-performance sensitivity where the dependent variable is lead CEO turnover (Forced and voluntary) and the market performance is measured by the buy and hold monthly returns for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition). The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 5: Effect of co-opted and non-co-opted directors on the sensitivity of CEO turnover to accounting performance by director type

	Lead turnover dummy					
	(1)	(2)	(3)	(4)	(5)	(6)
EBIT	-0.008***	-0.003*	-0.003*	0.003	0	-0.002
Ind. co-option	-0.033					
Inside co-option		-0.164				
Grey co-option			-0.211			
Ind. non-co-option				0.078		
Inside non-co-option					0.177	
Grey non-co-option						-0.176
EBIT*Ind.co-option	0.014***					
EBIT*Inside co-option		0.01				
EBIT*Grey co-option			0.016			
EBIT*Ind. non-co-option				-0.013***		
EBIT*Inside non-co-option					-0.028	
EBIT*Grey non-co-option						-0.006
Firm size	0.011	0.01	0.011	0.011	0.013	0.01
CAPEX/TA	1.236**	1.225*	1.220*	1.228**	1.213*	1.231**
Gender dummy	0.047	0.04	0.041	0.047	0.042	0.036
Age	0.046***	0.047***	0.047***	0.046***	0.047***	0.046***
% female	-0.007***	-0.007***	-0.007***	-0.007***	-0.007***	-0.007**
Board size	0.022**	0.020*	0.020*	0.020*	0.021*	0.022**
Constant	-4.172***	-4.198***	-4.215***	-4.236***	-4.240***	-4.165***
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.0649	0.0632	0.0633	0.0648	0.0635	0.0633
Number of observations	14441	14441	14441	14441	14441	14441

Table 5 employs a probit model to investigate the impact of co-option and non-co-option by director type on the CEO turnover-performance sensitivity where the dependent variable is CEO turnover (Forced and voluntary). The accounting performance is measured by the earnings before interest and taxes for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition). The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 6: Effect of co-option on the CEO's total compensation

	Lead compensation
Co-option	0.094***
Firm size	0.412***
Average director tenure	-0.001
Average director age	-0.003
Average number of other boards	0.241***
Gender dummy	0.015
% female	0.002
Age	-0.006***
Duality	0.100***
Market to book ratio	0
Constant	12.324***
Industry Dummies	Yes
Year Dummies	Yes
Adjusted R-squared	0.375
Number of observations	15284

Table 6 employs a regression of the dependent variable lead CEO compensation on co-option and the hypothesized determinants of compensation as control variables for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition) and year dummies are included to control for year specific characteristics. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 7: Effect of co-option on the CEO chair duality

	Lead duality
Co-option	0.709***
Firm size	0.096***
Board size	-0.006
Average director tenure	0.001
Average director age	0.011***
Average number of other boards	0.081***
Gender dummy	-0.226**
% female	0.003
Leverage	-0.134
Constant	-1.687***
Industry Dummies	Yes
Year Dummies	Yes
Pseudo R-squared	0.0666
Number of observations	16233

Table 7 employs a probit regression of the dependent variable lead CEO duality on co-option and the hypothesized determinants of CEO duality as control variables for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition) and year dummies are included to control for year specific characteristics. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 8: Effect of co-opted and non-co-opted directors on the CEO's total compensation by director type

	Lead CEO compensation					
	(1)	(2)	(3)	(4)	(5)	(6)
Ind. co-option	0.141***					
Inside co-option		-0.224*				
Grey co-option			0.289**			
Ind. non-co-option				-0.027		
Inside non-co-option					-0.433***	
Grey non-co-option						-0.342***
Firm size	0.412***	0.409***	0.410***	0.411***	0.410***	0.411***
Avg. director tenure	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Avg. director age	-0.003	-0.006*	-0.004	-0.005	-0.004	-0.004
Avg. num. other boards	0.238***	0.232***	0.241***	0.240***	0.228***	0.235***
Gender dummy	0.016	.	.	0.013	.	.
% female	0.002	0.002	0.002	0.002	0.002	0.002
Age	-0.006***	-0.004**	-0.005***	-0.005***	-0.006***	-0.006***
Duality	0.098***	0.113***	0.108***	0.108***	0.104***	0.105***
Market to book ratio	0	0	0	0	0	0
Constant	12.326***	12.41***	12.36***	12.39***	12.44***	12.38***
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R-squared	0.375	0.374	0.374	0.374	0.375	0.375
Number of Obs.	15284	15284	15284	15284	15284	15284

Table 8 employs a regression of the dependent variable lead CEO compensation on co-option and non-co-option by director type and the hypothesized determinants of CEO compensation as control variables for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition) and year dummies are included to control for year specific characteristics. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 9: Effect of co-opted and non-co-opted directors on CEO chair duality by director type

	Lead Duality					
	(1)	(2)	(3)	(4)	(5)	(6)
Ind. co-option	0.886***					
Inside co-option		0.939***				
Grey co-option			0.974***			
Ind. non-co-option				-0.787***		
Inside non-co-option					-0.917***	
Grey non-co-option						-1.262***
Firm size	0.095***	0.094***	0.094***	0.096***	0.096***	0.090***
Board size	-0.004	-0.011*	-0.014**	-0.005	-0.017**	-0.007
Average director tenure	0.001	0.001	0.001	0.001	0.001	0.001
Average director age	0.010***	0.009**	0.008**	0.010***	0.008**	0.009**
Avg. number of other boards	0.054*	0.073***	0.058**	0.106***	0.029	0.038
Gender dummy	-0.223**	.	.	-0.221**	.	.
% female	0.001	.	.	0.004*	.	.
Leverage	-0.143	-0.125	-0.186*	-0.120	-0.177*	-0.163*
Constant	-1.609***	-1.165***	-1.081***	-1.017***	-0.905***	-1.044***
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.0671	0.0473	0.0463	0.0624	0.0475	0.0503
Number of observations	16233	16233	16233	16233	16233	16233

Table 9 employs a probit model of the dependent variable lead CEO chair duality on co-option and non-co-option by director type and the hypothesized determinants of duality as control variables for the years 1996 to 2014. Industry dummies are included to control for industry specific effects (based on the Fama and French 48-industry definition) and year dummies are included to control for year specific characteristics. The asterisks \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.