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Corporate Governance issues in Family and Non-Family Owned Firms: an Empirical Analysis of CEO Compensation, Executive Turnover, and Earnings Management.

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che hanno sempre creduto in me
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Introduction

Why is corporate governance relevant? What is corporate governance for? There are numerous interesting questions regarding corporate governance and its relevance in the academic and corporate world. As widely known, managers' interests and objectives differ from those of the shareholders. The formers aim at maximizing their remuneration and personal wealth. They often engage in selfish behaviors, using shareholders' money in beyond-the-core activities in order to build an empire of large, diversified, and global business, which often underperform more focused companies (Lev, 2012).

In this regard, corporate governance aims at minimizing these conflicts of interests (i.e. agency costs), even though whether or not it mitigates such agency conflicts is still an unanswered question. Specifically, corporate governance is made by a large number of mechanisms, some of which are a result of competitive forces and market conditions (i.e. the market for corporate control, executive compensation, etc.), while others (the majority) are legally imposed (see, e.g., the Sarbanes-Oxley Act in the U.S., and the Codice Preda in Italy). Such mechanisms should monitor managers and punish opportunistic behaviors, thereby aligning their interests with those of the owners.

Most of the academic research on corporate governance has been largely focused on widely held public corporations. In this class of firms the ownership is dispersed amongst a multitude of investors. As a consequence, agency conflicts arise between managers and shareholders given the separation between ownership and control (Jensen and Meckling, 1976). This ownership structure is typical in countries with high legal investor protection (Zingales, 1994; Volpin, 2002), such as the United States and the United Kingdom.

Despite much of the research focusing on widely held public firms, in fact, family firms represent the dominant ownership form in the corporate world (Faccio and Lang, 2002). Even though it may sound unconventional, in the Unites States (which is broadly recognized as a country of dispersed ownership) more than 40% of the public corporations in the S&P500 can be classified as family firms (Chen et al. 2013).

As a consequence, in the last three decades, research on family firms has grown in importance among scholars, with prominent studies appearing at the end of the past century. In the Italian academic history, early works regarding family firms are Tomaselli (1996), and Corbetta (1998). In the past decade, family business studies have become important also at international level. For instance, some studies have firstly documented the diffusion of family ownership worldwide (Faccio and Lang, 2002), while others, although failing to obtain unambiguous empirical evidence, have found evidence for a higher financial performance of family controlled firms as compared to non-family firms (see, e.g., Anderson and Reeb, 2003; McConaughy, et al., 2001; Sraer and Thesmar, 2010).

The definition of what constitute a family firm is somewhat ambiguous in the literature. Family firms could be small businesses held by a family, but also large multinational firms. My work defines family firms, consistent with previous studies (see, e.g., Volpin, 2002; Tiscini, 2008; Faccio and Lang, 2002; Anderson and Reeb, 2003; Villalonga and Amit, 2006; Brunello et al., 2001, 2003), as publicly traded companies, which are directly controlled by one or more families, or by an individual who has publicly disclosed his intention to pass the baton to one of his relatives.

Research on family-owned companies typically focuses on the conflict between majority shareholders (the controlling family) and minority shareholders, also know as Type II agency problem (Villalonga and Amit, 2006). These studies show that typical agency conflicts of interests between shareholders and managers (Type I) are mitigated by family

ownership. In fact, different from widely held non-family firms, the ownership structure of family-owned companies allows the controlling family to monitor more easily the CEO (who, often, is a member of the controlling family). Furthermore, the family holds significant power, given the concentrated ownership, that may occasionally lead to collusion between managers and the controlling family (Brunello et al., 2001). The Chief Executive Officer (i.e., the CEO) may collude with the dominant family, extracting rents from minority shareholders, even in cases where he/she is an externally hired professional manager (Zingales, 1994; Volpin, 2002). Minority shareholders usually provide a great percentage of the firm's capital, but are often deprived of a real influence on the management of the firm. Frequently family-owned firms engage in transaction with other family-related businesses, subtracting corporate funds from minority shareholders. In such situations, effective corporate governance protecting minority shareholders is needed. Moreover, recent studies (e.g., Gomez-Mejia et al., 2007; Tiscini, 2008; Berrone et al., 2012) have outlined that family firms present some peculiarities with respect to the family's (or the CEO in cases where he is a family member) aim at non-financial benefits (i.e. Socioemotional benefits, or/and idiosyncratic benefits of control).

This dynamic opens the field to research regarding corporate governance in family-owned firms, because these family firm's characteristics logically lead to impact the corporate governance of the firm. As a consequence, some traditionally studied mechanisms of corporate governance may work differently in family-owned firms when compared to non-family firms.

The literature on executive compensation, for instance, is mainly tied to widely held public companies and to the Type I agency problems (conflicts of interests between managers and owners). Many authors[1] have examined the importance of managerial incentives in

[1] See, e.g., Coughlan and Schmidt's (1985) Murphy (1985), Jensen and Murphy (1990), Mehran (1995), Aggrawal et al. (1999), Core et al. (1999) Bebchuk and Grinstein (2010).

achieving benefits for the shareholders and, as a consequence, improving the firm's performance. Their findings point to the existence of executive compensation contracts, based on incentives for performance, reducing the costs associated with the Type I agency problems between managers and shareholders. Hence, these results point to the necessity to align the interests of managers and shareholders in order to incentivize managers to create value for the owners. On the other hand, in family owned companies the ownership concentration and the easier monitoring (by the family on the board of directors) should lead to a reduction of the agency problems between managers and shareholders (Villalonga and Amit, 2006). Moreover, for cases in which the CEO is a member of the controlling family the interests of owners should coincide with the ones of managers. As a consequence, we should expect that the typical mechanism of aligning interests of managers and shareholders (i.e. the sensitivity of CEO pay to performance) might work differently in family-owned firms when compared to non-family firms.

Another relevant corporate governance mechanism is CEO turnover. The likelihood of CEO dismissal in light of poor firm performance is often considered indicative of whether a firm is well governed; in fact, well-governed firms are more likely to dismiss their CEOs for poor performance than are poorly governed firms (Kaplan, 1994). Accordingly, several studies have empirically documented a negative association between CEO turnover and firm performance in public corporations. This literature is premised on the idea that poor firm performance leads firm owners to infer that their manager's ability to create shareholder value is lower than a potential replacement's, leading them to replace their CEO. However, the likelihood of a CEOs' performance related dismissal is also affected by the diligence with which executive performance is monitored and acted upon by owners, i.e. their firms' governance systems. The ability of owners to replace poorly performing management is, in turn, affected by their effective control over firm governance. The law and finance literature

documents that ownership structures that concentrate power in the hands of controlling shareholders, often-family members, limit the ability of other (minority) shareholders to discipline management (La Porta et. al, 1999). In some instances, controlling shareholders further enhance their control of the firm by appointing family members as chief executives (Volpin, 2002). This could create differences in the likelihood of CEO turnover between family and non-family controlled companies.

Finally, another important corporate governance mechanism is the one regarding the punishment of the managers' opportunistic behavior of misrepresenting the firm's financial performance in order to achieve selfish objectives, i.e. the earnings management. The literature on earnings management focuses extensively on the expected costs that earnings management imposes on shareholders. Haley and Wahlen (1999) define earnings management as the alteration of a firm's reported economic performance by insiders to either mislead stakeholders or to influence contractual outcomes. Along this line, much of the past research examines manager's expected private benefits from engaging in earnings management[2]. Many previous studies show that the managerial incentive to misrepresent firm's financial performance through earnings management arises, in part, from the conflict of interest between the firm's managers and shareholders (Type I) and the information asymmetry associated with this separation. Hence, it could be an opportunity to expand on the issue of corporate governance and earnings management using family firms, in which the traditional Type I agency problem has been shown to be mitigated. As a consequence, the extreme corporate governance mechanism aim at preventing/punishing such opportunistic behavior (i.e. the CEO turnover) might work differently in family-owned firms when compared to non-family firms.

[2] see, e.g., Bergstresser and Philippon 2006; Chung 2002; Frankel, Johnson, and Nelson 2002; Hazarika et al. 2012; Healy and Wahlen 1999; Leuz et al. 2003; Mergenthaler, Rajgopal, and Srinivasan 2012.

From this standpoint, this dissertation aims at filling a gap in the business literature by investigating some unstudied family firms' corporate governance issues, and providing empirical and theoretical contribution to the field of family business. The analysis is empirical archival, based on a hand-collected sample of non-financial Italian publicly traded companies from 2006 to 2010. In this setting of family and non-family firms, I developed my work studying how family ownership may affect corporate governance mechanisms behind CEO compensation, CEO turnover, and earnings management. As a consequence, this dissertation is divided into three main Chapters.

In Chapter 1, I analyze the CEO compensation in family and non-family firms, and I study the sensitivity of CEO pay to performance. I find CEO pay for performance sensitivity being higher for non-family firms with dispersed ownership than for family firms. The lower agency conflict of family-owned firms, and the easier monitoring on the board of directors explain the results. Furthermore, within family-owned firms, the pay for performance sensitivity of professional CEOs is higher than the pay for performance sensitivity of family CEOs, because family CEOs incentives are tightly aligned with those of the controlling family, and they are also motivated by the preservation of the corporate control. Robustness tests rule out competing hypotheses that family rent extraction purposes, or similar level of ownership concentration (i.e. the blockholder-controlled firms), may drive the results. Finally, this part of my dissertation demonstrates that, in the Italian sample, accounting performance is more important than stock market returns in setting the CEO pay for both family and non-family firms.

In Chapter 2, I begin by examining the likelihood of performance-related CEO turnover in family firms. I find that the likelihood of performance-related turnover is lower in family controlled firms as compared to firms with dispersed ownership. However, CEO turnover is sensitive to both stock market and accounting performance in non-family firms,

but is only sensitive to accounting performance in family-controlled firms. Furthermore, if the CEO is a member of the controlling family, turnover is insensitive to both stock market and accounting performance. I provide evidence that family ties drive the lack of sensitivity of family-CEO turnover to performance rather than concentrated ownership by blockholders. My results are consistent with family ownership exacerbating the conflict between majority and minority shareholders, and family ties creating executive entrenchment.

Finally, I analyze the directional change of performance-related CEO turnover. Results show that family firms with family CEOs are more willing to replace the family CEO with another family member. However, when the firm reports negative accounting performance, the probability that the new CEO is another family member decreases. On the other hand, family firms with professional CEOs are more willing to replace professional CEOs with another professional manager. Notwithstanding, when the firm reports a negative market performance, the probability that the new CEO is a family member increases. I posit that in cases of family CEO dismissals due to poor accounting performance, the family may feel the need of professional assistance. Also, in cases of dismissed professional CEOs, driven by low market performance, a family firm may feel threatened by potential takeovers and may appoint a family member to prevent any corporate raiders.

In Chapter 3, I investigate the moderating effect of family ownership on the relation between earnings management and CEO turnover. Consistent with agency theory, I find a positive and significant relation between earnings management and CEO turnover in the overall sample, the association being primarily driven by non-family-owned firms. In family-owned firms, I find that the positive relation is reduced. Furthermore, I find the association to be insignificant in cases where the CEO is a member of the controlling family. Robustness tests rule out competing hypotheses that differences in the propensity of family and non-family firms to manage earnings and ownership concentration drive my results. The study

contributes to our understanding of family ownership driven differences in corporate governance systems, a relatively unexamined topic in the literature.

This dissertation aims to shed new light in the field of corporate governance of family-owned firms. In particular, I aim to demonstrate that family firms' characteristics (such as the collusion between the controlling family and managers, the benefit of control, and the socioemotional wealth) affect some corporate governance mechanisms, moderating the results found in widely held non-family firms. Finally, I study conflicts of interests between majority and minority shareholders (Type II agency problems), which can lead to collusion between the dominant family and managers, and the family's extraction of private benefits. In this regard, I show when and how corporate governance's mechanisms act to prevent and/or punish managers' opportunistic behavior.

CHAPTER 1: Agency Conflicts, Family Ownership, and CEO Pay for Performance Sensitivity.

1.1. Introduction

An extensive literature examines the pay for performance sensitivity of Chief Executive Officers (CEO) in widely held public companies. Yet, little is known about the level and the sensitivity of pay for performance in firms with a lower degree of agency problems, such as family owned companies, as admitted by Villalonga and Amit (2006). On the one hand, it is widely known that public companies with dispersed ownership suffer from an agency problem (conflicts of interest between managers and shareholders). Family firms, on the other hand, are characterized by a lower conflict of interest between managers and owners (whose interests sometimes coincide) and by easier monitoring of shareholders on the board of directors.

The aim of this study is to demonstrate that some family firms characteristics, such as the lower agency conflicts, the easier monitoring, and the preservation of the family's benefits of control, can induce the controlling family to lower the CEO pay-performance sensitivity. The family control moderates the need of the incentive alignment mechanism of the CEO pay sensitivity to performance; whereas non-family companies with dispersed ownership strongly need such mechanism in order to align the interests of the firm's managers and shareholders.

Family firms represent a dominant ownership form in the corporate world, 40% of U.S. public companies in the S&P500 (Chen et al. 2013). Research on family firms typically focuses on the conflict between majority shareholders (the controlling family) and minority shareholders. Furthermore, these studies show how agency conflict of interests between shareholders and managers is mitigated by family ownership. The ownership structure of family firms allows the controlling family to more easily monitor the CEO. Moreover, the family holds significant power due to the concentrated ownership and this leads to collusion

between managers and the controlling family (Brunello et al., 2001). Very often the CEO tends to collude with the dominant family, extracting rents from minority shareholders, even in cases where the CEO is an externally hired professional manager (Zingales, 1994; Volpin, 2002). From this standpoint, CEO compensation can serve as an instrument for the purpose of extracting rents from minority shareholder, thus, pointing to a lower pay for performance sensitivity in family owned firms.

Optimal contracting theory suggests that when agency conflicts between managers and owners arise due to the misalignment of incentives, companies tie CEO compensation to performance indicators (high CEO pay-performance sensitivity) that are aligned with the interest of shareholders. Nevertheless, in cases of family firms the interests of these two actors are aligned via family ties, thus the high pay for performance sensitivity may not be warranted (McConaughy, 2000).

Moreover, for cases in which the CEO is a family member, one should observe an even lower CEO pay-performance sensitivity. Berrone et al. (2012) argues that family owned firms are often motivated to also pursue socioemotional wealth goals, such as entrenchment or the benefits of control, even if they are not financially rewarded for it. I argue that in the specific case of family CEOs, the emphasis put on the preservation of the benefits of control is critical in explaining a lower CEO pay-performance sensitivity in family firms.

I test the for relation between CEO pay performance sensitivity and Family ownership using a sample of 1027 firm/year observations of publicly traded Italian firms during the years from 2006 to 2010. I show that non-family firms exhibit positive and significant CEO pay for performance sensitivity (coefficient of 0.112), while the same relation is reduced in family firms, via the interaction term having a negative and significant coefficient of -0.108. Additionally, when I examine cases where the CEO is a member of the controlling family, I

find an even lower CEO pay for performance sensitivity. I control for both accounting and market measures of performance in each of my tests.

My findings are consistent with the easier monitoring and lower agency conflict in family firms and, as a result, the consequent lower need for interests' alignment and the preservation of the benefits of control, rather than rent extraction from minority shareholders. Specifically, when a family member is the CEO, the family might use its power to extract rents from minority shareholders. In these situations the CEOs would not be paid for achieved past performance but instead they would be paid for their family members status. Yet, this is not the case. I show that in family firms, family CEOs earn, on average, lower compensation than professional CEOs, and they perform on average better. This result is consistent with McConaughy (2000), Gomez-Mejia et al. (2003), and Berrone et al. (2012), and the preservation of the benefits of control driving behavior in family firms and affecting the corporate governance mechanisms of family firms such as the sensitivity of CEO compensation to performance.

I further examin the robustness of my results by controlling for blockholder firms. These firms have similar ownership concentration of that observed by family firms, but the main shareholder is not a family (or a firm controlled by a family), but it is an institutional investor such as a common fund, a pension fund, the State, etc. This test aims to role out the alternative view that my findings are just driven by the high ownership concentration of the family, rather then by the family characteristics mentioned above (i.e. lower agency conflicts, easier monitoring, the benefits of control, etc.). Results show that, even though blockholder-controlled companies experience ownership concentration levels similar to that of family firms, they report the same CEO pay-performance sensitivity of non-family firms with dispersed ownership, hence rejecting the alternative hypothesis that ownership concentration alone explains my results.

Finally, I examine the sensitivity of my findings, examining which measure of performance is more sensitive to CEO pay in family and non-family firms. I show that in my sample of analysis family owned public firms, as well as non-family owned public companies, place a lower relative weight on stock market return in CEO pay. This result is consistent with stock prices being less informative for firms with concentrated ownership (Volpin, 2002). Past research documents that ownership concentration and family ownership of firms is more prevalent in countries with weaker shareholder and creditor protection laws, then lower capital market development and participation (Shleifer and Vishny, 1986; Zingales, 1996; La Porta et. al., 1999). Consequently, the difference in the relative weight placed on accounting returns and stock returns in affecting CEO pay for performance sensitivity in family and non-family firms is still an unanswered empirical question.

This study contributes to the literature on pay for performance sensitivity and family firms by providing evidence that lower principle-agent conflict and easier monitoring family owners are related to lower CEO pay for performance sensitivity. I provide evidence on one of the underlying differences between public companies, with low levels of ownership concentration and high degree of agency conflicts, and companies owned by a dominant family. I contribute to both the theoretical and empirical literature on corporate governance of family firms building on McConaughy (2000), Brunello et al. (2001), Gomez-Mejia et al. (2003), Villalonga and Amit (2006) by demonstrating that lower agency problems are reflected in lower CEO pay for performance sensitivity. Additionally, I empirically examine how the preservation of the benefits of control is reflected in the corporate governance mechanisms of family firms, such as the sensitivity of CEO compensation to performance. I provide evidence that lower pay-performance sensitivity of family CEOs is not an instrument for rent extraction, but rather an effect of the family's preservation of the benefits of control. The controlling family does not lower the sensitivity of the CEO pay to performance in order

to extract private rents at the expense of minority shareholders, but rather in order to preserve the private benefits of control. Finally, I show that the accounting performance is, overall, more important in setting CEO pay packages as compared market performance in family firms which contradicts much of the pay studies done in widely held firms.

The remainder of the paper is organized as follows: section two motivates my hypotheses; section three details my sample selection, provides descriptive statistics on my variables of interest and discusses my empirical methods. Section 4 discusses results and describes several robustness tests of my results. Section 5 concludes.

1.2. Background and hypotheses development

The literature on executive compensation is mainly tied to the agency theory (conflicts of interests between managers and owners) and optimal contracting theory. Many authors such as Coughlan and Schmidt's (1985) Murphy (1985), Jensen and Murphy (1990), Mehran (1995), Aggrawal et al. (1999), Core et al. (1999) Bebchuk and Grinstein (2010), have examined the importance of managerial incentives in achieving benefits for the shareholders and, as a consequence, improving the firm's performance. Their findings point to the existence of executive compensation contracts, based on incentives for performance, reducing the costs associated with the agency problems between managers and shareholders. Hence, these results point to the necessity to align the interests of managers and shareholders in order to incentivize managers to create value for the owners. This stream of research justifies the use of incentive plans in order to pursue the final goal of creating shareholder value. Thus, optimal contracting theory suggests that, if the contract between executives and owners is defined in a proper way, managers would pursue their own interests and contemporarily they would create wealth for shareholders, thus the need to correlate pay to performance.

On the other hand, in family owned companies the ownership concentration and the easier monitoring (by the family on the board of directors) should lead to a reduction of the agency problems between managers and shareholders (Villalonga and Amit, 2006). Moreover, for cases in which the CEO is a member of the controlling family the interests of owners should coincide with the ones of managers. These effects seem to be higher for family owned firms than for institutional blockholder-owned companies, such as banks, investment fund etc., because the family is considered an active shareholder since its investments are, usually, undiversified. Instead, by definition institutional investors hold well diversified portfolios and, as a consequence, their monitoring is low (Volpin, 2002).

Based on this difference between family and non-family firms regarding the agency problem and monitoring, the first aim of this work is to understand whether or not the reduction of the agency conflict is detrimental for the CEO pay for performance sensitivity. While a few studies have documented that the remuneration of founding family members CEOs is not as high as external professional CEOs (McConaughy, 2000; Gomez-Mejia, 2003), they do not test for differences between family and non-family firms in the pay for performance sensitivity. Non-family companies' boards of directors are induced to pay high remunerations to managers in order to attract talent and compensation for their risk adversion. On the other hand, family controlled companies face lower agency conflicts, and experience easier monitoring by the controlling family on board of directors, hence the CEO pay for performance sensitivity should be lower.

This consideration leads me to draw the my hypothesis:

Hypothesis 1: *"given the lower agency conflicts and the easier monitoring of family firms as compared to non-family firms, the CEO pay for performance sensitivity is lower for family firms than for non-family firms"*.

In family firms the conflict of interests, as mentioned above, is between majority shareholders (the family) and minority shareholders, thus the lower agency problem in family owned companies and the easier monitoring made by the family on the board of directors should motivate hypothesis 1. Hence, CEO compensation contracts' function of moderating the agency conflicts of interests in family firms should be lower as compared to non-family companies.

The second aim of this research is to study CEO pay for performance sensitivity within family controlled companies. Family firms can have two different kinds of CEOs: professional (external hired) CEOs, or family member CEOs. The professional CEO, by definition, is not a family member. Notwithstanding, the monitoring by the dominant family should be reflected in a lower professional CEO pay for performance sensitivity as compared to CEOs in non-family firms. However, professional CEOs should still have higher pay-performance sensitivity when compared to family CEOs. Indeed, for cases in which a family manager runs the family firm, the need for interest alignment (the basis of the pay for performance sensitivity) should be very low. On the other hand, family CEOs can use their compensation contracts in order to extract rents from the minority shareholders, or in order to achieve others (nonfinancial) benefits.

These differences between family firms lead by professional CEOs and the family firms lead by family CEOs are addressed to a degree in Berrone et al. (2012). In the study, the authors theoretically infer that in family owned firms, more than rent extraction, others (nonfinancial) benefits, such as the benefits for control, can better explain the lower pay for performance sensitivity of family CEOs. According to Berrone et al. (2012) model, family CEOs look for other (nonfinancial) aspects, which can assure them of achieving their socioemotional wealth. On the other hand, professional CEOs typically do not look for such

kind of endowment. Hence, this issue should induce the controlling family to tie more the professional CEO compensation on firm performance than what they do for family CEOs.

Consequently, I expect that the family CEOs' pay for performance sensitivity to be lower than that of professional CEOs. The former require less pay for performance sensitivity in order to align their interests with the controlling family's than do the professional CEOs, and thus the lower sensitivity of their pay to performance.

These considerations lead me to the second hypothesis:

Hypothesis 2: *"within family owned firms, the CEO pay for performance sensitivity is higher for professional CEOs than for family CEOs"*.

1.3. Model and Data

Sample

Given the focus on family ownership's effect on the CEO pay for performance sensitivity, I utilize a hand-collected sample of Italian firms to conduct the study. The reliance on Italian firms stems from the high propensity of family ownership in this country, which allows me to increase the power of my tests. Specifically, Italy provides a unique institutional environment to examine the role of family ties in the effectiveness of corporate governance. As a consequence, concentrated ownership by blockholders and families through pyramids and cross-ownership is commonplace. For instance, more than 60% of my sample firms are classified as family controlled since a single family owns the highest percentage of the outstanding voting shares. Frequently, the CEO of a family-owned firm is also a member of the family. For example, over 30% of CEOs in my sample are members of a controlling family. Additionally, previous studies have also relied on the uniqueness of the Italian context to examine family business characteristics (Corbetta and Montemerlo, 1999; Volpin, 2002;

Brunello et al., 2001; Brunello et al., 2003; Prencipe et al., 2008; Barrios and Macciocchi, 2013).

I begin constructing my sample by identifying all companies listed on the Italian Stock Exchange during the period of 2006 to 2010. From this group I exclude financial firms as well as bank holding companies and insurance companies given the different nature of their financial statement as well as the regulatory environment in which they operate. In the end, I collected data from 221 non-financial Italian firms listed during the period of 2006-2010. This sample is reduced during some test given the data requirements discussed below. The remained of this section discusses my variables of interest, control covariates, as well as the empirical specifications used to test my hypotheses.

CEO Compensation

In order to examine the CEO pay for performance sensitivity, I hand-collected data from the corporate annual reports, because no database with information about CEO compensation of Italian companies is available. I define CEO compensation as the cash part of the CEO remuneration. The CEO cash compensation is made up of two main parts: salary and bonuses. Salary does not change during the year because it is not linked to any market or accounting performance measure, while bonuses are strictly linked to some key financial indicators such as net income, ROA, stock market performance etc. For the purpose of this study it has been decided to use both parts of the CEO compensation (see Table 1 for details and descriptive statistics), with the aim of measuring the effect of the cash part of CEO compensation on firm's performance. I decide to not consider the equity part of cash compensation for twofold reason. Firstly, as Tiscini and Raoli (2013) show, equity-based compensation is not an efficient instrument of incentive alignment in companies where the owners hold a significant part of the outstanding shares (i.e. the family-owned firms).

Secondly, as Mehran (1995) shows, companies where a great percentage of the shares are held by insiders or outside blockholders (i.e. the family firms or the blockholder-dominated firms) use less equity-based compensation.

Table 1
Descriptive Statistics for Variables Used in the Analysis.

This table reports means, medians standard deviations, 1st quartile and 3rd quartile for salary, bonuses, cash compensation, and other explanatory variables used in the analysis. I report the descriptive statistics for the whole sample (family woned firms and non-family firms) All financial variables are winsorized at the .01%. The variables are defined in the Appendix.

	# obs.	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Salary	1027	411,488.5	603,159.7	90,000	224,000	500,000
Bonuses	1027	187,669.6	601,535.1	0	0	82,161
Cash Compensation	1027	599,158.1	920796.9	124,233	298,862	686,000
Accounting Performance	1027	0.006	0.117	-0.02	0.02	0.05
Market Performance	1027	-0.037	0.371	-0.188	-0.000	0.100
Log Total Assets	1027	13.022	1.782	11.848	12.731	14.106
Market to Book Value	1027	0.167	0.142	0.055	0.136	0.243
Remuneration Committee	1027	0.821	0.383	1	1	1
% of Inderector Directors	1027	0.383	0.180	0.27	0.33	0.47

Table 1 presents the general summary statistics for the variables of interest for the full sample.

Performance Measures and other control variables

To measure firm performance, I examine the industry-adjusted stock market returns, and industry-adjusted return on assets (ROA). The industry-adjusted stock market return (Var: Market Performance) is calculated as the 4-quarter average return minus the industry return based on DataStream industry level 6 identifiers. The industry-adjusted ROA (Var: Accounting Performance) is calculated as net income divided by the book value of total assets minus the industry ROA. I decided to test for both, market and accounting performance to

make my model robust to any kind of performance measure. Furthermore, I can examine whether CEO pay is more sensitive to accounting performance or market performance.

I also control for other firm characteristics in my test by including additional covariates. To control for firm growth opportunities I use the market to book ratio, defined as the sum of the book value of debt plus market value of equity divided by the firms total assets. Finally, I control for the size of the firm by including the natural log of total assets in my tests. All of my accounting and financial covariates have been winsorized at the 1% and 99% level to reduce the effects of outliers.

Family Firm's Ownership, Control and Firm Governance Measures

In order to examine the effects of family ownership on the CEO pay for performance sensitivity, I construct a variable to empirically measure the percentage of ownership (control) by a family at the firm level. In constructing the measure, I adopt a family ownership classification scheme similar to that utilized by Minichilli et al. (2010) and Prencipe et al. (2008) in which I identify family controlled companies as firms in which the dominant family has some concrete form of controlling power. More specifically, I classified a listed company as having family ownership when the dominant family holds the highest percentage of the voting rights when compered to all other relevant shareholders listed by CONSOB[3], usually more than 30% of voting rights. In order to determine family ownership, I personally examined the firms CONSOB filings and the two stock market yearbooks for the period 2006-2010. Operationally, I implement the definition of family control by a dummy variable that takes on a value of 1 if a dominant family directly controls the firm and else 0. My sample contains roughly 60% family controlled firms, which is in line with the 59% found in the Faccio and Lang (2002) study.

[3]CONSOB is the Italian SEC equivalent and has the list of all the relevant shareholders for the publicly traded Italian companies.

Table 2

Panel A: Descriptive Statistics for Variables Used in the Analysis, non-family firms sub-sample.

This table reports means, medians standard deviations, 1st quartile and 3rd quartile for salary, bonuses, cash compensation, and other explanatory variables used in the analysis. I divided the sample into non-family firms sample, and family firms sample. Panel A reports the descriptive statistics for the non-family firms sub-sample; Panel B reports the descriptive statistics for the family owned firms sub-sample. All financial variables are winsorized at the .01%. The variables are defined in the Appendix.

	# obs.	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Salary	314	368,595.5	636,305.5	90,000	216,000	403,000
Bonuses	314	247,958.5	533,940.7	0	10,392.5	207,700
Cash Compensation	314	616,554	938,192.8	136,303	299,841	684,906
Accounting Performance	314	-0.002	0.117	-0.01	0.02	0.05
Market Performance	314	-0.030	0.373	-0.183	-0.000	0.098
Log Total Assets	314	13.354	1.901	12.250	13.161	14.177
Market to Book Value	314	0.174	0.148	0.054	0.140	0.270
Remuneration Committee	314	0.841	0.366	1	1	1
% of Inderector Directors	314	0.419	0.220	0.25	0.38	0.56

Panel B: Descriptive Statistics for Variables Used in the Analysis, family firms sub-sample.

	# obs.	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Salary	713	430,378.3	578,438.2	94,490	233,000	530,000
Bonuses	713	161,118.8	627,522.5	0	0	22,000
Cash Compensation	713	591,497.1	913,539.3	120,000	294,000	686,000
Accounting Performance	713	0.010	0.117	-0.02	0.02	0.05
Market Performance	713	-0.040	0.371	-0.190	-0.000	0.100
Log Total Assets	713	12.869	1.705	11.746	12.628	13.966
Market to Book Value	713	0.164	0.139	0.055	0.134	0.231
Remuneration Committee	713	0.812	0.391	1	1	1
% of Inderector Directors	713	0.367	0.156	0.27	0.33	0.46

As displayed in table 2 panel A and B, when I partition the sample based on family ownership I get 713 observations in family controlled firms while non-family firms have 314 observations. Furthermore, even if non tabulated in table 2, the average family ownership concentration is about 38% in the sample but the percentage can go as high as 97% in some family owned firms.

Using the search procedure described above, I also hand collect measures of the firms

corporate governance to include in my regressions given their apparent relation to the CEO pay. Specifically, I obtain information on whether the CEO is a member of the controlling family (Family CEO) or rather a professional CEO. I conduct news searches to detect CEOs belonging to the dominant family. I create a dummy variable equal to 1 when the family firm's CEO is a family member, and equal to 0 when the family firm's CEO is a professional CEO (see table 3 Panel A and Panel B for detailed descriptive statistics).

Finally, I obtain a measure of board independence by taking the percentage of independent directors for each of the firms in the sample, and I get data about the presence or not of the remuneration committee in the board.

Table 3

Panel A: Descriptive Statistics for Variables Used in the Analysis, family firms - family CEO sub-sample.

This table reports means, medians standard deviations, 1st quartile and 3rd quartile for salary, bonuses, cash compensation, and other explanatory variables used in the analysis. I divided the family owned firms sample into other two subsample: family firms - family CEO sub-sample, and family firms - professional CEO sub-sample. Panel A reports the descriptive statistics for the family firms - family CEO sub-sample; Panel B reports the descriptive statistics for the family firms - professional CEO sub-sample. All financial variables are winsorized at the .01%. The variables are defined in the Appendix.

	# obs.	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Salary	326	468,230.3	649,632.3	105,863	240,500	580,000
Bonuses	326	66,650.7	325,041.2	0	0	4,349
Cash Compensation	326	534,881	747,395	120,000	269,000	622,000
Accounting Performance	326	0.014	0.095	-0.02	0.01	0.05
Market Performance	326	-0.017	0.363	-0.186	-0.002	0.128
Log Total Assets	326	12.589	1.531	11.757	12.528	13.186
Market to Book Value	326	0.145	0.119	0.051	0.120	0.216
Remuneration Committee	326	0.841	0.366	1	1	1
% of Inderector Directors	326	0.362	0.161	0.25	0.33	0.44

Panel B: Descriptive Statistics for Variables Used in the Analysis, family firms - professional CEO sub-sample.

	# obs.	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Salary	387	398,492.5	528,174.7	90,000	220,000	505,000
Bonuses	387	240,696.6	789,631.1	0	0	113,514
Cash Compensation	387	639,189.2	1,031,625	116,000	300,000	752,632
Accounting Performance	387	0.006	0.132	-0.01	0.02	0.06
Market Performance	387	-0.058	0.377	-0.209	0.000	0.083
Log Total Assets	387	13.102	1.806	11.736	12.766	14.625
Market to Book Value	387	0.182	0.153	0.059	0.152	0.273
Remuneration Committee	387	0.788	0.409	1	1	1
% of Inderector Directors	387	0.371	0.153	0.27	0.33	0.46

The Empirical Specification

As in Jensen and Murphy (1990), and in Ortiz-Molina (2007), I define CEO pay for performance sensitivity by the empirical relation between changes in CEO cash compensation and changes in shareholder wealth, measured as market return or accounting performance. The general form of the model hereby used is as follow:

$$Wjt = \beta_0 + \beta_1 R_{jt} + \beta_2 Control_{jt} + \varepsilon_{jt},$$

where *j* indicates the firm to which the CEO belongs and *t* denotes the year. *W* is the change in CEO compensation in euros, *R* is shareholder return, and *Control* is the vector of control variables as defined above. Thus, β_1 captures the sensitivity of pay for performance. Following previous studies (i.e. Ortiz-Molina, 2007), I use median regression (also known as least absolute deviation regression) in this research.

Agency theory predicts a positive pay for performance sensitivity for CEOs in order to solve interests' misalignment between managers and shareholders. On the other hand, family firms experience lower agency conflicts. Family ownership assures easier monitoring by the family on the board of directors, and more interests alignment between managers and shareholders. As a consequence, I expect a lower pay for performance sensitivity. In order to test this first hypothesis I run the following regression:

$$CEO\ Compensation_{i,t} = \alpha_i + \beta_1(Performance_{i,t-1}) + \beta_2(Performance*family\text{-}firms\_dummy_{i,t-1}) + \beta_3(family\text{-}firms\_dummy_{i,t-1}) + \beta_4(LogTA_{i,t-1}) + \beta_5(Market\_to\_Book_{i,t-1}) + \beta_6(Remuneration\_committee_{i,t-1}) + \beta_7(Perc\_Independent\_directors_{i,t-1}) + \varepsilon_{i,t}$$

I examine Hypothesis 2 by running the previous specification adding the family CEO dummy and its triple interaction with the family firms dummy and the performance (accounting and market) measures variables. I use the magnitude and significance of these variables to test for the effects of the CEO's nature (family or professional CEO) on pay for performance sensitivity in family firms. Thus, my empirical model takes the following form:

$$CEO\ Compensation_{i,t} = \alpha_i + \beta_1(Performance_{i,t-1}) + \beta_2(Performance*family\text{-}firms\_dummy_{i,t-1}) + \beta_3(family\text{-}firms\_dummy_{i,t-1}) + \beta_4(Performance*family\text{-}$$

$$firms\_dummy*family\_CEO\_dummy_{i,t-1}) + \beta_5(family\_CEO\_dummy_{i,t-1}) + \beta_6(LogTA_{i,t-1}) + \beta_7(Market\_to\_Book_{i,t-1}) + \beta_8(Remuneration\_committee_{i,t-1}) + \beta_9(Perc\_Independent\_directors_{i,t-1}) + \varepsilon_{i,t}$$

I report the coefficients for standardized CEO cash compensation (my independent variable), standard errors in parenthesis, and coefficients in brackets for each of the variables to show the general magnitude of the effect of performance on CEO pay, and in order to help with the interpretation.

1.4. Results

The first hypothesis aims to test whether non-family firms with dispersed ownership – given their higher agency conflicts – need relative higher CEO pay for performance sensitivity as compared to family owned firms. Family firms typically report agency problems between majority shareholders (the dominant family) and minority shareholders. As a consequence, in family firms the conflict of interest between shareholders and managers is mitigated by concentrated ownership, which allows the controlling family to better monitor the CEO. From this standpoint, agency theory and optimal contracting theory suggest that when companies experience agency conflicts between managers and owners due to misalignment of incentives (such as for the widely held non-family firms), CEO compensation has to be tied to performance (high CEO pay-performance sensitivity). Whereas in the case of family firm the interests of the manager are already aligned with those of the family through family ties, and hence a high sensitivity of pay for performance is not needed (McConaughy, 2000).

TABLE 4
Hypothesis 1
Pay for Performance Sensitivity in Family and Non-Family Firms

This table reports the results of the median regressions that examine the CEO pay for performance sensitivity based on the sample of 1027 firm/year observation from 2006 to 2010. Model 1, 2, and 3 study the effect of family ownership on CEO pay for performance sensitivity. Model 1 reports the results of CEO pay for performance sensitivity using accounting performance (industry-adjusted ROA) as performance measure. Model 2 reports the results of CEO pay for performance sensitivity using market performance (industry-adjusted stock market return) as performance measure. Model 3 use interactions between family firms dummy and the performance measures used in model 1 and 2. The dependent variable is change in CEO cash compensation. The table reports the coefficients for the standardized dependent variable (standardized CEO cash compensation), the standard error in parentheses, and the coefficients in euros in brackets. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. All Variables are defined in the Appendix.

Variable	Predicted sign	Full Sample		
		Model (1)	Model (2)	Model (3)
Intercept		.001	.007***	.009***
		(.002)	(.002)	(.003)
		[695.21]	[5,156.24***]	[6,828.06***]
Accounting Performance	**+**	**.010*** **		**.112*** **
		(.003)		(.004)
		[7,421.32*]**		**[85,987.28***]**
Family*Accounting Performance	**-**	**-.007****		**-.108*** **
		(.003)		(.005)
		[-5,444.47]**		**[-82,552.09***]**
Market Performance	**+**		**.015*** **	**.015*** **
			(.001)	(.001)
			[11,357.7*]**	**[11,318.51***]**
Family*Market Performance	**-**		**-.014*** **	**-.014*** **
			(.001)	(.001)
			[-10,969.80*]**	**[-10,747.54***]**
Family firms dummy		-.000	-.006***	-.006***
		(.000)	(.001)	(.001)
		[-171.99]	[-4,456.22***]	[-4,848.06***]
Log Total Assets		-.000	-.000	-.000
		(.000)	(.000)	(.000)
		[-73.02]	[-88.06]	[-172.99]
Market to Book ratio		.008***	.007***	.005*
		(.002)	(.002)	(.003)
		[5,761.79***]	[5,568.55***]	[3,762.31*]
Remuneration Committee		.000	.000	.000
		(.001)	(.001)	(.001)
		[130.08]	[210.79]	[188.89]
(%) Independent Directors		.001	.001	.001
		(.001)	(.001)	(.001)
		[509.19]	[374.72]	[484.00]
Observations		693	665	638
Pseudo R2		.03	.04	.14

In table 4 Model 1, I regress the industry-adjusted return on assets (ROA), and its interaction with the family firms dummy, on change in CEO cash compensation. I report the coefficients for the standardized CEO cash compensation (my independent variable), standard

errors in parenthesis, and coefficients in euros in brackets[4]. The aim of this representation is to show the relation between CEO pay and firm performance. Model 1 of table 4 reports results for accounting performance (industry-adjusted ROA), model 2 reports results for stock market returns, and Model 3 uses both performance measures.

The results show that a significant difference between family and non-family firms exists, supporting my hypothesis 1. The CEO pay for performance sensitivity is positive and significant, with positive coefficients of .010 (Model 1) and .015 (Model 2) and significant at 1% for non-family firms, while the coefficients on the interaction of the family firms dummy and industry-adjusted ROA (model 1), or industry adjusted market return (model 2) are negative and significant (respectively -.007, and -.014) reducing the CEO pay for performance sensitivity for family controlled companies. Additionally, the control for growth opportunities, the market to book ratio, is positively and significantly related to changes in CEO cash compensation (.007), consistent with findings in previous studies. In Model 3, I replicate the analysis using both performance measures, providing additional support to hypothesis 1. The relation is higher for non-family firms than for family owned firms with the coefficients for the CEO pay-performance sensitivity in non-family firms being positive and significant (.112 for ROA, and .015 for market performance) and the coefficients on the interaction variable of the family firms dummy and firm's performance being negative and significant (-.108 for ROA, and -.014 for market performance).

These results allow me to reject the null hypothesis of no difference between family and non-family firms and irrespective of the performance measures used. The findings in table 1 give support to the thesis that easier monitoring and lower agency problems (typical of family controlled companies) are reflected in a lower CEO pay for performance sensitivity. Family firms do not require high sensitivity of CEO pay for performance because they have

[4] Coefficients in euros are reported to show the economic effect of the sensitivity of CEO pay to firm's financial performance.

other effective instruments to align the managers' interests with those of the family (for example they have the power to directly monitor the board of directors' activities). On the other hand, non-family firms with dispersed ownership face a higher agency conflict of interest and as suggested by optimal contracting theory, they need more incentive alignment between managers and shareholders. Hence, CEO compensation represents the best solution for this purpose.

Given the lower CEO pay for performance sensitivity found in family firms as compared to non-family firms, hypothesis 2 expands the analysis by examining the relation within the context of family controlled companies. The CEO in family firms can typically be of two different kinds: a family member, or a professional manager. The aim of this second analysis is to test whether family CEOs or professional CEOs determines the results showed in table 4.

According to agency theory, the interests of family CEOs coincide with the ones of the controlling family. Family firms with family CEOs experience the lowest degree of agency conflicts, thus the family could chose to not strongly tie the CEO remuneration on firm financial performance, and use CEO compensation as an instrument to extract rents from minority shareholders. As a consequence, the family CEOs would not be paid more for achieved performance, but rather for their status of family member. Another reason why family CEOs can chose to not tie their compensation to firm performance could be that they have different incentives (nonfinancial) in managing the firm, as compared to professional CEOs. For instance, they can derive non-monetary benefits from their positions, such as family identity with the company, which allows also the family to keep being a part of the community (McConaughy, 2000; Berrone et al., 2012). For both reasons here mentioned, family CEOs pay for performance sensitivity is lower as compared to professional CEOs.

In fact, when a professional CEO leads the family firm, there are still some agency

problems, because the interests of the CEO and those of the family may not coincide. In these cases, optimal contracting theory suggests that the firm needs an optimal contract in order to align the professional manager's interests with those of the family, thus I expect to observe a higher CEO pay for performance sensitivity as compared that observable for family firms with family CEOs.

TABLE 5
Hypothesis 2
Pay for Performance Sensitivity in Family Firms with Family CEO, and in Family Firms with Professional CEO.

This table reports the results of the median regressions that examine the CEO pay for performance sensitivity based on the sample of 1027 firm/year observation from 2006 to 2010. Model 1 reports the results of CEO pay for performance sensitivity using accounting performance (industry-adjusted ROA) as performance measure. Model 2 reports the results of CEO pay for performance sensitivity using market performance (industry-adjusted stock market return) as performance measure. The dependent variable is change in CEO cash compensation. Both Model 1 and 2 study the effect of family ownership on CEO pay for performance sensitivity. Moreover, in Model 3 I add the triple interaction variable (Family*Family CEO*Performance) in order to study the differences in pay for performance sensitivity between family CEOs and professional CEOs. The table reports the coefficients for the standardized dependent variable (standardized CEO cash compensation), the standard error in parentheses, and the coefficients in euros in brackets. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. All Variables are defined in the Appendix.

Variable	Predicted sign	Full Sample Model (1)	Model (2)	Model (3)
Intercept		.002	.008*	.010**
		(.003)	(.004)	(.004)
		[1,340.77]	[6,361.10*]	[8,059.85**]
Accounting Performance	**+**	**.014*** **		**.103*** **
		(.004)		(.006)
		[10,845.17*]**		**[78,282.61***]**
Family* Accounting Performance	**-**	**-.002****		**-.091*** **
		(.004)		(.007)
		[-1,368.75]**		**[-69,631.64***]**
Family* Family CEO* Accounting Performance	**-**	**-.013****		**-.011***
		(.006)		(.010)
		[-9,665.68]**		**[-8,747.34*]**
Market Performance	**+**		**.015*** **	**.014*** **
			(.002)	(.002)
			[11,381.14*]**	**[10,530.77***]**
Family* Market Performance	**-**		**-.004***	**-.003***
			(.003)	(.003)
			[-3,344.87*]	**[-2,181.40*]**
Family* Family CEO* Market Performance	**-**		**-.011*** **	**-.011*** **
			(.003)	(.003)
			[-8,220.86*]**	**[-8,425.00***]**
Family firms dummy		.002**	-.000	-.002
		(.001)	(.001)	(.001)
		[1,140.75**]	[-211.22]	[-1,200.98]
Family CEO dummy		-.002***	-.005***	-.005***
		(.001)	(.001)	(.001)
		[-1,651.2**]	[-3,998.82***]	[-3,670.10***]
Log Total Assets		-.000	-.000	-.000
		(.000)	(.000)	(.000)
		[-133.63]	[-272.32]	[-320.98]
Market to Book ratio		.011***	.012***	.010***
		(.002)	(.004)	(.004)
		[8,290.12***]	[9,443.32***]	[7,560.36***]
Remuneration Committee		.000	.000	.001
		(.000)	(.001)	(.001)
		[213.98]	[369.76]	[402.45]
(%) Independent Directors		.001	.002	.001
		(.002)	(.003)	(.003)
		[932.24]	[1,460.34]	[634.07]
Observations		693	665	638
Pseudo R2		.10	.07	.16

Table 5 displays the empirical results for hypothesis 2, which allow me to reject the null hypothesis of no difference between professional CEOs and family CEOs. The CEO pay

for performance sensitivity for professional CEOs is higher in cases where I use accounting performance alone (Model 1), stock market return alone (Model 2), and when I use both performance measures (Model 3). Contemporarily, professional CEO pay-performance sensitivity is lower than non-family firms' CEOs because the coefficients of the family dummy-performance interaction are negative and significant, and they capture the effect of professional CEOs on pay-performance sensitivity. On the other hand, the interaction variables of family firms, family CEO, and performance (both market and accounting) wash out the positive CEO pay for performance sensitivity found for professional CEOs and for non-family firms, being negative and significant (-.013 in Model 1 using accounting performance, and -.011 in Model 2 using market return). These results support hypothesis 2, demonstrating that family CEO's pay for performance sensitivity is lower than professional CEO's one. Indeed, optimal contracting theory suggests that CEO compensation has to be tied to performance indicators when the interests of two actors are not aligned. In the case of family firms with family CEO, the interests of these two actors are already aligned, thus a high sensitivity of pay for performance is not needed.

However, professional CEOs are not family members, so they need their compensation being tied and sensitive to performance. As a consequence, family firms with professional CEOs experience high CEO pay for performance sensitivity, while family firms with family CEOs report very low level of CEO pay for performance sensitivity. The pay for performance sensitivity for professional CEOs in family firms is lower than the pay for performance sensitivity for CEOs in widely held public companies. Indeed, even if the agency conflict of interests between managers and owners are present in both cases, the family firms can better monitor the CEO, hence the CEO pay-performance sensitivity can be reduced. This result has never been shown in the past, and represents an important step forward in the literature in the understanding of the different behavior of family owned companies regarding

some corporate governance aspects. Finally, table 5 provides us with further insights into CEO compensation. In column 1 and 2 the family CEO dummy is negative and significant respectively at 5% and 1%. This result means that in the full sample, on average, compensation is lower for family CEOs.

1.5. Robustness check, Sensitivity Test, and limitations

The findings in table 5 may be subject to alternative explanations. Firstly, the above differences in pay for performance sensitivity between professional and family CEOs may be due to the rent extraction purpose of the dominant family, or rather to the pursuit of others non-financial goals by the family CEO, such as the benefits of control. Given the rent extraction hypothesis, I expect to observe higher compensation for family firms with family CEOs and relative lower performance as compared to family firms with professional CEOs. On the other hand, if I find no differences in performance and lower CEO compensation for family CEOs it will give strong evidence to the explanatory power of the family firms' other characteristics, such as the preservation of the private benefits of control, on this issue.

TABLE 6 Panel A

Difference in Means Test and Descriptive Statistics.

This Table compares the means of Family Firms and Non Family firms. In order to test for the significance of the difference between means, I performed a T-test. The Null Hypothesis is that the means are the same. T values significance levels: * p < 0.10; ** p < 0.05; *** p < 0.01.

Variable	Family Firms	Non Family Firms	Difference family - Non Family Firms	T-test
Cash Compensation	591,497	616,554	25,057	0.402
Accounting Return	0.010	-0.002	-0.012	**-1.494***
Market Return	-0.040	-0.030	0.010	0.360

TABLE 6 Panel B

Difference in Means Test and Descriptive Statistics.

This Table compares the means of Family Firms with family CEOs and Family firms with professional CEOs. In order to test for the significance of the difference between means, I performed a T-test. The Null Hypothesis is that the means are the same. T values significance levels: * p < 0.10; ** p < 0.05; *** p < 0.01.

Variable	Family Firms, Family CEO	Family Firms, Professional CEO	Difference family - Non Family Firms	T-test
Cash Compensation	534,881	639,189	104,308	**1,520***
Accounting Return	0.014	0.006	-0.008	-0.875
Market Return	-0.017	-0.059	-0.042	**-1.366***

Table 6 Panel A and B compares the means of CEO cash compensation, accounting performance and stock market return for the three categories of firms hereby studied (non-family firms, family firms with professional CEOs, and family firms with family CEOs). The results reported in table 6 reject the rent extraction purpose of family firms but give strong support to my thesis of the preservation of the benefits of control. Indeed, family firms with family CEOs do not chose to structure the CEO pay to be less sensitive to performance in order to extract rent from the minority shareholders, because on average a family CEO earns less than a professional CEO (with a significant difference of 104,308) and perform even better, being the difference in stock market return negative and significant at 10% (Table 6, Panel B). This finding represents a contribution to the literature (building on Gomez-Mejia et al, 2003), and it is very relevant for the understanding of corporate governance system of family owned companies, which are the dominate ownership form in the corporate world, yet

have receive scant attention in previous academic research on corporate governance.

Moreover, table 6 Panel A shows that, on average, family firms perform better than non-family firms, being the difference of accounting return between family and non-family companies negative and significant at 10%. As argued by Berrone et al. (2012) and by Tiscini and Raoli (2013) family members do not just pursue selfish objectives. An important assumption in this sense is that family CEOs may protect and enhance their socioemotional wealth (like the preservation of the private benefits of control) even when they are not financially rewarded. The results of table 6 Panel B provide empirical strong support to this issue. Family CEOs seem to be more motivated to preserve their socioemotional wealth (such as the benefits of control), rather than extract rents from minority shareholders. This sensitivity test does not aim to reject the general rent-extraction assumption for family firms, but it aims to underline that CEO compensation is not a tool for rent-extraction purposes.

The second sensitivity test is in order to role out the alternative explanation that my results may be driven by ownership concentration rather than by family firm's characteristics. In order to show that ownership concentration alone may not affect the findings of this study I implement my analysis by controlling for blockholder-dominated firms. This companies experience the same ownership concentration of family firms, but the dominant shareholder is not a family but rather an institutional investor (common funds, pension funds, the State, etc.). I generate the blockholder firms dummy (see appendix 1 for variable definition) and I interact it with the performance measure hereby used. Being institutional blockholders passive shareholders, they usually do not monitor the board of directors like the dominant family does. Moreover, conflicts of interests between managers and shareholders are still commonplace in blockholder-dominated firms, because CEOs interests' may not coincide with those of the company that controls the blockholder firm. Thus, I expect this latter firms to report similar CEO pay for performance sensitivity as those observed for non-family firms

with dispersed ownership, showed in tables 4 and 5.

TABLE 7

Pay for Performance Sensitivity in Blockholder Dominated Companies

This table reports the results of the median regressions that examine the CEO pay for performance sensitivity based on the sample of 1027 firm/year observation from 2006 to 2010. Model 1, 2, and 3 study the effect of family ownership and blockholder dominated companies on CEO pay for performance sensitivity. Model 1 reports the results of CEO pay for performance sensitivity using accounting performance (industry-adjusted ROA) as performance measure. Model 2 reports the results of CEO pay for performance sensitivity using market performance (industry-adjusted stock market return) as performance measure. Model 3 uses both performance measures and their interactions with the dummy variables for family firms and for blockholder dominated firms. The dependent variable is change in CEO cash compensation. The table reports the coefficients for the standardized dependent variable (standardized CEO cash compensation), the standard error in parentheses, and the coefficients in euros in brackets. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. All Variables are defined in the Appendix.

Variable	Predicted sign	Full Sample		
		Model (1)	Model (2)	Model (3)
Intercept		.009***	.016	.018***
		(.002)	(.002)	(.002)
		[6,562.99***]	[12,069.56***]	[13,953.11***]
Accounting Performance	**+**	**.044*** **		**.078*** **
		(.008)		(.008)
		[33,314,25*]**		**[59,495.36***]**
Family* Accounting Performance	**-**	**-.041*** **		**-.076*** **
		(.008)		(.008)
		[-30,867.54*]**		**[-57,568.79***]**
Blockholder* Accounting Performance	**?**	**.009**		**.022**
		(.008)		(.009)
		[7,988.48]		**[16,784.6]**
Market Performance	**+**		**.026*** **	**.026*** **
			(.001)	(.001)
			[20,186.48*]**	**[20,069.5***]**
Family* Market Performance	**-**		**-.025*** **	**-.026*** **
			(.001)	(.001)
			[-19,680.72*]**	**[-19,597.59***]**
Blockholder* Market Performance	**?**		**.026**	**.022**
			(.001)	(.002)
			[19,461.03]	**[16,824.25]**
Control Variables		Yes	Yes	Yes
Observations		693	665	638
Pseudo R2		.02	.08	.10

Results in table 7 strongly support my thesis. Coefficients for interaction between blockholder firms dummy and performance measures (industry-adjusted ROA in model 1, industry-adjusted stock market returns in model 2, and both performance measures in model 3) are positive but insignificant. Despite similar level of ownership concentration,

blockholder-dominated companies still need high CEO pay-performance sensitivity.

Blockholder investors are generally assumed to hold well-diversified portfolios, thus thay can be assumed to be passive monitors. On the other hand, family owners generally are not diversified investors; hence they can be assumed to be efficient and effective monitors. Given their undiversified portfolio, their risk is higher as compared to blockholder investors, thus they need to monitor the board of directors to assure the achievement of their interests. As a result, family firms can lower the pay for performance sensitivity of both professional and family CEOs.

These findings show that ownership concentration alone may not justify a lower sensitivity of compensation to firm's performance.

The third sensitivity test hereby run is in order to increase the power of my results by examining whether the relations between CEO pay and firm financial performance is more sensitive to accounting or stock market performance.

TABLE 8
Sensitivity test for measures of performance used in CEO

This table reports the results from the sensitivity test. I use a median regression model run on the full sample in order to examin whether the CEO pay is more sensitive to stock market performance (industry-adjusted stock market return) or rather to accounting performance (industry-adjusted ROA). In Model 1 I run the regression using both accounting and market performance measures and the control variables generally used in my analysis. In Model 2 I add the interaction variables between the family firms dummy and the performance measures hereby used. The dependent variable is change in CEO cash compensation. The table reports the coefficients for the standardized dependent variable (standardized CEO cash compensation), the standard error in parentheses, and the coefficients in euros in brackets. The standard errors are clustered by firm to adjust for heterogeneity in the residuals. All variables are defined in the Appendix. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01.

Variable	Predicted sign	Full Sample	
		Model (1)	Model (2)
Intercept		.003	.009***
		(.003)	(.003)
		[2,265.59]	[6,828.06***]
Accounting Return	**+**	**.009*** **	**.112*** **
		(.003)	(.004)
		[7,077.37*]**	**[85,987.28***]**
Market Return	**+**	**.002***	**.015*** **
		(.001)	(.001)
		[1,240.05*]	**[11,318.51***]**
Family*Accounting Return	**-**		**-.108*** **
			(.005)
			[-82,552.09*]**
Family*Market Return	**-**		**-.014*** **
			(.001)
			[-10,747.54*]**
Control Variables		Yes	Yes
Observations		647	640
Pseudo R2		.10	.03

I posit that family owned firms, as compared to non-family companies, place a lower relative weight on stock returns in CEO compensation since stock prices are less informative in firms with concentrated ownership. Indeed, past research documents that concentrated and family ownership is more prevalent in countries with weaker shareholder and creditor protection laws and lower capital market development and participation (Shleifer and Vishny, 1986; La Porta et. al., 1999; Zingales, 1996). I run two different models to test the sensitivity of CEO pay to the performance measures hereby used. In Model 1 of table 8 I run the regression with both accounting and stock market returns on the whole sample, and I find that

ROA is weighted more than stock market return. In Model 2 I run the regression adding the interaction variables of performance and family firms dummy, getting the same results of Model 1. Thus, table 8 displays that in my sample of analysis CEO pay is more sensitive to accounting performance than to stock market return. The magnitude and the significance of the coefficients of accounting returns are higher than the ones of market returns. This finding is intuitive for family firms and is in line with other studies (Lambert and Larcker, 1987).

Family companies experience easier monitoring and control on board of directors, making the accounting measure of performance less noisy as compared to stock market returns. This allows family firms to capture all the information disclosed by accounting returns, and then to rely more on them. Further, as Mehran (1995) shows, companies where a great percentage of the shares are held by insiders or outside blockholders (i.e. the family firms or the blockholder-dominated firms) use less equity-based compensation, thus market performance becomes less relevant in structuring compensations contracts.

On the other hand, even non-family firms put more weight on accounting performance in remunerating their CEOs. These results are consistent with some previous studies (Coughlan and Schmidt, 1985: Sloan, 1993), and may be explained by the fact that stock market return is not an ideal measure of performance. The use of accounting-based performance measure in CEO compensation contracts can help CEOs from fluctuation in corporate value that are beyond their control. Moreover, in the Italian capital market the stock return is mostly a noisy measure of performance for many firms in the sample because many stocks suffer a lack of liquidity and infrequent trades (Volpin, 2002).

Furthermore, non-family firms' corporate governance system might compensate the weight put on stock market returns in evaluating and replacing CEOs (Volpin, 2002; Chen et al., 2013) with the weight put on accounting performance in remunerating CEOs. In doing so, non-family firms rely on both performance measures in structuring their corporate governance

system, while family firms, being their monitoring more efficient, rely more on accounting return.

While the results and robustness test point to the moderating effect of family ownership and control on the CEO pay for performance sensitivity, this study is subject to limitations on the bases of generalizability. By utilizing the Italian setting given its unique characteristics in terms of family ownership, the results are limited as much as the relation between family members in the Italian setting differs from those observed in other countries. While this is a concern, to my knowledge no empirical data so far has shown family ties to significantly differ between countries. Additionally, the positive and significant relation hereby showed for widely-held public companies (table 4, Model 1), similar to results found in the U.S. firms (Murphy, 1985; Aggrawal & Samwick, 1999; Core et al., 1999), gives credence to the generalizability of these findings.

1.6. Conclusion

This study demonstrates that CEO pay for performance sensitivity is lower in family than non-family firms. The findings are motivated by the lower agency problems and easier monitoring of family owned firms. Family controlled firms show less need to align the interest of CEO and shareholders, because monitoring by the dominant family is higher than the monitoring by shareholders in non-family firms with disperse ownership. Moreover, when the CEO is a family member, his interests are aligned with those of the dominant family by family ties. Indeed, I find that family CEOs are the ones with the lowest pay for performance sensitivity.

This study makes several contributions. First, it speaks to the firm's corporate governance and agency theory, giving empirical evidence that the incentive alignment role of

compensation plans, as predicted by optimal contracting theory, is mitigated when the interests of the principal and agent are aligned, or when monitoring is high as is the case of family owned firms. Second, I show that, within family firms, family member CEOs pay-performance sensitivity is lower as compared with professional CEOs. Furthermore, family member CEOs have lower compensation on average, but perform better as compared with professional CEOs. This insight is crucial in explaining how the family's preservation of the benefits of control affects governance mechanisms. Additionally, these findings help to explain the environment of family owned firms that are the dominate ownership form in the corporate world, yet have receive scant attention in previous academic research on corporate governance.

Finally, this study also sheds light on the importance of different performance measures in structuring CEO compensation. In fact, I demonstrate that family companies put more weight on accounting performance (such as return on assets) than on stock market return. Family companies experience easier monitoring and control on board of directors, making the accounting measure of performance less noisy as compared to stock market returns. This allows family firms to capture all the information disclosed by accounting returns, and rely more on them.

Table A1
Description of Variables

Variable	Definitions
Change in CEO Cash Compensation	The dependent variable, calculated as cash CEO compensation at year t minus cash CEO compensation at year t-1
Accounting Performance	The industry-adjusted Return on Assets, calculated as net income divided by book value of total assets
Market Performance	The industry-adjusted stock market return calculated as the 4-quarter average return the year before the CEO Compensation minus the contemporaneous industry return based on DataStream industry level 6 identifiers.
Family*Accounting Performance	The interaction variable calculated as Family firms dummy times industry-adjusted ROA
Family*Market Performance	The interaction variable calculated as Family firms dummy times industry-adjusted stock market return
Family*Family CEO*Accounting Performance	The triple interaction variable calculated as Family firms dummy times Family CEO dummy times industry-adjusted ROA
Family*Family CEO*Market Performance	The triple interaction variable calculated as Family firms dummy times Family CEO dummy times industry-adjusted stock market return
Blockholder*Accounting Performance	The interaction variable calculated as blockholder dominated firms dummy times industry-adjusted ROA
Blockholder*Market Performance	The interaction variable calculated as blockholder dominated firms dummy times industry-adjusted stock market return
Blockholder dominated firms dummy	The dummy variable equal to 1 if the firm is a blockholder dominated firm, and equal to 0 otherwise.
Family firms dummy	The dummy variable equal to 1 if the firm is a family dominated firm, and equal to 0 otherwise.
Family CEO dummy	Dummy variable that assumes the value of 1 if a member of the controlling family acts as CEO, and 0 if a Professional CEO (no Family member) act as CEO.
Log Total Assets	The natural logarithm of total Assets.
Market to Book ratio	The sum of the book value of debt plus market value of equity divided by the firms total assets.
Remuneration Committee	The dummy variable equal to 1 when the Board of Directors has nominated a Remuneration committee, and equal to 0 otherwise.
(%) Independent Directors	Calculated as the number of the independent directors on the board divided by the number of the board's members.

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CHAPTER 2: Executive Turnover and Familial Relations: Family Controlled Firms and Family CEOs in Italy

1.1. Introduction

The likelihood of Chief Executive Officer (CEO) dismissal in light of poor firm performance is often considered indicative of whether a firm is well governed; in fact, well-governed firms are more likely to dismiss their CEOs for poor performance than are poorly governed firms (Kaplan, 1994). Accordingly, several studies have empirically documented a negative association between CEO turnover and firm performance in public corporations.[5] This literature is premised on the idea that poor firm performance leads firm owners to infer that their manager's ability to create shareholder value is lower than a potential replacement's, leading them to replace their CEO. However, the likelihood of a CEOs' performance related dismissal is also affected by the diligence with which executive performance is monitored and acted upon by owners, i.e. their firms' governance systems. The ability of owners to replace poorly performing management is, in turn, affected by their effective control over firm governance. The law and finance literature documents that ownership structures that concentrate power in the hands of controlling shareholders, often-family members, limit the ability of minority shareholders to discipline management (La Porta et. al, 1999).[6] In some instances, controlling shareholders further enhance their control of the firm by appointing family members as chief executives (Volpin, 2002).

In this work, I empirically examine how family control and CEOs' relationship with controlling family owners affect the likelihood of performance-related CEO turnover. I posit that family control and whether the CEO is a member of the controlling family potentially

[5] See for example Weisbach (1988), Murphy and Zimmerman (1993), Volpin (2002), Dikolli, et. al. (2013) and Jenter and Lewellen (2010).

[6] Recent studies have shown that family firms represent a high portion of both public and private companies worldwide (Anderson and Reeb, 2003; Chen et al. 2013).

affect the agency conflicts between managers and shareholders and also between controlling and minority shareholders. The presence of a controlling family entrenches majority shareholders thereby weakening the disciplining role of the market (Shleifer and Vishny 1986; Zingales 1994). Family control potentially has two competing effects on the manager-shareholder agency conflict. First, family firm owners do not hold a well-diversified portfolio, thus their wealth is strongly correlated to the financial performance of the firm. As a consequence, controlling families are likely better monitors of executive activity, which reduce the free-rider problems typical of widely held public corporation (Demsetz and Lehn, 1985). This suggests that the agency conflict between managers and shareholders is lower in family controlled firms, thereby causing a higher sensitivity of CEO turnover to poor firm performance. In contrast, however, the controlling family's significant power due to its concentrated position potentially lowers their incentive to monitor the CEO if the parties collude to expropriate minority owners (Brunello et al., 2003). Further, controlling owners are likely to less intensely monitor a family-member CEO since they are more certain about their executive ability (Dikolli et. al. 2013). This implies that the likelihood of performance-related CEO turnover is lowered by the presence of a controlling family and family ties between a CEO and firm owners.

A related issue in studying the performance-turnover relation in family controlled firms is the choice of performance measure that is used by owners in evaluating a CEO (Engel et. al. 2003). I posit that family owned firms place a lower relative weight on stock returns in CEO evaluation since stock prices are less informative in firms with concentrated ownership. Past research documents that concentrated and family ownership of firms is more prevalent in countries with weaker shareholder and creditor protection laws that lower capital market development and participation (Shleifer and Vishny, 1986; La Porta et. al., 1999; Zingales, 1996). However, it is unclear whether owners would evaluate their CEO based on

accounting performance, since firms' accounting earnings are also shown to be less informative in countries with weaker legal investor protection and family firm ownership (Leuz et. al., 2003; Fan and Wong, 2002). On the other hand, accounting performance is potentially weighted higher than stock price if controlling family owners have more precise knowledge of the "true" accounting performance of the firm. Consequently, the difference in the relative weight placed on accounting earnings and stock returns in affecting CEO turnovers in family and non-family firms is an unanswered empirical question.

Another relevant and unstudied issue hereby analyzed is the one regarding the directional change of performance related CEO turnover (i.e. who serves as the new CEO after the CEO turnover). Is the CEO turnover from a family member to another, from a family member to a professional, or from a professional to a family member? This analysis can help in the understanding of the real corporate governance mechanisms driving family companies. I aim to provide evidence regarding which performance measure lead to a change from a professional CEO to a family CEO (and vice-versa), and to understand the underlying reasons.

I test my hypotheses using a sample of 221[7] unique public corporations in Italy during the 2006 to 2010 period. For several reasons Italy provides a unique institutional environment to examine to role of family ties in the effectiveness of corporate governance. It is widely considered as a country with weak laws protecting minority shareholders and creditors, little bank governance and poorly functioning capital markets (La Porta et. al., 1999; Zingales, 1994). As a consequence, concentrated ownership by blockholders and families through pyramids and cross-ownership is commonplace. For instance, over 60% of my sample firms are classified as family controlled since a single family owns more than 50% of the

[7] This is the number of firms at the last year of observation (2010).

outstanding voting shares. Frequently, the CEO of a family-owned firm is also a member of the family. For example, over 30% of CEOs in my sample are members of a controlling family.

In the full sample (family and non-family firms) I document an inverse relation between the likelihood of CEO turnover and negative firm performance as measured by both the stock returns and accounting earnings. However, the likelihood of performance related CEO turnover is significantly smaller in family-controlled firms than in non-family firms. Further, CEO turnover likelihood is insensitive to both stock returns and accounting earnings for CEOs that are members of the controlling family, and is sensitive to accounting performance only for non-family member (professional) CEOs. Results suggest that, in evaluating CEOs, non-family firms weight market performance more than they do accounting performance, whereas family firms rely solely on accounting performance, but only when their CEO is not a family member.

Moreover, I distinguish between non-family firms with dispersed ownership and those that are blockholder-dominated in order to role out the alternative explanation that the lower performance-turnover sensitivity of family firm CEOs is due to concentrated ownership rather than familial relations. Empirical results show that in blockholder-dominated firms CEO turnover is as sensitive to stock market and accounting performance as in non-family firms with dispersed ownership, whereas the performance-turnover sensitivity in family controlled firms is considerably lower. I propose that a lower performance-turnover sensitivity in family firms, than in firms with dominant blockholders, is due to familial relations between the CEO and the controlling owners since family firms and blockholder-dominated firms have, on average, the same ownership concentration.

Finally, I analyze the directional change of performance related CEO turnover. My results

show that family firms with family CEO are more willing to replace the family CEO with another family CEO. However, when the firm reports a negative accounting performance, the probability that the new CEO is another family member decreases. On the other hand, family firms with professional CEOs are more willing to replace professional CEOs with another professional CEO. Notwithstanding, when the firm reports a negative market performance, the probability that the new CEO is a family member increases. I posit that for cases of dismissed family CEOs for poor accounting performance, the family may feel that they need professional assistance. Also, for cases of dismissed professional CEOs for low market performance, a family firm may feel threatened by potential takeovers and may appoint a family member to prevent any corporate raiders.

This work makes several contributions to the literature on performance-turnover relation for CEOs of public corporations. First, it highlights the importance of family ownership on the CEO turnover-performance relation by documenting that executive turnover is less sensitive to performance in the presence of controlling family ownership. Second, it shows that non-family firms put greater weight on stock market performance than accounting measures of performance, while family firms rely solely on accounting measures in making CEO replacement decisions. Third, it documents that the CEO turnover relation is insensitive to firm stock market and accounting performance when the CEO is a member of the controlling family. Thus, the empirical measure of the sensitivity of CEO turnover to firm performance among family owned firms is driven solely by turnover among non-family member CEOs. Forth, it shows that it is the family tie of the CEO to the founding family rather than the family's concentrated ownership that lower the likelihood of performance-related dismissal, since CEOs of firms with significant blockholders are as likely to be dismissed for poor performance as are CEOs of firms with dispersed ownership. Finally, I show that family firms decide to replace a family CEO with a professional CEO just when they need

professional assistance (i.e. in cases of bad accounting performance). Instead, family firms replace a professional CEO with a family CEO in cases of low stock market returns, hence when the family feels threatened by potential takeovers and decide to appoint a family member in order to prevent any corporate raiders.

Admittedly, the lower sensitivity of CEO turnover to performance in family controlled firms has been documented by prior research. Volpin (2002) shows that Executive turnover is less sensitive to stock returns in Italian family controlled firms. However, his work is more about executive turnover than CEO turnover. His definition of executive turnover is too broad, because just when half of the executive are dismissed the dummy variable that takes value 1. This implies that the year where the CEO is replaced and the other executives are not, he does not record a turnover. Whereas, this work is testing the turnover-performance sensitivity for the most important position in the board, the Chief Executive Officer. In addition, this work distinguishes between CEOs that are family members and those that are professional (no family ties) so as to identify whether familial relations or concentrated ownership causes the dampening of the performance-turnover relation. More recently, Chen et. al. (2013) document that performance-turnover sensitivity is lower among family owned U.S. firms with a family member as CEO than in those with a professional CEO. However, they do not examine the relative weights placed on accounting and stock market performance. Further, their sample comprises of publicly traded U.S. firms, operating in a well-functioning capital market with strong legal protection of minority shareholders and creditors. As a result, U.S. firms do not have significant family ownership concentration. For instance, the average family ownership in firms that are classified as family-owned, which is almost half the sample, is only 20%. In contrast, family ownership in my sample of family owned firms (50% of my sample) is over 60% of voting stock. Finally, this paper is completely innovative in analyzing whether family ties of the CEO to the founding family rather than the family's

concentrated ownership lower the likelihood of performance-related dismissal, and it is innovative in providing evidence about the reasons that lead the family firms to replace a family CEO with a professional CEO or vice-versa.

This paper is organized as follow. The following section develops the hypotheses; section 3 details sample selection and provides descriptive statistics on my variables of interest. Section 4 discusses the empirical methods and results and describes several tests of the robustness of the results. Section 5 concludes.

1.2. Hypotheses development

My hypotheses are premised on the notion that corporate financial performance discloses information about the CEO's ability to create value for shareholders. A plethora of studies have explored the relation between CEO turnover and financial performance relying on the same premise, founding that firm performance is negatively related to the probability of CEO dismissal (Kaplan, 1994; Brickley, 2003; Weisbach, 1988; Murphy and Zimmerman, 1993; Farrel and Whidbee, 2003). I verified this baseline assumption on the full sample and move on to study whether there are significant differences between family controlled firms and non-family firms.

The Italian capital market is characterized by numerous family controlled firms where these family shareholders control at least 20% of the firm's voting rights[8] (Volpin, 2002). Within these family firms, there exist differences depending on the relationship between the firm's management (i.e. the CEO) and the controlling family. For instance, the CEO may be a member of the family or can be an external professional CEO hired from the external labor market. Additionally, non-family firms may present some different peculiarities too. They

[8] Excluding banks as well as insurance companies because their accounting measure of performance are not comparable with the other companies.

may be controlled by a dominant shareholder not identifiable as a family, i.e. the state, a foreign company, an investment or pension fund, etc., or rather they may not have any large controlling shareholder. I define the first category as blockholder-dominated firms, and the second as widely held public companies or publicly held non-family firms. Therefore, for the purpose of this study I divide my sample into four categories of firms: family firms with family CEO, family firms with professional CEO, blockholder-dominated non-family firms, and publicly held non-family firms.

The family and non-family firms differences may be viewed as being driven by the varying levels in the entrenchment and in the monitoring of the CEO by the controlling family. Further, the difference between family and non-family firms about the CEO turnover-performance sensitivity is still an open field of research. On the one hand, family's monitoring is effective because the family has the expertise, the incentive and the means to do so (Chen et al., 2013). The controlling family does not hold a well-diversified portfolio, and their wealth is strongly correlated to the financial performance of the firm. This suggests that the agency conflict between managers and shareholders is lower in family controlled firms, thereby causing a higher sensitivity of CEO turnover to poor firm performance. On the other hand, in family owned business the agency conflict is of the type II, between the family and the minority shareholders (La Porta et al., 1999). In this case the family should aim to extract rents from minority shareholders, and may not be willing to replace poor performing CEO if he is colluding with the family in extracting benefits from the other shareholders. As a consequence, I expect to observe a lower CEO turnover-performance sensitivity in family owned companies as compared to non-family firms.

This study aims to posit that family ties prevail and lower the sensitivity of CEO turnover to performance. Stated formally, the first hypothesis of my work is the following:

Hypothesis 1: family owned companies are less likely to dismiss a CEO for poor financial

performance than non-family firms.

Within family owned companies, when a member of the controlling family holds the CEO position, the interests of the manager and the family are further aligned. Thus, with considerable influence from the family CEO over the Board's decisions, the controlling family can extract private benefits or rents from the minority shareholders. On the other hand, retaining the poorly performing CEO is not costless to the family, because the reiterate poor performance may reduce the family ownership's value in the firm, and it may expose the firm to potential takeovers.

In contrast, when an external professional manager holds the CEO position in a family owned firm, there is a separation of management and ownership, leading to the traditional agency problems between the professional CEO and the family. This is similar to non-family firms in which the separation between management and control is always present. Nevertheless, the direct monitoring of the CEO by the dominant family is what distinguishes a family firm with a professional CEO from other non-family firms. In the family controlled case, the dominant family has a deep knowledge of the business, more than any other shareholders (Anderson and Reeb, 2003). As a consequence, it is far easier for family owners to evaluate whether the professional CEO is competent or not. Therefore, there are two forces that may influence the CEO turnover-performance sensitivity in family firms: on the one hand there is the entrenchment that retain the family from CEO dismissal, while on the other hand there is the effective monitor by the controlling family that enhance the dismissal of a poor performing professional CEO. Consequently, the CEO turnover-performance sensitivity should be higher in family owned firms with professional CEOs than in family firms with family CEOs.

Stated formally, my second hypothesis is as follow:

Hypothesis 2: family owned companies are less likely to dismiss a family member CEO for

poor financial performance than they are to dismiss a professional CEO.

Furthermore, I examine whether family owned firms place a lower or higher relative weight on market returns or accounting earnings as compared to non-family companies in the evaluation of a CEO's performance. In fact, the sensitivity of CEO turnover on accounting return or market return should be different across the categories of firms hereby studied. As a consequence of the different agency conflicts (type I vs. type II) and the intensity of monitoring I expect more weight on some performance measures rather than others. Specifically, I hypothesize that the family firms place, overall, a lower relative weight on market returns in CEO evaluation since stock prices are less informative in firms with concentrated ownership. Thus, accounting performance should be potentially weighted higher than stock marker performance if the controlling family owners have more precise knowledge of the real accounting performance of the firm, as stated by Anderson and Reeb (2003). This difference in the relative weight placed on accounting earnings and stock market returns in CEO turnovers between family and non-family firms is still an unanswered empirical question. I stand for more weight on accounting performance in family owned companies because of the effective monitoring by the family, whereas in the non-family firms the weight on stock market performance should be greater than that on accounting performance.

Finally I examine the reasons why family firms decide to replace a family CEO with a professional CEO or vice-versa. I hypothesize that family firms rely more on accounting performance than market performance in replacing a poor performing family CEO. I posit that for cases of bad accounting returns, the family may feel to need the assistance of a professional manager; hence the family CEO will be replaced by a non-family member CEO. On the other hand, poor stock market performing professional CEOs in family firms will be replaced by family manager because the family may feel threatened by potential takeovers

and may decide to appoint a family member in order to prevent any corporate raiders.

1.3. Sample and data

Sample

Given the focus on family ownership's effect on the CEO turnover-performance relation, I utilize a hand-collected sample of Italian firms to conduct the study. The reliance on Italian firms stems from the high propensity of family ownership in the Italian context, which allows me to increase the power of my tests. Additionally, previous studies have also relied on the uniqueness of the Italian context to examine various characteristics of family businesses (Brunello et al., 2001; Volpin, 2002). I begin constructing my sample by identifying all listed companies on the Italian Stock Exchanges during the period of 2006 to 2010. From this group I exclude financial firms as well as bank holding companies and insurance companies given the different nature of their financial statement as well as the regulatory environment in which they operate. Thus, I collected data from 221 non-financial Italian firms listed during the period of 2006-2010. This sample will be further reduced during some of the tests given the data requirements discussed below. The remained of this section discusses the variables of interest, control covariates, as well as the empirical specifications used to test the hypotheses.

CEO Turnover

I construct my measure of CEO turnover at the firm level by identifying the CEOs for all firms list on the Italian Stock Exchanges during the period of 2006-2010. I utilize the annual

firm filings with CONSOB[9], two Italian stock exchange yearbooks (Calepino dell'Azionista and the Taccuino dell'Azionista), as well as information from the Borsa Italiana (the Italian Stock-exchange) to identify the years in which there was a CEO change at the company. I define my turnover variable as a dummy equal to one in the year in which the CEO changes.

TABLE 1: PANEL A

Frequencies of Forced Turnovers.

This table reports the total number of forced CEO turnovers in the sample from 2006 to 2010.

Year	No turnover	Forced Turnover	Total
2006	165	17	182
	91%	9%	100%
2007	168	35	203
	83%	17%	100%
2008	195	18	213
	92%	8%	100%
2009	183	33	216
	85%	15%	100%
2010	202	19	221
	91%	9%	100%
TOTAL	**913**	**122**	**1035**
	88%	12%	100%

[9] CONSOB is the Italian SEC equivalent and has the list of all the relevant shareholders for the publicly traded Italian companies.

Given the lack of information on the causes of turnover from the public sources, I conduct news searches to eliminate turnovers due to death and retirements, which may introduce noise in the analysis, reducing my sample of turnovers to 122. Table 1 Panel A summarizes the turnover sample of 122 turnovers during the sample period by year. The non-turnover sample of firms includes all remaining non-financial listed Italian firms during the time period. This yields to a total sample of 221 firms in the year 2010, corresponding to 1035 firm/year observations.

Firm Family Ownership Control and Firm Governance Measures

In order to examine the effects of family ownership on the CEO turnover-performance sensitivity, I construct a variable to empirically measure the percentage of ownership (control) by a family at the firm level. In doing so, I personally examined the firms CONSOB filings and the two stock market yearbooks for the period 2006-2010. Further, I adopt a family ownership classification scheme in which it is really identifiable family controlled companies as firms where the dominant family has more than 50% of controlling power. Operationally, I implement the definition of family control by a dummy variable that takes on a value of 1 if a dominant family directly controls the firm and else 0. My sample contains roughly 60% family controlled firms, which is in line with the 59% found in the Faccio and Lang (2002) study.

TABLE 1: PANEL B

Frequencies of Forced Turnovers in Family Firms.

This table reports the total number of forced CEO turnovers in the sample from 2006 to 2010, for the Family Firms Sub-Sample.

Year	No turnover	Forced Turnover	Total
2006	99	13	112
	88%	12%	100%
2007	108	25	133
	81%	19%	100%
2008	134	8	142
	94%	6%	100%
2009	121	21	142
	85%	15%	100%
2010	131	13	144
	91%	9%	100%
TOTAL	**593**	**80**	**673**
	88%	12%	100%

TABLE 1: PANEL C

Frequencies of Forced Turnovers in Non-Family Firms.

This table reports the total number of forced CEO turnovers in the sample from 2006 to 2010, for the Non-Family Firms Sub-Sample.

Year	No turnover	Forced Turnover	Total
2006	66	4	70
	94%	6%	100%
2007	60	10	70
	86%	14%	100%
2008	61	10	71
	86%	14%	100%
2009	62	12	74
	84%	16%	100%
2010	71	6	77
	92%	8%	100%
TOTAL	**320**	**42**	**362**
	88%	12%	100%

As displayed in table 2 panel A and B, when I partition the sample based on family ownership I get 673 observations in family controlled firms while non-family firms have 362 observations.

Using the search procedure described above, I also hand collect measures of the firms corporate governance to include in the descriptive statistics. Specifically, I obtain information on whether the CEO is a member of the controlling family (Family CEO) or is a professional CEO. I create a dummy variable equal to 1 when the family firm's CEO is a family member and 0 when the family firm's CEO is a professional CEO (see table 2 Panel C and Panel D for detailed descriptive statistics).

Finally, I obtain a measure of board member independence by taking the percentage of independent board members for each of the firms in the sample as well as, using the search procedure described above, hand collect various measures of the firms corporate governance to include in the regressions given their apparent relation to turnover from previous literature, for instance if the CEO is also the chair of the board of directors (CEO Duality), as well as the CEO's age.

Performance Measures and other control variables

To measure firm performance, I examine the industry adjusted stock market returns, and the firm's accounting performance. The industry adjusted stock return (Var: Market Return) is calculated as the 4-quarter average return the year before the CEO turnover minus the contemporaneous industry return based on DataStream industry level 6 identifiers. The accounting performance measure (Var: Accounting Return) is the industry adjusted ROA, calculated as net income divided by the book value of total assets. I decided to test for both,

market and accounting performance to make my model robust to any kind of performance measure. Further, I can examine whether the CEO turnover is more sensitive to accounting performance, or to market performance. Performance measures are one year lagged to compute the real effect of performance on the CEO dismissal decision.

TABLE 2
Descriptive Statistics for Variables Used in the Analysis

Variable	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Panel A: Descriptive statistics for the entire sample					
Firm characteristics					
Market Return (Industry adjusted)	-0.01	0.11	-0.04	0.00	0.03
Accounting Return (Industry adjusted)	-0.00	0.11	-0.03	0.00	0.03
Sales Growth	0.09	0.35	-0.05	0.06	0.18
Market to Book	0.17	0.14	0.05	0.14	0.24
Log Total Assets	12.96	1.81	11.75	12.69	14.12
Leverage	0.16	0.14	0.05	0.13	0.23
Governance Variables & CEO characteristics					
CEO Turnover	0.11	0.31	0	0	0
Family Ownership (%)	0.38	0.29	0.00	0.50	0.62
CEO member of family	0.31	0.46	0	0	1
Independent Directors (%)	0.36	0.34	0.25	0.33	0.46
CEO duality	0.34	0.47	0	0	1
CEO Age	53.99	9.56	47	53	61

Variable	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Panel B: Descriptive statistics for the Non-Family Firms sample					
Firm characteristics					
Market Return (Industry adjusted)	-0.01	0.10	-0.04	0.00	0.03
Accounting Return (Industry adjusted)	0.00	0.09	-0.03	0.00	0.03
Sales Growth	0.09	0.33	-0.05	0.06	0.18
Market to Book	0.17	0.15	0.05	0.13	0.25
Log Total Assets	13.18	1.92	11.89	12.81	14.17
Leverage	0.16	0.15	0.05	0.13	0.25
Governance Variables & CEO characteristics					
CEO Turnover	0.11	0.31	0	0	0
Independent Directors (%)	0.39	0.20	0.25	0.36	0.5
CEO duality	0.33	0.47	0	0	1
CEO Age	53.88	9.44	47	53	61

Variable	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Panel C: Descriptive statistics for the Family Firms - Professional CEO sample					
Firm characteristics					
Market Return (Industry adjusted)	-0.01	0.12	-0.05	0.00	0.03
Accounting Return (Industry adjusted)	-0.01	0.19	-0.02	0.00	0.03
Sales Growth	0.07	0.40	-0.06	0.05	0.15
Market to Book	0.18	0.15	0.06	0.15	0.27
Log Total Assets	13.06	1.76	11.74	12.80	14.65
Leverage	0.17	0.15	0.05	0.14	0.23
Governance Variables & CEO characteristics					
CEO Turnover	0.09	0.29	0	0	0
Family Ownership (%)	0.62	0.09	0.55	0.60	0.68
Independent Directors (%)	0.39	0.15	0.29	0.38	0.50
CEO duality	0.14	0.35	0	0	0
CEO Age	53.76	8.74	48	54	60

Variable	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Panel D: Descriptive statistics for the Family Firms - Family CEO sample					
Firm characteristics					
Market Return (Industry adjusted)	-0.01	0.11	-0.05	-0.00	0.04
Accounting Return (Industry adjusted)	-0.00	0.10	-0.05	0.00	0.04
Sales Growth	0.09	0.39	-0.09	0.05	0.20
Market to Book	0.15	0.12	0.06	0.12	0.22
Log Total Assets	12.61	1.38	11.88	12.63	13.20
Leverage	0.15	0.12	0.06	0.13	0.22
Governance Variables & CEO characteristics					
CEO Turnover	0.12	0.33	0	0	0
Family Ownership (%)	0.64	0.09	0.56	0.63	0.69
Independent Directors (%)	0.35	0.16	0.25	0.33	0.43
CEO duality	0.59	0.49	0	1	1
CEO Age	54.54	10.71	45	53	64

In the descriptive statistics I also include other firm characteristics in order to enrich the descriptive power of my analysis regarding the differences between the four main category of firms hereby examined: family firms with family CEO, family firms with professional CEO, blockholder-dominated firms, and publicly held non-family firms (see table 2). To give information about firm's growth opportunities I use the market to book ratio, defined as the sum of the book value of debt plus market value of equity divided by the firms total assets. Sales Growth is measured as the percentage change in revenues over the prior year. I control for the financial structure of the firm and the effect of debt by including the leverage of the firm, defined as the total book value of debt divided by the book value of debt and market value of equity. Finally, I control for the size of the firm by including the natural log of total

assets in my tests. All of the accounting and financial covariates have been winsorized at the 1% and 99% level to reduce the effects of outliers.

However, all the variables of interest are summarized in the Appendix.

1.4. Empirical analysis

Primary analysis

To study the relation between firm's financial performance and CEO turnover the following logistic regression is run over the full sample of firms with the necessary data requirements and it is structured as following:

$$\text{CEO Turnover}_{i,t} = \alpha i + \beta_1(\text{Pos\_market\_return}_{i,t-1}) + \beta_2(\text{Neg\_market\_return}_{i,t-1}) + \beta_3(\text{Pos\_ROA}_{i,t-1}) + \beta_4(\text{Neg\_ROA}_{i,t-1}) + \beta_5(\text{Controls}_{i,t-1}) + \varepsilon_{i,t}.$$

I report the coefficients, standard errors in parenthesis and the average marginal effects in brackets for each of the variables in the multivariate test to help with the interpretation of the relations found. Note that all the independent variables are measured in the year before CEO turnover.

TABLE 3
Baseline Model
Effect of Firm Performance on CEO Turnover

Variable	Full Sample (1)
Intercept	-1.94***
	(0.45)
Pos. Industry Adjusted Market Return	-0.27
	(0.29)
	[-0.05]
Neg. Industry Adjusted Market Return	**-1.31****
	(0.69)
	[-0.25]**
Pos. Industry Adjusted ROA	0.11
	(0.93)
	[0.02]
Neg. Industry Adjusted ROA	**-1.41****
	(0.56)
	[-0.27]**
Control Variables	Yes
Industry Fixed effects	Yes
Observations	981
Pseudo R2	0.08

Probit regression; the dependent variable is CEO turnover. The table shows the estimate, the standard errors in round brackets, and the margins in squared brackets. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. Standard errors are clustered at company level. Variables are defined in the Appendix.

Table 3 makes my sample robust and consistent with previous studies, with firm performance measured as both industry-adjusted market returns and industry-adjusted ROA affecting CEO turnover. In the table, I report the coefficients of the interactions, the standard errors in parentheses, and the marginal effect for each variable of the analysis in order to assess the economic significance of the coefficient estimates. Following what has been done in previous studies, I also calculate the marginal effect as the change in the implied CEO turnover probability when the variable of changes from its 25^{th} to 75^{th} percentile value, or from 0 to 1 if the variable is a dummy variable, with all other explanatory variables held constant at their respective means.

As expected, CEO turnover-performance sensitivity is significant just for negative market return (with coefficient of -1.31 and marginal effect of -0.25) and for negative ROA

(coefficient of -1.41 and margins -0.27), while the results for positive firm performance are not significantly related with CEO turnover. These results are consistent with my predictions in the baseline hypothesis.

Furthermore, these findings strengthen the assumption of Coffee (1999), that successful governance systems penalize managers (Chief Executive Officers in this case) for poor performance.

Verifying previous studies findings on the whole sample (giving support to the reliability of my Italian sample), I can move on in analyzing how family control and CEOs' relationship with controlling family affects the likelihood of performance-related CEO turnover.

To study this relation the following logistic regression is run, testing Hypothesis 1 over the full sample of firms with the necessary data requirements and structured as following:

$$\text{CEO Turnover}_{i,t} = \alpha i + \beta_1(\text{Pos\_market\_return}_{i,t-1}) + \beta_2(\text{Neg\_market\_return}_{i,t-1}) + \beta_3(\text{Pos\_ROA}_{i,t-1}) + \beta_4(\text{Neg\_ROA}_{i,t-1}) + \beta_5(\text{Family\_firms\_dummy}_{i,t-1}) + \beta_6(\text{Family\_firms*Pos\_market\_return}_{i,t-1}) + \beta_7(\text{Family\_firms*Neg\_market\_return}_{i,t-1}) + \beta_8(\text{Family\_firms*Pos\_ROA}_{i,t-1}) + \beta_9(\text{Family\_firms*Neg\_ROA}_{i,t-1}) + \beta_{10}(\text{Controls}_{i,t-1}) + \varepsilon_{i,t}.$$

TABLE 4

Enhanced Model 1: Effect of Firm Performance on CEO Turnover in Family and Non Family Firms

Variable	Non-Family firms sub-sample (1)	Family Firms sub-sample (2)	Full Sample (using the interactions) (3)
Intercept	-2.50***	-1.34**	-2.07***
	(0.90)	(0.63)	(0.46)
Pos. Industry Adjusted Market Return	-0.05	-0.48	-0.21
	(0.49)	(0.43)	(0.30)
	[-0.01]	[-0.10]	[-0.04]
Neg. Industry Adjusted Market Return	**-2.55****	**-0.30**	**-1.32****
	(1.32)	(0.97)	(0.73)
	[-0.49]**	**[-0.06]**	**[-0.25**]**
Pos. Industry Adjusted ROA	0.75	0.09	0.30
	(1.24)	(1.19)	(1.21)
	[0.14]	[-0.02]	[0.06]
Neg. Industry Adjusted ROA	**-4.43****	**-1.34*****	**-3.96****
	(2.19)	(0.33)	(1.89)
	[-0.84]**	**[-0.27***]**	**[-0.75**]**
Family Firms Dummy			0.06
			(0.14)
			[0.01]
Family Firm*Pos. Industry Adjusted Market Return			0.11
			(0.24)
			[0.02]
Family Firm*Neg. Industry Adjusted Market Return			**3.74****
			(2.08)
			[0.71]**
Family firm*Pos. Industry Adjusted ROA			-0.29
			(1.84)
			[-0.05]
Family Firm*Neg. Industry Adjusted ROA			**2.74**
			(1.91)
			[0.52]
Control Variables	Yes	Yes	Yes
Industry Fixed effects	Yes	Yes	Yes
Observations	500	481	981
Pseudo R2	0.12	0.12	0.09

Probit regression; the dependent variable is CEO turnover. The table shows the estimate, the standard errors in round brackets, and the margins in squared brackets. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. Standard errors are clustered at company level. Variables are defined in the Appendix.

Table 4 reports the findings of the main analysis. The first column shows the results for the non-family firms sub-sample, the second column reports the results for the family firms sub-sample, whereas the third column reports the results for the full sample using interaction variables to pick up the family control differences. In table 4, I report the coefficients of the

interactions, the standard error in parentheses, and the marginal effect for each variable in order to assess the economic significance of my estimates. The marginal effect can be viewed as the change in the implied CEO turnover probability when the variable changes from its 25^{th} to 75^{th} percentile value, or from 0 to 1 if the variable is a dummy variable, with all other explanatory variables held constant at their respective means.

As showed in table 4 column 1, CEO turnover-performance sensitivity is significant for both negative industry-adjusted market returns and industry adjusted ROA, with coefficients and margins respectively of -2.55 and -0.49 for market returns, and -4.43 and -0.89 for accounting performance. This means that a reduction of 4.9% of market returns or a reduction of 8.9% of accounting performance will increase the likelihood of CEO dismissal of 10%. These findings are in line with the baseline Hypothesis and with previous studies: once the firm's financial performance is reduced, a good corporate governance systems penalize CEOs.

Table 4 column 2 shows the results for the family firms sub-sample. CEO turnover is negatively related with negative industry-adjusted ROA (with coefficient of -1.34 and margin of -0.27, both significant at 1%) but not with negative Industry-adjusted market return. This finding is expected and it is even more strengthen by what showed in column 3, where I run the regression on the full-sample using the interaction variables. The results in column 3 underline that while CEO turnover is sensitive to both negative industry-adjusted market return and negative industry-adjusted ROA for non-family firms (with a negative coefficient of -1.32 and negative margin of -0.25 for market return, and a negative coefficient of -3.96 and negative margin of -0.75 for ROA), for family firms the CEO dismissal is just sensitive to negative accounting performance, because the positive and significant coefficient of 3.74 and the positive and significant margin of 0.71 for the interaction between family firms dummy and negative industry-adjusted market returns reduces the negative coefficient and margin founded for market return in non-family firms.

These results confirm the first hypothesis that family owned companies are less likely to dismiss a CEO for poor financial performance than non-family firms. More deeply, what I find here is that, comparing the coefficients and margins founded for family and non-family firms I can see that CEO dismissal is less likely to occur in family firms as compared to non-family firms and, even more specifically, family firms prefer accounting performance to market performance in replacing bad performing CEO, while non-family companies rely on both measure (accounting and market return). In table 4, I highlight the importance of family ownership on the CEO performance-turnover relation by documenting that CEO turnover is less sensitive to performance in the presence of controlling family ownership. This is due to the higher monitoring characterizing family companies. The familial control allows the dominant family to deeply assess accounting number, thusly corporate governance mechanisms are more grounded on accounting measures than market measures as compared to non-family firms.

Table 4 shows that non-family firms put greater weight on stock market performance than accounting measures of performance, whereas family firms rely solely on accounting measures in making CEO replacement decisions. In fact, non-family firms shareholder care more about the market evaluation because they have a short-term investment horizon. Plus the measure provides a greater signal to noise ratio in measuring the CEO's performance. Thus, a CEO of a publicly held non-family firm, who suffers a negative market return, is more likely to be replaced. On the other hand, the dominant family of a family own firm does not care about capital gains, because of the long-term investment horizon (Andres, 2008). As a consequence, the corporate governance of family firms is structured to be more sensitive to accounting returns. The analysis gives support to this thesis showing that the CEO replacement mechanism for family firms is just related to negative industry-adjusted ROA, as documented by the results reported in table 4.

Family firms sub sample analysis

The above analyses indicate that the CEO turnover-performance relation is systematically different between family firms and non-family firms. In this section, in order to further analyze the main inferences, I explore cross-sectional variation within family firms along the dimension of family related CEOs in family firms and external professional CEOs in family firms.

I examine Hypothesis 2 by running the previous specification with the addition of a family member CEO indicator and its interaction with the performance variables, using the magnitude and significance of these variables to test for the effect of family member CEO on CEO dismissal. I run this regression in the family-firms sub-sample:

$$\text{CEO Turnover}_{i,t} = \alpha i + \beta_1(\text{Pos\_market\_return}_{i,t-1}) + \beta_2(\text{Neg\_market\_return}_{i,t-1}) + \beta_3(\text{Pos\_ROA}_{i,t-1}) + \beta_4(\text{Neg\_ROA}_{i,t-1}) + \beta_5(\text{Family\_CEO\_dummy}_{i,t-1}) + \beta_6(\text{Family\_CEO*Pos\_market\_return}_{i,t-1}) + \beta_7(\text{Family\_CEO*Neg\_market\_return}_{i,t-1}) + \beta_8(\text{Family\_CEO*Pos\_ROA}_{i,t-1}) + \beta_9(\text{Family\_CEO*Neg\_ROA}_{i,t-1}) + \beta_{10}(\text{Controls}_{i,t-1}) + \varepsilon_{i,t}.$$

The reason for separating family CEOs from professional CEOs is because the impact of family CEO on the turnover-performance sensitivity has to be explored yet. In order to shed light on this issue, I separately examine the effect of family CEOs and professional CEOs on CEO turnover-performance sensitivity.

TABLE 5

Enhanced Model 2: CEO Turnover-Firm Performance Relation: differences between Family CEOs and Professional CEOs

Variable	Family firms Professional CEO sub-sample	Family Firms Family CEO sub-sample	Family Firms sample (using the interactions)
	(1)	(2)	(3)
Intercept	-0.69	-3.45**	-1.81***
	(0.99)	(1.27)	(0.77)
Pos. Industry Adjusted Market Return	-1.15	-0.53	-0.95
	(0.80)	(0.60)	(0.71)
	[-0.20]	[-0.12]	[-0.19]
Neg. Industry Adjusted Market Return	-1.12	0.94	**-1.67**
	(2.18)	(1.29)	(1.71)
	[-0.20]	[0.22]	**[-0.33]**
Pos. Industry Adjusted ROA	-3.26	-0.04	-1.52
	(2.09)	(4.00)	(1.54)
	[-0.57]	[-0.01]	[-0.30]
Neg. Industry Adjusted ROA	**-1.46*** **	**-2.94**	**-1.68*** **
	(0.32)	(4.53)	(0.31)
	[-0.26*]**	**[-0.68]**	**[-0.33***]**
Family CEO Dummy			0.73
			(0.37)
			[0.14]
Family CEO*Pos. Industry Adjusted Market Return			0.60
			(0.83)
			[0.12]
Family CEO*Neg. Industry Adjusted Market Return			**3.32**
			(2.08)
			[0.65]
Family CEO*Pos. Industry Adjusted ROA			2.22
			(3.38)
			[0.44]
Family CEO*Neg. Industry Adjusted ROA			**1.98***
			(1.14)
			[0.39*]
Control Variables	Yes	Yes	Yes
Industry Fixed effects	Yes	Yes	Yes
Observations	261	220	481
Pseudo R2	0.20	0.13	0.13

Probit regression; the dependent variable is CEO turnover. The table shows the estimate, the standard errors in round brackets, and the margins in squared brackets. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. Standard errors are clustered at company level. Variables are defined in the Appendix.

Table 5 documents that the results founded for family firms in the main analysis are mainly driven by professional CEOs. In column 1 I report results for the family firms professional CEO sub-sample. The CEO turnover performance sensitivity is negative and significant just for negative industry-adjusted ROA, with coefficient of -1.46 and margin of -0.26, both significant at 1%, being completely in line with what found for family firms in table 4. Further, in column 2 I report results for the family firms family CEO sub-sample, showing no relation between CEO turnover and performance. In column 3 I find the same evidence: the inverted relation between negative industry-adjusted accounting performance (coefficient of -

1.68 and margin of -0.33, significant at 1%) in family firms sample is reduced by the interaction between the dummy variable for family CEOs and negative industry-adjusted ROA, with a positive coefficient of 1.98 and a positive margin of 0.39.

These findings indicate that when a family CEO leads a family owned company, there is no significant turnover-performance sensitivity. These results give strong support to the second hypothesis, and strengthen the *Entrenchment Hypothesis* of the Volpin's paper (2002), where the author had not found strong support in favor of different turnover-performance sensitivity between family CEOs and external CEOs. I also document that the CEO turnover relation is insensitive to the firm's stock market and accounting performance when the CEO is a member of the controlling family, but it is sensitive to industry-adjusted ROA when the CEO is external (not a member of the controlling family). Therefore, the empirical measure of the sensitivity of CEO turnover to firm performance among family owned firms is driven solely by the turnover among non-family member CEOs.

Several reasons can explain this finding. First of all, the Chief Executive Officer is the highest and most important position in the Board and through it the family can directly manage the company and better protect their private benefits (Chen et al., 2013). This can induce the dominant family to not replace bad performing family CEOs. Secondly, the family usually has a long-term horizon (Andres, 2008), thus it might be willing to give family CEOs extra-time to prove themselves, leading to lower turnover-performance sensitivity. Moreover, the market may badly reacts to a replacement of the family CEO, because a family member should know the family business better than an external manager (Anderson and Reeb, 2003).

Sensitivity analysis and Robustness check

In this last subsection, I test findings to possible alternative explanation.

First, I explore another important setting in order to investigate whether results about the underlined differences in CEO turnover-performance sensitivity between family and non-family firms are driven by the ownership concentration of family owned companies, or rather by the family firms' peculiar corporate governance characteristics due to familial relations.

I begin by adding blockholder-dominated firms in the analysis. This last kind of firm reports the same ownership concentration of a family firms, but it controlled by a dominant shareholder, which is not a family, but an institutional investor, like a common fund, a pension fund, etc. In this way, the sample of non-family firms is divided into blockholder-dominated firms and non-family firms with dispersed ownership (in which no dominant shareholder is present, and the shares are widely held) as already explained above. I expect to find results supporting my thesis that the differences between family and non-family firms are due to familial relations rather than ownership structure. Hence, I expect to find no differences between non-family firms with dispersed ownership and blockholder-dominated firms.

TABLE 6
Enhanced Model 3: Effect of Firm Performance on CEO Turnover in Family, Non Family, & Blockholder dominated Companies

Variable	Predicted sign	Full Sample (using the interactions)
Intercept		-2.14***
		(0.50)
Pos. Industry Adjusted Market Return		-0.09
		(0.32)
		[-0.02]
Neg. Industry Adjusted Market Return	**-**	**-1.39***
		(0.82)
	-	**[-0.26*]**
Pos. Industry Adjusted ROA		-0.50
		(1.57)
		[-0.09]
Neg. Industry Adjusted ROA	**-**	**-3.74****
		(1.92)
	-	**[-0.70**]**
Family Firms Dummy		0.18
		(0.17)
		[0.03]
Family Firm*Pos. Industry Adjusted Market Return		0.09
		(0.23)
		[0.02]
Family Firm* Neg. Industry Adjusted Market Return	**+**	**3.74***
		(2.10)
	+	**[0.70*]**
Family firm*Pos. Industry Adjusted ROA		0.52
		(2.16)
		[0.10]
Family Firm* Neg. Industry Adjusted ROA		**2.51**
		(1.94)
		[0.47]
Blockholder Firms Dummy		0.27
		(0.23)
		[0.05]
Blockholder Firms*Pos Industry Adjusted Market Return		-0.62
		(0.69)
		[-0.12]
Blockholder Firms* Neg Industry Adjusted Market Return		**-0.27**
		(1.67)
		[-0.05]
Blockholder Firms*Pos Industry Adjusted ROA		0.89
		(2.03)
		[0.17]
Blockholder Firms* Neg Industry Adjusted ROA		**-2.96**
		(5.20)
		[-0.55]
Control Variables		Yes
Industry Fixed effects		Yes
Observations		981
Pseudo R2		0.09

Probit regression; the dependent variable is CEO turnover. The table shows the estimate, the standard errors in round brackets, and the margins in squared brackets. Coefficients' significance: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$. Standard errors are clustered at company level. Variables are defined in the Appendix.

Table 6 reports the findings for the first sensitivity analysis with the blockholder-dominated

firms' variable. Empirical results show that in blockholder-dominated companies CEO turnover is as sensitive to stock market and accounting performance as in non-family firms with dispersed ownership, whereas the performance-turnover sensitivity in family controlled firms is considerably lower. The coefficients for blockholder-dominated firms are positive although insignificant for both stock returns and accounting performance, meaning that there are no differences with non-family firms with dispersed ownership, which report coefficient of -1.39 and margin of -0.26 for negative industry-adjusted market return, and coefficient of -3.75 and margin of -0.70 (both significant at 5%) for negative industry-adjusted ROA.

I propose that the lower CEO turnover-performance sensitivity in family firms, than in firms with dominant blockholders, is due to familial relations between the CEO and the controlling owners since family firms and blockholder-dominated firms have, on average, the same ownership concentration. This represents an important new insight for the corporate governance literature, demonstrating that concentrated ownership, like for family firms and for blockholder-dominated companies, enhance the monitoring activity on the board of directors and on the CEO. As a consequence, the higher is the monitoring the higher is the turnover-performance sensitivity and thus the corporate governance quality. Notwithstanding, the familial relations weaken the positive contribution of concentrated ownership because I report (given an equal level of ownership concentration on average) a weaker CEO turnover-performance sensitivity in family firms as compared to non-family firms dominated by a blockholder.

Furthermore, I show that blockholder-dominated firms and non-family firms with dispersed ownership put weight on both measures of performance. These findings give support of my thesis about the importance of monitoring in putting more weight on one measure of performance instead of another, and they underline once again that the differences between

family and non-family firms are not due to the ownership concentration, but rather are due to the family firms' characteristics and familial relations. Family owners are not well diversified investors, thus their personal wealth is highly related to the success of the firm. As a consequence they behave like an active shareholder (active monitor). On the contrary, the blockholder hold a well-diversified portfolio, thus it may be possible that he behave as a passive shareholder (passive monitor). Usually, the family just holds one company (undiversified risk), while the blockholder (Pension funds, Common Funds, Institutional Investors, etc.) generally invest in more than one business, being more diversified. This does not allow the blockholder to actively monitor the firm even if he has the power to do it. Thus, this explains why he needs to both measures of performance: market and accounting.

The second sensitivity test is in order to understand who replace a fired CEO from a family owned company. The idea is to understand whether a family CEO fired for poor performance is more or less likely to be replaced by a non-family member, than if a non-family CEO gets similarly terminated. I aim to understand the underlying reasons that induce a family firm to replace a family CEO or to replace a professional CEO.

TABLE 7
Enhanced Model 4: Effect of Firm Performance on Old Professional and Family CEO.

Variable	Predicted sign	Dependent Variable: New family CEO
Intercept		-2.53
		(2.42)
Pos. Industry Adjusted Market Return		-0.50
		(0.77)
		[-0.05]
Neg. Industry Adjusted Market Return		1.78
		(2.48)
		[0.20]
Pos. Industry Adjusted ROA		-5.24
		(5.02)
		[-0.57]
Neg. Industry Adjusted ROA		-8.67
		(5.72)
		[-0.95]
Old Family CEO Dummy	**+**	**1.49****
		(0.63)
		[0.16]**
Old Family CEO*Pos. Industry Adjusted Market Return		-0.06
		(0.48)
		[-0.01]
Old Family CEO*Neg. Industry Adjusted Market Return		**5.02**
		(4.66)
		[0.55]
Old Family CEO*Pos. Industry Adjusted ROA		5.78
		(4.89)
		[0.63]
Old Family CEO*Neg. Industry Adjusted ROA	**+**	**14.23****
		(6.46)
		[1.56]**
Old Professional CEO*Pos. Industry Adjusted Market Return		-4.49
		(16.36)
		[-0.49]
Old Professional CEO*Neg. Industry Adjusted Market Return	**-**	**-9.58****
		(4.19)
		[-1.05]**
Old Professional CEO*Pos. Industry Adjusted ROA		-13.54
		(24.77)
		[-1.48]
Old Professional CEO*Neg. Industry Adjusted ROA		**52.60**
		(33.11)
		[5.76]
Control Variables		Yes
Industry Fixed effects		Yes
Observations		331
Pseudo R2		0.31

Probit regression, the dependent variable is New Family CEO dummy. The table shows the estimate, the standard errors in round brackets, and the margins in squared brackets. Coefficients' significance: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$. Standard errors are clustered at company level. Variables are defined in the Appendix.

Table 7 reports the results for this analysis. In the specific case, the dependent variable is new family CEO dummy which is equal to 1 when the new CEO is a family member and equal to

0 elsewhere. As usual, I report the positive and negative stock market returns and ROA. Moreover, I interact these performance measures with the dummies old family CEO (equal to 1 when the dismissed CEO is a family member and equal to 0 elsewhere) and old professional CEO (equal to 1 when the dismissed CEO is not a family member and equal to 0 elsewhere) in order to get the specific effect of the old CEO's characteristics and performance on the probability that the new CEO is a family member.

Results in table 7 show that usually a family firm replaces a family CEO with another family CEO (consequently, family firms use to replace professional COEs with other professional CEOs). Nevertheless, results for performance-induced turnovers are different. In fact, the likelihood that the new CEO is a family member is lower if the replaced family CEO reports bad accounting performance (being the coefficient of the interaction between old family CEO dummy and negative ROA positive and significant at 5% level). Thus, for cases of bad accounting returns, I posit that the family may feel to need the assistance of a professional manager, and the family CEO will be replaced by a non-family member CEO.

On the other hand, table 7 reports evidence that when the replaced CEO is not a family member (i.e. he is a professional manager) and he reports low stock market performance, the probability that the new CEO is a family member increases (being the coefficient of the interaction between old professional CEO dummy and negative market returns negative and significant at 5% level). My interpretation of this finding is that in such situations the family may feel threatened by potential takeovers (given the bad market performance) and may decide to appoint a family member in order to prevent any corporate raiders.

These findings are completely novel and relevant, and they contribute to the understanding of the corporate governance literature of family firms.

1.5. Conclusion

A number of previous studies have documented a negative relation between chief executive officers (CEO) turnover and firm performance, predicting that when firm performance decreases, CEOs are replaced because they were not able to increase firm's value. In this work, I empirically study how family ownership and familial relations directly affect the turnover-performance sensitivity. Of interest to this particular study is how the CEO turnover process works in family controlled companies, which performance measure counts more and what are the underlying differences between family and non-family firms (both public held non-family firms and blockholder-dominated companies).

I demonstrate that family owned companies rely more on the accounting performance than market performance in evaluating CEOs (both family CEO and professional CEO). This is driven by the knowledge of the firm possessed by dominant family and the monitoring which is much greater than expected from the shareholders of widely held firms (given their free-rider problem as stated by Demsetz and Lehn, 1985), making the accounting performance measure less noisy as compared to the same measure for non-family firms. For these same reasons, non-family firms put more weight on the market measure of performance.

Additionally, I showed that the CEO turnover-performance sensitivity is lower for family CEOs as compared with non-family CEOs because of the entrenchment and familial relations (i.e. collusion). I use blockholder-dominated companies in order to find further evidence about the difference between family firms and non-family firms in the CEO turnover-performance sensitivity, finding that for blockholder-dominated companies there is an inverse relation between the likelihood of CEO turnover and negative firm performance, observable for both stock returns and accounting performance (as for the non-family firms with over-dispersion of shares) whereas, as expected, family firms rely just on the accounting

performance.

Finally, for the first time in the literature, this work provides evidence about the directional change of CEO turnover. Results show that family firms with family CEO are more willing to replace the family CEO with another family CEO. However, when the firm reports a negative accounting performance, the probability that the new CEO is another family member decreases. On the other hand, family firms with professional CEOs are more willing to replace professional CEOs with another professional CEO. Notwithstanding, when the firm reports a negative market performance, the probability that the new CEO is a family member increases.

This work makes several contributions to the literature on turnover-performance relation. First, I outline the importance and the impact of family control on the CEO turnover-performance sensitivity. I shed lights on the relative importance of the different performance measures used in evaluating a CEO in family and non-family firms. In fact, I find that non-family firms put more weight on stock market returns than accounting performance, while family firms just rely on the accounting performance. I interpret these findings as proof that better monitoring by family firms matter when evaluating a CEO. Non-family firms (especially the one with dispersed ownership) do not have such monitoring power, thus their shareholders have to consider more the market return, that in this case appears more accurate than accounting performance, in evaluating CEOs (when the monitoring is low the accounting measures of performance is a weaker performance signal). On the other hand, family firms rely on the accounting performance because it is more accurate in evaluating poor performing CEO. In fact, the family is more focused on the accounting performance, being the source of its main gain (i.e. the dividends).

Secondly, I show that, in the family firms' sample, the professional CEOs are the ones that

drive the results, because family related CEOs are not replaced for poor performance. This finding underlines the high benefits of control that lead to entrenchment. Furthermore, it is critical for the understanding of the corporate governance mechanisms of family firms and, also, it could be a clue for future research that aims to study the market reaction to such behavior.

Thirdly, the tests for blockholder-dominated firms show how they put weight on both measures of performance providing support for my view of the importance of monitoring in determining the relative weights put on the measures of performance. It also serves to show once again that the differences between family and non-family firms are not due to the ownership concentration, but rather are due to the family firms' characteristics and familial relations.

Finally, I show that family firms decide to replace a family CEO with a professional CEO just when they need professional assistance (i.e. in cases of bad accounting performance). Instead, family firms replace a professional CEO with a family CEO in cases of low stock market returns, hence when the family feels threatened by potential takeovers and decide to appoint a family member in order to prevent any corporate raiders.

Appendix

Appendix 1

Description of Variables

Variable	Definitions
CEO Turnover	Dummy variable equal to 1 for the years in which the CEO is replaced, and equal to 0 otherwise. Turnovers are classified as forced if the CEO was fired or forced out from the position. We removed cases where turnover is due to retirement or death or non performance related turnover.
Market Return (Industry adjusted)	The industry-adjusted returns calculated as the 4-quarter average stock return the year before the CEO turnover minus the contemporaneous industry return based on DataStream industry level 6 identifiers.
Accounting Return (Industry adjusted)	The industry-adjusted Return on Assets calculated as net income scaled by total assets the year befor the CEO turnover minus the contemporaneous industry ROA based on DataStream industry level 6 identifiers.
Sales Growth	Measured as the percentage change in revenues over the prior year.
Market to Book	The sum of the book value of debt plus market value of equity divided by the firms total assets.
Log Total Assets	The natural logarithm of total assets.
Leverage	The total book value of debt divided by the book value of debt and market value of equity.
CEO Age	The age of the CEO.
Family Ownership (%)	The percentage of shares owned by the controlling family.
Family CEO Dummy	Dummy variable that assumes the value of 1 if the firm is a family dominated firm and a member of the controlling family acts as CEO, and 0 otherwise.
CEO Duality	Dummy variable equal to 1 if the CEO also holds the position af the chairman, and equal to 0 otherwise.
Independent Directors (%)	Calculated as the number of the independent directors on the board divided by the total number of board members.
Family Firms Dummy	A dummy variable equal to 1 if the firm is a family dominated firm, and equal to 0 otherwise.
Blockholder Firms Dummy	Dummy variable equal to 1 if the Non-Family firm has a blockholder that directly controls the company, and equal to 0 if the Non-Family firms is not dominated by any relevant blockholder.
Old Family CEO Dummy	Dummy variable equal to 1 when the replaced CEO is a family member, and 0 otherwise.
Old Professional CEO Dummy	Dummy variable equal to 1 when the replaced CEO is a professional manager, and 0 otherwise.
New family CEO dummy	Dummy variable equal to 1 when the new CEO is a family member, and 0 otherwise.

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CHAPTER 3: Family Ownership, Earnings Management, and CEO Turnover.

1.1. Introduction

In this study, I investigate the effect of ownership structure on the threat of Chief Executive Officer (CEO) dismissal. Using the unique ownership characteristics of the Italian setting, I examine the association between earnings management and performance induced CEO turnovers in family and non-family controlled public firms. In doing so, I use the differences in ownership structures to gauge the sensitivity of the relation. Providing insight into the environment of family-owned firms, which are the dominant form of ownership in the corporate world (La Porta, Lopez-de-Silanes, Shleifer, and Vishny 2000).

Previous studies document the numerous costs imposed by earnings management on the firm's shareholders (see, e.g., Hazarika, Karpoff, and Nahata 2012; Leuz, Nanda, and Wysocki 2003). Leuz et al., (2003), point to the transparency costs associated with managers masking the true economic conditions of the firm through earnings management. Given this view, earnings management can be thought of as being primarily driven by an agency problem, managers trying to extract private rents to the detriment of shareholders. As a result, the firm's corporate governance system is structured to minimize the managerial incentive to engage in earnings management. For example, the firm's board may structure the CEO's compensation to be less sensitive to opportunistic behaviors or it may dismiss CEOs that behave opportunistically.

Using an agency framework to motivate their study, Hazarika et al., (2012), find a positive association between earnings management and CEO turnover, concluding that governance increases the manager's marginal cost of engaging in earnings management. I aim to examine the nature of this relation in the context of family-controlled firms in which the agency problem is mitigated by family ownership concentration and family ties. This issue is

relevant because in family controlled and managed firms, the CEO being a member of the family, the incentives of the CEO and controlling family are closely aligned by family ties. In this case, earnings management may be utilized to extract benefits for both the CEO and controlling family. Using this view, I study whether the sensitivity of the governance mechanism used to punish earnings management is executed equally amongst firms with different ownership structures. Specifically, I predict that characteristics of family firms moderate the positive association between CEO turnover and earnings management that may be found in widely held public firms.

Results of the empirical analysis indicate that earnings management, measured as the absolute value of discretionary accruals, is positively related with the probability of CEO dismissal in the full sample. Given earnings management, I find a 1.77% marginal increase in the likelihood of turnover consistent with the costly nature of earnings management to the firm's shareholders. When I examine the relation in family-controlled firms, I find an incremental negative relation between earnings management and CEO turnover. This -1.53% marginal decrease in the likelihood of turnover, when netted against the unconditional effect, results in a lower earnings management-CEO turnover sensitivity in family-controlled firms. Finally, when I look at family-controlled and managed firms, in which the CEO is a family member, the positive relation between earnings management and CEO turnover is further reduced. This result supports the lower principal-agent problem in family firms, as would be predicted, when family ties align the incentives of the CEO and controlling family.

I examine the sensitivity of the results for cases in which earnings management could be more or less costly, e.g., the magnitude of the earnings management is extremely high or low. I find that baseline results are strengthened when high levels of absolute discretionary accruals are used rather than low levels of absolute discretionary accruals. This is consistent with high levels of absolute discretionary accruals being costlier to shareholders, such as

financial restatements and transparency costs. As a result, I observe a significant and positive relation between CEO turnover and high levels of absolute discretionary accruals. On the other hand, low levels of absolute discretionary accruals are not significantly related to CEO turnover, consistent with them being less costly to shareholders and, in some cases, even providing benefits to the firm in meeting or beating analysts' forecast or in smoothing earnings. As expected, with regard to family controlled firms, the positive and significant relation between high levels of absolute discretionary accruals and CEO turnover is absent.

I conduct an array of robustness tests to rule out alternative explanations. I examine whether differences in the propensity of family and non-family firms to engage in earnings management are driving my results. I find that there is no significant difference in the levels of total and discretionary accruals between family and non-family firms. I go on to study whether ownership concentration as opposed to family ownership, drive my results. Looking at the effect of non-family dominant shareholders (i.e. blockholder-dominated firms) on the relation between earnings management and CEO turnover, finding that ownership concentration alone does not explain baseline results.

This study contributes to the literature by examining the diversity in corporate governance systems as well as providing insights into the understudied yet prominent ownership structure of family firms. By investigating variations in the sensitivity of the earnings management-CEO turnover relation, I demonstrate that differences in ownership structure, as well as differences in the magnitude of the agency problems associated with them, lead to different corporate governance systems. This distinction is crucial when interpreting many of the findings in the corporate governance literature, given that some results may not be generalizable to all settings. I demonstrate that corporate governance is not invariant, but rather conditional on the specific context of the firm. I use family firms and the mitigation of the agency problem associated with these firms to stress the differences in corporate

governance systems. I shed light on the environment of family-owned firms, which are the dominant ownership form in the corporate world. La Porta et al. (2000) document that families control over 53% of publicly traded firms with at least 500 million of capitalization in 27 countries. Yet, despite the prevalence of the ownership structure, family firms have received scant attention in previous research on corporate governance. Finally, I speak to the relative costs of earnings management to shareholders under an agency framework, using the sensitivity of the CEO turnover-earnings management relation as a measure of the importance of the costs of earnings management to shareholders.

The remainder of the paper is organized as follows: Section 2 provides a background and develops my two hypotheses. Section 3 covers the research design and describes the empirical model used to investigate the hypotheses. Results and sensitivity tests are discussed in Section 4. Finally, in section 5 I conclude.

1.2. Earnings management and forced CEO turnovers

The literature on earnings management focuses extensively on the expected costs that earnings management imposes on shareholders. Haley and Wahlen (1999) define earnings management as the alteration of a firm's reported economic performance by insiders to either mislead stakeholders or to influence contractual outcomes. Along this line, much of the past research examines manager's expected private benefits from engaging in earnings management (see, e.g., Bergstresser and Philippon 2006; Chung 2002; Frankel, Johnson, and Nelson 2002; Hazarika et al. 2012; Healy and Wahlen 1999; Leuz et al. 2003; Mergenthaler, Rajgopal, and Srinivasan 2012).

I argue, and many previous studies show, that the managerial incentive to misrepresent firm's financial performance through earnings management arises, in part, from the conflict of interest between the firm's managers and shareholders and the information asymmetry

associated with this separation. Managers use their informational advantage and discretion to manage earnings to bolster their compensation, increase the gains in the sales of shares, increase job security and obtain operational flexibility or control (see, e.g., Ahmed et al. 2006; Beneish and Vargus 2002; Bergstresser and Philippon 2006; Burns and Kedia 2006; Cornett et al. 2008; DeFond and Park, 1997; Efendi et al. 2007; Safdar 2003). Implicitly assumed in the arguments put forward in these studies is the notion that managers face some costs in their manipulation. If not, there would be no end to the manipulation. Desai et al. (2006), examine the adverse reputational penalties to managers that result from the announcement of an earnings restatement. They find that 60% of restating firms experience a turnover in at least one top manager within 24 months of the restatement compared to only 35% among age-, size- and industry-matched firms. These results coincide with those of Agrawal et al., (1999) and Beneish, (1999). The private rents that managers extract through earnings management come at a significant cost to the firm and its shareholders, under the form of earnings restatements or sanctions by regulators, to name a few (see, e.g., Agrawal and Cooper 2008; Desai et al. 2006; Karpoff et al. 2008). The firm's corporate governance system serves as a mechanism to increase the manager's marginal cost of partaking in these opportunistic activities.

Given that earnings management generally arises out of an agency problem, a number of studies examine the role that a firm's corporate governance system has on the manager's propensity to manage earnings. I examine the effects of governance mechanisms on earnings management by focusing on CEO turnover, given that the threat of dismissal is one of the most significant costs a manager may face in the firm (see Hazarika et al. 2012).

Studies on CEO turnover usually focus on the relation between firm's financial performance and CEO turnover. The literature points to a significant negative association between forced turnovers and firm performance; the likelihood of CEO dismissal increases as the firm's

financial performance deteriorates, be it return on assets (ROA) or stock performance (Kaplan and Minton 2012; Kothari et al. 2006; Murphy 1999). In regards to the relation between earnings management and CEO turnover, Hazarika et al. (2012) examine the relation in the context of widely-held U.S. firms. They find that the likelihood and speed of CEO turnover is positively related to earnings management (both downwards and upwards). Specifically, they find that earnings management increases the likelihood of forced CEO turnovers in subsequent years while having no effect on voluntary CEO turnovers. They claim that the internal governance of the firm works to discipline earnings management incentives before they become severe enough to attract public attention. This interpretation is consistent with Leuz et al. (2003), who argue that earnings management imposes costs on shareholders, specifically transparency costs. As a result, the threat of CEO dismissal is sensitive to the amount of earnings management.

I take the opportunity to expand on the issue of corporate governance and earnings management using family firms, in which the traditional type I agency problem has been shown to be mitigated (see, e.g., Demsetz and Lehn 1985; Ronald et al. 2003, 2004; Van den Berghe and Carchon 2003; Villalonga and Amit 2006). In family firms, the family generally controls a large stake in the firm and acts as a large shareholder mitigating the agency problem. As a consequence, the family has both a general interest in profit maximization and enough control over the assets to have their interest respected. The family is more likely to have stronger incentives to monitor managers, who for the most part are members of the family itself. In this regard, the family is actively involved in the firm's management and has a thorough understanding of the business, with the family tending to have longer investment horizons. Bartholomeusz and Tanewski (2006), for example, find that family firms adopt substantially different corporate governance structures as a result of their ownership.

In family controlled firms, the influence of family ties may help mitigate the incentive to

misrepresent firm performance through earnings management, which usually arises from a conflict of interest between the firm's insiders (managers) and outsiders (shareholders in general). I believe that the level of earnings management in family firms may not differ from widely-held firms, given that the dominant family may still allow managers to engage in earnings management in order to reduce dividends to minority shareholders, as shown in Wang (2006), or in order to increase family members' compensation and bonuses (when the CEO is a member of the family). Given that the dominant family directly controls the firm, any earnings management is done with the consent of the family itself and, as such, I expect that the relation between CEO turnover and earnings management to differ from the case of widely-held firms.

Overall, given the same level of earnings management, the reduction of the agency problem in family controlled firms should be reflected in a weaker relation between earnings management and CEO turnover in family-controlled companies as compared to non-family firms. Moreover, I expect an even lower sensitivity, with respect to the relation between earnings management and CEO turnover, when the family also manages the firm, i.e., the CEO is a member of the dominant family.

1.3. Data and research design

Sample

Given the focus on family ownership's effect on the CEO turnover-earnings management relation, I utilize a hand-collected sample of Italian firms to conduct the study. I rely on the Italian setting given the high propensity of family ownership in this country, which allows me to increase the power of my tests in determining the effects of family ownership on the CEO turnover-earnings management relation. Additionally, previous studies have also relied on the uniqueness of the Italian context to examine family business characteristics (see, e.g.,

Corbetta and Montemerlo 1999; Corbetta and Tomaselli 1996; Cucculelli and Micucci 2008; Mengoli et al. 2009; Perrini et al. 2008; Prencipe and Bar-Yosef 2011). I begin constructing my sample by identifying all listed companies on the Italian Stock Exchanges during the period of 2006 to 2010. From this group I exclude financial firms, as well as bank holding companies, given the different nature of their accruals and the regulatory environment in which they operate. Thus, I are left with 221 non-financial Italian firms listed during the period of 2006-2010. This sample will be further reduced during tests, given the data requirements discussed below. The remainder of this section discusses the variables of interest and control covariates, as well as the empirical specifications used to test the hypotheses.

CEO Turnover

I construct my measure of CEO turnover at the firm level by identifying CEOs for all firms listed on the Italian Stock Exchanges between 2006-2010. I utilize the annual firm filings with CONSOB (the Italian Securities and Exchanges regulator), two Italian stock exchange yearbooks (Calepino dell'Azionista and the Taccuino dell'Azionista), as well as information from the Borsa Italiana to identify the years in which there was a CEO change at the company. I define the turnover variable as a dummy equal to one in the year in which the CEO changes.

TABLE 1

Frequencies of Forced Turnovers.

This table reports the total number of forced CEO turnovers in the sample from 2006 to 2010. Given the lack of information on the causes of turnover from public sources, we conduct news searches to eliminate turnovers due to death and retirements, and voluntary turnovers not related to financial performance. This process reduces our final sample of turnovers to 122 forced turnovers. The non-turnover sample of firms includes all remaining listed Italian firms during the time period. This yields a total sample of 221 firms corresponding to 1035 firm-year observations.

Year	No turnover	Forced Turnover	Total
2006	165	17	182
	91%	9%	100%
2007	168	35	203
	83%	17%	100%
2008	195	18	213
	92%	8%	100%
2009	183	33	216
	85%	15%	100%
2010	202	19	221
	91%	9%	100%
TOTAL	**913**	**122**	**1035**
	88%	12%	100%

Given the lack of information on the causes of turnover from public sources, I conduct news searches to eliminate turnovers due to death and retirements, turnovers that were not linked to performance, which may introduce noise in the analysis, reducing the sample of turnovers to 122. I do not consider situations in which the CEOs leave voluntarily for other opportunities (i.e. volunteer turnovers). Consequently, the turnovers considered are solely forced turnovers. Table 1, Panel A summarizes the turnover sample of 122 turnovers during the sample period by year. The non-turnover sample of firms includes all remaining non-financial listed Italian firms during the time period. This yields a total sample of 221 firms corresponding to 1035 firm-year observations.

Earnings Management

I measure earnings management as the absolute value of abnormal accruals, using the performance-adjusted discretionary accrual model of Kothari et al. (2005).[10] In estimating the Jones model, I follow previous literature (Jones 1991) and use non-cash working capital accruals (TA) as measure of total accruals, where:

$$TA_{i,t} = (\Delta \mathrm{CA}_{i,t} - \Delta \mathrm{CL}_{i,t} - \Delta \mathrm{Cash}_{i,t} + \Delta \mathrm{STD}_{i,t} - DEP_{i,t})/A_{i,t}$$

and

$\Delta \mathrm{CA}_{i,t} = Change\ in\ Current\ Assets$

$\Delta \mathrm{CA}_{i,t} = \ Change\ in\ Current\ Liabilities$

$\Delta \mathrm{Cash}_{i,t} = \ \ Change\ in\ Cash$

$\Delta \mathrm{STD}_{i,t} = Change\ in\ Short - Term\ debt$

$DEP_{i,t} = Depreciation\ and\ Amortization$

$A_{i,t} =$ Total Assets.

I estimate discretionary accruals from the performance-adjusted discretionary accrual model pooling all firm-year observations cross-sectionally and running the model by industry taking the absolute value of the residual from the model as measure of discretionary accruals:[11]

$$TA_{i,t} = \alpha + \beta_1 \left(1/A_{i,t-1}\right) + \beta_2 \left(\Delta Sales_{i,t}\right) + \beta_3 \left(PPE_{i,t}\right) + \beta_4 \left(ROA_{i,t-1}\right) + \epsilon_{i,t}$$

where:

$\Delta Sales_{i,t} = Change\ in\ Sales\ scaled\ by\ lagged\ total\ assets$

$\mathrm{PPE}_{\mathrm{i,t}} =$ Net Property Plant and Equipment scaled by lagged total assets

$\mathrm{ROA}_{i,t-1} = Firm\ i'sReturn\ on\ Assets\ in\ year\ t-1.$

The use of lagged total assets, as a scaler, is consistent with prior literature (see, Dechow et al. 1995; Kothari et al. 2005) and mitigates any heteroskedasticity in the residuals.

[10]Results are not sensitive to this particular measure of discretionary accruals. I obtain similar results using discretionary accruals from the Jones (1991) model as well as the Dechow-Dichev Model (2002).

[11] I note that in cases where the number of firms in an industry is less than 10 estimates of the coefficients to run the performance-adjusted Jones Model.

Additionally, I include a constant in the model to further reduce heteroskedasticity and increase the power of the tests as recommended by Kothari et al. (2005). I include the firm's lagged ROA to control for the correlation between accruals and the performance of a firm. The data used to estimate the two equations above come from the Thompson Reuters Worldscope database. I exclude firm-year observations where there are insufficient data to estimate the Jones model. Additionally, I winsorize extreme values of TA when running the performance augmented Jones model at the 1st and 99th percentiles to reduce the influence of outliers.[12]

Following Cohen et al. (2008), Hazarika et al. (2012), Klein (2002), and others, I define earnings management as the absolute value of discretionary accruals. The use of the absolute value reflects the fact that managers can utilize discretionary accruals to either increase or decrease reported earnings. Managers have an incentive to manage earnings up to increase bonuses and stock compensation (Efendi, Srivastava, and Swanson 2007). On the other hand, managers also have an incentive to manage earnings downward, before the reissue of stock options (Teoh, Welch, and Wong 1998) or before share repurchases (Gong, Louis, and Sun 2008). Additionally, managers can use negative accruals strategically to shift income between time periods or by the controlling family to extract rents from minority shareholders. By using the absolute value of discretionary accruals, I capture managers' attempts to both manage earnings up or down.

Firm Family Ownership Control and Firm Governance Measures

In order to examine the effects of family ownership on the earnings management-CEO turnover relation, I construct a variable to empirically measure the percentage of ownership (control) by the family at the firm level. In constructing the measure, I adopt a family

[12] Results are robust to winsorizing at less extreme percentiles and truncation (untabulated).

ownership classification scheme similar to the one implemented by Minichilli et al. (2010) and Prencipe and Bar-Yosef (2011) where family-controlled companies are identified as firms in which the dominant family has some concrete form of controlling power. More specifically, I classified a listed company as having family ownership when the dominant family holds the highest percentage of the voting rights when compared to all other relevant shareholders listed by CONSOB, usually more than 30% of voting rights.[13] In order to determine family ownership, I examined the firms CONSOB filings and the two stock market yearbooks for the period 2006-2010. I operationalize the definition of family control by a dummy variable that takes on a value of 1, if a dominant family directly controls the firm or else 0. My sample contains roughly 60% family-controlled firms, which is in line with the 59% found in the Faccio and Lang (2002) study. Also, I use this variable to partition the sample.

When I partition the sample based on family ownership, I have 83 CEO turnovers in family-controlled firms while non-family firms have 50 turnovers. Furthermore, in table 2, in which I provide descriptive statistics on the sample, I see average family ownership concentration of 38% in the sample, but the percentage is as high as 97% for some family-owned firms.

I hand collect measures of the firms' corporate governance to include in the regressions given the association to turnover found in the previous literature. Specifically, I obtain information on whether the CEO is a member of the controlling family (CEO Member of the Family), whether the CEO is also the chair of the board of directors (CEO Duality), and the CEO's age. Finally, I obtain a measure of board member independence by taking the percentage of independent board members for each of the firms in the sample.

Firm Financial Performance and Other Firm Characteristics

[13] CONSOB is the Italian SEC equivalent and discloses the list of all relevant shareholders for publicly traded Italian companies.

In the multivariate test, I control for several firm characteristics that may influence the extent to which managers may manage their firms' accruals and the probability they may be fired. By doing this, I isolate the impact of absolute discretionary accruals on CEO turnover.

To measure firm performance, I examine the industry adjusted stock returns, the industry returns as a whole, operating performance, and sales growth.[14] The industry adjusted stock return (Return) is calculated as the 4-quarter average return for the year prior to the CEO turnover minus the contemporaneous industry return based on DataStream industry level 6 identifiers. I also include the 4-quarter average return for the industry (Industry Return) in the regressions to capture any industry-wide performance that might affect the inferences. Operating performance is measured as operating income before depreciation and amortization divided by the book value of total assets. Sales growth is measured as the percentage change in revenues over the prior year. I also include operating income in the multivariate test to control for firm performance.

Additionally, I control for other firm characteristics in my tests by including additional covariates. To control for firm growth opportunities, I use the market to book ratio, defined as the sum of the book value of debt plus market value of equity divided by the firms' total assets. I control for the financial structure of the firm and the effect of debt by including the leverage of the firm, defined as the total book value of debt divided by the sum of the book value of debt and market value of equity. Finally, I control for the size of the firm by including the natural log of total assets in my tests. All of the accounting and financial variables have been winsorized at the 1% and 99% level to reduce the effects of outliers.

Table 2 presents the general summary statistics for the variables of interest for the full sample (Panel A), as well as for the sub sample of CEO Turnover (Panel B), and no-CEO turnover

[14] All of the financial and accounting variables are obtained from Thompson Reuters DataStream and Worldscope databases and are winsorized at the 1% and 99% levels to reduce the effects of outliers.

sample (Panel C). The table displays the difference in the level of absolute discretionary accruals in panels B and C, where the average absolute discretionary accrual, 0.05 in the CEO turnover sample, is greater than the 0.03 of the non-turnover one.

TABLE 2
Descriptive Statistics for Variables Used in the Analysis

This table reports means, medians standard deviations, 1st quartile and 3rd quartile for absolute discretionary accruals and other explanatory variables used in the analysis. We divided the sample into the full-sample, family firms sample and non-family firms sample as well as between turnover and non-turnover. Panel A reports the descriptive statistics for the whole sample (forced turnovers and no turnovers); Panel B reports descriptive statistics for the sub-sample of forced CEO turnovers; Panel C reports the descriptive statistics for the sub-sample of no turnovers. All financial variables are winsorized at the .01%. The variables are defined in the Appendix.

	Full Sample					Family Firm Sample					Non-Family Firm Sample				
Variable	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
Panel A: Descriptive statistics for the whole sample (N= 1035)															
CEO Turnover	0.11	0.31	0	0	0	0.10	0.30	0	0	0	0.12	0.32	0	0	0
Absolute Discretionary Accruals	0.03	0.02	0.01	0.02	0.05	0.03	0.03	0.01	0.03	0.05	0.03	0.03	0.01	0.03	0.05
Return	-0.01	0.11	-0.04	0.00	0.03	-0.01	0.12	-0.05	-0.00	0.03	-0.01	0.11	-0.05	0.00	0.03
Industry Return	0.01	0.10	-0.05	0.01	0.06	-0.00	0.13	-0.07	0.00	0.06	-0.00	0.12	-0.08	0.00	0.06
Sales Growth	0.09	0.35	-0.05	0.06	0.18	0.09	0.38	-0.06	0.06	0.19	0.08	0.34	-0.05	0.05	0.16
Market to Book	0.17	0.14	0.05	0.14	0.24	0.16	0.14	0.05	0.13	0.23	0.17	0.15	0.05	0.14	0.27
Operating Performance	0.03	0.15	-0.02	0.03	0.08	0.02	0.19	-0.02	0.03	0.08	0.04	0.09	-0.00	0.04	0.08
Log Total Assets	12.96	1.81	11.75	12.69	14.12	12.87	1.70	11.75	12.63	13.97	13.35	1.90	12.25	13.16	14.18
CEO Age	53.99	9.56	47	53	61	54.02	9.74	46	53	62	53.93	9.15	47	54	61
Leverage	0.16	0.14	0.05	0.13	0.23	0.16	0.14	0.05	0.13	0.23	0.17	0.15	0.04	0.13	0.26
Operating Income	223,93	1,341,076	-1,804	8,125	54,441	212,695	1,516,933	-3,562	7,069	48,643	310,863	1,138,975	-20	14,185	70,184
Family Ownership (%)	0.38	0.29	0.00	0.50	0.62	0.56	0.15	0.50	0.57	0.66	0	0	0	0	0
CEO member of family	0.31	0.46	0	0	1	0.46	0.50	0	0	1	0	0	0	0	0
Independent Directors (%)	0.36	0.34	0.25	0.33	0.46	0.37	0.16	0.27	0.33	0.46	0.42	0.22	0.25	0.38	0.56
Board Size	9.33	3.26	7	9	11	9.13	3.09	7	9	11	9.76	3.57	7	9	12
Panel B: Descriptive statistics for the sub-sample of forced CEO Turnover; (N=122)															
Absolute Discretionary Accruals	0.05	0.03	0.02	0.04	0.07	0.05	0.03	0.02	0.05	0.07	0.04	0.03	0.02	0.05	0.07
Return	-0.04	0.14	-0.08	-0.01	0.02	-0.06	0.17	-0.10	-0.01	0.01	-0.02	0.11	-0.07	0.00	0.30
Industry Return	0.01	0.15	-0.06	0.00	0.07	0.03	0.16	-0.05	0.00	0.07	-0.00	0.12	-0.09	0.02	0.08
Sales Growth	0.07	0.37	-0.89	0.02	0.15	0.08	0.41	-0.09	0.00	0.22	0.03	0.31	-0.07	0.02	0.08
Market to Book	0.18	0.15	0.06	0.15	0.26	0.18	0.14	0.06	0.16	0.24	0.18	0.16	0.06	0.14	0.28
Operating Performance	0.02	0.13	-0.04	0.02	0.08	0.02	0.14	-0.04	0.02	0.07	0.02	0.08	-0.01	0.03	0.06
Log Total Assets	12.75	1.67	11.61	12.52	13.68	12.62	1.56	11.67	12.43	13.25	13.02	1.73	11.47	13.15	13.73
CEO Age	54.75	9.55	48	54	62	55.06	10.40	47.5	55	63	54.19	7.86	49	53	59
Leverage	0.17	0.15	0.06	0.14	0.23	0.17	0.14	0.06	0.14	0.22	0.18	0.17	0.07	0.14	0.28
Operating Income	100,180	559,320	-6,754	3,316	27,392	110,583	692,019	-8,513	2,490	19,888	88,071	254,164	-3,249	7,556	46,144
Family Ownership (%)	0.37	0.30	0	0.50	0.64	0.57	0.13	0.50	0.57	0.67	0	0	0	0	0
CEO member of family	0.30	0.46	0	0	1	0.46	0.50	0	0	1	0	0	0	0	0
Independent Directors (%)	0.40	0.20	0.26	0.35	0.54	0.36	0.15	0.29	0.33	0.43	0.46	0.25	0.23	0.46	0.70
Board Size	8.89	3.21	7	8	10	8.66	2.82	7	8	10.5	9.30	3.83	7	9	10
Panel C: Descriptive statistics for the sub-sample of No-Turnover; (N=913)															
Absolute Discretionary Accruals	0.03	0.02	0.01	0.02	0.05	0.03	0.03	0.01	0.03	0.05	0.03	0.02	0.01	0.02	0.04
Return	-0.01	0.11	-0.04	0.00	0.03	-0.00	0.11	-0.04	0.00	0.03	-0.01	0.11	-0.04	0.00	0.03
Industry Return	-0.00	0.12	-0.08	0.00	0.06	-0.00	0.12	-0.08	0.00	0.06	-0.00	0.12	-0.08	-0.01	0.05
Sales Growth	0.09	0.36	-0.04	0.06	0.17	0.09	0.36	-0.05	0.06	0.18	0.08	0.33	-0.04	0.06	0.17
Market to Book	0.17	0.14	0.05	0.13	0.24	0.16	0.14	0.05	0.13	0.23	0.18	0.15	0.06	0.14	0.27
Operating Performance	0.03	0.17	-0.01	0.04	0.08	0.02	0.20	-0.02	0.03	0.08	0.04	0.08	0.00	0.04	0.08
Log Total Assets	13.12	1.76	11.92	12.80	14.19	12.96	1.68	11.84	12.68	14.18	13.51	1.88	12.42	13.22	14.27
CEO Age	54.11	9.54	47	54	61	54.09	9.63	46	53	61	54.17	9.34	47	54	61
Leverage	0.16	0.14	0.05	0.13	0.24	0.16	0.14	0.05	0.13	0.23	0.17	0.15	0.05	0.13	0.26
Operating Income	225,567	1,199,501	-1,750	11,539	67,945	173,468	1,216,134	-2,673	9,107	57,286	359,613	1,237,284	594	19,478	88,308
Family Ownership (%)	0.38	0.29	0	0.50	0.61	0.56	0.15	0.50	0.57	0.66	0	0	0	0	0
CEO member of family	0.31	0.46	0	0	1	0.45	0.49	0	0	1	0	0	0	0	0
Independent Directors (%)	0.38	0.18	0.27	0.33	0.47	0.36	0.16	0.27	0.33	0.46	0.42	0.22	0.27	0.38	0.53
Board Size	9.36	3.27	7	9	11	9.20	3.16	7	9	11	9.70	3.47	7	9	12

The Empirical Specification

To study the relation between earnings management and CEO turnover, the following probit regression is run over the full sample of firms with the necessary data requirements and is structured as follows:

$$CEO\ Turnover_{i,t} = \alpha_i + \beta_1(AbsDisc_{i,t-1}) + \beta_2(Return_{i,t-1}) + \beta_3(Ind\_Return_{i,t-1})$$
$$+ \beta_4(Sales\_Growth_{i,t-1}) + \beta_5(Market\_to\_Book_{i,t-1}) + \beta_6(Operating\_Performance_{i,t-1})$$
$$+ \beta_7(LogTA_{i,t-1}) + \beta_8(CEOage_{i,t-1}) + \beta_9(Leverage_{i,t-1}) + \beta_{10}(Operating\_Income_{i,t-1})$$
$$+ \beta_{11}(Perc\_Independent\_directors_{i,t-1}) + \varepsilon_{i,t}$$

I examine the hypothesis by running the previous specification with the addition of a family firm indicator and its interaction with my earnings management variable, using the magnitude and significance of this variable to test for the effect of family control on earnings management.

$$CEO\ Turnover_{i,t}$$
$$= \alpha_i + \beta_1(AbsDisc_{i,t-1}) + \beta_2(Return_{i,t-1}) + \beta_3(Ind\_Return_{i,t-1})$$
$$+ \beta_4(Sales\_Growth_{i,t-1}) + \beta_5(Market\_to\_Book_{i,t-1})$$
$$+ \beta_6(Operating\_Performance_{i,t-1}) + \beta_7(LogTA_{i,t-1}) + \beta_8(CEOage_{i,t-1})$$
$$+ \beta_9(Leverage_{i,t-1}) + \beta_{10}(Operating\_Income_{i,t-1})$$
$$+ \beta_{11}(Perc\_Independent\_directors_{i,t-1}) + \beta_{12}(Family\_Dummy_{i,t-1})$$
$$+ \beta_{13}(Family\_Dummy * AbsDisc_{i,t-1}) + \varepsilon_{i,t}$$

I report the coefficients, standard errors in parenthesis, and the average marginal effects in brackets for each variable in the multivariate test to facilitate with the interpretation of the results.

1.4. Results

Drawing on the previous literature on earnings management and CEO turnover, I examine the baseline model of CEO turnover and earnings management irrespective of the ownership structure.

TABLE 3
Correlation Matrix

This table displays the Pearson correlation matrixe for our variables of interest. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. All Variables are defined in the Appendix.

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Absolute Discretionary Accruals	1							
CEO Turnover	**0.15*** **	1						
Return	-0.02	**-0.11*** **	1					
Operating Performance	-0.13 ***	-0.03	0.12***	1				
Log Total Assets	-0.19 ***	-0.07**	0.05*	0.16***	1			
Leverage	-0.07 **	-0.01	-0.01	-0.02	0.23***	1		
Operating Income	-0.05 *	-0.03	0.01	0.12***	0.42***	0.05*	1	
CEO member of family	0.09 **	-0.01	0.01	0.01	-0.16***	-0.01	-0.01	1

The correlation matrix (Table 3) provides preliminary evidence on the relation. In terms of CEO turnover and earnings management, I find that absolute discretionary accruals are significant and positively correlated with CEO turnover with a correlation of 0.15. Consistent with previous findings, I find that performance is negatively and significantly correlated with CEO turnover with a correlation of -0.11.

TABLE 4

Effect of Discretionary Accruals on CEO Turnover Conditional on Firm Performance in Family and Non-Family Firms

This table reports the results of the probit regressions that examine the likelihood of forced CEO turnovers, based on our sample of 122 forced CEO turnovers from 2006 to 2010. Model 1 reports the effects of just the absolute discretionary accruals, Model 2 looks at the effects of the various control variables, Model 3 combines the absolute discretionary accruals with the control variables, while Model 4 incorporates the effects of family ownership concentration. Finally, Model 5 analyzes the effect of family control by including a CEO member of the family indicator variable and interacting it with discretionary accruals. The dependent variable takes the value of 1 for forced turnovers and 0 otherwise in each model. The table reports the estimate, the standard error in parentheses, and the margins in brackets. The standard errors have been clustered by firm to adjust for heterogeneity in the residuals. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01. All Variables are defined in the Appendix.

Variable	Full Sample				
	(1)	(2)	(3)	(4)	(5)
Intercept	-1.57***	-0.74	-1.92**	-1.58*	-1.71*
	(0.10)	(0.66)	(0.86)	(0.86)	(0.91)
Absolute Discretionary Accruals	**8.32*** **		**10.91*** **	**13.24*** **	**16.72*** **
	(2.12)		(2.76)	(2.79)	(3.40)
	[1.45 *]**		**[1.77***]**	**[2.05***]**	**[2.57]**
Family Firms Dummy				-0.07	-0.09
				(0.21)	(0.24)
				[-0.01]	[-0.01]
Family Firms* Absolute Discretionary Accruals				**-9.65** **	**-9.95** **
				(4.07)	(4.01)
				[-1.50]**	**[1.53**]**
Family Firms/Family CEO Dummy					0.50
					(0.32)
					[0.08]
Family Firms/Family CEO Dummy* Absolute Discretionary Accruals					**-10.05***
					(5.70)
					[-1.54*]
Return		**-1.48*** **	**-1.42** **	**-1.58** **	**-1.50** **
		(0.54)	(0.67)	(0.69)	(0.69)
		[-0.27*]**	**[-0.23**]**	**[-0.24**]**	**[-0.23**]**
Industry Return		-0.88	-0.84	-0.74	-0.81
		(0.56)	(0.66)	(0.66)	(0.68)
		[-0.16]	[-0.14]	[-0.11]	[-0.12]
Operating Performance		-0.41	0.36	0.27	0.36
		(0.51)	(0.63)	(0.59)	(0.58)
		[-0.08]	[0.06]	[0.04]	[0.06]
Operating Income		-0.00	-0.00	-0.00	-0.00
		(0.00)	(0.00)	(0.00)	(0.00)
		[-0.00]	[-0.00]	[-0.00]	[-0.00]
Sales Growth		-0.01	0.19	0.19	0.23
		(0.21)	(0.23)	(0.25)	(0.25)
		[-0.01]	[0.03]	[0.03]	[0.04]
Market to Book ratio		1.02**	1.04*	1.17*	1.21**
		(0.45)	(0.61)	(0.61)	(0.62)
		[0.19**]	[0.17*]	[0.18*]	[0.19**]
Log Total Assets		-0.06	-0.01	-0.01	-0.00
		(0.04)	(0.06)	(0.06)	(0.06)
		[-0.01]	[-0.00]	[-0.00]	[-0.00]
Leverage		-0.15	-0.40	-0.52*	-0.63**
		(0.26)	(0.29)	(0.29)	(0.30)
		[-0.03]	[-0.06]	[-0.08*]	[-0.10**]
CEO age		0.00	0.01	0.00	0.00
		(0.00)	(0.01)	(0.01)	(0.01)
		[0.00]	[0.00]	[0.00]	[0.00]
(%) Independent Directors		0.45*	0.78**	0.64**	0.71**
		(0.29)	(0.33)	(0.31)	(0.32)
		[0.08*]	[0.13**]	[0.10**]	[0.11**]
Board Size		-0.01	-0.00	-0.00	-0.00
		(0.02)	(0.02)	(0.02)	(0.02)
		[-0.00]	[-0.00]	[-0.00]	[-0.00]
Industry Fixed	Yes	Yes	Yes	Yes	Yes
Observations	593	593	593	593	593
Chi2	15.36	20.65	31.20	43.45	47.82
Pseudo R2	0.04	0.05	0.07	0.11	0.12

Table 4 displays the main results of the analysis. In Model 1, I regress the absolute value of discretionary accruals on CEO turnover and I find a significant positive relation. Model 2

examines whether CEOs are dismissed given their previous financial performance (measured as the industry-adjusted market return). I obtain results consistent with previous literature, finding a negative and significant relation between CEO turnover and market returns (see, e.g., Dikolli, Mayew, and Nanda 2012; Murphy and Zimmerman 1993). Specifically, a one-percent decrease in the firm's industry-adjusted market return leads to an average 0.27% marginal increase in the probability of CEO dismissal. Also consistent with previous findings, I find the market to book ratio, which controls for potential growth opportunities is positively and significantly related to CEO turnover, with an average marginal effect of 0.19%. Finally, I control for board independence using the percentage of independent directors and find a positive and significant relation to CEO dismissal. This relation is consistent with previous works that have shown the effectiveness of independent boards in terms of governance (Hermalin and Weisbach 2001).

In Model 3, I add the control variables employed in previous studies, from Model 2, to the earnings management measure combing Models 1 and 2. I find that the coefficient of absolute discretionary accruals remains positive and significant after the addition of the covariates. Specifically, I find that an increase in absolute discretionary accruals of one percent leads to a marginal increase of 1.77% in the probability of CEO dismissal. The market performance, market to book ratio and percentage of independent directors continue to be positively and significantly associated with CEO turnover. Overall, results from Model 3 support the findings of previous studies that after controlling for performance, an increase in the level of earnings management is associated with a higher likelihood of CEO turnover. These results confirm the notion that earnings management arises out of an agency problem between managers and owners, as suggested by Clikeman (2003) and Leuz, et al. (2003) and, as such, the firm uses the threat of dismissal to constrain the agency problem. Findings are also consistent with those of Hazarika et al. (2012), who find that the likelihood and speed of

CEO turnover is positively related to the firms' earnings management (both downwards and upwards). Additionally, Models 1, 2 and 3 serve to give external validity of my Italian sample, in which I observe results similar to those found in the U.S. context when I examine the full cross section.

In Models 4 and 5, I examine how family ownership and management affect the positive and significant relation between absolute discretionary accruals and CEO turnover. Model 4 indicates that in family-dominated firms, where the typical agency conflict between managers and owners is mitigated by family ownership concentration and monitoring, the relation is weaker than the one observed in non-family firms. Empirical results allow me to reject the null hypothesis of no difference between family and non-family firms, with the coefficient of the interaction of the family control dummy and earnings management variable (-9.65) being negative and significant at the 5% level. In terms of economic significance, in family-controlled firms the average marginal effect of earnings management on the likelihood of CEO turnover is 1.50% less than in widely-held public firms. This negative relation is in line with the view that in family-controlled firms, the agency conflict between managers and shareholders is reduced by family ownership, and the likelihood of the CEO being dismissed is lower, even when I observe earnings management.

These results support the conjecture that CEOs in family firms tend to collude with the dominant family in managing earnings. This explains why the coefficient on the interaction of the family dummy and earnings management is negative and three-fourth the size of the coefficient on the non-family firms earnings management estimate, with an (untabulated) F-test rejecting the null that the two coefficients are the same. Thus, family ownership mitigates the positive relation between CEO turnover and earnings management observed in Table 4 as well as in Hazarika et al. (2012).

Finally, I examine variations in the alignment of incentives between managers and

shareholders may lead to a differential in the likelihood of the CEO dismissal in family firms. In particular, I examine differences between cases in which the CEO is a family member and cases in which a non-family professional manager is the CEO. If the family firm's attributes drive my notion of lower agency conflict, then family controlled and managed firms should experience less sensitivity with respect to the likelihood of turnover given earnings management when compared to family controlled firms with professional CEOs. The difference being driven by family ties between the controlling family and family member CEO further aligning interests and lowering the agency problem.

Model 5 of Table 4 indicates that while the relation between earnings management and CEO turnover continues to be relevant (coefficients are significant at the 1% and 0.1% level), the interaction between family firms, CEO member of the family, and earnings management is negative and significant with a coefficient of -10.05. This negative and significant relation with CEO turnover shows the collusion between the dominant family and the family CEO in cases of earnings management and, as a consequence, I observe a net zero probability of getting dismissed for family CEOs who may engage in earnings management. Additionally, the residual significance in the CEO turnover-earnings management relation observed in family-controlled firms, found in Model 4, can be explained by the presence of non-family professional CEOs in which case the incentives are not as aligned as for family CEOs, and I observe a significant weight on earnings management as a result. This finding strengthens the view that lower agency conflict in family controlled and managed firms reduces the likelihood of CEO dismissal. Overall, results are in line with previous literature that argues that family and non-family-controlled companies have different corporate governance systems, driven by the differences in the agency problem, thereby, confirming the moderating effect of family ownership on the relation between CEO turnover and earnings management (see, e.g., Brunello, Graziano, and Parigi 2003; Claessence et al. 2000; DeAngelo and

DeAngelo 2000; Demsetz and Lehn 1985; Morck et al. 2000).

Robustness and Sensitivity Analysis

The findings in Table 4 support the view that the relation between CEO turnover and earnings management is less sensitive in family-controlled firms, and even less sensitive in family controlled and managed firms. However, there are several alternative explanations that could also explain my findings. In this section, I examine the sensitivity and robustness of the results to these alternative explanations.

Given the claim that the cost of earnings management on shareholders drives the positive relation observed between earnings management and CEO turnover, I increase the power of my tests by examining the sensitivity of the relation in cases of extremely high levels of earnings management, as well as in cases of extremely low levels of earnings management. I partition the sample based on the level of absolute discretionary accruals, assuming that extremely high levels of absolute discretionary accruals (values of absolute discretionary accrual from the top quartile) are more costly to the firm than extremely low values of absolute discretionary accruals. This reasoning stems from the notion that extremely high levels of absolute discretionary accruals should be correlated with private rent extraction on the part of the CEO, i.e., efforts to maximize bonuses or share repurchases. Whereas, extremely low values of discretionary accruals could reflect efforts to meet or beat analyst expectations, which would provide benefits to the overall firm. Hence, if the cost of earnings management is the primary driver for the positive relation observed in Table 4, I should observe a higher sensitivity in the relation for the high levels of absolute discretionary accruals as compared to that of low absolute discretionary accruals.

TABLE 5

Difference between High level of Discretionary Accruals and Low level of Discretionary Accruals.

This table shows the results of our sensitivity tests using high level of discretionary accruals (above 0.75% of the distribution) and low level of discretionary accruals (below 0.25% of the distribution). Models (1) and (2) are run over the full sample, while models (3) and (4) are run over the family firms sample. We report the coefficients, standard errors in parenthesis, and the margins in brackets for hign and low absolute discretionary accruals and returns. The remaining control variables are omitted for ease of exposition. The standard errors are clustered by firm to adjust for heterogeneity in the residuals. Coefficients significance: * p < 0.10; ** p < 0.05; *** p < 0.01.

Variable	Full sample		Family firms sample	
	(1) Estimate	(2) Estimate	(3) Estimate	(4) Estimate
High Discretionary Accruals	**14.15****		**3.54**	
	(8.16)		(8.42)	
	[3.10]**		**[0.67]**	
Low Discretionary Accruals		**91.65**		**85.08**
		(64.45)		(96.38)
		[7.06]		**[4.89]**
Return	-2.70**	-3.41**	-3.07***	-5.18***
	(1.20)	(1.39)	(1.20)	(1.53)
	[-0.59**]	[-0.26**]	[-0.58***]	**[-0.30***]**
Controls	Yes	Yes	Yes	Yes
Observations	146	156	118	105
Chi2	18.89	60.08	28.46	57.52
Pseudo R2	0.16	0.27	0.20	0.53

TABLE 6

Differences in Means Test and Descriptive Statistics.

This table compares the mean accruals and discretionary accruals of family firms and non family firms. In order to test for the significance of the difference between the means, we performed a T-test. The Null Hypothesis is that the means are the same. T-values significance levels: * p < 0.10; ** p < 0.05; *** p < 0.01.

Variable	Family Firms	Non Family Firms	Difference family - Non Family Firms	T-test
Total Accruals	0.07	0.07	0.00	-0.05
	(0.11)	(0.08)		
Discretionary Accruals	0.03	0.03	0.00	-1.36
	(0.03)	(0.03)		

In Table 5, I replicate the analysis of Table 4[15], but I replace discretionary accruals with high values of absolute discretionary accruals or low values of absolute discretionary accruals. I observe that the coefficient of earnings management is significant for high absolute discretionary accruals, while the relation is statistically insignificant for low absolute

[15] I omit the coefficients for the control variables for brevity, but the estimation of the models included previous control variables.

discretionary accruals (Table 5, Model 1, and 2). When I examine the family-controlled firms (Model 3, and 4), the two cases are statistically insignificant, again consistent with previous findings in Model 4 and 5 of Table 4. Hence, these results further support the view that the costly levels of earnings management (i.e. those observed in cases of high values of discretionary accruals) are associated with a higher probability of CEO turnover in non-family firms. While in family controlled firms this relation is absent, given the reduction of the agency problem, even for high values of discretionary accruals.

The differential in the sensitivity of earnings management and CEO turnover relation between family-controlled and non-family-controlled firms observed in Table 4, could also arise from differences in the propensity of family and non-family firms to manage earnings. Thus, it could be that the propensity to manage earnings is lower in family firms when compared to the non-family-controlled firms, and this may affect the relation hereby studied. To test this alternative explanation, I examine the average level of various measures of accruals between family and non-family firms. In Table 6, I show the significance of the mean differences between the two classes of firms.

The results in Table 6 show that both family and non-family firms equally manage earnings. The two variables measuring earnings management (total accruals and discretionary accruals) are not statistically different, as T-tests do not reject the null hypothesis of no difference in the means. Thus, I can rule out the notion that differences in propensity to manage earnings drive my results. Hence, the lower CEO turnover-earnings management sensitivity of family owned firms is due to family ownership and its corporate governance.

Finally, I examine whether the differences between family and non-family firms observed in Table 4 are simply driven by ownership concentration and the associated monitoring, rather than by the unique characteristics of the family-controlled firms' corporate governance system. To test this alternative explanation, I include an indicator variable for blockholder-

dominated firms and interact this variable with the earnings management variable in the model. I define a blockholder-dominated firm as a firm in which there is an institutional investor that is not a family and has direct control of the firm[16]. While I find that the level of ownership concentration is comparable between blockholders and family owners, which should lead to similar monitoring levels, results in Table 7 point to differential effects between the two. Specifically, Table 7 reports that, in blockholder-dominated firms the likelihood of the CEO being dismissed after managing earnings is not significantly different from that of widely-held public companies, with a statistically insignificant coefficient of 4.94 on the blockholder-earnings management interaction.

[16] Data from CONSOB.

TABLE 7

Effect of Discretionary Accruals on CEO Turnover in Blockholder-Dominated Firms.

This table reports the results from the blockholder sensitivity test. We run a probit model on the full sample and examin the differences between widely-held public companies, family firms and blockholder-dominated companies based on our sample of 122 forced CEO turnovers from 2006 to 2010. The interaction variable Blockholder firm*Absolute Discretionary Accruals displays the explanatory power of blockholder-dominated firms on the CEO turnover-earnings management relation. The dependent variable takes the value of 1 for forced turnovers, and 0 otherwise. The table reports the estimate, the standard error in parentheses, and the marginal effects in brackets. The standard errors are clustered by firm to adjust for heterogeneity in the residuals. All variables are defined in the Appendix. Coefficients' significance: * p < 0.10; ** p < 0.05; *** p < 0.01.

Variable	Full Sample (1)
Intercept	-1.51*
	(0.88)
Absolute Discretionary Accruals	**12.08*** **
	(3.36)
	[1.86*]**
Return	**-1.49** **
	(0.69)
	[-0.23]**
Family Firms Dummy	0.18
	(0.28)
	[0.03]
Family Firms*Absolute Discretionary Accruals	**-9.57** **
	(4.11)
	[-1.47]**
Blockholder-Dominated Firm Dummy	0.19
	(0.31)
	[0.03]
Blockholder Firm*Absolute Discretionary Accruals	**4.94**
	(6.01)
	[0.76]
Industry Return	-0.69
	(0.66)
	[-0.11]
Operating Performance	0.26
	(0.61)
	[0.04]
Operating Income	-0.00
	(0.00)
	[-0.00]
Sales Growth	0.15
	(0.25)
	[0.02]
Market to Book ratio	1.24**
	(0.61)
	[0.19**]
Log Total Assets	-0.03
	(0.06)
	[-0.01]
Leverage	-0.53*
	(0.29)
	[-0.08*]
CEO age	0.00
	(0.01)
	[0.00]
(%) Independent Directors	0.72**
	(0.33)
	[0.11**]
Board Size	-0.00
	(0.02)
	[-0.00]
Industry Fixed	Yes
Observations	593
Chi2	48.68
Pseudo R2	0.12

This result can be reconciled by the differences in the characteristics of the monitors because

dominant families act as active monitors, whereas non-family blockholders may take a passive role and, as a result, they are no different than widely-held public firms. Hence, ownership concentration alone does not explain my preliminary results.

While results and robustness tests point to the mitigating effect of family ownership and control on the CEO turnover-earnings management relation, this study is subject to generalizability limitations. In utilizing the Italian setting given its unique family ownership characteristics, results are limited in that the relation between family members in the Italian setting differs from those observed in other countries. While this is a concern, to my knowledge, no empirical study has shown family ties to significantly differ between countries. Additionally, the positive and significant relation found in public widely-held companies in Italy (Table 4, Model 1, 2, and 3), is similar to findings in the U.S setting (Hazarika et al. 2012) giving credence to the generalizability of the results. Additionally, results only point to the effect of family ownership on the costs of earnings management due to type I agency problems, as such, I are not able to speak to other agency problems, such as those between majority and minority shareholders (type II), that have been shown to exist in family-controlled firms.

1.5. Conclusion

This study examines the understudied topic of CEO turnover and earnings management in family-controlled firms. Given the prominent role of the agency problem, i.e. managers extracting private rents at a cost to shareholders, in driving earnings management the firm's corporate governance system should be structured to minimize the incentives of mangers to engage in earnings management. As a result, I focus on one of the most extreme mechanisms boards have to discipline managers: CEO dismissal. Using the unique ownership

characteristics of the Italian setting, I examine the relation between earnings management and performance induced CEO turnovers in family and non-family controlled public firms.

As such, I aim to examine the nature of this relation in the context of family-controlled firms in which the agency problem is mitigated. I predict that ownership concentration and family ties in family firms reduce the positive association between CEO turnover and earnings management found in widely held firms. Additionally, I study whether the sensitivity of the governance mechanism used to punish earnings management is executed equally amongst firms with different ownership structures.

The results of my empirical analysis indicate that earnings management is positively related to the probability of CEO dismissal in the full sample. This finding is consistent with the costly nature of earnings management to the firm's shareholders and the use of turnover as a disciplining mechanism in widely-held public firms. When I examine the relation in family-controlled firms, i.e. when a family holds a controlling stake in the firm, I find an incremental negative relation between earnings management and CEO turnover, resulting in a lower CEO turnover sensitivity to earnings management in family controlled firms. Finally, when I look at family-controlled and managed firms in which a family member is the CEO, the positive relation between earnings management and CEO turnover is further reduced. This result supports the notion that earnings management imposes a lower cost to majority shareholders in family firms because family ties align the incentives of the CEO and controlling family.

I go on to conduct an array of robustness tests to rule out alternative explanations for my results. I examine whether results are induced by differences between family and non-family firms in their propensity to commit earnings management, finding no significant difference between firms. I analyze cases in which earnings management could be more costly, i.e., when the magnitude is extreme, finding that my baseline results are strengthened. I move on to examine the monitoring story, as an alternative explanation, by looking at cases of

blockholder-dominated firms, finding no significant results supporting the blockholder effect. In this regard, my study provides insight into the understudied topic of corporate governance in family firms, specifically with respect to the effects of family ownership on the relation between CEO turnover and earnings management. I provide evidence as to two distinct corporate governance systems: the one found in widely-held firms, where the behavior is punished, and the one found in family-controlled firms, where the behavior is not punished. This insight is useful in explaining the corporate governance of family-owned firms, one of the dominant ownership forms in the corporate world. Yet, despite the prevalence of the ownership structure, this setting has received scant attention from previous academic research on corporate governance. This study provides further evidence as to the differences in corporate governance mechanism and the care with which current results grounded in widely held firms should be applied to cases of family firms. Additionally, this study tests the traditional predictions of agency theory in an innovative way using a setting in which the agency relation can be mitigated and examine how the sensitivity may change as a result.

Appendix

Table A1
Description of Variables

Variable	Definitions
CEO Turnover	Dummy variable equal to 1 for the years in which the CEO is replaced, and equal to 0 otherwise. Turnovers are classified as forced if the CEO was fired or forced out from the position. I removed cases in which turnover is volunteer, or due to retirement or death.
Absolute Discretionary Accruals	My measure of Earnings Management from the performance-adjusted modified Jones (1991) model.
Return	The industry-adjusted market return calculated as the 4-quarter average market return the year before the CEO turnover minus the contemporaneous industry market return based on DataStream industry level 6 identifiers.
Industry Return	The 4-quarter average market return for the industry.
Sales Growth	Measured as the percentage change in revenues over the prior year.
Market to Book	The sum of the book value of debt plus market value of equity divided by the firm's total assets.
Operating Performance	Operating income scaled by total assets.
Log Total Assets	The natural logarithm of total assets.
CEO Age	The age of the CEO.
Leverage	The total book value of debt divided by the book value of debt and market value of equity.
Operating Income	Earnings before interests and taxes.
Family Ownership (%)	The percentage of shares owned by the controlling family.
Independent Directors (%)	Calculated as the number of the independent directors on the board divided by the number of the board's member.
Family Firms Dummy	The dummy variable equal to 1 if the firm is a family-dominated firm, and equal to 0 otherwise.
Family Firms*Earnings Management	The interaction variable calculated as Family firms dummy times Absolute value of discretionary accruals.
Family member CEO	Dummy variable that assumes the value of 1 if a member of the controlling family acts as CEO, and 0 if a Professional CEO (no Family member) act as CEO.
Family member CEO*Earnings Management	The interaction variable calculated as Family member CEO times absolute value of discretionary accruals.
Blockholder-Dominated Firm Dummy	Dummy variable equal to 1 if the Non-Family firm has a blockholder that directly control the company, and equal to 0 if the Non-Family firms is not dominated by any relevant blockholder.
Blockholder Firm*Earnings Management	The interaction variable calculated as Blockholder-dominated firms dummy times absolute value of discretionary accruals.

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Concluding Remarks

Even though family ownership is sometimes considered as an inefficient enterprise model, it represents the dominant ownership form in the world. Research on family firms is a relatively new stream in the business area, which has analyzed the effect of family ownership on a multitude of business issues.

This dissertation aims at studying the corporate governance of family-owned firms. In fact, previous studies on corporate governance have mainly been based on public corporations with over-dispersed shares, leaving family firms apart.

In particular, this work aims at demonstrating that family firms' characteristics (such as the collusion between managers and owners, the benefit of control, the socioemotional wealth, and the family ownership) affect some corporate governance mechanisms, moderating the results found for widely held non-family firms. I aim at studying when conflicts of interests between majority and minority shareholders (Type II agency problems) lead to collusion between the dominant family and managers, and to the family's extraction of private benefits. I show when and how corporate governance's mechanisms act at preventing and/or punishing such opportunistic behavior.

In this regard, every chapter of this dissertation provides several contributions to the literature of corporate governance of family-owned firms. Firstly, Chapter 1 speaks to the agency theory, giving empirical evidence that the incentive alignment role of compensation plans, as predicted by optimal contracting theory, is mitigated when the interests of managers and the main shareholder (i.e. the dominant family) are aligned, or when monitoring is high as is the case of family-owned firms. In fact, in Chapter 1 I demonstrate that CEO pay for performance sensitivity is lower in family than in non-family firms. The findings are motivated by the lower agency problems and easier monitoring of family-owned firms.

Family-controlled firms show less need to align the interest of CEO and shareholders, because monitoring by the dominant family is higher than the monitoring by shareholders in non-family firms with dispersed ownership. Moreover, when a family member acts as CEO, his interests are aligned with those of the dominant family by family ties. Indeed, I find that family CEOs are the ones with the lowest pay for performance sensitivity. Notwithstanding, family firms with family CEOs perform better as compared to non-family firms, thus confirming that CEO compensation is not an instrument of family's benefit (rent) extraction. This insight is completely new and crucial in explaining how the family's preservation of the benefits of control affects governance mechanisms.

Secondly, Chapter 2 builds on previous studies that have documented a negative relation between CEO turnover and firm performance, predicting that when firm performance decreases, CEOs are replaced because they were not able to increase firm's value. In this part of the dissertation, I empirically demonstrate how family ownership and familial relations directly affect the turnover-performance sensitivity. Of interest to this particular study is how the CEO turnover process works in family controlled companies, which performance measure counts more and what are the underlying differences between family and non-family firms (both widely held non-family firms and blockholder-dominated companies). In this regard, in Chapter 2 I make several contributions to the literature of turnover-performance relation. First, I outline the importance and the impact of family control on the CEO turnover-performance sensitivity. I shed lights on the relative importance of the different performance measures used in evaluating a CEO in family and non-family firms. I find that non-family firms put more weight on stock market returns than accounting performance, while family firms just rely on the accounting performance. I interpret these findings as proof that better monitoring by family firms matter when evaluating a CEO. Non-family firms (especially the one with dispersed ownership) do not have such monitoring power, thus their shareholders

have to consider more the market return, that in this case appears more accurate than accounting performance, in evaluating CEOs (when the monitoring is low the accounting measures of performance is a weaker performance signal). On the other hand, family firms rely on the accounting performance because it is more accurate in evaluating poor performing CEO. In fact, the family is more focused on the accounting performance, being the source of its main gain (i.e. the dividends). Moreover, I show that, in the family firms' sample, the professional CEOs are the ones that drive the results, because family related CEOs are not replaced for poor performance. This finding underlines the high benefits of control that lead to entrenchment. Furthermore, it is critical for the understanding of the corporate governance mechanisms of family firms and, also, it could be a clue for future research that aims to study the market reaction to such behavior. Additionally, the tests for blockholder-dominated firms show how they put weight on both measures of performance providing support for my view of the importance of monitoring in determining the relative weights put on the measures of performance. It also serves to show once again that the differences between family and non-family firms are not due to the ownership concentration, but rather are due to the family firms' characteristics and familial relations. Finally, I show that family firms decide to replace a family CEO with a professional manager just when they need professional assistance (i.e. in cases of bad accounting performance). Instead, family firms replace a professional CEO with a family member in cases of low stock market returns, hence when the family feels threatened by potential takeovers and decide to appoint a family member in order to prevent any corporate raiders.

Thirdly, Chapter 3 builds on what demonstrated in Chapter 2, and examines the understudied topic of CEO turnover and earnings management in family-controlled firms. Given the prominent role of the agency problem (i.e. managers extracting private rents at a cost to shareholders) in driving earnings management the firm's corporate governance system

must be structured to minimize the incentives of mangers to engage in earnings management. As a result, I focus on one of the most extreme mechanisms boards have to discipline managers: CEO dismissal. In this regard, I provide evidence as to two distinct corporate governance systems: the one found in widely held firms, where the opportunistic behavior of extreme earnings management is punished with the CEO dismissal, and the one found in family-controlled firms, where the behavior is not punished. This chapter provides further evidence as to the differences in corporate governance mechanism and the care with which current results grounded in widely held firms should be applied to cases of family firms. Furthermore, it shows that in family-owned firms, the corporate governance's mechanism aim at preventing opportunistic behavior such as extreme earnings management does not work, underlining collusion between managers and the dominant family.

In conclusion, this dissertation shows that the corporate governance of family-owned firms significantly differs from that of non-family firms. Family firms' characteristics, such as the collusion between the family and managers, the socioemotional wealth, and the idiosyncratic benefits of control, moderate results found in the previous studies for widely held (non-family) public corporations. Although family-owned firms report higher financial performance for the years here analyzed as compared to non-family firms, they present weaker corporate governance, hiding entrenchment and collusion between the dominant family and the management of the firm.

The need for stronger corporate governance in family-owned firms is clear, and the findings of this dissertation are in line with what also claimed in some previous studies: "Family firms need to empower minority shareholders by effecting financial disclosure and auditing, along with strict internal rules to prevent self-dealing and transactions with family-related businesses" (Lev, 2012).