







### UNIVERSITA' DELLA CALABRIA

Dipartimento di Economia, Statistica e Finanza e Dipartimento di Scienze Aziendali e Giuridiche

# Scuola di Dottorato in Scienze Economiche e Aziendali

in co-tutela di tesi con

# Ph.D. in Applied Economics - University of Antwerp

#### Indirizzo

Managerial decisions - Corporate finance

Con il contributo della Commissione Europea, Fondo Sociale Europeo e della Regione Calabria.

### XXVI CICLO

# OWNERSHIP CONCENTRATION: ROLE OF MODERATORS AND OWNERS' IDENTITY

Settore Scientifico Disciplinare SECS / P08

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# Abstract of the thesis

The aim of my PhD thesis is to contribute to the literature on firm ownership concentration, by investigating the role of moderators and owners' identity in the relation between ownership concentration and firm value. The thesis is made up of three empirical chapters. The first chapter is a meta-analysis on the relationship between ownership concentration and value. It has the aim to quantitatively summarize the empirical literature on the subject under analysis. The second chapter investigates the role of moderating factors in the relationship between blockholders and performance for a sample of Italian firms, focusing on the role played by firm-specific and country-specific factors. Finally, the last chapter analyzes the determinants of the presence of foreign blockholders in European companies and the impact on performance, focusing on the role played by the interaction of internal and external mechanisms of corporate governance. In general, the results of three chapters show that the value of ownership depends on the identity of the shareholders and other corporate governance mechanisms. Firms should define ownership structure in a complementary way to other corporate governance mechanisms, paying attention to the composition of the shareholders as driver of the system of incentives and control of firm governance.

\*\*\*\*\*\*

Lo scopo della mia tesi di dottorato è quello di contribuire alla letteratura sulla concentrazione proprietaria di impresa, indagando sul ruolo dei fattori di moderazione e sull'identità degli *owner* nella relazione tra concentrazione proprietaria e valore di impresa. La tesi si compone di tre capitoli empirici. Il primo capitolo è una meta-analisi sulla relazione tra concentrazione proprietaria e valore. Essa ha lo scopo di riassumere quantitativamente la letteratura empirica inerente il tema in esame. Il secondo capitolo analizza il ruolo dei fattori di moderazione nella relazione tra *blockholder* e performance in un campione di imprese italiane, con particolare attenzione al ruolo svolto da fattori *firm-specific* e *country-specific*. Infine, l'ultimo capitolo analizza le determinanti della presenza di *blockholder* stranieri nelle imprese europee e l'impatto sulle performance, con particolare attenzione al ruolo svolto dalla interazione di meccanismi interni ed esterni di *corporate governance*. In generale, i

risultati dei tre capitoli mostrano che il valore della proprietà dipende dall'identità degli azionisti e da altri meccanismi di *corporate governance*. Le imprese dovrebbero definire gli assetti proprietari in modo complementare rispetto ad altri strumenti di *governance*, prestando attenzione alla composizione dell'azionariato come *driver* del sistema di incentivi e controllo della *governance* di impresa.

\*\*\*\*\*\*

In mijn doctoraal proefschrift onderzoek ik de impact van de concentratie van eigendom op de waarde van ondernemingen. Het werk omvat drie empirische studies. De eerste studie is een meta-analyse van de relatie tussen eigendomsconcentratie en ondernemingswaarde. Deze studie heeft tot doel de empirische literatuur over dit onderwerp kwantitatief samen te vatten. De tweede studie onderzoekt de impact van modererende factoren op de relatie tussen blokaandeelhouders en de performantie van Italiaanse ondernemingen. De focus ligt hierbij op de modererende rol van ondernemingsspecifieke en geografische factoren. De derde studie analyseert de determinanten van de aanwezigheid van buitenlandse blokaandeelhouders en hun impact op de waarde van Europese beursgenoteerde ondernemingen. Hierbij wordt rekening gehouden met zowel ondernemingsspecifieke als geografische factoren die een rol kunnen spelen, waarbij we focussen op de interactie tussen interne en externe mechanismen van corporate governance. De drie studies tonen samen aan dat de waarde van ondernemingseigendom in sterke mate afhangt van de identiteit van de aandeelhouders en van andere corporate governance mechanismen.

# **Introduction of the thesis**

Among the major topics that have attracted the attention of economists, scholars, managers, investors, regulators and policy makers, one that is of particular importance is corporate governance. Despite the large number of contributions that have been produced on the subject over the past few decades, presenting a clear definition of corporate governance, able to encompass all aspects and functions that the expression grouping itself, turns out to be difficult. A general definition that appears, however, able to synthesize the dimensions that characterize the construct is that it serves to protect small investors from opportunistic behavior of managers or entrepreneurs (La Porta et al, 2000), influencing ex-ante the allocation of resources through the distribution of decision-making power within the company, and ex-post the distribution of created value (Tirole, 2001; Zingales, 1998; Rajan and Zingales, 2000). Corporate governance is, therefore, the set of management and control systems, rules, institutions and practices that influence the allocation of resources and decision making, protecting stakeholders from opportunistic behavior of managers or entrepreneurs (Zingales, 1998). The need for efficient mechanisms of corporate governance arises from the potential conflicts of interest among firm stakeholders. Such conflicts often arise from two main reasons. First, the various stakeholders have different objective functions to maximize. Secondly, the presence of asymmetric information, creating imperfections in the distribution of information, generate phenomena of opportunism (Jensen and Meckling, 1976).

Corporate governance is a broad concept, suitable to interpret the different relationships that may occur in an organization from a multidisciplinary perspective. In recent years, partly as a result of the collapse of numerous multinational companies considered invulnerable, the issue has become a hot topic. In particular, the failure of governance mechanisms and accounting firms such as Enron, WorldCom, Adelphia and Tyco in the United States, Ahold in the Netherlands, the instability of Parmalat, Cirio and Freedomland in Italy, the scandals of the Banks of the German Laender and carmaker Volkswagen, albeit with different methods and intensity, occurred in a very limited period of time, arising a profound reflection on a possible new "regulatory wave" in most industrialized countries. These scandals have put a strain on the economic, financial and social environment of the

countries in which they have occurred, and have demonstrated that systems of corporate governance are vital for the proper functioning of the whole economy, as they involve interests that affect the capital and labor market, as well as the economic and social system. McKinsey' survey (2002) on more than 200 institutional investors in 31 countries revealed that corporate governance is at the heart of investment decisions. In particular, investors are concerned most with financial disclosure. In fact, an overwhelming majority is prepared to pay a premium for companies exhibiting high governance standards, according to the survey.

Corporate governance can be analyzed by two different perspectives, which are distinguished from each other based on the emphasis given, in one case, to the mechanisms and instruments for allocating and managing the power of government within the firm, and in the other case, to the role played by institutions and mechanisms external to organizational boundaries. Starting from the following premise, one can identify the two main dimensions that characterize and define the issue under consideration: operational or managerial corporate governance, as a system of allocation of decision-making power within the company, to overcome the impossibility to conclude complete contracts between different stakeholders (Zingales, 1998); external or institutional corporate governance, viewed as a set of rules, institutions and practices designed to protect investments from opportunistic behavior by entrepreneurs and managers (Shleifer and Vishny 1997; La Porta et al, 1997).

To limit agency problems and information asymmetry, among the tools of internal corporate governance, there is ownership. Ownership structure can be defined as the distribution of property rights between the various parties involved in the life of the firm (Zattoni, 2006). It is the most studied mechanism of corporate governance in the literature, to which the business community pays so much attention. The combination of ownership and property rights system essentially outlines the incentives and the performance of firms (Claessens and Fan, 2002). Ownership also helps the economy in general through the continuous reallocation of resources to their highest value in use. The origin of the debate on corporate governance derive from separation between ownership and control, i.e. the separation of roles between those who take the decisions necessary to the life of the company and the shareholders/partners who are in fact the owners of the company. More precisely, initial studies on corporate governance arose from the need to measure the performance of companies in the presence of separation between ownership and control (Berle and Means, 1932) or between those who invests capital in the company and who has the managerial skills and competencies to deal with the greater competitiveness and complexity, leading the

company in its financial and operating policy decisions. The phenomenon of separation between management and property has been the subject of study by many authors in the economic and financial management (Berle and Means, 1932, Cyert and March, 1963, Jensen and Meckling, 1976; Galbraith, 1977); however, Jensen and Meckling (1976) were the first ones to formally analyze the link between managers and shareholders as a relationship of agency, dealing with the value of firm and private benefits, and suggesting the need to develop a system of incentives and controls aimed at prevent opportunistic behavior of management.

The literature on corporate governance, in particular, focuses on two aspects of ownership structure, namely ownership concentration (Demsetz and Lehn, 1985; Shleifer and Vishny, 1986; McConnell and Servaes, 1990; Leech and Leahy, 1991; Morck et al, 2000), and ownership identity (Galve and Salas, 1992; Thomsen and Pedersen, 1997, 2000, and 2003).

Going into more detail, the concept of ownership concentration refers to the amount of shares held by each shareholder, so it can be considered as a kind of parameter that indicates how the ownership is divided among shareholders. Studies concerning it have recognized the existence, from country to country, of extremely varied models. In fact, the business model theorized by Berle and Means (1932) does not reflect the actual characteristics of ownership of the majority of firms in the world, except in the United States and the United Kingdom, where it is particularly fragmented. Most large companies in the rest of the world, including listed companies, generally have a concentrated ownership, albeit with differences among countries in the degree of concentration, as well as in the mechanisms that allow the so-called majority shareholder to exercise his control rights. The reason of this heterogeneity seems to lie in factors related to the context in which the company operates, with particular reference to the legislative framework and the role of the capital market.

Among the positive aspects that accompany a concentrated ownership, the most significant is certainly represented by the activity of monitoring that large shareholders exercise over management. This greater control over management translates into a lower power for the manager and depresses the level of agency costs, determining, by reflection, a higher degree of efficiency and, hence, an increase of the total firm value. Among the benefits of concentrated ownership also is normally counted the long-term horizon that characterizes investments generally made by large blockholders, compared to short or very

short time of managers, focused instead on immediate returns (Zahra et al, 2004). Nevertheless, a high level of ownership concentration is followed by a series of problems and costs. Berle and Means (1932) suggest that the use of ownership concentration as an internal tool of corporate governance limits the classic agency problem between manager and owner, but at the same time could cause conflicts of interest between majority and minority shareholders (Shleifer and Vishny, 1997; La Porta et al, 1999). Therefore, in the case of companies with concentrated ownership, there may be a conflict of interest between the larger and the minority shareholders. In addition, the presence of large shareholders could increase the likelihood of phenomena of entrenchment, consisting in the adoption of behaviors in order to consolidate and strengthen the position of power and control in the firm, also by limiting the inherent aspect of the market for corporate control, i.e. containing the function performed by the discipline of the market and preventing the possibility of hostile takeover that could constitute a threat to their status quo. In addition, the lack of competitiveness of the managerial labor market caused by the small group of subjects to whom it is addressed the choice increases the probability of hiring managers incapable, creating the phenomena of adverse selection.

Regarding the second issue, only recently the literature has developed a set of empirical evidences on the issue of ownership identity (Faccio and Lang, 2002). Not only ownership concentration, but also ownership identity (i.e. family, corporations, institutions, and foreigners) may play a central role in explaining differences in terms of competitiveness of country systems and the effectiveness of structures and governance mechanisms in regulating the behaviour of the manager and in the creation of shareholder value (Zattoni, 2006). Cubbin and Leech (1983) argue that the degree of control and the investor identity are both important determinant in the relationship between ownership and performance. In particular, Thomsen and Pedersen (2000) examine the association between ownership structure and corporate performance on a composite sample of the largest European companies, noting that the ownership identity is as important as the ownership concentration in the determination of corporate performance. The objective functions vary widely for different types of owners, which means that it is important not only the amount of equity owned by a shareholder, but also the identity of the same. Studies that consider the ownership identity, in particular, can address the questions related firm wealth creation and the agency problems.

In fact, the value of a business depends on who has the "property" or manages it, as different owners may generate different cash flows from the same business. This principle is called "the best owner" (Koller et al, 2010) because the value can reach the maximum when it is "owned" by anyone who can generate higher cash flow from it. A corollary is that there is not an absolute value, inherent in a business, it always depends on who runs it. Koller et al (2010) examine the sources of value that can be added by "the best owner": 1) uniqueness of links with other businesses, 2) distinctive capabilities of management, 3) better ability of prediction, 4) better governance; 5) privileged access to experienced managers, sources of capital, relations with governments, suppliers and customers.

However, the link between ownership structure and firm performance remains to be clearly established. In particular, a review of the extant literature suggests a number of potential moderating factors that may matters. In general, moderating effect occurs when a variable changes the form and/or the strength of the relationship between independent and dependent variable (Hair et al, 1998). One can in fact aspects that different variables of various nature moderates the relationship between ownership structure and firm performance, explaining the different results obtained in this long-studied field (Sanchez-Ballesta and Garcia-Meca, 2007), hence the need for evaluate the moderating role played by other variables which could impel the use and effectiveness of governance mechanisms.

The aim of the Ph.D. dissertation is to contribute to the literature on firm ownership, by investigating the role of moderators and owners' identity in the relation between ownership concentration and firm value. The idea is to develop the dissertation in three essays of empirical character, each of which has as its main theme firm ownership structure. Below a brief summary of the chapters is proposed.

The first chapter focuses on the relationship between ownership and firm value, with the aim to summarize the empirical literature on the subject, highlighting the source of heterogeneity in the previous results, through the use of meta-analysis. The latter is a quantitative technique that aggregates, compares and synthesizes the results of different empirical studies, translating them into a common metric (Glass, 1976; Hunter and Schmidt, 1990). A preliminary narrative review of the empirical literature is designed to offer an overview of the topic. A quantitative review follows, with the aim of summarize the controversial empirical results using a single quantitative index, called *effect size*. Finally, the meta-regressions illustrate the variability of effect size explained by moderating variables. In particular, through the meta-regressions, it is possible to verify whether the strength of the

relationship between ownership concentration and value is influenced by a number of moderating factors. The moderating factors belong substantially to three different categories: firm-specific variables, paper-specific variables and institutional-specific variables. The results offer a number of suggestions for further research and ideas for actions to improve corporate governance. In particular, the meta-regressions show how the relationship between ownership and value is moderated by some factors that influence direction and intensity of the link, such as the publication of the paper, the capacity of the econometric technique to deal with endogeneity, the years of analysis, the status of listed firm, and the legal origin of the context of analysis.

The second chapter extensively analyses the role of multiple moderating variables, both firm-specific and related to the institutional environment, in the relation between ownership concentration and performance, on a sample of Italian firms, since in the Italian context large shareholders strictly affects companies' modus operandi. Italy is a Civil Law country with low investor protection (La Porta et al, 2000), high ownership concentration (Zattoni, 1999), family-based business model, where majority shareholders can protect their own interests by themselves. The high level of ownership concentration generates a strong influence of large shareholders on firm governance. On the one hand, a greater ownership concentration, which increases the blockholders' sense of belonging to the firm and their responsibilities, can lead to a more efficient governance that could result in higher performance. On the other hand, the largest shareholders may amplify problems of opportunism, since the risk of expropriation at the detriment of minority shareholders is great when there are blockholders with high equity stakes. The unbalanced panel data sample in the analysis includes both listed and unlisted Italian firms monitored for the period 1980-2009. The results confirm the important role of moderating variables, and can be used to recommend improvements for corporate and country-specific governance mechanisms.

The final chapter focuses on the presence of foreign blockholders in European companies. Foreign capital may be an important opportunity for economic growth; in fact, investment by foreign investors should lead to greater demand for shares of a company and thus lower costs of capital. This can help companies compete more effectively in the global market, and thus promote the economic development of the country. As the literature shows, the more the corporate governance system is strong, the more it is possible to attract foreign investors (La Porta et al, 1998). But why do some situations happen in which the foreign blockholders choose to invest in countries that have weak corporate governance? In

particular, the research question lies in the analysis of the relationship that links foreign blockholding, corporate governance and performance. The analysed sample consists in panel data relative to listed companies in 26 European countries, while the time horizon of the data is from 2003 to 2009. Essentially, we get that foreign blockholding are associated with weak firm-level governance and higher performance, in countries with weak country governance, so foreign blockholders substitute for weak governance. In particular, these results are driven by cases in which foreign blockholders 1) are non-financial investors and 2) come from countries with a strong institutional corporate governance.

In general, the results of the three chapters show that the value of ownership depends on the identity of the shareholders and other corporate governance mechanisms. Firms should define ownership structure in a complementary way to other corporate governance mechanisms, paying attention to the composition of the shareholders as driver of the system of incentives and control of firm governance. Therefore, the main conclusion of this dissertation is that the articulation of form and substance of firm ownership must be consistent with the characteristics of the firm itself and with context in which it competes.

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# **Chapter I**

# The value of ownership: a meta-analysis

The chapter focuses on the controversial relationship between ownership concentration and value with the aim of synthesizing the main empirical literature and highlighting the source of heterogeneity among the studies. As the main output of the work, the use of meta-regressions allow the identification of the variables that moderate the relationship between ownership and value, detecting their potential function in explaining the reasons of controversial outcomes in previous studies. The results offer a number of suggestions for further research and, hopefully, ideas for actions to improve corporate governance in the interests of stakeholders.

#### 1.1 Introduction

The recent financial crisis, together with cases of fraud and opportunism on the part of managers and entrepreneurs all over the world, has led to a widening of the debate on corporate governance. Phenomena such as integration of financial markets, globalization and hyper-competition in product markets have produced significant changes in economic and business activities. Thus, institutional mechanisms, as well as tools for self-regulation within companies, have proved to be inadequate in countering phenomena of deviance from the proper functioning of business processes and value creation. As much as the current debate on the role of laws, rules and institutions that act as deterrents and to discourage opportunistic behavior and mismanagement by imposing restrictions and sanctions may be significant, certainly of equally importance is the role of managerial corporate governance instruments, able to internally stimulate development of skills and innovation, which are needed to compete in the current context, promoting social responsibility and accountability of management. The role that ownership concentration plays in the process of value creation is one of the outstanding issues in the sphere of studies of management and corporate finance.

The present chapter is part of this debate and focuses analysis on one of the most important tools of corporate governance: firm ownership, particularly in terms of ownership concentration. The empirical evidence regarding the relationship between ownership concentration and firm value is mixed, and provides very little in the way of consistent results (McConnell and Servaes, 1990; Agrawal and Knoeber, 1996; Demsetz and Villalonga, 2001; Miguel et al, 2004; Thomsen et al, 2006). Despite the wealth of research, the question remains whether large owners contribute to the solution of agency problems or whether they exacerbate them (Sanchez-Ballesta and García-Meca, 2007). Despite the substantial empirical research undertaken in the ownership-firm performance link, the findings reported are characterized by fragmentation and diversity, thus limiting theory development in this field. For this reason, it is necessary to review, synthesize, and assess the relevant empirical research. Such an understanding is important because investigation efforts took place at different points in time, in varying geographical contexts, and with different terminologies, definitions, and operationalization of variables.

In particular, the aim of this review is to use meta-analysis to investigate the role of ownership in the processes of firm governance and value creation. Ownership, in effect, is an instrument of great importance and interest, which offers a contribution in mitigating

problems of opportunism in business processes. We meta-analytically integrate empirical literature on the link between ownership and value in order to illustrate the current state of the art as far as this relationship is concerned. In particular, as a main output of this review, the use of the statistical technique of meta-regression analysis enables to explain variations among reported estimates and identify the main issues underlying the current debate, by verifying the role of external factors (moderators) in the relationship between block ownership and value.

The meta-analysis results confirm a robust, economically important, positive effect of ownership on firm value; however, this effect is significantly affected by moderator factors. The aim of this output is to detect the presence of possible factors of heterogeneity among studies in explaining differences in the relationship between ownership and value (Sanchez-Ballesta and García-Meca, 2007). In particular, the identified potential sources of heterogeneity are the publication of the paper, the capacity of the econometric technique to deal with endogeneity, the years of analysis, the status of listed firm, family ownership and the legal origin of the context of analysis. We show that the publication of the paper amplifies the effect of ownership structure and firm value. Conversely, contrary to what intuition suggests, the relationship between ownership concentration and performance is not weaker, but rather stronger, with the use of techniques that take into account problems of endogeneity. Furthermore, the relationship between ownership concentration and firm value is weakened when the period of analysis refers to the 80s compared to more recent years. In addition, the role of the majority shareholders increases in listed companies. Finally, in Civil Law contexts, the positive relationship between ownership concentration and value is amplified. Our results support agency theory and Law and Finance theoretical point of view. In addition, they offer a number of directions for further research on this subject and, hopefully, suggestions for actions to improve corporate governance in the interest of stakeholders.

The paper is structured as follows. The second section covers the concepts of ownership concentration and the theories on the possible effects on value. The third section presents the research hypotheses. The fourth section refers to the selection criteria of the sample. The fifth section describes qualitatively the relationship observed in the selected articles. The sixth section introduces the quantitative analysis of literature review (meta-analysis), while the following deal with the problem of publication bias. The eighth section presents the output of the analysis, i.e. the results of the moderation effects (meta-regression). The work ends with some concluding remarks, highlighting possible managerial implications

and future research directions.

# 1.2 The relationship between ownership concentration and value

Corporate governance is a broad and complex concept, economically very important but not easy to define, because of the multiple dimensions that characterize its domain (Zingales, 1998; Lazzari, 2001; Becht et al, 2002). Adopting a managerial perspective (internal to the firm), corporate governance relates to the allocation of the decision-making system, designed to overcome the incompleteness of contracts between stakeholders (Zingales, 1998; Lazzari, 2001). One of the most studied mechanisms of corporate governance is ownership (Shleifer and Vishny, 1997; Denis, 2001). Specifically, this paper uses the meta-analysis approach to investigate the role of ownership, in terms of ownership concentration, highlighting the effect on value creation processes.

The term "ownership concentration" is usually related to the blockholders who, according to a definition commonly accepted by the business community, in line with the U.S. Securities Exchange Commission, represent those shareholders holding at least 5% of the equity (Denis, 2001; Seifert et al, 2005; Holderness, 2009). However, within a broader definition, there is high ownership concentration when the majority shareholders have an equity stake with which they are able to influence business activity.

In the analysis of the relationship between ownership concentration and value it is possible to identify three main perspectives of study (Table 1.1). Although some scholars find a non-significant relationship (Demsetz, 1983; Demsetz and Lehn, 1985) or that it is not detectable (Prowse, 1992), the major contributions have shown, alternately, that this link may be positive (monitoring hypothesis), negative (entrenchment hypothesis) or may have a non-monotonic trend (combining monitoring and entrenchment hypothesis).

TABLE 1.1

Theoretical evidence on the relationship between ownership concentration and value

RELATIONSHIP	HYPOTHESIS	AUTHORS
Value Ownership Concentration	Monitoring Hypothesis: The positive relationship between ownership concentration and value is justified by the benefits in terms of monitoring that a concentrated ownership structure exerts on management.	Holderness and Sheehan (1985) Shleifer and Vishny (1986) Agrawal and Mandelker (1990) Barclay and Holderness (1991) Bethel et al (1998)
Value Ownership Concentration	Entrenchment Hypothesis: The negative relationship between ownership concentration and value is supported by the argument that shareholder would abuse his position of control for expropriate private benefits, then depressing firm value.	Leech and Leahy (1991) Cronqvist and Nilsson (2003) Thomsen et al (2006)
Value Ownership Concentration	Monitoring Hypothesis & Entrenchment Hypothesis: The relationship between ownership concentration and value is positive up to a certain level due to the benefits of monitoring, and negative for high levels of concentration due to expropriation.	Slovin and Sushka (1993) Gedajlovic and Shapiro (1998) Miguel et al (2004)

The first theoretical perspective is reflected in the context of large U.S. corporations (Berle and Means, 1932), in which conflicts of interest between the manager and a multitude of small shareholders, accompanied by a lack of control over the management, could give rise to opportunistic behavior. In this context, ownership concentration, and therefore the presence of a single or a few large shareholders, may be a valuable tool for limiting problems related to abuse of managerial discretion, through the so-called monitoring effect. In fact, a blockholder may have a large enough stake to do some monitoring of the incumbent management, as the large shareholder's return on his own shares suffices to cover his monitoring. Holderness and Sheehan (1985) discuss the hypothesis, that are consistent with their evidence, for which large investors improve the management of firms. Shleifer and Vishny (1986), Agrawal and Mandelker (1990), Barclay and Holderness (1991) and Bethel et al (1998) show that the existence of blockholders, controlling the management, leads to better performance.

The second theoretical perspective supports the view that blockholders, as controlling shareholders, would adopt opportunistic behavior against the expropriation of minority shareholders to their advantage by exploiting the power of control over monetary and non-monetary benefits (Denis and McConnell, 2005), through the entrenchment effect. Leech and Leahy (1991), Cronqvist and Nilsson (2003) and Thomsen et al (2006) emphasized that an increased ownership concentration is associated with a reduction in value.

The third perspective combines the monitoring and the entrenchment effect, arguing that the predominant one depends on the level of ownership concentration, so monitoring and expropriation effects exist depending on the level of ownership concentration, for which reason firm value will be non-linearly related to ownership concentration (Slovin and Sushko, 1993; Gedajlovic and Shapiro, 1998; Miguel et al, 2004).

# 1.3 Research hypotheses

Previous empirical studies regarding the link between ownership and value, showing mixed results, have failed to settle disputes on this issue (Denis, 2001; Demsetz and Villalonga, 2001). The difficulties in interpreting the link between ownership and value may derive from several factors acting upon it. The choice of moderating factors is not random, but is based on the main theories about the phenomenon under analysis, and they belong substantially to three different categories: paper-specific, firm-specific and institutional-specific.

# 1.3.1 Paper-specific moderating factors

H.1: The status of "published" results amplifies the relationship between ownership concentration and performance. It is a common belief, backed by several empirical assessments, that studies are not uniformly likely to be published in journals (Cooper, 1998). Statistical significance is a major determining factor of publication since, in some research areas, scholars may not submit a non-significant result for publication, and editors may not publish non-significant results even if they are submitted. It is a common problem in the research culture (Sterling, 1959). More precisely, the so-called publication bias occurs when studies with statistically significant and favorable findings are more likely to be published (Rosenthal, 1979; Iyengar and Greenhouse, 1988; Duval and Tweedie, 2000). This is therefore a bias towards reporting significant results, despite the fact that studies with significant results do not appear to be superior to studies with a null result with respect to quality of design. The tendency for increased publication rates among studies that show a statistically significant effect has been documented repeatedly (so-called *file drawer effect*). Published studies reporting statistically significant results are preferentially published in journals, are more likely to be cited by other authors and are more likely to produce multiple

publications. From this, it may follow that the effect size is smaller in the case of unpublished studies, as without the latter the results of meta-analyses may be biased toward an overestimation of the true effect (Pfeffer, 2007). In other word, published results can easily overestimate actual effect sizes, and we try to test this regarding the relationship between ownership concentration and performance, as made by Heugens et al (2009).

H.2: The relationship between ownership concentration and firm value is weakened when econometric techniques, able to control for problems of endogeneity, are used. According to some scholars (Demsetz and Villalonga, 2001; Himmelberg et al, 1999) contradictions in the relationship between ownership and value arise from the complexity of the econometric analysis. In effect, there would appear to be serious problems of endogeneity between the two variables. The term endogeneity means that there is reciprocal causation or the presence of covariation in the absence of causation (i.e. the covariation between ownership and value would appear to be caused by one or more additional variables, which act randomly on both ownership and value). Börsch-Supan and Koke (2002) address the problem stating that ownership structure is co-determined with the firm performance, and without structural assumptions, the impact of this corporate governance mechanism on performance cannot be identified, because of the problem of reverse causality. Citing an example, one can suppose that negative firm performance may lead to a takeover which results in higher shareholder concentration, and that the new owners may replace management which in turn may lead to improved performance. This implies that the impact of shareholder concentration on performance is overestimated because OLS does not consider the endogeneity of shareholder concentration. Hence, performance is a function of endogenously related ownership variables, and a simple OLS regression may overestimate their explanatory roles (Agrawal and Knoeber, 1996; Hamilton and Nickerson, 2003). Therefore, given the complexity of the relationship, more sophisticated and advanced econometric techniques may be used (2SLS/3SLS or GMM), able to capture the multidimensionality of the observed phenomenon and to control problems of endogeneity, as compared to traditional models (OLS).

H.3: The relationship between ownership concentration and firm value is weakened when the period of analysis refers to the 80s compared to more recent years. There may also be changes in the sign or in the intensity of the relationship between ownership concentration and value because of a general trend. As with any economic analysis, a question can arise as to whether the results for one time period are representative of those that would occur in a

later or earlier time period (McConnell et al, 2008). In particular, taking into account that the use of reliable data to support results is essential, the time period of the analysis can be a proxy of the growing availability of firm datasets, that over time also become higher in quality. From previous meta-analyzes, even on different issues, it is found that higher quality studies produced a quantitatively larger effect size and a greater level of significance than lower quality studies, and such differences in study results may be explained by differences in time-period of the analyses. In recent years, there is indeed greater availability and quality of data, linked to the period of analysis of which each single paper is based on. Therefore, we examine the effect of the time, assuming that the studies based on the 80s are less accurate than those based on more recent years, which latter make it possible to better measure the shape of the link ownership-value.

### 1.3.2 Firm-specific moderating factors

H.4: The relationship between ownership concentration and firm value is amplified in listed firms compared to unlisted firms. Differences in listing status means different sensitivity to asymmetric information and opportunism. Previous studies have examined corporate governance differences of listed and unlisted firms (i.e Loderer and Waelchli, 2010). Listed firms have, generally, a dispersed ownership, potentially facing problems concerning the separation between ownership and control. In listed firms, the role of capital markets and transparency requirements, backed up by entities outside control, provides additional managerial control. By contrast, unlisted firms have highly concentrated ownership, often with a large shareholder typically controlling the majority of the votes, and a business model that does not depend on capital markets. In our setting, it is particularly useful to recall the agency problem, that concerns the potential conflicts of interest between owners and non-owners. This specific type of agency problem produces the more serious cost in listed firms, respect to the unlisted ones (La Porta et al, 2000, Faccio et al, 2001; Villalonga and Amit, 2006). For this reason, the monitoring and incentive problem between owners and managers are major in listed firms, so we expect that status of listed company reinforce the relationship between ownership concentration and performance, given the importance that blockholders takes in solving such problems.

H.5: The relationship between ownership concentration and firm value is amplified in family firms compared to nonfamily firms. We cannot overlook the importance of the identity

of largest owner, particularly when the control of the company is in the hand of a family. Families represent in fact a unique class of shareholders that hold poorly diversified portfolios, are long-term investors, and often control senior management positions. As such, families are in an uncommon position to exert influence and control over the firm, potentially leading to performance differences respect to nonfamily firms. For example, Barclay and Holderness (1989) note that family's role in selecting managers and directors can also create impediments for third parties in capturing control of the firm, suggesting greater managerial entrenchment and lower firm values relative to nonfamily firms. In addition, family's desire for special dividends can impact the firm capital expansion plans, leading to poor operating and stock price performance. In general, while families may pursue actions that maximize their personal utility, many of these same actions potentially lead to suboptimal policies, resulting in poor firm performance relative to nonfamily firms. Although part of the literature suggests that family ownership and control can lead to poor firm performance, family influence can also provide competitive advantages. Specifically, because the family's wealth is so closely linked to firm welfare, families may have strong incentives to monitor managers and minimize the free rider problem inherent with small, atomistic shareholders. If monitoring requires knowledge of the firm's technology, families potentially provide superior oversight because their lengthy tenure permits them to move further along the firm's learning curve. Further, families also often maintain a long-term presence in their firms, so they have longer horizons than other shareholders, suggesting a willingness to invest in long-term projects relative to shorter managerial horizons. Family suffer less managerial myopia and are therefore less likely to not undertake good investments to boost current earnings. In addition, the long-term nature of founding-family ownership suggests that external entities, such as suppliers or providers of capital, are more likely to deal with the same governing bodies and practices for longer periods in family firms than in nonfamily firms. Thus, family reputation is more likely to create longer-lasting economic consequences for the firm relative to nonfamily firms, where managers and directors turn over on a relatively continuous basis. One consequence of families maintaining a long-term presence is that the firm will enjoy a lower cost of debt financing compared to nonfamily firms. In summary, since families are therefore more involved in the governance of the firms respect to other shareholders, we expect to observe a stronger link between ownership and performance if the main owners are a family.

# 1.3.3 Institutional-specific moderating factors

H.6: The relationship between ownership concentration and firm value is stronger in Civil Law countries compared to Common Law countries. Some studies have noted the role of country-specific factors that would act on the relationship analyzed. These factors could play a decisive role with respect to the efficacy of ownership as a corporate governance mechanism. Miguel et al (2004) show that ownership concentration is influenced by the level of investor protection, the degree of financial market development<sup>1</sup>, the role of the market for corporate control and, in general, by other external factors of governance, while La Porta et al (1999) detect changes in the degree of cross-country ownership concentration. In particular, according to Shleifer and Vishny (1997), the choice of the degree of ownership concentration is a function of the effectiveness of a given country's legal and enforcement system. The lack of protection of small shareholders, in the presence of asymmetric information and incomplete contracts, would lead to ownership concentration as a viable mechanism to mitigate agency problems. Under this view, shareholder lawsuits and blockholder monitoring are substitutes: when shareholders have few rights to sue managers, the value of a blockholder who can monitor managers increases, so we expect that the relationship between ownership concentration and value is strongest where there is a lack of legislation, because of a greater monitoring effect. There are striking differences between countries' corporate governance systems due to a number of features, including laws, taxes, capital market characteristics, culture, history, and industrial organization, and, above all, shareholder protection. One way to address this concern, suggested by La Porta et al (1998) is to classify countries in terms of legal origin, which is strongly correlated with shareholder protection<sup>2</sup>. In particular, the Common Law countries tend to have better protection of minority shareholders in comparison to Civil Law countries.

## 1.4 Sample of studies

In an effort to resolve the doubts about the link between ownership and value, this

<sup>1</sup> An efficient financial system facilitates access to external sources of capital, leading to low levels of ownership concentration (Miguel et al, 2004).

<sup>&</sup>lt;sup>2</sup> In Common Law countries the role of the financial market is predominant, exerting a discipline on managers (market for corporate control). In contrast, Civil Law contexts are characterized by the significant role of financial intermediaries. These differences are discussed by La Porta et al (1999).

research aims to use the tool of meta-analysis<sup>3</sup>. This is a technique of quantitative review of the empirical literature that aggregates, compares and synthesizes the results of different empirical studies, translating them into a common metric. The objective of the meta-analysis is the integration of knowledge on a particular relationship through the analysis and the combination of empirical results from studies on the subject, amplifying the explanatory power and the possibility of generalizations (Glass, 1976; Hunter and Schmidt, 1990)<sup>4</sup>. Compared to the narrative literature reviews<sup>5</sup>, meta-analysis provides a rigorous methodological approach, together with statistical soundness, to examine the results of the literature regarding a specific topic.

First of all, to identify the population of studies on the relationship between ownership concentration and firm performance, we read several prior meta-analysis focusing on the relationship between ownership concentration and firm performance (e.g., Dalton et al 2003; Heugens et al 2009; Sanchez-Ballesta and García-Meca, 2007). Second, to implement the meta-analysis, it is necessary to identify and select the studies of interest that reported findings on the relationship between firm performance and ownership concentration, when performance is treated as the dependent variable and ownership structure as the independent, or when both are considered endogenous and simultaneously determined. Whether a given indicator of ownership concentration is an independent or a control variable is unimportant, since this variables need not has been a main focus to be included in the meta-analyses. It is only necessary that a simple correlation between ownership concentration and value be available in the article or derivable from it. We have used some of the most important search engines for academic study including: ScienceDirect, JSTOR, Ideas, Ingenta, Blackwell, EBSCO, Blackwell, Emerald, Elsevier and ABI Inform. Using SSRN, it has also been possible to obtain working papers. We have consulted some of the most important journals of

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<sup>&</sup>lt;sup>3</sup> For a theoretical and practical extension of the subsequent arguments, we recommend consultation of some manuals including Kulinskaya et al (2008), Hedges (1992), Glass et al (1981), as well as some contributions and research papers (Stanley and Jarrell, 1989).

<sup>&</sup>lt;sup>4</sup> In particular, according to Glass (1976): "Meta-analysis refers to the analysis of analyses . . . the statistical analysis of a large collection of analysis results from individual studies for the purpose of integrating the findings. It connotes a rigorous alternative to the casual, narrative discussions of research studies which typify our attempts to make sense of the rapidly expanding research literature".

<sup>&</sup>lt;sup>5</sup> The narrative literature reviews can be misleading, because different researchers may reach different conclusions on a series of studies, due to changes in characteristics such as sample size, methodology, time period, etc. (Hunter and Schmidt, 1990).

Accounting, Economics, Finance, and Management fields, including: Journal of Corporate Finance, Journal of International Financial Management & Accounting, Journal of Finance, Strategic Management Journal, Journal of Business Venturing, Journal of Multinational Financial Management, Corporate Ownership and Control, Accounting and Finance, Corporate Governance: An International Review, Journal of Business Research, Journal of Financial Economics, European Financial Management, Journal of Financial and Quantitative Analysis, Journal of Political Economy, Journal of Comparative Economics, Journal of Financial Intermediation, The Academy of Management Journal, German Economic Review, Journal of Family Business Strategy. As search criteria, we have used keywords, present in the title, in the abstract or in the text, such as: "corporate governance", "ownership structure", "ownership concentration", "blockholder", "equity" "shareholders", "performance" and "value". The research has been defined by reference to the JEL classification codes "G32" and "G34". Third, upon collecting an initial set of studies, we used the 'snowballing' technique in that we searched reference lists for previously unidentified relevant papers, so we have observed the quotes in the identified papers to identify other sources.

We have excluded from the meta-analysis the works in which: 1) ownership concentration have been expressed in terms of dummies (i.e. dichotomous variables), 2) empirical evidences that examine multiple classes of stocks and pyramid structures, which entail different voting and cash flow rights, 3) measures of ownership exclusively expressed by levels (the so-called piecewise regressions), 4) studies in which only the Beta of the regression has been present, with no additional information on the t-student, the p-value or the standard error.

Based on these criteria we have 278 initial observations. From a methodological point of view, as suggested by Geyskens et al (2009), it is necessary to monitor the role of outliers. Therefore, in order to produce an accurate average effect size, as realized by Lipsey and Wilson (2001), we have performed some steps to eliminate the observations with standard error of regressions exceeding a threshold equal to three times the average standard deviation of all standard errors in the analysis. Finally, we have eliminated observations relating to abnormal value of the effects size resulted, identified through cumulative pooled estimates analysis (Lau et al, 1992).

Following the application of the process just described, the sample was reduced to 245 studies, with 50 selected articles dating from 1985 to 2011.

Finally, we proceeded by reading all articles in the final set and by developing a coding protocol for extracting data on all relevant variables.

Looking at Table 1.2, it is possible to identify certain characteristics that distinguish the paper selected, taking into account that there are some studies that may fall into several categories. These characteristics, considered as possible factors that moderate the relationship between ownership and value, may be the cause of the controversial empirical evidence.

TABLE 1.2 Specificity of selected studies

Characteristics of papers	Authors				
Analyses in Common Law contexts	and Lehn (1985), Demsetz and Villalonga (2001), Driffield et al (2006), Gaspar and Massa (2007) McConnell and Servaes (1990), Mitton (2002), Seifert et al (2005), Thomsen et al (2006), Villalonga and Amit (2006)				
Alonso-Bonis and De Andrés-Alonso (2007), Andres (2008), Arosa et al (2010), Baek Beiner et al (2006), Boehmer (2000), Bøhren and Ødegaard (2004), Boubakri et al (2005 (2010), Chang (2003), Chen (2001), Chirinko et al (2004), Claessens and Djankov (1999 al (2008), Driffield et al (2006), Earle et al (2005), Gedajlovic and Shapiro (2002), (2008), Hovey et al (2003), Huang et al (2011), Jaafar and El-Shawa (2009), Joh (2003) and Lazaretou (2007), Lehmann and Weigand (2000), Ma et al (2010), Maury (2006), (2004), Minguez-Vera and Martin-Ugedo (2007), Morck et al (2000), Pakamore et al (2007), Perrini et al (2008), Randøy and Goel (2003), Seifert et al (2005), Thomsen (2000), Thomsen et al (2006), Yeh (2005), Zeitun (2009)					
Studies that have analyzed listed companies	Agrawal and Knoeber (1996), Alonso-Bonis and De Andrés-Alonso (2007), Anderson and Reeb (2003), Andres (2008), Baek et al (2004), Beiner et al (2006), Bhabra (2007), Boehmer (2000), Bøhren and Ødegaard (2004), Bruton et al (2010), Callahan et al (2003), Chang (2003), Chen (2001), Chirinko et al (2004), Claessens and Djankov (1999), Gedajlovic and Shapiro (2002), Davies et al (2005), Deb and Chaturvedula (2003), Demsetz and Lehn (1985), Demsetz and Villalonga (2001), Desender et al (2008), Driffield et al (2006), Earle et al (2005), Gaspar and Massa (2007), Guthrie et al (2008), Hovey et al (2003), Huang et al (2011), Jaafar and El-Shawa (2009), Joh (2003), Kapopoulos and Lazaretou (2007), Lehmann and Weigand (2000), Ma et al (2010), Maury (2006), McConnell and Servaes (1990), Miguel et al (2004), Minguez-Vera and Martin-Ugedo (2007), Mitton (2002), Morck et al (2000), Pakamore et al (2010), Perrini et al (2007), Perrini et al (2008), Randøy and Goel (2003), Seifet et al (2005), Thomsen and Pedersen (2000), Thomsen et al (2006), Yeh (2005), Villalonga and Amit (2006), Zeitun (2009)				
Studies that have analyzed unlisted companies	Anderson and Reeb (2003), Arosa et al (2010), Boubakri et al (2005), Demsetz and Villalonga (2001), Joh (2003), Lehmann and Weigand (2000), Maury (2006), Seifet et al (2005)				
Studies that have monitored problems of endogeneity	Agrawal and Knoeber (1996), Alonso-Bonis and De Andrés-Alonso (2007), Andres (2008), Beiner et al (2006), Boubakri et al (2005), Bruton et al (2010), Chang (2003), Claessens and Djankov (1999), Davies et al (2005), Demsetz and Villalonga (2001), Driffield et al (2006), Huang et al (2011), Jaafar and El-Shawa (2009), Kapopoulos and Lazaretou (2007) Lehmann and Weigand (2000), Miguel et al (2004), Minguez-Vera and Martin-Ugedo (2007), Perrini et al (2008), Seifet et al (2005)				
Studies that have not monitored problems of endogeneity	Anderson and Reeb (2003), Arosa et al (2010), Baek et al (2004), Bhabra (2007), Boehmer (2000), Bøhren and Ødegaard, (2004), Callahan et al (2003), Chang (2003), Chen (2001), Chirinko et al (2004), Claessens and Djankov (1999), Deb and Chaturvedula (2003), Demsetz and Lehn (1985), Desender et al (2008), Earle et al (2005), Gaspar and Massa (2007), Gedajlovic and Shapiro (2002), Guthrie et al (2008), Hovey et al (2003), Huang et al (2011), Joh (2003), Kapopoulos and Lazaretou (2007), Ma et al (2010), Maury (2006), McConnell and Servaes (1990), Mitton (2002), Morck et al (2000), Pakamore et al (2010), Perrini et al (2007), Randøy and Goel (2003), Thomsen and Pedersen (2000), Thomsen et al (2006), Yeh (2005), Villalonga and Amit (2006), Zeitun (2009)				

It is possible to distinguish between the analysis based on Common Law or Civil Law

contexts, which differ in terms of legal system and enforcement, i.e. the degree of protection accorded to investors and the ability to penalize those who adopt opportunistic behavior. Legal and governance models are closely related and therefore potentially able to alter the relationship between ownership and value. Most of the articles analyze Civil Law contexts, since ownership concentration is more important and valuable in countries with weaker investor protection (i.e. Civil Law countries). A further taxonomy shows that the majority of the articles is based on listed firms. Finally, we note that the papers that control for endogeneity problems are similar in number compared to the contributions that use simple econometric techniques that do not consider this issue.

The conflicting conclusions reached at the end of this qualitative analysis justify the use of meta-analysis to identify the minimum common denominator that will help to explain the sources of the observed heterogeneity, offering new ideas and hypotheses to test in further research.

# 1.5 Qualitative analysis of the relationship between ownership concentration and value

At a descriptive level, it is useful to classify the selected articles, as shown in Table 1.3, based on the direction of the observed relationship between ownership and value, drawing attention to differences in results based on the institutional context.

TABLE 1.3
Relationship between ownership concentration and value as a function of the related legal system

Link between Own. Concentration &Value	Analyses in Common Law Contexts	Analyses in Civil Law Contexts
Positive Relationship	Boubakri et al (2005), Bruton et al (2010), Deb and Chaturvedula (2003), Driffield et al (2006), Gaspar and Massa (2007), Mitton (2002), Seifet et al (2005), Villalonga and Amit (2006)	Alonso-Bonis and De Andrés-Alonso (2007), Andres (2008), Baek et al (2004), Boubakri et al (2005), Bruton et al (2010), Chang (2003), Chen (2001), Earle et al (2005), Gedajlovic and Shapiro (2002), Guthrie et al (2008), Huang et al (2011), Jaafar and El-Shawa (2009), Kapopoulos and Lazaretou (2007), Ma et al (2010), Morck et al (2000), Perrini et al (2007), Perrini et al (2008), Randøy and Goel (2003), Seifet et al (2005), Yeh (2005), Zeitun (2009)
Negative Relationship	Callahan et al (2003), Davies et al (2005), Demsetz and Villalonga (2001), Driffield et al (2006), Gaspar and Massa (2007), Seifet et al (2005),	Alonso-Bonis and De Andrés-Alonso (2007), Boehmer (2000), Bøhren and Ødegaard, (2004), Chen (2001), Desender et al (2008), Driffield et al (2006), Guthrie et al (2008), Lehmann and Weigand (2000), Pakamore et al (2010), Randøy and Goel (2003), Seifet et al (2005) Thomsen et al (2006), Zeitun (2009)
Non-monotonic Relationship	Anderson and Reeb (2003), Boubakri et al (2005)	Andres (2008), Boubakri et al (2005), Claessens and Djankov (1999), Joh (2003), Minguez-Vera and Martin-Ugedo (2007), Miguel et al (2004), Pakamore et al (2010), Perrini et al (2007); Thomsen and Pedersen (2000)
No Relationship	Agrawal and Knoeber (1996), Bhabra (2007), Bruton et al (2010), Deb and Chaturvedula (2003), Demsetz and Lehn (1985), Demsetz and Villalonga (2001), Driffield et al (2006), Gaspar and Massa (2007), McConnell and Servaes (1990), Thomsen et al (2006)	Andres (2008), Arosa et al (2010), Beiner et al (2006), Boehmer (2000), Bruton et al (2010), Chang (2003), Chen (2001), Chirinko et al (2004), Desender et al (2008), Driffield et al (2006), Earle et al (2005), Guthrie et al (2008), Hovey et al (2003), Huang et al (2011), Lehmann and Weigand (2000), Ma et al (2010), Maury (2006), Minguez-Vera and Martin-Ugedo (2007), Pakamore et al (2010), Perrini et al (2007), Randøy and Goel (2003), Seifert et al (2005), Zeitun (2009)

In particular, Table 1.3 shows that the relationship between ownership concentration and value has been analyzed mainly in Civil Law countries, while it has been a theme less pursued in-depth in Common Law countries. This finding may indicate how ownership concentration represents an important instrument of governance especially in Civil Law countries, where there is less legal protection for investors and there is no market for corporate control (La Porta et al, 1998). With reference to the observed links in the Civil Law context, one can see the mostly positive role of ownership concentration, which may become non-monotonic due to problems of entrenchment for high levels of ownership concentration. In addition, there is some consistent evidence supporting the hypothesis of no-link between ownership and value.

In addition, we show in Table 1.4 the descriptive statistics of the coefficients (beta) drawn from the sample, which indicate the effect of ownership concentration on firm value.

TABLE 1.4

Descriptive statistics on coefficients

Full Sample		l Sample Positive Beta (significant)		Negative Beta (significant)		Quadratic relationship		Not significant Beta		
Obs	Mean	SD	Obs	Percentage frequencies	Obs	Percentage frequencies	Obs	Percentage frequencies	Obs	Percentage frequencies
245	0.67	5.20	83	33.88%	29	11.84%	21	8.57 %	112	45.71%

The average value of beta is 0.67. Analyzing the final sample one should note that most of the studies have an ownership concentration coefficient with a significant positive impact on firm value (33.88%), but there are many studies in which the beta are not significant (45.71%), often with a positive sign but weaker in terms of significance. On the other hand, the studies that have a significant negative coefficient are 11.84% of total, while those that have a non-linear relationship are 8.57% of total.

In general, from tables 1.3 and 1.4 an evidence in favor of the positive impact of ownership concentration on firm value seems to emerge, confirming in prevalence the ability of large shareholders to positively influence firm performance. These considerations must be understood with due caution as potentially distorted. In fact, the average value of beta is based on the comparison between very different estimates; therefore, several factors may be possible sources of heterogeneity, whereby their relevance and role of moderation should be investigated through the application of meta-regressions. It is important to combine both positive, negative, non-monotonic and insignificant links, giving appropriate weight to each study, in order to quantitatively assess the effect of ownership structure on firm value.

# 1.6 Quantitative analysis of the relationship ownership concentration and value: determination of the effect size

The first step of the meta-analysis is based on the determination of a summary measure of the magnitude of the relationship object of study, expressing the results of several studies in terms of a common metric and then determine the average *effect size* of the sample. The latter is a measure of the synthesis of an effect observed in different studies. Several

metrics may be used (Rosenthal, 1984): the correlation coefficient r, the Cohen's d effect size index, the odds ratio, the risk ratio or the risk difference ratio. We prefer to use the Pearson correlation coefficient r, that is the most widely used metric in the economic and social studies as it can measure the intensity of the correlation between two continuous variables. The beta coefficients are transformed into the correlation coefficient r, through the conversion formula of Cooper and Hedges (1994). It is therefore necessary to perform a process of standardization that makes comparable (i.e. on the same size scale) the results from the different studies. Additionally, the Pearson coefficient was transformed into the Fisher score Zr to normalize the distribution and correct problems of skewness. In Appendix 1.1 we report in more detail the methods for calculating effect size.

Therefore, the objective of the quantitative analysis is to convert the estimated coefficients from each study into a common metric (standardization process) and then combine them with each other, to achieve an average effect size. The main difference in the path that leads to the average effect size, is related to the way in which the variability is calculated, using as weights the standard errors or the amount of information N (number of cases for study). The methods used to conceptualize the data are two: fixed effect, with which it is assumed that the studies come from a population that has a mean effect fixed, and random effect, with which it is assumed that the studies come from a population that has different average effects. In order to have a general framework, in the following table both methods of conceptualization will be presented. Table 1.5 summarizes and quantifies, through the effect size, the influence of ownership concentration on performance showing the results obtained by calculating the unweighted and weighted effect size through both the fixed effects model and the random effects model.

TABLE 1.5

Descriptive statistics on effect size of ownership concentration on value for the full sample

Models	Obs	Effect size (mean value)	Confidence Interval 95%	Q test (p-value)	I-squared	Tau-squared
Zr (Not weighted)	245	0.04	[0.02; 0.05]			
FE (I-V)	245	0.02	[0.02; 0.02]	0.00	99.7%	
RE (D+L)	245	0.03	[0.02; 0.04]	0.00	99.7%	0.01

The analysis in Table 1.5 highlights again, on average, the prevalent positive relationship between ownership concentration and value, even here never negative. Moreover, the presence of the confidence intervals always positive reinforces this evidence, for which the effect size on average keeps the same positive sign. The results achieved confirm the positive impact that ownership seems to have on value, with a range, considering all methods of calculating average effect size, between 0.02 and 0.05. With regard to the variability, the homogeneity tests reject the null hypothesis at a confidence level of 99.7% and accept the alternative hypothesis of heterogeneity among studies. In addition, it is possible to apply the Cochran's Q test (not reported for the sake of brevity), calculated as shown in the appendix 1.1, which is always statistically significant, indicating a high heterogeneity among studies. Therefore, even from a statistical point of view, the deepening of the fundamental sources of possible heterogeneity across studies by using the methodology of meta-regressions is necessary.

For completeness, we draw up table 1.6, from which it is possible to observe the analysis of the effect size without heterogeneity of the studies within the same contributions. The elimination of heterogeneity was obtained by calculating the average score of Zr Fisher and the standard error for each contribution, so we show the results eliminating the influence of statistical power represented by the quantitative weight of the number of studies in the present contribution.

TABLE 1.6

Descriptive statistics on effect size of ownership concentration on value by article

Models	Obs	Effect size (mean value)	Confidence Interval 95%	Q test (p-value)	I-squared	Tau-squared
Zr (Not weighted)	50	0.04	[0.02; 0.05]			
FE (I-V)	50	0.02	[0.02; 0.02]	0.00	95.6%	
RE (D+L)	50	0.02	[0.02; 0.03]	0.00	95.6%	0.01

In confirmation of the above results, also in this type of analysis, the data give strong indications on the heterogeneity of the studies, so it is necessary to deepen the analysis of the effects of moderation through the meta-regressions.

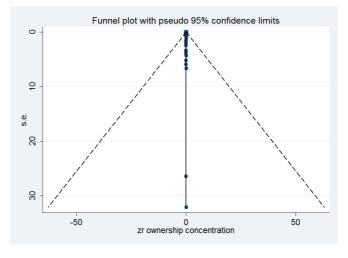
#### 1.7 Publication bias

Critical examination for the presence of biases must become an essential part of meta-analytic studies and systematic reviews, in particular in the case of the so-called publication bias, which represents a particular threat to the validity of meta-analysis. The selective publication of significant findings is an important concern in meta-analytic reviews of the literature. In fact, while the combined analysis can increase inferential power over any individual study, there are several drawbacks to meta-analysis (Thompson and Pocock, 1991; Mengersen et al, 1995), and one is the need to collect all studies, both published and unpublished, relevant to the meta-analysis (Rosenthal, 1979; Iyengar and Greenhouse, 1988; Dear and Begg, 1992; Hedges, 1992; Begg, 1994). This is because the use of a non-representative proportion of significant studies will lead to a no representative set of studies in the meta-analysis data set. After adjusting for unpublished studies, the point estimate of the overall effect size is approximately correct and coverage of the effect size confidence intervals is substantially improved. Therefore, we strive to obtain a representative sample of both published and unpublished studies.

Despite the inclusion of unpublished studies in the analysis sample, evaluating the effect of publication bias is difficult since the missing studies influence the overall mean that is estimated in the meta-analysis. Therefore, it is advisable to use such specific analytical tools as a Begg's test and/or Egger's test, to quantify the potential presence of publication bias. Tests for publications bias rely on the underlying theory that small studies with small sample size (and large variance) would be more prone to publication bias, while large-scale studies would be less likely to escape public knowledge and more likely to be published regardless of significance of findings. In particular, the Begg's test is based on the degree of association between the size of effect estimates and their variances. If publication bias is present, a positive correlation between effect size and variance emerges. Conversely, Egger's linear regression method uses the actual values of the effect sizes and their precision, rather than ranks. In the Egger test, the effect size is regressed on precision, defined as the inverse of the standard error. The intercept in this regression corresponds to the slope in a weighted regression of the effect size on the standard error. The power for this last test is generally higher than power for the Begg's method. However, we perform both Begg's and Egger's tests. In both cases, the p-value have values well above 10% (0. 98 for Begg's test and 0.28 for Egger's test), so we do not reject the null hypothesis of no small-study effects.

In addition, in the meta-analysis, the publication bias is often examined through the research of asymmetry in the so-called funnel plots, i.e. scatter plots of the effects estimated from single studies on the horizontal axis. The funnel plot is based on the fact that precision in estimating the underlying treatment effect will increase as the sample size of component studies increases. Each studies supplies an estimate  $Y_i$  of the effect in question in the i study and an estimate of the variance  $\sigma_i^2$  within that study. The name "funnel plot" is based on the fact that the precision in the estimation of the underlying effect will increase as the sample size of component studies increases. It is shaped like a funnel in the same way the Normal distribution curve is shaped like a bell: 95% of studies should lie within the two limit lines. If there is no bias, a scatter plot of effect size against sample size should generate a funnel shape around the 'true' effect size, with effect sizes based on larger samples being closer to the 'true' effect size (Light and Pillemer, 1984). In the absence of bias the plot will resemble a symmetrical inverted funnel. The more comprehensive literature searches may mean that publication bias is reduced so that funnel plots are more symmetric. In contrast, bias will lead to an asymmetrical appearance of the funnel plot with a gap in the right bottom side of the graph. In this situation, the combined effect from meta-analysis will overestimate the treatment's effect. Any deviations from this symmetrical funnel-shaped plot can be used to infer publication bias. Specifically, if there is a moderate 'true' effect size and researchers, reviewers and editors respond more favorably towards statistically significant results (Song et al, 2000), this should generate a skewed funnel plot in which effect size decreases as sample size increases (Begg, 1994). In Figure 1.1, in particular, we perform the graphical analysis, still texting the null hypothesis under which there is no effect of small studies.

FIGURE 1.1
Funnel plot



As discussed above, the key idea behind the funnel plot is that in the absence of bias the plot would be symmetric about the summary effect. If there are more small studies on the right than on the left, our concern is that there may be studies missing from the left, but in our case this does not happen. Consequently, the evidence demonstrates the absence of publication bias for our meta-analysis. However, this type of considerations on such techniques are in some cases subjective, so it makes sense to consider the publication bias as an additional source of heterogeneity of the results of the studies.

## 1.8 Determinants of the relationship between ownership concentration and value: the meta-regressions

The primary output of the meta-analysis concerns the study of moderating factors on the relationship between ownership and value. In fact, the high variability in the observed phenomenon, together with the controversial and heterogeneous results in each study, highlights the need for further analysis through meta-regressions, examining the moderating role of some possible explanatory variables on the relationship between ownership and value (Stanley, 2001).

The meta-regressions investigate possible sources of heterogeneity between the results reported in the literature in order to estimate the incidence of special features of the individual studies on the relationship between ownership structure and value. They are merely regressions which measure the effect of some independent variables on a dependent variable, that in this case is the effect size that synthesizes the link between ownership structure and value. In particular, the independent variables are moderating variables, as they can indicate the ability of a given attribute of the studies to influence the effect size. Therefore, the moderating variables represent factors that are external parties respect to the relationship between ownership concentration and value, able to influence the sign and the intensity of the relationship object of study. In other words, through meta-regressions, we study the extent to which the statistical heterogeneity between the results of different studies can be connected to one or more characteristics of the studies (Stanley and Jarrel, 1989)<sup>6</sup>. The exploration of this source of heterogeneity is the most valuable part of a meta-analysis. In particular, through the meta-regressions, it is possible to verify whether the direction and strength of the relationship between ownership concentration and value (OC ⇒ W) is

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<sup>&</sup>lt;sup>6</sup> Differences among studies included in the meta-analysis necessarily lead to statistical heterogeneity.

influenced by a number of moderating factors. In practice, we regress a series of coded dummies as explanatory variables on the transformed values of Fisher's Z of adjusted correlations. The dichotomous explanatory variables provide information on the effect size differences due to the presence of a specific factor that distinguishes the studies. These are the factors that could cause controversy in the results reported in the literature (Hunter and Schmidt, 1990).

#### 1.8.1 Model and variables

According to the formulated research questions, the following model is estimated, where the dependent variable is the effect size of ownership concentration on value, Zr (OC  $\Rightarrow$  W).

Effect size Ownership on Value 
$$(Zr_{Own_{\bullet}W}) = f(Moderating Factors)$$

In particular, this paper intends to investigate the role of moderating factors, in order to determine which attributes may be able to influence the relationship between ownership and value. The choice of moderating factors is not random, but is based on the main theories about the phenomenon under analysis mentioned in the formulated research hypotheses.

From an econometric point of view, the "weighted regressions" are used, in which the dependent variable is represented by unweighted effect size of ownership on value, while the weights are represented by the number of sample observations and the inverse of the variance.

In particular, the analysis verifies the role of moderating factors in order to determine what paper-specific, firm-specific and institutional-specific features may be able to influence the ownership concentration-value link. The aim of the output is to detect the presence of possible factors of heterogeneity among studies in explaining differences in the relationship between ownership and value (Sanchez-Ballesta and García-Meca, 2007). The features that discriminate the various studies, used as explanatory variables are approximated by dummy variables and are related to the assumptions listed in section 1.3. In particular, the identified potential sources of heterogeneity are the publication of the paper, the capacity of the econometric technique of deal with endogeneity, the years of analysis, the status of listed firm, family ownership and the legal origin of the context of analysis. The definition of the variables is described in detail in Appendix 1.2.

The role of the features that are considered as moderators can be tested directly in a

single meta-regression by including all covariates simultaneously, without single univariate meta-regressions. To determine whether there is a causal relationship between two variables (a single moderator and the effect size), it is important to verify the existence of a relationship between the two variables, without the intervention of a third variable. In other words, it is necessary to verify the absence of multicollinearity among the covariates through the VIF test (not reported for the sake of brevity), which has confirmed the validity of the analysis.

Several econometric issues affect the application of meta-regression. Although it is possible to apply a standard OLS regression<sup>7</sup>, it is appropriate to use a variance-weighed regression, in which the dependent variable is represented by the effect size of each study (unweighted), weighting the regression, so that more precise studies have more influence in the analysis. The meta-regressions are conducted using three estimation methods: 1) Restricted maximum likelihood (REML), 2) Empirical Bayesian technique (EB) and the Method of moments (MM). The regression results are interpreted without differences with respect to the output of a normal regression, as well as the goodness statistic of the coefficients is observed through the p-value of the Student's t test. Given that we use as moderators dichotomous variables (dummies), the coefficients inform on the differences in effect size in a category/group compared to another.

#### 1.8.2 Results of the meta-regressions

This section verifies the role of moderating factors on the ownership-value relationship, to draw the appropriate conclusions from the study. The results of the meta-regressions are presented in Table 1.7. In all of the variance-weighted regressions the dependent variable is represented by the unweighted effect size, while the weights are assigned using the inverse of the variance. Table 1.7 analyzes the model through the use of different meta-analytic techniques. First, we compare the REML method with Bayesian technique and the process of the moments. Furthermore, we analyze a robust model, which estimates robust standard errors that take account the so-called "dependent effects". Dependent effects occur in two cases, i.e. correlated effects and hierarchical meta-regression. In the first case, the dependency arises as a result of correlated estimation errors; for example, a study collects two outcome measures and then summarizes these as two effect size

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<sup>&</sup>lt;sup>7</sup> In OLS method the observations are presumed to be independent, which is incorrect. In addition, standard errors too small for the parameter estimates are generated, and then, too many effects are considered significant.

measures. In the second case, the dependency arises as a result of correlated parameters; for example, the same research group may publish several studies and there may be elements of these studies that are similar to one another.

TABLE 1.7

Results of the meta-regressions on the ownership-value relationship

	(1) REML	(2) EB	(3) MM	(4) ROBUMETA MODEL
VARIABLES	zr_ownership concentration	zr_ownership concentration	zr_ownership concentration	zr_ownership concentration
Published Dummy	0.06*** (0.02)	0.06*** (0.02)	0.06*** (0.02)	0.06** (0.03)
Endogeneity Dummy	0.05** (0.02)	0.05*** (0.02)	0.05*** (0.02)	0.05** (0.02)
80s Dummy	-0.05*** (0.02)	-0.04*** (0.01)	-0.04*** (0.01)	-0.05* (0.03)
Listed Dummy	0.08*** (0.02)	0.07*** (0.01)	0.07*** (0.01)	0.08*** (0.03)
Family Dummy	-0.01 (0.02)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.02)
Civil Law Dummy	0.04** (0.02)	0.04*** (0.01)	0.04*** (0.01)	0.04* (0.03)
N	245	245	245	245
Adj R <sup>2</sup>	18.28%	24.29%	-9.90%	
F test	6.68(6, 238)	10.40(6, 238)	10.19(6, 238)	
N. Cluster				50
Tau <sup>2</sup>	0.01	0.01	0.01	0.00

In all of the variance-weighted regressions the dependent variable is represented by the unweighted effect size, while the weights are assigned using the inverse of the variance. The econometric techniques applied to the meta-regressions are the REML model (restricted, maximum likelihood), the empirical Bayesian model, the process of the moments and the "robust" model. The moderating variables are described in Appendix 1.2. In brackets there are the standard errors. (\*) (\*\*) and (\*\*\*) indicate statistical significance of each coefficient to a level of 10%, 5% and 1% respectively.

The first moderating variable shows that the quality of the publication amplifies the

link between ownership structure and firm value. Therefore, the different type of paper, journal or working paper, represents a possible major source of heterogeneity of the results obtained in the literature. This confirms the hypothesis H.1, so stronger results are a major determining factor of publication since some researchers may not submit a no significant result for publication, and editors may not publish no significant results even if they are submitted.

Another factor that alters the relationship between ownership structure and value is the capacity of the econometric technique to deal with endogeneity. Contrary to what is claimed in the hypothesis H.2, the relationship between ownership concentration and performance is not weaker, but rather stronger when appropriate techniques for controlling problems of endogeneity are applied. Therefore, the use of techniques that take into account problems of endogeneity seems to unearth a greater value of large shareholder, that less sophisticated techniques do not seem able to grasp. The results seem to recall that obtained by Himmelberg et al (1999). In fact, the ownership–performance relationship observed in their OLS tests were much stronger in the tests with instrumental variables. Similarly, Hermalin and Weisbach (1991) find that the use of instrumental variables strengthen (instead of weaken) the results in OLS regressions. This is interesting to be explored by future research through greater use of instrumental variables.

Observing the results regarding the period of analysis, we see that the 80s Dummy coefficients are always negative and significant. Therefore, there is the significance of the time factor, which can be a proxy of the growing availability of firm datasets, that over time also become higher in quality. The studies based on the 80s are supposed to be less accurate than those based on more recent years, and this justifies the obtained results, in accordance to hypothesis H.3.

The distinction between listed and unlisted companies is important for pointing out the difference in the intensity of the relationship between ownership concentration and value in this two so dissimilar categories of firms. According to hypothesis *H.4*, the importance of the role of the majority shareholders increases in listed companies, being the blockholders more active in monitoring the decisions of managers, reducing problems of opportunism.

The inclusion of the legal system as a source of heterogeneity between the studies is aimed at verifying the claims of La Porta et al (1999). The results confirm the role of the legal system in explaining the relationship between ownership structure and value. In particular, consistent with the hypothesis H.6, in Civil Law contexts the positive relationship between

ownership concentration and value is amplified. Therefore, the level of protection granted to investors also justifies the choice of a more appropriate governance model.

Conversely the presence of family ownership seems to not affect the relationship between ownership concentration and performance.

#### 1.9 Conclusions

This chapter analyzes one of the main mechanisms of corporate governance, i.e. the ownership structure of firms in terms of ownership concentration. The objective was to verify the existence of a relationship, and then analyze it. In particular, through the tool of meta-analysis, a methodological approach able to synthesize the state of the art and the sources of heterogeneity among the studies on a given theme, the role of ownership in the process of governance and creation of firm value has been examined in depth. We have studied the direction and strength of the relationship between ownership and value, investigating the possible causes of controversial empirical results found in literature. First, we present the analysis on the effect sizes, and then we show our meta regression models, analyzing the moderating factors. The results offer a number of suggestions for further research on the subject of investigation and, hopefully, ideas for actions to improve corporate governance.

This study reveals the extreme importance of ownership in the creation of value. With reference to the relationship between ownership concentration and value, there is a prevalence of a positive relationship; even in the presence of high levels of ownership concentration, effects resulting from entrenchment do not outweigh the benefits in terms of monitoring of the management by controlling shareholders. However, given the complexity of the issue, it is fundamental to use meta-regressions in the phase of quantitative analysis to test the influence of moderating variables on the intensity of the link between ownership and value. The second and most important output of the meta-analysis is so provided by the meta-regressions, which show how the relationship between ownership and value is, in fact, moderated by several factors. Much of the contradiction in the previous results derive from the fact that some researchers may not submit a non-significant result for publication, and editors may not publish non-significant results even if they are submitted. In fact, it is noted that the authors who publish their studies tend to demonstrate the significance of the relationship between ownership and performance. Additionally, it occurs that the techniques and methods used by the authors affect the results, because the control for the endogeneity

amplifies the effect of ownership on value. Moreover, the time factor, which can be a proxy of the growing availability of firm datasets, turns out to be relevant, since the relationship between ownership concentration and firm value is weakened when the period of analysis refers to the 80s compared to more recent years. Furthermore, the monitoring and incentive problem between owners and managers are major in listed firms, so the relationship between ownership concentration and performance, given the importance of blockholders in solving such types of problems, is stronger compared to unlisted firms. Finally, also the external environment determines the strength of the effect of ownership on value, since blockholders have a considerable importance where the protection of investors is not guaranteed, or in situations with the presence of entrenched managers. Future research should better investigate the role of these variables, as well as the possible moderating effect of other variables of governance, going more deeply into the question of the presence of relations of complementarity or substitutability between instruments of corporate governance.

Managers should pay more attention to the role of ownership, focusing on its benefits and costs. Companies should give due weight to ownership concentration, enjoying its advantages. The benefits of ownership are in fact tangible and visible. However, there are also costs, with reference to problems of opportunism to the detriment of small investors and corporate stakeholders. It is necessary, therefore, to take into account the capacity of the ownership structure to affect firm value. However, benefits and costs of ownership not always occur in a univocal way, but according to the role played by other factors. Therefore, there is a need to develop a broader knowledge of how the potential benefits/costs, arising from ownership structure, can be influenced by other variables of moderation. The systematic examination of multiple studies allows to highlight how the results of a single study are random or due to a systematic error, reaching, through the analysis of the differences in the results, to new hypotheses for new empirical works.

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### **Chapter II**

# The value of blockholders shaped by firm and context-specific moderators: the Italian case

This chapter investigates the role of moderating variables in the relationship between ownership and performance. Based on a unique panel of hand-collected data from listed and unlisted Italian firms, the results of this study reveal that the effect of ownership concentration and, therefore, of blockholders on firm performance is considerably influenced by the role of moderating variables that strictly determine the direction and the magnitude of the relationship between ownership and performance. In general, the results of this study can inform recommendations for improving corporate and country-specific governance mechanisms.

#### 2.1 Introduction

The role of ownership is widely considered to be central; it is the most studied mechanism of internal corporate governance in the literature and is instrumental in the differences in performance among firms as well as the differences in competitiveness across country systems (Claessens and Fan, 2002).

Significant cross-country differences are observed in terms of ownership. The Anglo-Saxon countries manifest highly dispersed ownership structures, whereas in the continental European countries ownership concentration is significantly higher (Faccio and Lang, 2002; Franks and Mayer, 1997; Shleifer and Vishny, 1986). Although in the U.S., the average equity stake of the five largest shareholders in the sample of Fortune 500 is equal to 15.4% (Shleifer and Vishny, 1986), the ownership concentration in the U.K. is 6%, and the corresponding values are 50% or greater for France and Germany (Franks and Mayer, 1997) and are greater than 52% in Italy (Barontini and Caprio, 2006). The causes of this heterogeneity in ownership structures can be attributed, according to La Porta et al (1998 and 2000), to the so-called Law and Finance view, i.e. to different levels of investor protection. In particular, the larger ownership concentration in Civil Law countries (e.g., countries in continental Europe) compared to Common Law countries results from the need for large shareholders to safeguard their own interests under a weak system of contract protection (Barca and Becht, 2001; Barontini and Caprio, 2006; Faccio and Lang, 2002).

The studies of the effect of ownership concentration on performance began in the 1980s and did not reveal any relationship due to problems of endogeneity (Demsetz, 1983; Demsetz and Lehn, 1985); ownership and performance appeared to both be co-determined by other factors, and it was felt that their relationship could be spurious. Subsequently, such studies were continued, analysing the advantages and disadvantages of ownership concentration. Specific attention has been focused on the relevance of the conflict of interest between majority shareholders and minority investors (Faccio and Lang, 2002; Gedajlovic and Shapiro, 1998; Perrini et al, 2008). This issue has noteworthy implications, as illustrated by La Porta et al (1999) in a large-scale, cross-country study, by Barca and Becht (2001) and Faccio and Lang (2002) with regard to European firms and by Claessens et al (2000) with regard to East Asian firms.

Regarding the benefits of ownership, the so-called monitoring hypothesis suggests that the relationship between ownership concentration and performance will be positive in the

presence of conflicts of interest between managers and shareholders, thanks to the active role of large shareholders in limiting managerial discretion and the expropriation of value. This dynamic is widely reflected in the Anglo-Saxon contexts, in which the existence of blockholders leads to better performance (Holderness and Sheehan, 1985; Shleifer and Vishny, 1986). In shaping the decision maker's incentives, ownership may be considered an instrument of managerial discipline that ensures the effectiveness of the processes of value creation (Shleifer and Vishny, 1986 and 1997).

Regarding the disadvantages of ownership, the expropriation hypothesis suggests that the relationship between ownership concentration and performance may be negative because of opportunistic behaviour adopted by blockholders. A high ownership concentration can potentially lead large shareholders to consider their own interests and not those of the other shareholders (Shleifer and Vishny, 1997). As stated by Shleifer and Vishny (1986), large shareholders are individuals who exercise their power to influence decision making within the government to gain economic benefits at the expense of outside investors (minority shareholders and creditors). The majority shareholder is able to extract wealth from the firm and receive all benefits, bearing only a fraction of the costs (Leech and Leahy, 1991; Mudambi and Nicosia, 1998). For example, Lehmann and Weigand (2000), who find that a negative connection exists between ownership concentration and profitability in a sample of German firms, reveal that high levels of ownership are non-optimal. Moreover, concentrated ownership may decrease the diversification and liquidity of the market and therefore may increase the incentives for large shareholders to expropriate firm resources (Florackis, 2008).

An additional perspective study combines the potential advantages and disadvantages of ownership, arguing that the predominant effect depends on the level of ownership concentration (Miguel et al, 2004; Gedajlovic and Shapiro, 1998). The benefits of ownership concentration should exceed the costs up to a certain level, beyond which the relationship should be reversed, with costs and inefficiencies higher than any benefits. Several studies have found a curved relationship in either Anglo-Saxon or European contexts (Miguel et al, 2004; Holderness, 2003). In particular, McConnell and Servaes (1990) identify the optimal threshold of ownership to be approximately 40% for U.S. companies, whereas Miguel et al, (2004) suggest that in Spanish firms the relationship is positive up to a level of ownership concentration of 87%, beyond which performance is adversely affected by ownership concentration.

Even today, the effect of ownership concentration on performance is a much debated topic. The current controversy in the literature seems to highlight the need to investigate the role of moderating factors. In particular, the relationship between ownership and performance appears to be controversial because it may depend on other factors that interact with ownership, amplifying or reducing the effect on performance and affecting both the sign and the magnitude of the relationship. Contributions that verify the role of moderating factors, both at the firm-level and at the institutional-level, are limited.

In response to the relevant literature, this chapter uses Italy as an empirical setting, because in the Italian context this corporate governance mechanism strictly affects companies' *modus operandi*. The Italian case provides unique information that helps to clarify the relationship between ownership and performance in a small and relatively new European stock market (Perrini et al, 2008). The peculiarity of the Italian economic system has long been known (Mengoli et al, 2009). As shown by La Porta, et al (2000), Italy is a Civil Law country with low investor protection. Ownership concentration is high, the business model is family-based, and majority shareholders who preserve corporate control can protect their own interests. Zattoni (1999) documents the prevalence of Italian firms in which the largest shareholder owns more than 51% of equity, highlighting the low level of separation between ownership and control and indicating the lack of widely held firms. Aganin and Volpin (2005), analysing the firms listed on the Milan Stock Exchange in the 20<sup>th</sup> century, found that ownership structure in Italy was more widespread in the 1940s than in the 1980s.

The high level of ownership concentration, even more so in Italy than in other continental European countries, generates a strong influence of large shareholders on firm governance. On the one hand, a greater ownership concentration, which increases the blockholders' sense that they are a part of the firm and their responsibilities, can lead to a more efficient governance and thus could result in higher performance. For this reason, it is appropriate to talk about the "incentive effect" in Italy. Blockholders can financially support the firm by guaranteeing their personal assets, reducing financial constraints and facilitating access to external finance (e.g., Isachenkova et al, 2007). In addition, the presence of a majority shareholder can lead to lower transaction costs by facilitating economic negotiations and relationships with banks, customers and suppliers, as well as with competitors and foreign markets. On the other hand, the largest shareholder in an Italian system may amplify problems of opportunism. In Italy, the risk of expropriation is great when there are large

shareholders with high equity stakes. Thus, there is a need for legislative action to improve the institutional environment, since the Italian system is generally regarded as a poorly functioning one because of its weak legal protection of small shareholders (La Porta, et al, 1999), its underdeveloped capital markets, and the limited monitoring role of banks. These factors can, in fact, lead to the expropriation of small shareholders. Overall, in Italy, there are 'type II' agency problems. In particular, if the largest shareholder is an individual or a family, as is often true in the Italian case, he has significant incentives to expropriation (Villalonga and Amit, 2006). As suggested by Mengoli et al (2009:7), citing Roe (1994), the prevailing role of large shareholders leads to a system characterised by "weak managers, strong blockholders and unprotected minority shareholders". Research in Italy shows how ownership influences different activities and processes. For example, the probability of CEO turnover when the CEO is the owner is extremely low (Brunello et al, 2003). Furthermore, as the ownership concentration increases, the dividend payouts decrease (De Cesari, 2012), as do the remuneration of board members (Barontini and Bozzi, 2011). Finally, increased ownership concentration tends to have a negative effect on the probability of innovation (Minetti et al, 2011).

Regarding the consequences of ownership on performance, the empirical literature in the Italian context highlights controversial findings. Fratini and Tettamanzi (2007), for example, do not obtain statistically significant results. For the 1986-1997 time period, Volpin (2002) finds higher market values in firms with a large blockholder with an equity stake greater than 50%. Additionally, Destefanis and Sena (2007) observe for the 1992-1997 time period that the percentage of shares held by the majority shareholder has a positive impact on the performance of Italian manufacturing firms in terms of the technical efficiency of production. Similarly, for the 2000-2003 time period, Perrini et al (2008) find a positive effect of ownership concentration on performance based on the five largest shareholders. In contrast, for the 1990-2002 time period, Barucci and Cecacci (2005) reveal the negative performance effect of the level of controlling stakes in the hands of the majority shareholder.

The conflicting results that emerge in the Italian and the international literature indicate the confusion regarding the direct relationship between governance mechanisms and performance (Bianco and Casavola, 1999). The contradictory findings may be caused by the central role of moderating factors in this relationship. In fact, the effect of ownership on performance can be classified differently depending on the moderating effect of other firmspecific or institutional-level variables. These moderating variables may determine which

effect is dominant between the incentive and the expropriation ones. This chapter explores the consequences of ownership structure on corporate performance in the Italian context, to determine the influence of moderating factors on this relationship. It is essential to determine the main factors that influence the value of ownership and the interdependencies between ownership and other internal and external governance mechanisms. The chapter draws on the meta-analytic work of Sanchez-Ballesta and Garcia-Meca (2007), which suggests the need to clarify the relationship between ownership and value by analysing the role of moderating variables. Sanchez-Ballesta and Garcia-Meca (2007) suggest that part of the observed variation in the ownership-performance relationship is due to moderating factors that may explain the different results obtained in this much studied field. Moderating factors may affect the relationship between ownership and performance by altering the direction (sign) and intensity (magnitude) of the link. The chapter is also related to other empirical studies, such as that by Seifert et al (2005), which observed that the relationship between ownership concentration and performance depends on intervening country-specific factors.

The results confirm the important role of moderating variables in the analysed relationship. Although the effect is generally positive, the relationship between ownership concentration and performance is negative in listed firms and family-controlled ones. Moreover, the effect vanishes for firms with high debt that have difficulty paying interest. In addition, in contexts in which opportunism is particularly relevant, e.g., in the presence of high free cash flow and low debt, ownership concentration has an increased positive net effect on corporate performance. On the other hand, new governance rules and reforms that improve investor protection have changed the centrality of the majority shareholder. In general, the results of the study can be used to recommend improvements for corporate and country-specific governance mechanisms.

The work is divided into four main sections. The second section describes the model and assumptions. The third presents the results of the empirical analysis, and the concluding section focuses on the managerial implications of the results obtained, as well as on future research directions.

#### 2.2 Model and assumptions

#### 2.2.1 Research hypotheses

The causal link between ownership and firm performance is not unidirectional or isolated, which suggests that a number of potential moderating factors may exist (Sanchez-Ballesta and Garcia-Meca 2007). Ownership is a complex issue, and it is important to empirically determine the moderating effects of firm-specific factors and of the relationship between the firm and its external environment. The effect of ownership on performance is influenced by the institutional setting through direct relations with shareholders and creditors, the effects of the financial system and the legal system, and the enforcement of contracts. Thus, this relationship is conditioned by variables that can play an important moderating role together with ownership, altering the ability of the latter to affect processes of growth and development as well as corporate survival. In practice, the effect of ownership concentration on firm performance may vary due to moderating variables that can change the analysed relationship, making the incentive or expropriation effect more prevalent. Each moderator could alternately amplify (+) or reduce (-) the incentive or expropriation effect associated with ownership, which in turn might improve or worsen firm performance based on these factors. Therefore, the aim of this research is to empirically test the presence of a connection between ownership and other factors that could influence the proper functioning of firm governance and change the effect of ownership on value creation. Many theoretical and empirical analyses have individually examined the link between ownership and performance, producing controversial results that may have resulted from the researchers' failure to consider the interdependencies and complementarities between ownership and other factors. Although various tests have examined ownership and its interaction with a single specific governance mechanism, as in Pindado and De La Torre (2011), which analysed capital structure and ownership, this study extensively analyses the role of multiple moderating variables, both firm-specific factors and elements that are related to the institutional environment.

The research hypotheses that we thus intend to investigate based on the Italian institutional context are as follows:

H.1: The relationship between ownership and performance is negatively moderated by debt. Capital structure represents one of the main mechanisms of corporate governance; it

affects the efficiency of governance and, in general, the success of firms (Mahrt-Smith, 2005; Myers, 2000; Rajan and Zingales, 2000). Coase (1992) notes that capital structure can mediate and moderate economic transactions within a firm<sup>8</sup>. Similarly, Williamson (1988) explains that capital structure choices affect governance structures, changing the exercise of power and the allocation of resources, and Pindado and De La Torre (2011) illustrate the connection between ownership and capital structure. Hence, debt and equity should be considered simultaneously as instruments of financing and as influencing governance: debt generates stringent management rules, whereas equity allows for greater flexibility and discretion<sup>9</sup>. Jensen and Meckling (1976) similarly describe the link between ownership and capital structure<sup>10</sup>. To verify how a financial structure influences firm governance, we test whether the use of debt modifies a large shareholder's incentives to support the business. In general, firm leverage influences corporate governance and methods of exercising control. This effect limits the potential development of firm performance, as suggested by Williamson (1988), and we thus expect a negative moderating effect.

H.2: A higher probability of managerial opportunism in the firm positively shapes the relationship between ownership and performance. Conflicts of interest are particularly relevant for firms with high free cash flow. According to agency theory, the management tends to hoard cash whenever possible to build up the resources under its control (Jensen, 1986). With abundant free cash flow and high discretionary power over assets, a manager is more likely to undertake low-benefit or even value-destroying decisions after valuable investments are made. Due to empire-building preferences, firm size increases beyond the optimal level because this allows higher compensation, power and prestige. In addition, as stated by Jensen (1986), agency costs related to the presence of free cash flow are exacerbated in the presence of low levels of debt. Debt financing is a rule-based governance structure that requires a firm to make interest and principal payments according to the schedule stipulated in the contract to avoid the exercise of the creditors' right to declare a state of bankruptcy. In contexts such as those described by Jensen (1986), which feature high free cash flow, low debt levels, and potential opportunism on the part of those who control

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<sup>&</sup>lt;sup>8</sup> Coase (1992) considers the need for further investigation of transaction cost theory through its application to particular functional areas such as corporate finance, and, in particular, issues such as financial structure.

<sup>&</sup>lt;sup>9</sup> For a discussion of the role of debt as an instrument of corporate governance, see Jensen (1986), Jensen and Meckling (1976) and Williamson (1988).

<sup>&</sup>lt;sup>10</sup> The choice of debt or equity affects the ownership structure and changes the relevance of the interests of some stakeholders with respect to the firm.

the firm, the role of ownership concentration in performance may be conditioned by a stronger monitoring effect, with more stringent monitoring of the management. We therefore expect a positive moderating effect.

H.3: The relationship between ownership and performance is negatively moderated by family control. Thomsen and Pedersen (2003) are among those who argue that the identity of large shareholders has important implications for corporate strategy and firm performance, influencing the value of ownership concentration. Specifically, the use of a family business model in a firm can affect the role of ownership. Family ownership, the dominant ownership structure throughout the world, is widespread in Continental Europe and has relevant implications for business activities (Barca and Becht, 2001; Faccio and Lang, 2002). The family business model is particularly widespread in bank-based countries, with low legal protection for investors and a relatively inefficient market for corporate control. Although the sense of responsibility in family-controlled firms increases among the family members involved in the business, opportunism among controlling shareholders (the family) may particularly harm minority shareholders (the market), especially in contexts in which the financial markets are underdeveloped (Faccio et al, 2001). In Western European contexts, the effect of family control in reducing agency problems between owners and managers is counteracted by significant conflicts between large family shareholders and minority investors (Maury, 2006). Especially in markets in which disclosure is poor, the politically powerful families who control firms are able to expropriate minority shareholder value (Faccio et al, 2001). Therefore, the role of ownership in performance may be conditioned by expropriation that negatively impacts minority investors in family firms, in which the role of large shareholders is affected by family needs and plans. We therefore believe that the moderating effect is negative.

H.4: The relationship between ownership and performance is negatively moderated by listing status. Listed firms have the support of the stock market as an additional source of funding that non-listed firms lack, but listed firms must also comply with disclosure and transparency requirements to reduce information asymmetry and offer greater protection to investors, especially minorities. There may be an adverse relationship between large shareholders of listed firms, mainly the firm founders, and small investors. Given an inefficient institutional framework, a poorly developed financial market and a lack of legislative actions, as in the Italian case, a low level of investor protection creates the danger of opportunism (La Porta, et al, 2008). Listing status generates potential agency problems for

controlling agents and investors, as suggested by Loderer and Waelchli (2010). In Italy, these problems especially concern conflicts between majority shareholders and minority shareholders (investors). If the institutional framework does not sufficiently protect small shareholders who are investing in a listed firm, there will be opportunities for those who have control to expropriate value to the detriment of firm stakeholders. Therefore, the performance effects of ownership can be affected more by expropriation in listed firms, so the moderating effect should be negative.

H.5: The relationship between ownership and performance is negatively moderated by diversification. Diversified firms, those that operate mostly in industries that are different from their core business, incur both benefits and costs. Although diversification reduces business risk and provides greater access to credit, with the beneficial creation of an internal capital market, diversification can be linked to opportunistic behaviour because of greater discretion. Due to the expropriation effect, large shareholders could seek private benefits from diversification at the expense of other stakeholders, using the diversified firm as their own personal "fiefdom" (Lins and Servaes, 2002). Based on this perspective, Lins and Servaes (2002) argue that when the ownership concentration is higher, majority shareholders will tend to extract private benefits at the expense of minority shareholders. We therefore expect a negative moderating effect.

H.6: The relationship between ownership and performance is negatively moderated by the introduction of reforms into the legal system. Historically, as shown by Aganin and Volpin (2005), Italian law has provided little protection for investors, and enforcement by the judicial system is also considered poor. However, in an attempt to increase investor protection, many relevant reforms and legislative acts have been introduced since 1998. The first important reform to protect minority shareholders from expropriation risk was the TUF (Law number 58, instituted in 1998; also known as the Draghi Law). This measure has led to greater disclosure, an increase in minority representation in assemblies, and increased activism by institutional investors (Mengoli et al, 2009; Volpin 2002). In addition, since 1998, other regulatory changes have occurred, and the new laws that have been put into force indicate a new approach to corporate governance. A corporate governance code that was introduced in 1999 have influenced business activity by presenting best practice guidelines for corporate governance. The Corporate Law Reform in 2004 (Vietti Law) was also instituted, along with the 62/2005 and 262/2005 laws in 2005, which addressed market abuse and the protection of savings. There were also a number of regulations introduced to enhance

financial disclosure and transparency (Law 195/2007) and to regulate tender offers on the stock market (Law 229/2007). By improving corporate disclosure and the representation of minority shareholders in Italy, the new legal reform should have made firms less dependent on controlling shareholders. In effect, stronger investor protection should reduce large shareholders' interest in holding increasing amounts of shares to safeguard their interests. Therefore, the introduction of the TUF and of the other reforms should have reduced the role of majority shareholders in influencing corporate performance, so the expected moderating effect is negative.

H.7: The relationship between ownership and performance is negatively moderated by the development of the financial system. The financial system in Italy can be defined as bankbased. A radical reform of the bank regulations began in 1990, and the restructuring process has led to an increase in the system's overall efficiency. More efficient banks have taken over for less efficient ones, making it possible to bolster both the solidity and the profitability of Italy's credit institutions because costs are more constantly monitored and a wider range of services are offered to clients. The range of services has grown in terms of quality, quantity, terms and conditions. A better developed financial system provides more efficient financial support to firms and further control over opportunistic behaviour. Therefore, the role of ownership concentration in terms of effects on performance should be reduced by these changes, as well as is the case of improvement of the legal system. We want to verify whether the introduction of these reforms, increasing protection for investors and thus reducing the centrality of majority shareholders and their importance to value creation, has had a negative moderating effect on the relationship between ownership concentration and performance.

H.8: The relationship between ownership and performance is positively moderated by macroeconomic shocks such as the recent financial crisis. The financial crisis of the late 2000s challenged a host of classical theories regarding corporate governance. A financial crisis represents a relatively exogenous shock (at least for any individual firm) that significantly lowers the available return on investment for firms. As noted by Desender et al (2008), in times of crisis and macroeconomic shocks, a higher level of ownership concentration is associated with superior performance, perhaps because in such contexts, a majority shareholder can support the firm in facing its financial constraints. The analysis performed for Italy, a country that was significantly affected by the recent global crisis of 2008-2009 but was only marginally influenced by the issue of subprime mortgages in 2007,

might allow us to determine the validity of this thesis. At the firm-level, the effects of the recent financial crisis on firm performance are mainly due to the deterioration of firms' financial wealth, which affects operating activities. Thus, ownership concentration can have an active role in supporting firms' financial needs, so we expect a positive moderating effect.

#### 2.2.2 Empirical Model

This study aims to analyse the relationship between ownership concentration and performance using a basic model that introduce the role of the moderating variables.

Performance = f (Ownership Concentration, Moderator, Ownership Concentration x Moderator, Control Variables)

Following Cornett et al (2007), as a measure of performance, we use the industryadjusted operating cash flow return on assets (Adj Cfroa) based on the ratio of the EBITDA to total assets at the end of the year. This ratio measures performance independent of financial leverage. Levels of operating performance may be affected by industry effects. Therefore, following Cornett et al (2007), Denis and Kruse (2000) and Lie (2001), we calculate industry-adjusted performance by selecting control firms that are in the same industry (in accordance with Pavitt's taxonomy<sup>11</sup>) and that are of a similar size in terms of their book assets. Industry-adjusted comparisons allow us to examine firm-specific performance irrespective of any industry-wide factors that may affect ROA (Cornett et al, 2007). In particular, the measure for operating performance is corrected to control for specific industry affiliations by subtracting from the value of the indicator for every firm and each

<sup>&</sup>lt;sup>11</sup> The taxonomy of Pavitt (1984) is a classification of products and services that considers the sources and nature of technological opportunities and innovations, the intensity of research and development, and the types of knowledge flows. The scale intensive group includes those industries that produce standard materials or durable goods. Industries such as food and beverages and metal manufacturing are classified as scale intensive industries. Companies classified as supplier dominated include the forest sector industries. Supplier dominated firms are characterized by weak in-house R&D, and their innovations are drawn from suppliers of equipment or materials. Specialized suppliers are also production intensive, but what differentiates them from those in scale intensive industries is that they tend to be smaller. The fourth group, science-based industries, is characterized by strong links to universities and other science institutes. Within the science based sector, we identify service firms such as IT consulting and communication services firms and classified these as knowledge intensive service firms. The remaining firms were from various service industries such as logistics.

year of observation the mean value obtained for firms of a similar size that belong to the same industry. The use of cash flow ROA as a performance measure offers several advantages (Cornett et al, 2007). Cash flow ROA is a more focused measure of current performance; it does not reflect growth opportunities, is not inflated by expectations regarding the stock market and is less affected by endogeneity problems in analyses of the link between ownership and performance. In addition, operating performance, unlike net income, is not influenced by special charges (Denis and Kruse, 2000).

Ownership concentration is measured as the proportion of shares held directly by the larger shareholder. In this study, as in the previous literature (Lehmann and Weigand, 2000; Perrini et al, 2008), we measure ownership concentration as the percentage stake of the largest shareholder. The share of the largest shareholder indicates his essential voting power: that is, his ability to outvote other shareholders or initiate major changes by himself. Most of the research has followed Demsetz and Lehn (1985) in measuring concentration with respect to a group of owners, typically as the total equity share held by the largest 5 or largest 20 investors. However, the group measure may be ineffective if the firm has a significantly large owner, as most Italian firms do. In such a case, the marginal contributions of smaller blockholders are minor, and the latter may serve only to increase the costs of concentration by reducing market liquidity and the informational value of the share price. If the additional blockholders do not yield net benefits, then the inclusion of their shareholdings in the concentration variable will increase measurement error, thus reducing the magnitude of the estimated performance effect and increasing the standard error. Estimates of the effect of concentration on performance may critically depend on the measure of concentration employed in the study; if one large owner has dominant control of the firm, as is the case in most Italian firms, then measuring only his holdings seems to be more appropriate than using the joint holdings of the top 5 or more owners (Earle et al, 2005). In any case, jointly with our measure of ownership concentration, based on the large percentage of shares held by the first shareholder, we also use a variable calculated as the sum of the percentage of shares directly held by the first 3 shareholders (*Ownership concentration 3*).

Regarding the analysis of moderation, in the basic model we add from time to time an interaction between ownership concentration and the variables that act as proxies for the verification of the moderating hypotheses formulated.

An interaction variable between leverage (ratio of financial debt to financial debt and equity) and ownership is used to verify the effect of debt on the relationship ownership

concentration-performance. Moreover, following Carpenter and Guariglia (2008), this effect is also measured by examining the interaction between ownership concentration and a dummy variable that is equal to 1 for firms with high debt (the threshold is the median in the sample) and a poor ability to meet their commitments to their creditors. The latter is indicated by a low EBITDA (annual earnings before interest and taxes plus depreciation and amortisation) to interest ratio (the threshold is the median in the sample). The dummy identifies firms whose capital structure significantly affects their governance, generating severe financial constraints.

To measure the moderating effect of probability of opportunism in the firm, we examine the interaction between ownership concentration and a dummy variable that is equal to 1 for firms with low debt and high free cash flow (based on median values). Following Jensen (1986), it is possible to consider free cash flow as net income plus depreciation and amortisation scaled by total assets.

To test the hypothesis regarding family control, we use an interaction variable between ownership concentration and a *Family Dummy* that is equal to 1 for family-controlled firms. For a firm to qualify as a family firm, it must meet at least one of the following two criteria: a) the founder and/or family members must hold more than 25% of the shares, or b) if the founding family owns less than 25% of the shares, the family must be represented on either the executive or the supervisory board (Andres, 2008).

To validate the hypothesis inherent listing status, we consider the interaction between ownership concentration and a *Listing Dummy* that is equal to 1 if the firm is listed.

To test whether the relationship between ownership and performance is moderated by diversification status, we consider the interaction between ownership concentration and a dummy variable that is equal to 1 for multi-business firms. To increase the robustness of our results, we also consider the possibility of unrelated diversification, creating an interaction variable with a dummy that is equal to 1 in such cases.

To verify whether the introduction of reforms into the legal system reforms that increase protection for investors and thus reduce the centrality of majority shareholders and their importance to value creation has a moderating effect on the relationship between ownership concentration and performance, we consider the interaction between ownership concentration and a dummy variable that is equal to 1 for the years equal to or later than 1998, when the first reform (the TUF) was enacted.

In addition, we consider the interaction between ownership concentration and a *Bank Reform Dummy* that is equal to 1 for years equal to or later than 1990, when the Bank Reform Act was introduced. Additionally, we consider the interaction between ownership concentration and a variable for bank development, which is calculated as private credit by banks and other financial institutions over GDP. To ensure the robustness of our results, we also use stock market development calculated as total capitalisation over GDP, although the Italian stock market is relatively undeveloped compared not only to the US market but also to some extent to the markets of other large European countries. In fact, very few Italian companies are traded publicly and even large ones (e.g., Ferrero, Barilla) are not listed.

Finally, to test the role of ownership on firm performance during crises, we use the interaction between ownership concentration and a *Crisis Dummy* that is variable equal to 1 for the years 2008 and 2009.

Following the previous literature (Miguel et al, 2004; McConnell and Servaes, 1990; Perrini et al, 2008), after having tested several econometric specifications, we use leverage, tangibility and growth opportunity as our control variables. The variables used are described in detail in Appendix 2.1. The identification of the "best" model is determined passing from more general specifications to gradually more parsimonious ones. In fact, in the first instance the model also included firm age and firm size; however, these variables were not statistically significant, and their inclusion does not changed the estimates, neither increase the explanatory power of the model, so we remove them in order to have a more parsimonious model. In addition, the model includes one dummy for each year of observation to control for the effect of macroeconomic factors on firm performance.

#### 2.3 Empirical analysis

#### 2.3.1 Sample analysis and descriptive statistics

The unbalanced panel data sample in this analysis includes data for both listed and unlisted Italian firms<sup>12</sup> monitored for the period 1980-2009 (30 years). Mediobanca Ricerche & Studi (Ric&St) provides firm-level data for a number of the leading businesses based in

<sup>&</sup>lt;sup>12</sup> Whether a firm is listed has important consequences for the relationship between majority and minority shareholders, but having unlisted firms in the sample does not reduce my ability to interpret the results because whether a firm is listed is taken into account as a moderating variable.

Italy<sup>13</sup>. Ric&St aims to provide a fully comprehensive financial profile of firm operations, enabling users to gain in-depth knowledge of large, leading Italian companies. This database is hand-collected and unique, having been created using Ric&St paper-based reports for the years prior to 2002 and PDF files for the years prior to 2010. A copy of each selected firm's prospectus is used to obtain the firm-level variables required for the empirical investigation. Thereafter, we collect the macro-level data using the World Bank and Borsa Italiana – BiStat databases. The initial sample was composed of 2,734 observations. We begin the sample selection process by eliminating observations that are outliers to avoid distortions in the estimates. Second, firms that do not correspond to the conceptual framework are identified and excluded from the final sample. It is important to note that firms in the financial and insurance sectors are excluded, as well as entities in an "abnormal" situation (e.g., Parmalat and Cirio<sup>14</sup>). Third, observations from the initial sample for which all necessary data are not available for analysis are eliminated. Therefore, the final sample consists of 229 firms (of which 132 are family-controlled firms and 92 are listed firms) and 2,586 observations. Although some firms have been followed throughout the entire period of analysis, data are available for at least 5 years for each firm, and on average, firm data are available for 11.2 years. Compared with previous studies in Italy and other countries, this one employs a longer period of analysis.

A descriptive analysis of the variables allows us to understand the main features and attributes of the relationship, providing fundamental support for the interpretation of the results through the use of regressions.

Table 2.1 provides information on the main statistical characteristics of the variables used in the analysis.

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<sup>&</sup>lt;sup>13</sup> Since 1976, Ric&St has provided a detailed balance sheet analysis, complemented by a profile of each company's history and its operations, the names of its directors and major shareholders, figures on production and market share, and details regarding production facilities, sales, employees and, for listed companies, stock market performance.

<sup>&</sup>lt;sup>14</sup> The Parmalat financial scandals has typical Italian features; in this regard, the comment made by Pier Luigi De Angelis, the CFO of the firm, Parmalat is symptomatic: "...while Enron and Worldcom are dead, Parmalat is still alive". The Cirio bankruptcy in 2003 is another financial scandal, that highlights the power of the Italian banks, able to transfer the Cirio's debt to small investors and families just a couple of months prior to the default.

TABLE 2.1
Descriptive statistics

Variables	Variables N M		Stand. Dev.	1 <sup>st</sup> Quartiles	Median	3 <sup>rd</sup> Quartiles
Adj_Cfroa	2,586	0.00	0.14	-0.09	-0.02	0.05
Ownership Concentration	2,586	0.66	0.26	0.47	0.64	0.97
Leverage	2,586	0.42	0.23	0.23	0.42	0.59
Tangibility	2,586	0.33	0.16	0.24	0.33	0.45
Growth opportunities	2,586	0.09	0.23	0.00	0.06	0.15

As expected for an Italian sample, the level of ownership concentration is very high on average. In fact, the majority shareholder owns more than 60% of the firm share on average. The industry-adjusted performance values range from -0.49 to 0.93, with a mean value close to 0. The average debt ratio in the sample is approximately 42%. The average tangibility index is well below 50%.

Table 2.2 presents the industry composition of the final sample, indicating the mean and standard deviation of the ownership concentration for each sector.

TABLE 2.2
Observations by industry

Sectors	Number of observations	Relative frequencies	Mean of ownership concentration	S. D. of ownership concentration
Food, beverages and tobacco	457	0.13	0.71	0.27
Textiles, apparel and leather	369	0.10	0.63	0.26
Wood products and furniture	80	0.02	0.54	0.28
Paper, paper products and printing	155	0.04	0.62	0.29
Petroleum production	57	0.02	0.87	0.22
Chemicals, rubber and plastic products	394	0.11	0.64	0.26
Manufacture of non-metallic products	251	0.07	0.59	0.20
Manufacture of metal products	211	0.06	0.62	0.24
Mechanical, electric and electronics industry	902	0.25	0.66	0.26
Other manufacturing industries	245	0.07	0.60	0.26
Utility	184	0.05	0.60	0.30
Construction	113	0.03	0.63	0.26
Communication and transportation	125	0.04	0.69	0.30

This industry classification shows that the greatest number of firms are in the mechanical, electrics and electronics industries, followed by the food, beverages and tobacco group and finally the chemicals, rubber and plastic products group. On the other hand, the sector with greatest ownership concentration is that of oil.

Table 2.3 shows the level of correlation between the variables used in the basic model.

TABLE 2.3
Correlations matrix

	Adj_Cfroa	Ownership Concentration	Leverage	Tangibility	Growth opportunities
Adj_Cfroa	1				
Ownership Concentration	0.14*	1			
Leverage	-0.31*	0.04	1		
Tangibility	-0.14*	-0.10*	0.00	1	
Growth opportunities	0.10*	0.01	0.10*	-0.07*	1

In general, the correlations between variables that could affect the validity of the econometric results due to multicollinearity are negligible. In addition, the VIF (Variance Inflactor Factor) test, the results of which are not reported, indicates that the significance of the outcomes produced by using this sample are unbiased in this respect.

#### 2.3.2 The relationship between ownership concentration and performance

This paragraph describes the results of the empirical analysis of the relationship between ownership concentration and performance. The choice of the estimation method used in the analysis deserves special mention as uncorrected coefficient estimates for a panel model can be severely biased. In fact, estimation methodology may significantly affects the inferences drawn from the panel analysis.

The selected estimation method, which can be used to avoid problems of endogeneity and unobserved heterogeneity, is based on the generalised method of moments (GMM) framework. In particular, to avoid the weak instrument problem, the system GMM estimator

is applied (Blundell and Bond, 1998)<sup>15</sup>. Moreover, because the relationship between ownership and performance is considered an empirical issue and because the econometric techniques used may influence the results, together with the GMM model, additional empirical tools have been used. These include pooled OLS and fixed effect estimators (preferable to the use of random effect regression as a result of the Hausman test), the latter performed with and without the use of instrumental variables (2SLS). Moreover, given the possibility of obtaining estimates biased due to the problems of reverse causality, we also apply a SUR model.

Table 2.4 describes the results that indicate the relationship between ownership concentration and performance.

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 $<sup>^{15}</sup>$  All variables are treated as endogenous, since control variables could be determined simultaneously with firm value. Therefore, lags t-1 of all the right-hand side variables have been used as instruments for the first differenced model, and the first differences of all the right-hand side variables have been used as instruments for the model in levels.

TABLE 2.4

Results indicating the relationship between ownership and firm performance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	GMM	OLS	FE	2SLS FE	SURE	GMM	GMM
Variables	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa
Adj_Cfroa (-1)	0.42*** (0.04)					0.41*** (0.04)	0.43*** (0.05)
Ownership Concentration	0.05** (0.02)	0.08*** (0.01)	0.03** (0.01)	0.06*** (0.02)	0.10*** (0.01)	-0.17 (0.12)	
Ownership Concentration <sup>2</sup>						0.16 (0.10)	
Ownership Concentration 3							0.09** (0.04)
Leverage	-0.25*** (0.04)	-0.22*** (0.01)	-0.22*** (0.01)	-0.23*** (0.01)	-0.22*** (0.01)	-0.23*** (0.04)	-0.23*** (0.04)
Tangibility	-0.09** (0.04)	-0.10*** (0.02)	-0.08*** (0.02)	-0.06** (0.03)	-0.09*** (0.02)	-0.08** (0.04)	-0.08** (0.04)
Growth opportunities	0.05*** (0.02)	0.08*** (0.01)	0.06*** (0.01)	0.07*** (0.01)	0.08*** (0.01)	0.05*** (0.02)	0.05*** (0.02)
Constant	No constant	0.07*** (0.03)	0.14*** (0.02)	-0.02 (0.02)	0.01 (0.02)	No constant	No constant
$\frac{N}{R^2}$	2,248	2,586 0.16	2,586 0.15	2,248 0.15	2,248 0.17	2,248	2,248
Arellano-Bond Hansen	1.37 178.41(319)					1.38 169.02(371)	1.09 126.88(319)

The table reports the results of GMM, pooled OLS, FE, 2SLS with FE and SURE regressions, in which the dependent variable is an industry-adjusted performance measure ( $Adj\_Cfroa$ ). The variables are described in Appendix 2.1. The time dummies are included in the model, but the coefficients are not reported. The figures in brackets are the robust standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

The GMM estimates shown in column 1 of Table 2.4 indicate that the estimators have the desired statistical properties in terms of efficiency and consistency<sup>16</sup>. The Arellano and Bond test verifies the presence of second-order serial correlation (which may render the instruments invalid) and is asymptotically distributed as a standard normal distribution under

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<sup>&</sup>lt;sup>16</sup> The results of the GMM estimates are calculated for a sample of 2,586 observations; the sample is reduced to 2,248 because the use of lags requires to exclude some observations.

the null hypothesis of no serial correlation, which is not disproved (Z = 1.37, p = 0.17). The Hansen test in the two-step GMM regression verifies the over-identifying restrictions, and it is asymptotically distributed as a chi-square under the null hypothesis that there is no correlation between the instruments and the error term. In this case, the value obtained is 178.41 with 319 degrees of freedom (p = 1.00), which leads to the non-rejection of the null hypothesis. In addition, we look at the lag structure of the dependent variables, as a highly persistence lag structure is deleterious and makes it difficult to get accurate estimates for endogenous variables (Flannery and Hankins, 2013). In our case, the coefficient of the lagged term  $Adj\_Cfroa$  is equal to 0.42, which indicates a medium level of persistence. However, GMM system is generally reliable regardless of the level of endogeneity or dependent variable persistence and should be the default choice under these conditions (Flannery and Hankins, 2013).

The results in Column 1 show the statistically significant and positive coefficient of the variable Ownership Concentration ( $\beta = 0.05$ , p = 0.04), suggesting the existence of an incentive effect in Italy. Columns 2-4 show the results for the effect of ownership concentration on firm performance obtained by applying the pooled OLS and fixed effect estimator with and without instrumental variables. The results are qualitatively identical and do not change the previous conclusions, especially regarding the positive effect of ownership. In particular, in the case of 2SLS with fixed effects, we consider various instruments for ownership concentration: the lagged performance variable (which is useful for verifying reverse causality) the lagged ownership variable (Hermalin and Weisbach, 1991), firm size (which is strongly correlated with ownership concentration<sup>17</sup>) and industry dummies. The instruments used were found to be particularly significant (F = 301.75, p < 0.01). Even the coefficient obtained for the SUR model (column 5), which we present here only the results concerning the equation of the performance, show once again the positive and statistically significant impact of ownership concentration. As determinants of ownership concentration, we refer to the previous literature, considering, in addition to the lagged performance variable and the lagged ownership variable, the presence of family control and institutional investors, free cash flow, age, size and industry affiliation. Note that some of these methods are less accurate than GMM; the estimate via OLS yields biased and inconsistent results because OLS

<sup>&</sup>lt;sup>17</sup> The size theory states that the ownership of smaller firms tends to remain concentrated, whereas it is more likely that large firms will be widely held; the larger the firm, the greater the dispersion of the stock control (Faccio and Lang, 2002; La Porta, et al, 1998; Morck and Steier, 2005).

omits the fixed effect, while the fixed effect estimate controls for the unobserved (timeinvariant) heterogeneity, but it also yields biased coefficient estimates. The GMM estimation methods for dynamic panels eliminates the fixed effects, but the lagged dependent variable remains correlated with the differenced residual; however, the bias declines with panel length (Flannery and Hankins, 2013), and we have 30 years of analysis. Several econometric techniques have been derived to correct biases. The instrumental variables (IV) approach offers one good option, provided one can identify reliable instruments. Arellano and Bond (1991) use another type of generalized method of moments framework, the difference GMM estimator, to develop valid instruments. The difference GMM method certainly outperforms OLS and fixed effects (FE) estimators when the regression residuals are uncorrelated; however, the lagged levels may provide little information about the first-differenced variable particularly if they are serially correlated (Arellano and Bover, 1995; Blundell and Bond, 1998). For this reason, we prefer to use the "system" GMM estimator: in addition to the firstdifferencing used by Arellano Bond, Blundell and Bond utilize the lagged first differences as instruments in a non-transformed (levels) equation, which among other things, remains the best option for higher levels of endogeneity (Flannery and Hankins, 2013), even with unbalanced panel data such as mine.

Column 6 in Table 2.4 shows the results of the GMM estimates, which test the non-linear relationship between ownership concentration and performance (Miguel et al, 2004; Gedajlovic and Shapiro, 1998; McConnell and Servaes, 1990). The coefficient of the quadratic term is not statistically significant ( $\beta = 0.16$ , p = 0.11). Therefore, the effect of ownership concentration on performance is not shaped by a non-linear relationship. The Arellano and Bond test (Z = 1.38, p = 0.17) indicates the absence of problems of second-order serial correlation. In addition, the value of the Hansen test is 169.02, with 371 degrees of freedom (p = 1.00), and indicates the absence of a correlation between the instruments and the error term.

Finally, column 7 in Table 2.4 reports the results of the regression that measures ownership concentration with respect to the total equity share held by the largest three shareholders, and the coefficient *Ownership Concentration 3* confirms the previous results ( $\beta$  = 0.09, p = 0.03). The Arellano and Bond test (Z = 1.09, p = 0.27) verifies the absence of problems of second-order serial correlation. In addition, the value obtained from the Hansen test is 126.88 with 319 degrees of freedom (p = 1.00). This finding indicates the absence of a correlation between the instruments and the error term.

In essence, Table 2.4 indicates the positive and statistically significant coefficient of the ownership variable. Ownership concentration may indicate virtuous governance by blockholders, who are able to bolster business performance and capture the major benefits of successful operational and strategic choices given the equity held. Therefore, the empirical evidence indicates that greater ownership concentration, which increases blockholders' sense of belonging and responsibility to their firm, may generate more efficient corporate governance, which can result in higher performance. Moreover, the positive relationship between ownership concentration and performance can be a signal that blockholders are able to financially support firms using their resources, eliminating financial constraints. In addition, the presence of large shareholders can lead to lower transaction costs, including in economic negotiations and in relationships with banks, customers and suppliers, as well as competitors and foreign markets.

About the control variables, leverage, tangibility and growth opportunities always have coefficients that are statistically significant and are consistent with those presented in other relevant studies. The former two variables have a negative effect on firm performance, whereas the growth opportunities variable has a positive effect.

Hereinafter, to avoid that our results may be related to the methods of construction of the lags for the GMM, we test in table 2.5 some regression with several modifications of lags.

TABLE 2.5

Tests on GMM regression with modifications of lags

VARIABLES	(1)	(2)	(3)	(4)
	GMM	GMM	GMM	GMM
	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa
Adj_Cfroa (-1)	0.42***	0.43***	0.40***	0.47***
	(0.04)	(0.04)	(0.04)	(0.04)
Ownership Concentration	0.05**	0.04*	0.04*	0.09***
	(0.02)	(0.02)	(0.02)	(0.03)
Leverage	-0.24***	-0.23***	-0.26***	-0.16***
	(0.03)	(0.04)	(0.03)	(0.04)
Tangibility	-0.07*	-0.11**	-0.10***	-0.08*
	(0.04)	(0.05)	(0.04)	(0.05)
Growth opportunities	0.05***	0.06***	0.09***	0.05***
	(0.02)	(0.02)	(0.01)	(0.02)
N	2,248	2,248	2,248	2,248
Arellano-Bond	1.36	1.39	1.35	1.47
Hansen	168.28(318)	178.78(319)	177.10(310)	175.89(315)

The table reports the results of GMM regressions with different combinations of lags of the explanatory variables, in which the dependent variable is an industry-adjusted performance measure ( $Adj\_Cfroa$ ). The variables are described in Appendix 2.1. The time dummies are included in the model, but the coefficients are not reported. The figures in brackets are the robust standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

As it is possible to see, the results remain unchanged even altering the lags used in the system GMM, confirming the robustness of the results.

Since the performance measure used may have affected the results obtained, as robustness of our findings,  $Adj_Roa$  is used as a dependent variable, again calculated by correcting the ROA for sector-specificity (i.e., for each year of observation, the average value obtained for firms in the same industry is subtracted from the value of the indicator for each firm). The results are qualitatively identical and do not alter the conclusions reached in the analysis, especially regarding the positive effect of ownership. Even using CfRoi or Roa, the results are qualitatively similar.

## 2.3.3 Moderating effects

Although past analysis shows that the allocation of ownership and control in Italy is inefficient due to the high stability of control in large firms (Barucci and Cecacci, 2005), we have found a positive relationship based on the empirical findings for Italy (e.g., Perrini et al, 2008; Volpin, 2002). Studies in Europe found both positive relationships (e.g., Kapopoulos and Lazaretou, 2007, in Greece) and negative links (e.g., Lehmann and Weigand, 2000, in Germany). The lack of clarity regarding the direction of the relationship may result from the existence of other factors that affect performance. In fact, our results show a (net) positive effect of ownership concentration on corporate performance, but the relationship may be influenced by other factors that can change the sign and intensity of the relationship. To determine how firm-specific characteristics and environmental factors influence the role of ownership, further analyses are conducted to test the conditional effect of ownership on performance. The interactions between ownership concentration and various moderating variables are included in the model to measure the effect on the ownership-performance link.

Table 2.6 shows the empirical evidence of how the relationship between ownership concentration and performance is influenced by firm-specific moderator variables.

TABLE 2.6

The role of firm-specific moderating variables on the relationship between ownership and performance

	(1) GMM	(2) GMM	(3) GMM	(4) GMM	(5) GMM	(e) GMM	(7) GMM
VARIABLES	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa	Adj_Cfroa
Adj_Cfroa (-1)	0.42***	0.39***	0.41***	0.39***	0.41*** (0.04)	0.41***	0.41***
Ownership concentration	0.12**	0.08***	0.03*	0.09***	0.05**	0.03 (0.04)	0.04 (0.03)
Leverage	-0.11* (0.06)	-0.18*** (0.04)	-0.20*** (0.04)	-0.26*** (0.04)	-0.24*** (0.03)	-0.23*** (0.03)	-0.24*** (0.04)
Own conc × leverage	-0.17* (0.10)						
High Leverage & Low Ebitda/Interests Dummy		0.01 (0.02)					
Own conc $\times$ High Leverage & Low Ebitda/Interests Dummy		-0.08** (0.03)					
Low Leverage & High Cash Flow			0.00 (0.02)				
Own conc × Low Leverage & High Cash Flow			0.07**				
Family Dummy				0.03 (0.03)			
Own $conc \times Family Dummy$				-0.11** (0.04)			
Listing Dummy					0.04 (0.03)		
Own $conc \times Listing Dummy$					-0.08* (0.05)		
Diversification Dummy						-0.02	

						(0.03)	
Own conc $\times$ Diversification Dummy						0.03 (0.05)	
Unrelated diversification Dummy							-0.03 (0.03)
Own conc $\times$ Unrelated diversification Dummy							0.04 (0.05)
Tangibility	-0.08* (0.04)	-0.09** (0.04)	-0.07 (0.04)	-0.06 (0.04)	-0.09** (0.04)	-0.08** (0.04)	-0.08* (0.04)
Growth opportunities	0.05*** (0.02)	0.05*** (0.0160)	0.05*** (0.02)	0.052***	0.05***	0.05*** (0.02)	0.05*** (0.02)
N Arellano-Bond Hansen	2,248 1.37 187.84(373)	2,248 1.42 182,21(427)	2,248 1.54 188.07(427)	2,248 1.30 177.86(427)	2,248 1.32 184,43(427)	2,248 1.34 177,44(427)	2,248 1.37 181.21(427)

The table reports the results of GMM regressions where the dependent variable is a proxy for firm performance. Among the explanatory variables of interest there are the values for ownership concentration and the firm-specific factors as interaction variables. The time dummies are included in the model, but the coefficients are not reported. The figures in brackets are the robust standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively. In all of the Table 2.6 regressions, key assumptions are verified. The Arellano and Bond tests do not indicate the existence of problems related to second-order serial correlation, and the results of the Hansen tests indicate the validity of the models. Furthermore, the level of persistence of the dependent variable is always not overly worrisome.

Column (1) in Table 2.6 contains a negative and statistically significant interaction term ( $\beta = -0.17$ , p = 0.08), showing that the effect of ownership concentration on performance decreases with increasing debt. Consequently, the H.1 hypothesis is confirmed: firm leverage influences corporate governance and the exercise of control, which limits the potential to further develop firm performance, as suggested by Williamson (1988). Changes in the composition of debt and equity modify the incentives of blockholders to influence management choices and business activities. As observed by Rajan and Zingales (2000), the capital structure influences the manner in which the surplus generated is distributed and thus affects the appropriability of the created value. Therefore, the results show that a lower level of debt makes possible to magnify the positive effect of ownership concentration on firm performance. Column (2) in Table 2.6 shows the results obtained using a dummy for firms with high debt and significant difficulty covering borrowing costs through operating returns. The results confirm what has been indicated in column (1): the overall effect of ownership concentration on performance becomes zero, which indicates that financial distress intimidates majority shareholders, limiting business activity with a detrimental effect on firm performance.

The results presented in column (3) of Table 2.6 confirm H.2, as the coefficient of the interaction variable is positive and statistically significant ( $\beta = 0.07$ , p = 0.05). In contexts such as those described by Jensen (1986), in which opportunism is particularly relevant (e.g., in the presence of high free cash flow and low debt), ownership concentration encourages managerial discipline. In essence, when opportunism is more relevant, the majority shareholder plays a central role because he can maintain the efficiency of governance to ensure higher performance.

The results in column (4) show that the effect of ownership concentration on performance depends on the existence of family control, which confirms H.3: family control has a negative impact on the effect of ownership concentration on performance ( $\beta = -0.11$ , p = 0.04). The presence of a family in a firm can affect ownership because it generates significant conflicts between large family shareholders and minority investors (Maury, 2006).

Especially in markets where disclosure is poor, the politically powerful families who control firms are able to expropriate minority shareholder value (Faccio et al, 2001).

The results in column (5) confirm H.4, showing that the effect of ownership concentration on performance depends on the listed firm's status. Ownership has a positive effect in unlisted companies, whereas the negative and statistically significant coefficient of the interaction variable ( $\beta = -0.08$ , p = 0.10) indicates that ownership has a negative effect in listed firms. Consequently, given the inefficiency of the Italian stock market and the conflicts of interest between large shareholders and minority shareholders, increasing ownership concentration in listed firms seems to lower performance. In listed firms, in fact, the potential for opportunism is significant, and the institutional context intensifies the problem because small shareholders who invest in listed firms are insufficiently protected.

Finally, the results presented in column (6) and (7) do not support H.5. Whether a firm is diversified does not change the effect of ownership concentration on performance, a fact that is confirmed when both the total *Diversification Dummy* ( $\beta = 0.03$ , p = 0.52) and the *Unrelated diversification Dummy* ( $\beta = 0.04$ , p = 0.40) are used as moderating variables.

On the other hand, Table 2.7 shows the empirical evidence regarding the relationship between ownership concentration and performance as influenced by country-specific moderating variables.

TABLE 2.7

The role of institutional factors as moderating variables on the relationship between ownership and performance

VARIABLES	(1) GMM Adj Cfroa	(2) GMM Adj Cfroa	(3) GMM Adj Cfroa	(4) GMM Adj_Cfroa	(5) GMM Adj Cfroa
Adj_Cfroa (-1)	0.42*** (0.04)	0.42*** (0.04)	0.41*** (0.04)	0.41*** (0.04)	0.41*** (0.04)
Ownership concentration	0.07* (0.04)	0.03 (0.04)	0.04 (0.06)	0.07** (0.03)	0.02 (0.02)
TUF Dummy	0.04** (0.02)				
Own conc × TUF Dummy	-0.07* (0.04)				
Bank Reform Dummy		-0.02 (0.03)			
Own conc × Bank Reform Dummy		0.00 (0.05)			
Bank development			-0.67** (0.31)		
Own conc × Bank development			0.01 (0.08)		
Stock market development				0.29*** (0.10)	
Own conc × Stock market development				-0.05 (0.08)	
Crisis Dummy					-0.01 (0.01)
Own conc × Crisis Dummy					0.01 (0.02)
Leverage	-0.22*** (0.03)	-0.22*** (0.04)	-0.24*** (0.04)	-0.26*** (0.04)	-0.25*** (0.03)
Tangibility	-0.08* (0.04)	-0.09** (0.04)	-0.09** (0.04)	-0.09** (0.04)	-0.08* (0.05)
Growth opportunities	0.05*** (0.02)	0.05*** (0.02)	0.05*** (0.02)	0.04*** (0.01)	0.04*** (0.01)
N Arellano-Bond Hansen	2,248 1.36 179.99(427)	2,248 1.38 167.45(427)	2,248 1.35 181.26(427)	2,248 0.53 193.25(427)	2,248 0.53 188.42(427)

The table reports the results of GMM regressions where the dependent variable is a proxy for firm performance. Among the explanatory variables of interest there are the values for ownership concentration and the institutional factors as interaction variables. The time dummies are included in the model, but the coefficients are not reported. The figures in brackets are the robust standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical

In all of the Table 2.7 regressions, key assumptions are verified. The Arellano and Bond tests do not indicate the existence of problems related to second-order serial correlation, and the results of the Hansen tests indicate the validity of the models. Furthermore, the level of persistence of the dependent variable is always not overly worrisome.

The results presented in column (1) confirm H.6, showing the importance of the legal context to the effect of ownership concentration on performance ( $\beta = -0.07$ , p = 0.03). In fact, with the introduction of the TUF, improved governance rules in the market and increased investor protection have reduced the centrality of majority shareholders. It is possible that after 1998, firms acquired the capacity to act in the interest of their shareholders, exhibiting greater independence and objectivity, and that this new dynamic changed the centrality of majority shareholders to performance.

Columns (2), (3) and (4) show that the development of the financial system in Italy does not seem to have affected the relationship between ownership concentration and performance. In fact, the coefficients of the interactions between ownership concentration and the *Bank Reform Dummy* ( $\beta = 0.00$ , p = 0.53), *Bank development* ( $\beta = 0.01$ , p = 0.87), and *Stock market development* ( $\beta = -0.05$ , p = 0.54) are not statistically significant, which indicates that the role of ownership in performance should not be influenced by the quality of the financial system.

Finally, column (5) shows the results regarding the role of macroeconomic shocks in the relationship between ownership concentration and performance. The lack of statistical significance of the coefficient of the interaction variable ( $\beta = 0.01$ , p = 0.67) indicates that the large shareholders of the Italian firms were not active participants in corporate governance during the credit crunch. During the years of the financial crisis, the large Italian shareholders should actively pursue policies that would support business activities. However, the results suggest that in times of crisis, large shareholders were "aloof" and did not provide adequate support to sustain business performance. The crisis therefore seems to have generated panic and fear even among the large shareholders, weakening their support. Perhaps the macroeconomic shocks aroused concerns that have led large shareholders to not wish to expose themselves by supporting their firms.

#### 2.3.4 Further analysis

For the study of the relationship between ownership structure and firm performance, from the perspective of empirical study, the governance reforms have an important significance. Following a long tradition of agency theorists who have examined the positive relationship between ownership concentration and firm performance, and seeing that, however, this positive relationship may be affected by a number of moderating variables, we argue that ownership concentration is both a "governance" and a "context" issue. Focusing on the role of firm-specific moderating variables, it is relevant to ask whether and how the legislative changes described above have affect these moderation effects.

In order to take account this aspect, we consider only the sub-temporal samples for the years subsequent to the first major reforms that have, in several respects, changed the level of investor protection and the efficiency of the financial system in Italy. Within these sub-samples, we replicate the analysis of moderation of firm-specific variables, to check if there are significant difference compared with previous results.

First, we consider the year after TUF reform (1998-2009). Table 2.8 shows the results.

**TABLE 2.8** 

The role post-TUF of firm-specific moderating variables on the relationship between ownership and performance

	(T)	(5)	(3)	(4)	(5)	(9)	(Z)
VARIABLES	Adj_Cfroa						
Adj_Cfroa (-1)	0.38***	0.34***	0.37***	0.35***	0.35***	0.35***	0.35***
Ownership concentration	0.16*** (0.05)	0.12*** (0.03)	0.07** (0.03)	0.15*** (0.04)	0.13*** (0.03)	0.12*** (0.03)	0.12***
Leverage	-0.04 (0.04)	-0.21*** (0.05)	-0.17*** (0.05)	-0.27*** (0.05)	-0.26*** (0.05)	-0.25*** (0.04)	-0.25*** (0.05)
Own conc × leverage	-0.30*** (0.08)						
High Leverage & Low Ebitda/Interests Dummy		0.06**					
Own conc $\times$ High Leverage & Low Ebitda/Interests Dummy		-0.12*** (0.03)					
Low Leverage & High Cash Flow			0.04 (0.03)				
Own conc × Low Leverage & High Cash Flow			0.03 (0.04)				
Family Dummy				0.11*** (0.03)			
Own conc × Family Dummy				-0.16*** (0.05)			
Listing Dummy					0.10** (0.04)		
Own conc $\times$ Listing Dummy					-0.14*** (0.05)		
Diversification Dummy						0.05*	

						(0.03)	
Own conc × Diversification Dummy						-0.06 (0.04)	
Unrelated Diversification Dummy							0.06 (0.04)
Own conc $\times$ Unrelated diversification Dummy							-0.07 (0.05)
Tangibility	-0.03 (0.05)	0.02 (0.04)	-0.01 (0.04)	0.01 (0.05)	-0.01 (0.05)	0.02 (0.04)	0.03 (0.05)
Growth opportunities	0.10***	0.11*** (0.03)	0.11***	0.11*** (0.03)	0.10***	0.10***	0.10***
N Arellano-Bond Hansen	968 1.48 151 73(168)	968 1.26 149 53(168)	968 1.49 143 02(168)	968 1.40 144 66(168)	968 1.38 145 91(168)	968 1.43 150 09(168)	968 1.40 147 58(168)

The table reports the results of GMM regressions where the dependent variable is a proxy for firm performance. Among the explanatory variables of interest there are the values for ownership concentration and the firm-specific factors as interaction variables. The time dummies are included in the model, but the coefficients are not reported. The figures in brackets are the robust standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively. In all of the Table 2.8 regressions, key assumptions are tested. The Arellano and Bond tests do not indicate the existence of problems related to second-order serial correlation, and the results of the Hansen tests indicate the validity of the models. Furthermore, the level of persistence of the dependent variable is always not overly worrisome.

The results obtained in the Table 2.6 are confirmed, except that of the column 3, i.e. that concerning the capacity of ownership concentration to limit the problems of opportunism in contexts such as those described by Jensen (1986). The lack of significance of the corresponding coefficient ( $\beta = 0.03$ , p = 0.43) can be justified by the fact that improving the protection of minority shareholders in Italy have made firms less dependent on controlling shareholders, failing the need of a stronger monitoring effect on the part of the latter.

Finally, we look at the sub-sample of the years after the Bank Reform Act (1990 – 2009). The results are reported in Table 2.9.

TABLE 2.9

The role post-Bank Reform Act of firm-specific moderating variables on the relationship between ownership and performance

	(T)	(2) GMM	(3)	( <del>4</del> )	(5) GMM	(9) (9)	
VARIABLES	Adj_Cfroa						
Adj_Cfroa (-1)	0.41*** (0.05)	0.40***	0.41***	0.39***	0.41*** (0.05)	0.41***	0.42***
Ownership concentration	0.15*** (0.04)	0.11*** (0.03)	0.07*** (0.02)	0.14*** (0.03)	0.11*** (0.03)	0.10*** (0.03)	0.09***
Leverage	-0.12*** (0.04)	-0.19*** (0.04)	-0.17*** (0.03)	-0.25*** (0.04)	-0.24*** (0.03)	-0.23*** (0.04)	-0.24*** (0.04)
Own conc × leverage	-0.19*** (0.07)						
High Leverage & Low Ebitda/Interests Dummy		0.03 (0.02)					
Own conc $\times$ High Leverage & Low Ebitda/Interests Dummy		-0.11*** (0.03)					
Low Leverage & High Cash Flow			0.02 (0.03)				
Own conc × Low Leverage & High Cash Flow			0.05 (0.04)				
Family Dummy				0.07**			
Own $\operatorname{conc} \times \operatorname{Family} \operatorname{Dummy}$				-0.12*** (0.04)			
Listing Dummy					0.07* (0.03)		
Own conc $\times$ Listing Dummy					-0.11** (0.06)		
Diversification Dummy						0.03	

						(0.03)	
Own conc × Diversification Dummy						-0.03 (0.05)	
Unrelated diversification Dummy							0.02 (0.04)
Own conc $\times$ Unrelated diversification Dummy							-0.01 (0.04)
Tangibility	-0.05 (0.04)	-0.03 (0.03)	-0.03 (0.03)	-0.01 (0.04)	-0.02 (0.04)	-0.01 (0.04)	0.01 (0.04)
Growth opportunities	0.07*** (0.02)	0.07***	0.07*** (0.02)	0.07***	0.07***	0.07*** (0.02)	0.07***
N Arellano-Bond Hansen	968 1.68 170.59(297)	968 1.66 161.11(297)	968 1.69 163.60(297)	968 968 1.69 1.60 163.60(297) 156.06(297)	968 1.68 168.54(297)	968 1.63 168.67(297)	968 1.60 170.64(297)

The table reports the results of GMM regressions where the dependent variable is a proxy for firm performance. Among the explanatory variables of interest there are the values for ownership concentration and the firm-specific factors as interaction variables. The time dummies are included in the model, but the coefficients are not reported. The figures in brackets are the robust standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively. The Hansen test shows the validity of the model, but the results of this table should be read with caution, since the selected temporal subsample presents in some cases problems in terms of second order serial correlation. In fact, the Arellano and Bond test assumes the values a little bit high, not sufficient to reject the null hypothesis of absence of second order serial correlation. The level of persistence of the dependent variable is not extremely high.

The results of Table 2.9 are similar to those of Table 2.8; also in this case there is a decrease in the role of ownership concentration as a mean to solve the problems of opportunism typical of the contexts described by Jensen (1986), as the coefficient is not statistically significant ( $\beta = 0.05$ , p = 0.20). The findings in the column 3 shows that a better developed financial system provides more efficient financial support to firms and, above all, further control over opportunistic behaviour; therefore, the role of ownership concentration is reduced by these changes.

#### 2.4 Conclusions

Using Italy as an empirical setting, the chapter examines ownership concentration, highlighting its effects on business performance. In particular, the chapter focuses on the role of moderating variables at the firm-specific and context-specific level in probing the link between ownership and performance. The innovative quality of the chapter is its deeper analysis of the effect of ownership on firm performance, which is significantly influenced by the role of moderating variables. Ownership concentration appears to be strictly affected by other moderator factors. In general, we must develop a greater sensitivity to ownership structure decisions and become aware of their economic or financial consequences and their influence on competition, as well as their direct and indirect effects on activities and governance processes.

The evidence we obtain generally indicates the positive relationship between ownership concentration and operating performance. First, when we do not consider the role of moderating factors, the results reveal a positive monotonic relationship that is strong and statistically significant; there is no evidence of a non-linear relationship. Ownership concentration (and therefore, the presence of large shareholders) gives a positive contribution to the process of business development. Ownership structure affects firm performance, encouraging virtuous behaviour and limiting conflicts of interest and opportunism. There is an incentive effect on large shareholders, who identify themselves with the firm, feel directly responsible for its performance and benefit from the value created in proportion to the equity share that they hold. At the same time, the positive relationship between ownership concentration and performance may indicate the ability of

blockholders to limit corporate financial constraints by supporting firm-level access to credit using their own assets and relationship capital. This result may also highlight the ability of large shareholders to reduce transaction costs by supporting the economic relationships of the firm with banks, customers and suppliers, as well as with competitors and foreign markets. In essence, it is important to note that in the Italian scenario, ownership concentration seems to facilitate improved business management. Although it is said that in Italy a controlling shareholder can still "live like a king" (Meoli et al, 2008), blockholders can allow companies to attain positive performance.

Nevertheless, this relationship is actually moderated by several factors, and it can even become negative.

The positive effect of ownership concentration on performance decreases under high indebtedness and difficulty meeting commitments to creditors. Leverage influences corporate governance, changing how command is exercised and generating stringent financial constraints. The dependence of most Italian firms on external capital, which imposes stricter management rules, generates costs that are often difficult to pay in the long term. This dependency limits the propensity of firms to invest, and such investment may be critical for development and value creation. In fact, the major Italian companies have very high levels of leverage (e.g., Pirelli, Italmobiliare, Enel, Telecom, and Fiat), which allows controlling shareholders to do business primarily with other people's money (banks or small investors). Our conclusion questions the role of debt as a mechanism of corporate governance. The debt limits the incentives for large shareholders to act, reducing the discretionary decision making and the positive effect of ownership on corporate performance. In addition, the majority shareholders of firms with difficult financial circumstances seem to worsen such situations rather than improving them because the shareholders attempt to protect their investments even at the expense of firm performance. Therefore, given our findings and those of Pindado and De La Torre (2011), we suggest greater complexity in competitive and organisational contexts requires a redesign of the financial structures at play in combination with ownership.

Moreover, the influence of ownership is different in contexts such as those described by Jensen (1986), in which problems of opportunism are particularly pressing. As this empirical evidence indicates, higher levels of ownership encourage majority shareholders to achieve important goals and sustain virtuous processes of value creation. In other words, when the degree of opportunism is significant, ownership concentration has a more positive effect on corporate performance, and the role of majority shareholders, who can maintain the efficiency of governance and support firm performance, becomes central. A higher ownership concentration, which

encourages a greater commitment and presence by the majority shareholder within the firm and increases his accountability to and identification with the firm, can facilitate value creation. Therefore, ownership structure appears capable of protecting value through opportunistic choices, ensuring the efficient allocation of resources through governance.

However, a higher ownership concentration decreases performance in family-controlled firms, indicating significant agency problems. Family governance therefore seems to accentuate the agency costs of equity, generating a negative effect on performance. In a context like the Italian one, which is characterised by a poor-quality legal environment and a high ownership concentration, the family, as the dominant shareholder, will be more inclined to expropriation. Future research might consider whether one can limit this effect, for instance, by reducing the involvement of family members in managing the board.

The status of a listed company can also influence the relationship between ownership and performance, as increasing ownership concentration in listed firms yields negative performance. It seems likely that inefficiency in the financial market and a lack of legislation and regulations may encourage the expropriation of value by large shareholders of listed first, disadvantaging small shareholders. The degree of development of the financial system, together with other institutional factors, is essential to whether listing can benefit the firm. Why are the best Italian companies not listed on the stock market? For instance, why are large firms such as Ferrero, Barilla and Armani not listed on the Italian stock market? In Italy, the decision to be listed is often not driven by the desire to access more rapidly available and less costly funding sources or to attract private and institutional investors. The decision is instead based on convenience or the desire to exercise control over sectors of the economy. The results obtained from the analysis have significant implications for firm management teams and for policy makers, suggesting the need for greater efforts to improve the efficiency of the Italian stock market. Our results contribute to the literature by providing additional guidance to policy makers engaged in the on-going debate regarding the proper role and design of corporate governance and legal institutions.

Additionally, new regulations and reforms that can improve the protection of minority shareholders and retail investors can reduce the role of large shareholders and their contribution to governance. In particular, the introduction of the TUF in 1998 and other further laws seems to have reduced the positive effect of ownership concentration on performance, limiting the centrality of the majority shareholder and the importance of the latter's contribution to firm performance. This result supports the concept that ownership concentration and legal protection are substitutable for one another as a means to resolve the problem of opportunism. This is fully confirmed by the analysis of

temporal subsamples, looking at the opportunistic situations described by Jensen (1986), since the presence of large blockholders, in this sense, is irrelevant in Italy after the reforms aimed at improving the institutional framework. The results is that shareholders, after the reforms, rely less on ownership concentration to protect their interests from managerial opportunism. Therefore, policy makers should improve governance systems and provide legal protection for outside investors by designing policies that reduce the costs of the information asymmetries associated with external finance. We should stress that, however, La Porta et al (1999) point out that controlling shareholders normally do not support the legal reform that would enhance minority rights and they usually lobby against it. Protracted and slow reforms imply that the probability of abuses of minority shareholders in the future remain high. Political links between firms, especially large holding companies, banks and all levels of the state are still very strong in Italy, and a intentionally insufficient legislative framework may also be a consequence of rent-seeking behavior of politicians who have strong formal and informal relations with influential shareholders (Modigliani and Perotti, 1997).

This study suggests new research directions related to ownership structure, as it is clear that we must more deeply examine the effects of moderating variables on the relationship between ownership concentration and performance. Given the results of our analyses, we conclude that the value of ownership cannot be assessed unless the role of moderating variables is considered jointly with that of ownership. The chapter suggests that the relationship between ownership and performance may need to be contextualised, with attention paid to particular firm-specific characteristics and environmental conditions. In addition, the work contributes to the debate on the effects of the new regulations inspired by the Anglo-Saxon model of corporate governance in European countries, since these new rules are based on those that are in force in Common Law countries. Regarding the limitations of the present work, we should note that the findings presented here are relevant to the Italian context, so they may be generalised most effectively to firms in countries that are similar to Italy in that they feature a bank-based financial system that is full of friction and has a poor corporate governance system. For this reason, future research should also explore the effect of other moderating variables; for example, it might be interesting to test the moderating role of context in the relationship between ownership concentration and performance in a cross-country analysis. Finally, one could investigate the role of moderating variables by also considering the value of other dimensions of ownership structure, such as managerial ownership.

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# **Chapter III**

# Foreign blockholders in European companies: antecedents and consequences

The chapter focuses on the presence of foreign blockholders in European companies, and refers to the ability of this type of investors to substitute for weak governance system. Our study, in particular, analyzes how the relationship between firm-level corporate governance factors and the presence of foreign blockholders in a firm can be different depending on the external corporate governance system of the company itself. In addition, we investigate the performance of the recipient firms, to observe potential effects of foreign blockholding, according to the different degrees of effectiveness of country-level corporate governance system.

#### 3.1 Introduction

The globalization and liberalization of markets, as well as technological innovations, resulting in a reduction in transaction costs, have led to an alteration of the competitive "battle" among firms, and also to an enlarging of the borders field in which companies used to operate. To be able to face and overcome the competitive challenge, therefore, it is now necessary to go beyond national borders, and this applies to both large and small firms that want to compete successfully.

Preceded respectively by the growth of export flows and agreements between firms, the movements of foreign capital derive from a series of economic and institutional assessments. According to the definition of the International Monetary Fund, Foreign Direct Investments (FDI) are investments made by a resident entity in one country aimed to establish a long term relationship (i.e. lasting interest) in a non-domestic company, influencing the management<sup>18</sup>. Foreign investors have emerged as an important group of investors in many financial markets (He et al, 2013). Both theoretical models and empirical evidence have highlighted significant benefits of foreign capital to finance economic growth (Bekaert and Harvey, 1997). In the current international context, foreign direct investments are a key to better understand the logic of economic integration between the various countries of the world. The capital movements not only nourish capital inflows and encourage an improvement in the process of accumulation, but above all play a role as a driving force for development both at micro and macro levels<sup>19</sup>. In addition, foreign shareholders may also help improving disclosure quality of the invested firms (Aggarwal et al, 2011). The criticism that is often made in relation to the control by foreign owners is the possibility that they can take ownership of brands and technologies, "dismantling" domestic production.

The ability to attract investment assumes, therefore, a strategic role in promoting development. In addition, the attractiveness of a country becomes an effective indicator of the vitality of the national production system. FDI flows thus represent an important vehicle to accelerate the economic growth of a country and, consequently, in-depth knowledge of the determinants of such capital movements and of its natural consequences is essential to guide the strategies of both practitioners and policy makers.

<sup>&</sup>lt;sup>18</sup> see http://www.imf.org/external/np/sta/di/glossary.pdf

<sup>&</sup>lt;sup>19</sup> Foreign capital may be a source of opportunities for economic growth: in fact, investment by foreign investors should lead to a greater demand for equity capital, and thus lower costs of financing. This can help companies to compete more effectively in the global marketplace and, therefore, to promote the economic development of the country in question.

Special attention should be paid to those foreign investors who hold particularly high equity stake in the company, so as to significantly influence the processes of value creation, i.e., foreign blockholders. In fact, many foreign investors are also blockholders, and they may be large enough to exert influence over management if they wish to. Around the world, 35% of publicly listed firms possess a foreign blockholder, that almost half are the largest investors in the firm, and in some markets the proportion of firms with a foreign blockholder rises to over 50% (Liu et al, 2012). As an illustration, table 3.1 gives examples of how some leading companies in the international scene have significant shares (i.e. 5% or more) of foreign blockholding in their shareholder structure.

TABLE 3.1

Examples of companies that hold significant shares of foreign blockholding (last available data)

Firm's name	Firm's country	Largest foreign blockholder	Largest foreign blockholder's country	Largest foreign blockholder's equity stake
Air France-KLM S.A.	France	Donald Smith & Co., Inc.	U.S.	5.26%
Alitalia	Italy	Air France-KLM SA	France	25%
Anglo American Plc	U.K.	BlackRock, Inc.	U.S.	5.97%
Burberry Limited	U.K.	Thornburg Investment Management, Inc.	U.S.	68.00%
Conergy AG	Germany	York Global Finance	Luxembourg	20.15%
Iberia	Spain	British Airways	U.K.	13.20%
L'Oréal	France	Nestlé SA	Switzerland	29.30%
NH Hoteles	Spain	Banca Intesa Spa	Italy	5.65%
Tod's Spa.	Italy	Oppenheimer Holdings	U.S.A.	5.03%
Volkswagen Aktiengesellschaft	Germany	Qatar Holding LLC	Qatar	16.40%

Throughout this, corporate governance is a key factor that may be strongly linked to foreign blockholding decisions. Generally, when there is a poor corporate governance and investor protection is weak, agency problems within the firm tend to worsen (Denis and McConnell, 2003; Shleifer and Vishny, 1997), whereas, in the presence of good governance and strong investor protection, the agency problem is less worrying. However, the prevalence of very large foreign blockholders, even in context characterized by weak investor protection and inefficient financial market, raises a number of important questions. What is the association between large foreign investors and weak corporate governance, both at firm-level and at country-level? And what are the potential effects on firm performance? The issue is of fundamental importance to understand whether the phenomenon of foreign blockholding may act as a mechanism that can compensate for the lack of good governance (Aggarwal et al, 2011). However, despite a wealth of evidence on country-level ownership concentration (La Porta et al, 1999; Claessens et al, 2000; Faccio and

Lang, 2002) and on cross-border investment preferences (Kang and Stulz, 1997; Chan et al, 2005; Dahlquist and Robertson, 2001), literature does not give a systematic answer on the issue<sup>20</sup>.

We analyze a sample of 3,886 firms from 26 European countries for which we have comprehensive data on foreign blockholding by investors from around the world for the period 2003-2009. The collection of such data has required a considerable effort, due to the fact that available ownership data have to be manually compiled. The heterogeneous European context has been little analysed from the previous literature, given that the majority of studies focus on the U.S. market. However, over the past two decades, the European economy has been characterized by very strong growth of the phenomenon of foreign ownership<sup>21</sup>. The choice of this context of analysis is therefore suitable especially because corporate governance characteristics, both at firm-level and at country-level, are very different across European countries.

Our findings suggest that foreign blockholding inside the firms is positively affected by different proxies measuring the consumption of private benefits of control at the detriment of outsiders, but only in countries with poor external corporate governance. We argue that this may be due to the fact that foreign blockholders face the possibility of expropriation by local investors in weak corporate governance environment, so, in such situations, the foreigners may demand a greater equity stake to compensate the risk of being expropriated by insiders. We test this relationship also for foreign blockholders which differ by type and corporate governance system of source country, and we find that our results are in particular driven by the case in which foreigners are industrial companies and when they come from strong governance countries. Furthermore, we examine how the associated institutional context may explain the differences in the relationship between foreign blockholding and firm performance. Foreign blockholding is undoubtedly an important component in the process of value creation, but potentially not in the same way in all countries. We find that foreign blockholding positively affects firm performance and profitability in countries with poor corporate governance system. The underlying reasoning is that, in that contexts, foreign blockholders may pressure on family/manager owners to reduce the extraction of private benefits of control by improving performance, so increasing firm value. Therefore, there is a relationship of substitutability between local governance and foreign blockholders. This is consistent with the idea that foreign investors act as facilitators in weak institutional setting. Even in this case, we distinguish foreign blockholders by typology and corporate governance of source

<sup>&</sup>lt;sup>20</sup> Leuz et al (2009) have responded partially to some of these research questions, but with different limits of analysis.

<sup>&</sup>lt;sup>21</sup> In particular, since 2002 there has been a sharp rise in FDI in the Euro area thanks to the introduction of the single currency, the fall in interest rates and the simultaneous expansion of liquidity in international markets.

country, and our conclusions are reinforced in case of foreign investors that are not financial blockholders and when they come from countries with a strong corporate governance system.

We are able to contribute in several ways to the existing literature. Firstly, we give new contribution to the literature on effects of country and firm-level governance regimes on foreign investment and ownership structures (La Porta et al, 1999; Leuz, et al, 2009) by showing that foreign blockholders implement specific strategies to deal with governance problems in target markets. Secondly, our results support the notion that cash invested or wagered can be "smart", depending on the type and origin of foreign investors, unlike the claims made by some practitioners<sup>22</sup>. Thirdly, this work considers shareholders from different countries, in contrast to the previous literature, mainly based on US investors (i.e. Leuz et al, 2009). Fourthly, our investigation is unique because we combine data on foreign blockholders from around the world and belonging to different categories, using a large panel dataset of European firms. Prior empirical work on this topic has been hampered by data limitations because firm-level data on governance and foreign holdings are hard to obtain. Finally, our results are among the first ones to empirically evaluate the claim that foreign blockholders substitute for weak country governance.

The chapter is divided into six sections. The next section presents the research question of the work and the hypotheses generated from it. The third section describes the empirical models and the variable definition. The fourth section refers to sample selection and summary statistics. The fifth section presents the empirical findings. The final section concludes with the discussion of results and implications.

#### 3.2 Research questions and hypotheses

As previously mentioned, in this final chapter we put the emphasis on the dynamic relationship between corporate governance, foreign blockholding and performance. In the first instance, we analyze how corporate governance at firm-level (internal) can affect the amount of firm foreign blockholding and whether this effect can be conditioned by country-level corporate governance factors. Next, we intend to verify the role played by foreign blockholders in the process of value creation, analyzing the relationship between foreign blockholding and performance, and seeing if the relation changes to vary the external governance. What we want to understand, in a last

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<sup>&</sup>lt;sup>22</sup> For example, Paolo Scaroni, CEO of the Italian energy company ENI, recently said, during a known Italian TV program, that the important thing is the location of the firms, not the nationality of the owners.

instance, is whether the foreign blockholding may be a good mechanism to compensate the deficit in institutional governance.

H.1: Foreign blockholdings is increasing in poor internal corporate governance in weak institutional corporate governance countries. Leuz et al (2009), using the percentage of a firm's free float that is held by U.S. investors as foreign investment proxy (then considering only small foreign investors) find that generally foreigners invest less in firms with internal governance problems. However, large foreign investors are not necessarily deterred by weak corporate governance (Antras et al, 2009; Liu et al, 2012). A possible explanations could be that, in these contexts, foreign blockholders might require a higher amount of shares, so a higher control. While foreigners might generally face the risk of expropriation by the local owners, as the latter have the ability to divert the outputs to their own pocket, foreign blockholders might demand a greater equity in firms with poor corporate governance to compensate the risk of diversion by the local counterpart (Liu et al, 2012). Therefore, when there is a greater risk that the local shareholders will expropriate the foreigners, the latter will require a larger ownership stake to compensate. This may allow greater monitoring on insiders by foreign investors, and implies a positive association between foreign blockholding and internal problems of corporate governance. However, the above explanation concerning the phenomena of foreign blockholders in firms with poor internal corporate governance depends on the effectiveness of the external corporate governance system in providing investor protection and enforcement. Antras et al (2009) examine how weak investor protection influences foreign ownership, and their analysis demonstrates that foreign direct investment arises endogenously when monitoring is non-verifiable and financial frictions exist. This should apply even more to foreign blockholding.

H.2: Foreign blockholding contributes to firm performance in weak institutional corporate governance countries. The next step is to see what happens to firm performance with increasing foreign blockholding, making comparisons at country-level in terms of different corporate governance settings. Empirical analysis on the topic have suggested that the presence of foreigners is a relevant factor for value creation, and that foreign ownership positively affects firm performance and profitability (Chibber and Majumdar, 1999; Konings, 2001; Kim et al, 2010). The underlying reasoning is that foreigners would have great power to exert influence over management and family owners. In particular, foreign blockholders may pressure on family/manager owners to reduce the extraction of private benefits of control by improving performance and increasing the firm value, also in cooperation with the insiders (Douma et al, 2006). However, these considerations are linked to the institutional context of the recipient firm. In fact, monitoring activities by foreign

blockholders is more valuable in the presence of weak institutional contexts, so that there may be a relationship of substitutability between local governance and foreign blockholding. This is consistent with the idea that foreign investors act as facilitators in weak institutional setting (Ferreira et al, 2010). In conclusion, foreign blockholders are in a better position to exploit their relative advantages to positively influence firm performance as a consequence of imperfections of external corporate governance setting (Chibber and Majumdar, 1999; Khanna and Palepu, 2000; Sarkar and Sarkar, 2000).

# 3.3 Empirical models and variable definition

#### 3.3.1 Empirical models

Regarding the econometric analysis, the base model to test the first hypothesis takes the following form:

Foreign Blockholding = 
$$f$$
 (Weak Firm-Level C.G., Control Variables) (1)

Conversely, to test the second hypothesis, the basic specification model used takes the following form:

Performance = 
$$f$$
 (Foreign Blockholding, Control Variables) (2)

Below we define in detail the variables of most interest to our analysis. All variables are described in Appendix 3.1.

#### 3.3.2 Measures of foreign blockholding

The most important variables used in the study are the foreign blockholding ones. To identify the proxy of foreign blockholding, it is necessary to first define what is meant generally by the term "blockholder". Following Denis (2001), Seifert et al (2005) and Holderness (2009), a blockholder is a shareholder who owns at least 5% of the firm's common stock<sup>23</sup>. To identify foreign blockholding, avoiding that the results depend on the type of proxy, we construct three

<sup>&</sup>lt;sup>23</sup> This is the level at which shareholders are typically required to reveal their ownership stake.

variables: 1) Foreign largest blockholding, equal to the percentage equity stake held by the largest foreign blockholder in each firm, to take into account who has the large incentive to undertake value-enhancing strategies; 2) Total foreign blockholding, calculated as the sum of the percentage equity stake held by all foreign blockholders in each firm, to observe the action of foreigners as cohesive block; 3) Herfindahl index of foreign blockholders' concentration, calculated as sum of squared percentage equity stake of all foreign blockholders in each firm, to account for the degree of concentration.

#### 3.3.3 Performance variables

For our analyzes of the impact on performance, we use market-to-book value ratio (M/B) as measures of firm performance. This is a financial ratio used to compare a company's current market price to its book value. The market-to-book value ratio is defined as the market value of equity (determined by the financial marketplace) over the book value of equity. A higher value of the index should reflect greater expected future gains because of perceived growth opportunities and/or some competitive advantages. A lower M/B ratio could mean that something is fundamentally wrong with the company. In this way one will have an immediate idea of the market value of the equity of a company. If the ratio is equal to 1, it means that the market capitalization is exactly equal to book equity value, then obviously the market believes that the company is not worth much more than its book value. If the ratio is below 1, the equity market value worths less then book equity value; in contrast, with a ratio above 1, evidently the market favors the company, so much so that it is willing to pay for it more than the book value.

However, to verify that the results obtained do not depend on the performance measure used, we carry out some robustness test using also the *ROE*, equal to a fiscal year's net income divided by total equity. This index, unlike the *M/B*, refers to present profits, not to the future. Since the *ROE* expresses the return on equity, the more it will be higher, the more the market will be willing to pay to have that equity.

## 3.3.4 Firm-level corporate governance variables

As already discussed, the first hypothesis refers to the link between internal corporate governance and foreign blockholding. Therefore, we need to use proxies that capture the presence

of consumption of private benefits of control at the expense of outsiders, to see if these factors are attractive in countries with a weak system of corporate governance.

Insider ownership percentage. Similar to Leuz et al (2009), we consider family/managerial ownership as our main measure of the risk of expropriation, i.e. internal corporate governance problems. The presence of a family or a manager within the team owners can influence the role of ownership, with many implications on economic activity (Faccio and Lang, 2002). The concentration of ownership in the hands of a family and/or a manager leads to problems of expropriation against minorities (Villalonga and Amit, 2006), particularly in the presence of low investor protection and an inefficient market for corporate control (La Porta et al, 1997 and 1999). Given these arguments, we construct a proxy indicating ownership structures that are likely to be costly to evaluate and, at least in principle, more conducive to governance problems. In constructing our ownership-based governance proxy, we focus on managerial and family ownership because it is the management group and/or the family that actually makes the operational and financial decisions of a firm, and these decisions potentially lead to expropriation of outside investors. In this sense, our proxy captures not only the ability but also the incentives of insiders to consume private control benefits at the expense of outsiders.

To provide robustness test, we also use other proxies, in an attempt to focus on other mechanisms by which poor internal governance manifests itself. In fact, using alternative variables mitigates concerns that our results are spurious.

Earnings management. Similar to Leuz et al (2009), we use a proxy of levels of earnings management. The basic idea is that earnings management indicates opaque financial statements and poor information flows to outside investors. Financial reporting involves judgment, and the underlying measurements are often based on private information. Insiders can use this discretion and their private information to hide the reality about true economic performance, and/or they can also abuse their position by managing earnings. Whether insiders do the former or the latter depends crucially on the incentives to do so, such as the quality of the governance structures. Supporting this notion, Leuz et al (2003) and Haw et al (2004) provide evidence that earnings management are more pervasive in countries with weak investor protection and in firms where ownership structures are more conducive to outsider expropriation. To construct the variable, we use the discretionary accruals (scaled by total assets) from the Modified Jones model (Dechow et al, 1995).

*Board dependence*. Second, we use percentage of not independent directors (respect to insiders) on the total board members. Directors have to be independent in order to monitor the insiders (Hermalin and Weisbach, 2003). When the insiders have "bargaining power", the board's

independence declines (Baker and Gompers, 2003; Boone et al, 2007; Ryan and Wiggins, 2004); conversely, more independent boards find it easier to confront the insiders than less independent boards (Adams et al, 2010). If the board is sufficiently lacking in independence, then the probability of its seizing control is low. Firms with a majority of independent directors will adopt pills to minority shareholders' interests<sup>24</sup>, while firms with insider-dominated boards use them as a means of entrenching of insiders at the minority shareholders' expense. Most research on boards begins with the assumption that the directors' effectiveness is a function of the board's independence from insiders. Therefore, the more is the percentage of independent members of the board, the more firms tend to be strong-governance firms. It is easy to understand that board independence matter more in countries with weak shareholder protection than in countries with strong shareholder protection, so the proxy is consistent with our aim. We measure board dependence as the percentage of not independent directors in the board.

## 3.3.5 Country-level corporate governance variables

As previously mentioned, our hypotheses focuses not only on potential governance problems at the firm-level, but also on country-level differences in governance and information flow. Therefore, we use different proxies for weak country-level governance as listed below.

Outside investor rights. First of all, we use the revised index of Anti-director rights as proxy of outside investor rights, used as a measure of shareholder protection in over a hundred articles and based on laws and regulations applicable to publicly-traded firms. The revised index relies on dimensions of corporate law, and summarizes the protection of minority shareholders in the corporate decision-making process, including the right to vote, so that a higher index level corresponds to better institutions. The index covers the following six areas: (1) vote by mail; (2) obstacles to the actual exercise of the right to vote; (3) minority representation on the Board of Directors through cumulative voting or proportional representation; (4) an oppressed minority mechanism to seek redress in case of expropriation; (5) pre-emptive rights to subscribe to new securities issued by the company; and (6) right to call a special shareholder meeting. The general principle behind the construction of the Anti-director rights index is to associate better investor protection with laws that explicitly are favorable to minority shareholders. In particular, we use the updated index for Anti-director Rights in La Porta et al (2006), that ranges from 1 to 5, and we

<sup>&</sup>lt;sup>24</sup> For example, a consequence of more independent boards over time could be upward pressure on CEO compensation.

classify countries with Anti-director Rights below the sample median score of 3.5 as low protection countries, and those with scores above or equal to 3.5 as high protection countries.

Disclosure requirements. Every country has different requirements for when and how firm information must be disclosed. Disclosure rules make it easier for all investors to obtain information to evaluate firms' governance structures, while well-enforced governance rules and investor protection make knowledge about private control benefits and expropriation less important. An important aim of the disclosure requirements is to improve market discipline by enabling market participants to compare the composition of firm capital and value. In particular, we test the role of disclosure by using Disclosure Requirements values reported in La Porta et al (2006), that ranges from 0 to 1, distinguishing high and low quality of information environment at country-level. We distinguish between low and high disclosure countries based on whether a country is below or above our sample median score of 0.8.

Legal origin. According to the Law and Finance view, many aspects of a country's economic state of development are the result of the legal system, as a style of social control of economic life. Several economists have documented persistent correlations between legal origins, modern regulation, and economic outcomes around the world. The legal system has been defined in economic literature as a fundamental pillar for the effectiveness of the judicial system of the protection of investors' rights (La Porta et al, 1998). A good judicial system reduces the problems of asymmetric information and offers greater protection to investors, especially minority groups, while a low level of investor protection creates a dangerous situation of opportunism (La Porta et al, 2008). Traditionally, there is a juxtaposition between the Anglo-Saxon system (Common Law) and the German, Scandinavian and French system (Civil Law). In particular, countries whose legal rules originate in the Common Law tradition tend to protect investors considerably more than do countries whose laws originate in the Civil Law one, especially in the case of French Civil Law tradition (La Porta et al, 1998). Along a broad range of dimensions, French Civil Law countries afford the worst legal protections to shareholders. The German and the Scandinavian Civil Law countries take an intermediate stance toward investor protection; however, it is necessary to emphasize that German and Scandinavian Civil Law countries have the best quality of law enforcement, better even than that of the Common Law countries (La Porta et al, 1998). Therefore, to create the subsamples, as a proxy for poor country-level corporate governance, we classify French Civil Law countries as the worst, according to La Porta et al (1997 and 1998).

Divergence voting rights-cash flow rights. We also account for the divergence between voting rights and cash flow rights of the ultimate shareholder (Claessens et al, 2000; Lins, 2003;

Maury and Pajuste, 2005). Control rights refer to the voting rights entitled to the investors while cash flow rights mean the rights to obtain cash depending on the proportion of ownership. Control rights and cash flow rights are not always equivalent. In fact, the controlling shareholders may keep cash flow rights far below the control rights. Substantial researches prove that the divergence of control from ownership leads to controlling shareholders encroaching on the benefits of minority shareholders. The divergence in control and cash flow rights provides the controlling shareholders with both the ability and incentive to expropriate wealth from the firm, enjoying the entire benefit, but only bearing a fraction of costs (Claessens and Fan, 2002). In fact, the divergence in the controlling shareholder's voting and cash flow rights represents a major corporate governance risk to providers of firm capital, because the increasing controlling shareholders' incentive and ability to expropriate wealth from the firm. Larger voting rights entrench the controlling shareholders and give them the power to expropriate wealth from the firm, while the lower cash flow rights reduce the controlling shareholders' expropriation activities. In agreement with this vision, Claessens et al (2000) show that the entrenchment effect is measured by the detachment of control rights from cash flow rights. Theoretical literature on the role of large shareholders suggests that the separation between cash flow and control rights should be more important when private benefits are large (Grossman and Hart, 1988; Harris and Raviv, 1988). Hence, majority shareholders with important control divergence have higher incentives to expropriate. In particular, we conduct the analysis by creating two sub-samples, distinguishing countries in which the divergence between ownership and control is substantial or not. Following Faccio and Lang (2002), in the first group we put Belgium, Italy, Norway, Sweden and Switzerland, other countries are in the remaining one.

Tax haven status. A tax haven is a country where certain taxes are levied at a low rate there are not at all. As it is known, tax havens provide a regulation-free platform for those who invest in, making it increasingly easier for wealthy individuals, corrupt businesses, money launderers, powerful banks, hedge funds, and multinational companies to protect their profits from taxation. In addition, tax haven secrecy makes it extremely difficult to access information about ownership, activities and assets of companies in that countries, since benefits of control can be hidden (Gourevitch and Shinn, 2007). The basic intuition for how corporate governance and taxation interact is that tax avoidance demands complexity and obfuscation to prevent detection. These characteristics, in turn, can become a shield for opportunism. More precisely, tax avoidance and expropriation of minorities can be thought to be complementary (Desai and Dharmapala, 2006; Desai et al, 2007). This view can be assumed as an "agency perspective on tax avoidance" or, more broadly, as the "corporate governance view of taxation". To keep account of the tax haven status,

we perform the analysis on two sub-samples formed by countries classified as tax havens (Ireland, Latvia, Luxembourg, Switzerland) and countries that are not.

Financial market development. The link between internal corporate governance and foreign blockholding may be also conditioned by the development of the financial market system. In particular it is expected that higher private benefits of control are associated with less developed capital markets (Dyck and Zingales, 2004). In addition, countries with better legal protection should have more available external finance in the form of both higher valued and broader capital markets. We classify as countries with less developed capital markets those that have a number of listed companies less than the sample median and as countries with a more developed capital market those who have a number of listed companies greater than or equal to the median sample value. Data come from World Bank database. The number of listed companies is an important indicator of the importance of equity markets that is not tainted by fluctuations in stock market.

#### 3.3.6 Control variables

As regards the model (1), before assessing the effects under hypothesis, it is important to control for some control variables, that prior studies show as related to portfolio investment levels, capturing some effects on foreign holdings.

Adjusted total domestic ownership. Foreign investors can find it difficult to obtain a great equity ownership block when domestic owners have a large proportion of stock, so the massive presence of domestic ownership may deter the phenomenon of foreign blockholding, limiting the possibilities for foreigners to be able to directly influence the management of a firm, being crowded out from investing in firms with highly local ownership<sup>25</sup> (Dahlquist and Robertsson, 2001; Goyer and Jung, 2011; Liu et al, 2012).

Cash holdings. Cash and highly liquid assets are able to finance low-cost investment opportunities, and ensures the future ability of the company to seize growth opportunity. In addition, high amount of free cash flow makes it easier for foreign blockholders to reap some benefits from their targets, e.g., either in terms of stock repurchases or stock dividends (Goyer and Jung, 2011).

<sup>25</sup> This measure of total domestic ownership is exclusive of family/management domestic ownership, to avoid to double-count family/management ownership present in the explanatory variable of main interest.

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Leverage. Highly levered firms are more financially vulnerable and, thus, might less attract foreign investment, also because information about highly indebted firms is less readily available (Dahlquist and Robertsson, 2001; Kang and Stulz, 1997; Leuz et al, 2009).

Size. Large firms are better known abroad than small firms, such that foreign investors may prefer larger companies, since information asymmetries between foreign and domestic investors might be less important for such firms (Dahlquist and Robertsson, 2001; Goyer and Jung, 2011; Kang and Stulz, 1997; Leuz et al, 2009; Liu et al, 2012).

*Return.* The use of this variable is connected to the fact that classical Asset Pricing models predict that investors hold portfolios of securities towards high expected return stocks (Dahlquist and Robertsson, 2001; Kang and Stulz, 1997; Liu et al, 2012).

Stock price volatility. The use of an indicator inherent the volatility of the stock price lies in the fact that foreign investors may favor particular stocks simply for their risk characteristics (Dahlquist and Robertsson, 2001; Kang and Stulz, 1997; Liu et al, 2012).

In addition to the control variables described for the model (1), as a result of goodness of fit and explanatory power tests, in model (2) we also control for *Capital expenditure*, that can proxy for investment and may positively affect firm performance (see Jensen, 1986 and 1989) and *Intangible assets* (see Chan et al, 2001), since firms with greater intangible assets generally operate more efficiently *ceteris paribus* and thus have better operating performance. However, in model (2) we do not insert domestic ownership, due to the strong collinearity with foreign blockholding.

Finally, we control for industry, country and year fixed effects in all our models, through dummy variables.

## 3.4 Sample selection and summary statistics

We obtain firm-level data from two sources: accounting, board and ownership data are from the Amadeus database<sup>26</sup>, while stock-market information comes from the Datastream database<sup>27</sup>. Efforts in collecting data have been somewhat laborious due to the fact that ownership data have to be manually compiled and collected at the end of every year of analysis. In addition to firm-specific

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<sup>&</sup>lt;sup>26</sup> Amadeus is an European financial database containing information on over 5 million companies from 34 countries, including all the EU countries and Eastern Europe. Data includes detailed financial and activity information, holdings and subsidiaries, currency conversion facilities and cross-border searching.

<sup>&</sup>lt;sup>27</sup> Datastream is a global financial and macroeconomic database covering equities, stock market indices, currencies, company fundamentals, fixed income securities and key economic indicators for 175 countries and 60 markets.

data, for regression analyses, we use country-level data extracted from various sources (La Porta et al, 1997, 1998 and 2006; Faccio and Lang, 2002; World Bank).

The sample analysed consists of an unbalanced panel of 3,886 listed companies and 12,904 observations in 26 European countries, with investors that may be from all over the world. The time horizon of the data is from 2003 to 2009. We have excluded financial firms similar to Leuz et al (2009). In addition, we have eliminate observations that are outliers, winsorizing the first and last percentile for each variable, to avoid distortions in the estimates. Finally, observations from the initial sample for which all necessary data are not available for analysis are eliminated.

The analysis of descriptive statistics provides vital support for the interpretation of the relationships that emerge through the use of regressions. First of all, we classify foreign block investments flows in table 3.2, so we report in the table average foreign blockholding investment flows, in percentage terms, from the different part of the world (*sources*) to the European countries of the sample (*hosts*).

TABLE 3.2 Foreign block investments flows

Hosts/Sources	North	South	Western	Eastern	Other areas
nosts/sources	America	America	Europe	Europe	of the world
All	55.5%	0.1%	38.3%	0.1%	6.1%
Austria	13.4%	0.0%	50.6%	0.0%	36.0%
Belgium	9.6%	0.0%	90.4%	0.0%	0.0%
Bulgaria	49.8%	0.0%	34.0%	0.0%	16.2%
Czech Republic	0.0%	0.0%	68.8%	31.2%	0.0%
Estonia	0.0%	0.0%	100.0%	0.0%	0.0%
Finland	28.6%	0.0%	69.7%	0.2%	1.5%
France	41.7%	0.2%	54.2%	0.0%	3.8%
Germany	35.1%	0.0%	39.3%	0.5%	25.1%
Greece	38.4%	0.0%	56.8%	0.0%	4.8%
Hungary	0.6%	0.0%	58.5%	40.0%	0.9%
Iceland	0.0%	0.0%	100.0%	0.0%	0.0%
Ireland	85.2%	0.0%	11.1%	0.1%	3.7%
Italy	41.6%	0.0%	57.3%	0.7%	0.4%
Latvia	0.0%	0.0%	100.0%	0.0%	0.0%
Luxembourg	73.6%	0.0%	26.4%	0.0%	0.0%
Norway	64.7%	0.0%	33.2%	0.0%	2.1%
Poland	10.4%	0.0%	89.2%	0.0%	0.4%
Portugal	7.2%	0.2%	91.6%	0.0%	0.9%
Romania	0.4%	0.0%	97.2%	0.0%	2.3%
Slovakia	0.0%	0.0%	8.4%	86.8%	4.8%
Slovenia	0.0%	0.0%	54.3%	45.7%	0.0%
Spain	68.1%	0.2%	22.8%	0.0%	9.0%
Sweden	16.8%	0.0%	74.8%	0.0%	8.4%
Switzerland	54.3%	0.0%	43.1%	0.0%	2.6%
Ukraine	0.0%	0.0%	81.5%	0.0%	18.5%
United Kingdom	62.9%	0.0%	31.1%	0.0%	6.0%

The table reports average foreign blockholding investment flows, in percentage terms, from the different part of the world (*sources*) to the European countries of the sample (*hosts*).

Consideration on table 3.2 highlights some important characteristics of foreign block investments flows in Europe. Overall, foreign blockholding flows from North America account for

about a half of foreign blockholding flows (55.5%), and are particularly relevant for firms localized in Bulgaria (49.8%), Ireland (85.2%), Luxembourg (73.6%), Norway (64.7%), Spain (68.1%), Switzerland (54.3%) and U.K. (62.9%). However, foreign blockholding flows from Western Europe are also significant (38.3%), especially in companies that are in Austria (50.6%), Belgium (90.4%), Czech Republic (68.8%), Estonia (100%), Finland (69.7%), France (54.2%), Greece (56.8%), Hungary (58.5%), Iceland (100.0%), Italy (57.3%), Latvia (100.0%), Poland (89.2%), Portugal (91.6%), Romania (97.2%), Slovenia (54.3%), Sweden (74.8%) and Ukraine (81.5%).

Table 3.3 provides summary statistics for our full sample and based on firm's country of domicile.

TABLE 3.3
Basic summary statistics on full sample and by country

Country	Country N		ockholding blockholding		lockholding blockholders		blockholding		oreign olders	Total assets in thousands of euro	Insider ownership percentage (mean value)	M/B ratio (mean
		Full sample	FB ≠ 0	Full sample	FB ≠ 0	Full sample	FB ≠ 0	(mean value)	(mean value)	value)		
All	12,904	0.06	0.16	0.09	0.22	0.02	0.06	1,993,144	0.06	2.10		
Austria	68	0.13	0.33	0.15	0.38	0.07	0.18	986,809	0.05	2.38		
Belgium	426	0.13	0.27	0.15	0.32	0.06	0.12	1,079,794	0.03	2.08		
Bulgaria	149	0.05	0.25	0.06	0.27	0.02	0.10	38,655	0.01	1.24		
Czech Republic	20	0.19	0.42	0.19	0.42	0.10	0.22	287,151	0.00	0.64		
Estonia	6	0.20	0.24	0.28	0.34	0.12	0.14	81,305	0.00	4.63		
Finland	469	0.05	0.15	0.06	0.19	0.01	0.04	1,143,804	0.07	2.08		
France	2,496	0.05	0.16	0.07	0.22	0.02	0.06	1,894,443	0.06	2.24		
Germany	1,505	0.08	0.21	0.09	0.26	0.04	0.10	2,686,581	0.13	2.01		
Greece	885	0.06	0.19	0.07	0.24	0.02	0.07	417,550	0.10	1.61		
Hungary	196	0.09	0.38	0.10	0.40	0.06	0.23	208,345	0.03	1.40		
Iceland	9	0.01	0.11	0.02	0.17	0.00	0.02	205,242	0.00	2.50		
Ireland	106	0.09	0.12	0.17	0.22	0.02	0.03	1,690,999	0.04	2.03		
Italy	752	0.05	0.16	0.07	0.21	0.02	0.05	2,472,804	0.05	2.15		
Luxembourg	11	0.05	0.08	0.06	0.09	0.01	0.01	5,377,356	0.00	2.26		
Latvia	12	0.26	0.44	0.37	0.63	0.14	0.25	55,799	0.07	1.20		
Norway	282	0.07	0.14	0.10	0.22	0.02	0.04	1,020,620	0.03	2.64		
Poland	27	0.09	0.27	0.12	0.36	0.04	0.11	984,512	0.27	1.86		
Portugal	176	0.05	0.14	0.07	0.21	0.01	0.04	1,329,943	0.06	1.59		
Romania	29	0.45	0.59	0.48	0.64	0.32	0.42	395,759	0.00	0.84		
Slovakia	8	0.16	0.16	0.23	0.23	0.04	0.04	70,271	0.00	0.68		
Slovenia	50	0.01	0.07	0.01	0.07	0.00	0.01	401,886	0.00	1.25		
Spain	438	0.06	0.11	0.10	0.18	0.01	0.02	2,926,155	0.11	2.90		
Sweden	712	0.04	0.13	0.06	0.17	0.01	0.03	762,127	0.04	2.64		
Switzerland	811	0.07	0.15	0.12	0.23	0.02	0.05	2,490,727	0.09	2.05		
Ukraine	8	0.06	0.24	0.14	0.57	0.03	0.12	430,460	0.00	3.67		
U.K.	3,253	0.06	0.12	0.09	0.18	0.01	0.03	2,746,088	0.03	2.06		

The table reports average value for foreign blockholding proxies, total assets, insider ownership and M/B ratio for our full sample and based on firm's country of domicile.

The table shows that the sample has a large proportions of firms from France (19.34%), Germany (11.66%) and specially United Kingdom (25.21%). Considering all the sample observations, foreign blockholders of each firm hold altogether, on average, 9% of the equity, with an average concentration of 2%; however, the largest foreign shareholder holds alone an average value of 6% of the total shares. We be aware that foreign blockholders do not invest in all firm of the sample, that is, foreign blockholding is zero for various observations. Therefore, we have recalculated the average values excluding observations for which there is not the presence of foreign blockholding. With this method of calculation, all foreign blockholders of each firm hold altogether, on average, 22% of the equity, with an average concentration of 6%, and the largest foreign shareholder holds on average 16% of the total shares. Regardless of how the average value is calculated, in the firms of the sample there is often a large foreign blockholder (if not a single) that owns an equity stake much higher than of the other foreign blockholders; therefore, in the analysis, considering as proxy the stake of the first foreign investor is very valuable. The firms in the sample are quite large overall, with mean total assets of 1.993 billion of euro. Insider ownership is on average 6%, with wide variation across countries. The mean value for market-to-book value ratio is 2.10.

Since we can construct average national foreign blockholding aggregation, we also represent trends of foreign blockholding in Europe during the 2003-2009 period in Figure 3.1.

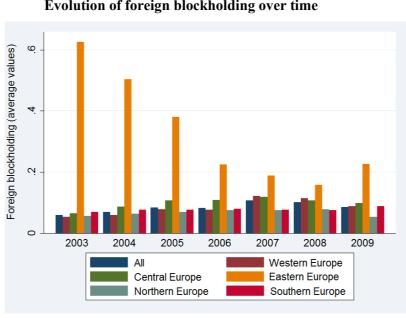


FIGURE 3.1 Evolution of foreign blockholding over time

The bars represent simple average percentages of foreign-owned shares per year for firms in the sample. Generally, foreign blockholding in Europe as a whole increased slightly during the 2003-2007 period, by the introduction of the single currency, the fall in interest rates and the simultaneous expansion of liquidity in international markets. Afterwards, it decreased with the onset of the financial crisis of 2008, as a symptom of a greater perceived risk by foreign investors. This trend is reflected in Western, Central and Northern Europe countries. The amount of foreign blockholding inside firms is greater in Eastern Europe, even if the difference with the other countries is less significantly over time. Finally, in the case of the Southern Europe countries, there were no significant changes over time in the average percentages of foreign-owned shares.

# 3.5 Empirical results

In this section we illustrate the results of the regression analysis. In particular, the empirical analysis on the role of corporate governance in the phenomenon of foreign blockholding is divided into two parts: the first concerning the antecedents of foreign blockholding; the second, regarding the consequences on performance.

## 3.5.1 Corporate governance and foreign blockholding

This sub-section shows the results of the empirical verification on the relationship between internal corporate governance and foreign blockholding.

In selecting an appropriate econometric model, we must note that foreign blockholders do not invest in each firm of the sample. The nontrivial proportion of firms with zero foreign blockholding lead us to use a Tobit model. As Wooldridge (2002) makes clear, this is a case of corner solution model, so it is problematic to use OLS in this setting. In particular, we use a random-effects Tobit model, since we have panel data. It is appropriate to use this model even though it does not take into account the fixed-effects<sup>28</sup>. In addition, to reduce the concern of reverse causality, all independent variables are one-period lagged.

## 3.5.1.1 Results for the full sample

Table 3.4 reports the coefficients of Tobit models estimated on full sample.

<sup>&</sup>lt;sup>28</sup> Honoré (1992) has developed a semi-parametric estimator for fixed-effect Tobit models, but the unconditional fixedeffects estimates are biased.

TABLE 3.4

Foreign blockholding and internal corporate governance — full sample of countries

	(1)	(2)	(3)
	Foreign largest	Total foreign	Herfindahl index for
	blockholding	blockholding	foreign blockholders
Insider ownership percentage	0.02	0.02	0.02*
	(0.02)	(0.03)	(0.01)
Adjusted total domestic ownership	-0.12***	-0.17***	-0.06***
	(0.01)	(0.01)	(0.01)
Cash holdings	0.05**	0.05	0.02**
	(0.02)	(0.03)	(0.01)
Leverage	0.00	-0.03	-0.00
	(0.02)	(0.02)	(0.01)
Size	0.02***	0.06***	0.01***
	(0.00)	(0.00)	(0.00)
Return	-0.01*	-0.02***	0.00
	(0.00)	(0.01)	(0.00)
Stock price volatility	0.06	0.09	0.04
	(0.05)	(0.07)	(0.02)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	7,819	7,819	7,819
Wald $\chi^2$	561.82(55)	789.58(55)	494.76(55)
Log-likelihood	-327.86	-1349.08	2250.21

The table reports the results of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

In column 1, the measure of family/management ownership is non-significantly related to the *Foreign largest blockholding* ( $\beta = 0.02$ , p = 0.29), after controlling for other factors. In column 2, we test the relationship between *Total foreign blockholding* and *Insider ownership*, and the coefficient is consistent with that of the first column ( $\beta = 0.02$ , p = 0.55). In column 3, we use a

measure of foreign blockholding which takes into account the degree of concentration of large foreign shareholders. Only in this model, the coefficient of the family/management ownership measure is positive but with weak significance ( $\beta = 0.02$ , p = 0.07). Our control variables exhibit coefficient signs that are partly consistent with our expectations. *Total domestic ownership* variable coefficient is negative and significant, confirming that foreign blockholders are crowded out from investing in markets with highly local ownership. Foreign blockholding is higher in firms that have greater cash holding and are larger. Conversely, foreign blockholding is lower in firms that have higher stock return. The coefficients on *Leverage* and *Stock price volatility* are not significantly different from zero. Taken together, the results in Table 3.4 show that, considering the whole sample, the effect of a weak internal corporate governance on foreign blockholding does not emerge clearly, presumably because in this analysis we do not take into account the heterogeneity of the analyzed countries. However, as noted before, the effect of opaque firm-level ownership structures on foreign blockholdings is likely to be altered in countries with different investor protection and disclosure rules.

## 3.5.1.2 Results segmented by country-level corporate governance parameters

One of the most important contribution of this chapter is that we conduct tests on the relation between corporate governance at firm-level and foreign blockholding, discriminating for different settings of corporate governance at country-level. We hypothesize that there is a positive relationship between foreign blockholding and weak corporate governance at firm-level in countries with poor disclosure and investor protection rules. Therefore, in the following regressions we analyze how the relationship between corporate governance at firm-level and foreign blockholding is influenced by country-specific variables. To capture the interplay between firm and country-level governance effects, we re-estimate our previous regressions, partitioning the sample based on our country-level governance proxies. In this way, we explicitly allow for differences in all coefficients across the two subsamples. Variation in the effects of the firm-level corporate governance proxy also alleviates concerns that our findings are driven by correlated omitted variables.

Table 3.5 presents the association between our firm-level governance proxy and foreign blockholding using the *Outside investor rights* variable to segment the sample.

 ${\bf TABLE~3.5}$  Foreign blockholding and internal corporate governance — Outside investor rights

	(1)	(2)	(3)
	Foreign largest	Total foreign	Herfindahl index for
	blockholding	blockholding	foreign blockholders
	Panel A:	Low value of Outside inv	estor rights
Insider ownership percentage	0.14***	0.17***	0.08***
	(0.04)	(0.05)	(0.02)
Adjusted total domestic ownership	-0.21***	-0.30***	-0.10***
	(0.02)	(0.03)	(0.01)
Cash holdings	0.17***	0.17**	0.09***
	(0.06)	(0.08)	(0.03)
Leverage	0.05	0.02	0.01
	(0.04)	(0.05)	(0.02)
Size	0.02***	0.03***	0.01***
	(0.01)	(0.01)	(0.00)
Return	0.00	-0.01	0.00
	(0.01)	(0.01)	(0.01)
Stock price volatility	0.05	0.05	0.03
	(0.09)	(0.13)	(0.05)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	2,224	2,224	2,224
Wald $\chi^2$	183.07(40)	217.02(40)	168.10(40)
Log-likelihood	-126.95	-399.42	531.75
	Panel B:	High value of Outside inv	estor rights
Insider ownership percentage	-0.03	-0.05	-0.01
	(0.03)	(0.04)	(0.01)
Adjusted total domestic ownership	-0.10***	-0.14***	-0.04***
	(0.01)	(0.02)	(0.01)
Cash holdings	0.03	0.04	0.01
	(0.02)	(0.04)	(0.0119)
Leverage	-0.02	-0.05*	-0.01
	(0.02)	(0.03)	(0.01)

Size	0.02***	0.04***	0.01***
	(0.00)	(0.00)	(0.00)
Return	-0.01	-0.01**	0.00
	(0.01)	(0.01)	(0.02)
Stock price volatility	0.05	0.10	0.04
	(0.05)	(0.08)	(0.03)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	5,595	5,595	5,595
Wald $\chi^2$	450.78(42)	638.39(42)	383.67 (42)
Log-likelihood	-141.76	-899.17	1778.94
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00

The table reports the results of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Panel A reports results for our low *Outside investor rights* subsample, comprising countries whose score is below our sample median score of 3.5. Column 1 shows that family/management ownership is positively related to *Foreign largest blockholding* ( $\beta = 0.14$ , p < 0.01). In column 2, we again see that the percentage of *Insider ownership* has a positive effect on *Total foreign blockholding*, as predicted in Hypothesis 1 ( $\beta = 0.17$ , p < 0.01). In column 3, we again find that our measure of family/management ownership is positively related to foreign blockholding concentration ( $\beta = 0.08$ , p < 0.01). We therefore interpret the low *Outside investor rights* results as consistent with the argument that foreign blockholders increase their holdings when information problems and monitoring costs are likely to be most pronounced.

Panel B of Table 3.5 reports results for the high *Outside investor rights* subsample. We observe that none of the *Insider ownership* coefficients are significant. These results are consistent with our hypothesis and support the notion that country-level corporate governance has an important impact on the relationship between foreign blockholding and *Insider ownership*.

At the bottom of the table, we report the *p-values* of the difference in coefficients of the variable of interest in the low and high value of *Outside investor rights* subsamples, which confirm the statistically significant difference across the two subsamples<sup>29</sup>.

Table 3.6 features our *Disclosure requirements* measure.

TABLE 3.6

Foreign blockholding and internal corporate governance — Disclosure requirements

	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders				
	Panel A: Low level of Disclosure requirements						
Insider ownership percentage	0.17*** (0.03)	0.21*** (0.05)	0.09*** (0.02)				
Adjusted total domestic ownership	-0.22*** (0.02)	-0.32*** (0.03)	-0.11*** (0.01)				
Cash holdings	0.04 (0.05)	0.01 (0.06)	0.03 (0.02)				
Leverage	0.03 (0.03)	0.00 (0.05)	0.00 (0.02)				
Size	0.03*** (0.01)	0.04*** (0.01)	0.02*** (0.003)				
Return	0.01 (0.01)	0.01 (0.01)	0.00 (0.004)				
Stock price volatility	0.11 (0.09)	0.09 (0.13)	0.11** (0.04)				
Industry Dummies?	Yes	Yes	Yes				
Country Dummies?	Yes	Yes	Yes				
Year Dummies?	Yes	Yes	Yes				
N	2,155	2,155	2,155				
Wald $\chi^2$	222.12(45)	245.49(45)	235.54(45)				
Log-likelihood	-54.01	-352.24	627.95				

Panel B: High level of Disclosure requirements

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<sup>&</sup>lt;sup>29</sup> In all table, the comparison tests are based on the methodology shown by Cohen (1983).

Insider ownership percentage	-0.06**	-0.08**	-0.02*
	(0.03)	(0.04)	(0.01)
Adjusted Total domestic ownership	-0.10***	-0.14***	-0.04***
	(0.01)	(0.02)	(0.01)
Cash holdings	0.06**	0.08**	0.02
	(0.03)	(0.04)	(0.01)
Leverage	-0.01	-0.05*	0.00
	(0.02)	(0.03)	(0.01)
Size	0.02***	0.03***	0.01***
	(0.003)	(0.003)	(0.00)
Return	-0.01***	-0.03***	-0.01**
	(0.01)	(0.01)	(0.002)
Stock price volatility	0.02	0.08	0.00
	(0.05)	(0.08)	(0.03)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	5,664	5,664	5,664
Wald $\chi^2$	433.52(38)	649.44(38)	341.70(38)
Log-likelihood	-216.94	-935.27	1,683.90
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00

The table reports the results of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Panel A shows that the coefficients on our family/management ownership measure are always positive in the low *Disclosure requirements* subsample. In panel B, which reports results for the high *Disclosure requirements* subsample, we observe that all columns have *Insider ownership* coefficients that are negative and significant. Again, we find that there is a difference in the *Insider ownership* coefficients across subsamples.

Even here, at the bottom of the table, we report the *p-values* of the difference in coefficients of the variable of interest in the low and high value of *Disclosure requirements* subsamples, which confirm the statistically significant difference across the two subsamples.

In Tables 3.7, we split the sample based on the other proxies of a country's overall level of corporate governance. We expect that if firms have ownership structures that, in principle, are conducive to expropriation, foreign blockholders will increase their shares if the institutional environment is weak. For those countries, we predict that *Insider ownership* will have a positive effect on foreign blockholding. We report only the result on Insider *ownership* coefficient for the sake of brevity.

TABLE 3.7

Foreign blockholding and internal corporate governance — Other country-level corporate governance proxies

	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
			Panel A: L	egal origin		
	1	French Civil Law	7	No	o French Civil La	aw
Insider ownership percentage	0.06* (0.03)	0.07* (0.04)	0.03* (0.02)	0.00 (0.02)	-0.01 (0.03)	-0.01 (0.01)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	3,509	3,509	3,509	4,310	4,310	4,310
Wald $\chi^2$	272.75(38)	290.28(38)	280.08(38)	329.13(44)	568.55(44)	271.39(44)
Log-likelihood	-165.22	-543.36	834.8561	-89.81	-708.98	1487.99
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.09	0.09	0.07			
		Panel B:	Divergence voti	ng rights-cash flo	ow rights	
		High			Low	
Insider ownership percentage	0.16***	0.20***	0.08***	-0.03	-0.05	-0.01

	(0.04)	(0.06)	(0.02)	(0.02)	(0.03)	(0.01)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	1,858	1,858	1,858	5,961	5,961	5,961
Wald $\chi^2$	139.85(32)	177.57(32)	130.62(32)	482.93(50)	664.95(50)	412.85(50)
Log-likelihood	-45.60	-306.65	598.90	-246.60	-1,011.54	1,689.7944
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00	l		

	Panel C: Tax haven status							
	Ta	ax haven countri	es	No	Tax haven count	rries		
Insider ownership percentage	0.20*** (0.04)	0.26*** (0.07)	0.12*** (0.03)	-0.01 (0.02)	-0.02 (0.03)	0.00 (0.01)		
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes		
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
N	661	661	661	7158	7158	7158		
Wald $\chi^2$	76.77(26)	95.13(26)	78.96(26)	528.25(51)	708.31(51)	448.93(51)		
Log-likelihood	130.26	-47.59	373.87	-419.019	-1,278.03	1,913.38		
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00	I				

Low High -0.10\*\* 0.11\*\*\* 0.13\*\*\* 0.05\*\*\* -0.07\*\* -0.03\* Insider ownership percentage (0.03)(0.04)(0.01)(0.03)(0.04)(0.01)Control Variables? Yes Yes Yes Yes Yes Yes Industry Dummies? Yes Yes Yes Yes Yes Yes Country Dummies? Yes Yes Yes Yes Yes Yes Year Dummies? Yes Yes Yes Yes Yes Yes N 3,584 3,584 3,584 4,235 4,235 4,235

Panel D: Financial market development

Wald $\chi^2$	244.92(49)	316.91(49)	246.82(49)	398.31(34)	562.07(34)	360.71(34)
Log-likelihood	-304.58	-729.93	785.42	-67.07	-647.43	1,472.75
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00	I		

The table reports the coefficients of the *Insider ownership percentage* variable of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Also regarding Table 3.7, we find essentially the same results as before, since the coefficients on family/management ownership behave as predicted and as in our previous tables 3.5 and 3.6. Overall, the results highlights the importance of variables that capture countries' information and governance country-level regimes.

#### 3.5.1.3 Robustness checks

In selecting an appropriate modeling approach, we have already said that we take into account the fact that foreign blockholders do not invest in each and every firm. Although such data can be analyzed using a Tobit model, the latter has a potential limitation. Tobit forces one parameter to determine the effect of poor internal governance on both the decision to invest and the decision regarding the amount to invest. Since the hypothesis 1 focuses mainly on the amount of foreign blockholding within companies, we therefore implement our holdings model using a random effect model for panel data on the subsample of firms in which the amount of foreign blockholding is different from 0. We do so for the analysis in the subsamples obtained splitting by *Outside investor* rights and *Disclosure requirements*. For brevity, we report only the main coefficients of interest in table 3.8.

	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
			Panel A: Outsid	le investor rights		
		Low			High	
Insider ownership percentage	0.09*** (0.03)	0.11** (0.05)	0.06*** (0.02)	-0.03 (0.02)	-0.04 (0.03)	-0.01 (0.01)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	875	875	875	2,359	2,359	2,359
$R^2$	0.23	0.20	0.22	0.17	0.13	0.19
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.01	0.00	I		
			Panel B: Disclos	sure requirements	3	
		Low			High	
Insider ownership percentage	0.08*** (0.02)	0.09** (0.04)	0.06*** (0.02)	-0.03 (0.02)	-0.04 (0.03)	-0.01 (0.01)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	921	921	921	2,313	2,313	2,313
$R^2$	0.33	0.24	0.38	0.14	0.12	0.13
p-value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00	I		

The table reports the coefficients of the *Insider ownership percentage* variable of random effects regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

We find that random effects estimates are very similar to our Tobit estimates in that Family/Management ownership is positively related to foreign blockholding in low protection countries but not in high protection countries. The results and inferences from these models are very similar to those from Tobit estimations reported in the previous tables. Taken together, the results alleviate concerns that the findings are specific to or driven by the choice of a Tobit model. For the sake of brevity, we do not tabulate the results when we use the splits with the other country-level corporate governance variables.

As a further robustness check, we try to address endogeneity concerns between internal governance and foreign blockholding. In particular, we use an instrumental-variables regression where we instrument for *Insider ownership* using the firm's age (Ayyagari et al, 2013). Given that ownership diffuses over time, we expect older firms to have lower levels of insider holding (Su, 2004), but there is no theoretical reason to expect that the age of the firm be directly correlated with foreign blockholding. In particular, we proceed in the following way: the first stage regression is estimated using random effects regressions, regressing *Insider ownership* proxy on *Age* variable; the second stage regressions are estimated by Tobit models, in which we use the predicted values of the first stage regressions. We include all the control variables in both the first- and second- stage regressions. The results of the second stage regressions are presented in table 3.9. We do so for the analysis in the subsamples obtained splitting by *Outside investor rights* and *Disclosure requirements*, and, for brevity, we report only the main coefficients of interest.

TABLE 3.9

Foreign blockholding and internal corporate governance — Control for endogeneity

	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
			Panel A: Outsic	le investor rights		
		Low			High	
Insider ownership percentage	0.21*	0.30*	0.12*	0.01	0.02	0.00

	(0.12)	(0.16)	(0.06)	(0.02)	(0.03)	(0.03)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,224	2,224	2,224	5,595	5,595	5,595
Wald $\chi^2$	170.41(40)	209.43(40)	154.07(40)	449.97(42)	638.19(42)	383.32(42)
Log-likelihood	-132.89	-403.00	524.00	-142.51	-899.72	1,778.60
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.09	0.09	0.07			

Panel B: Disclosure requirements

		Low			High	
Insider ownership percentage	0.32*** (0.11)	0.42*** (0.16)	0.17*** (0.06)	0.00 (0.05)	0.03 (0.07)	0.00 (0.03)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,155	2,155	2,155	5,664	5,664	5,664
Wald $\chi^2$	205.27(45)	234.94(45)	216.38(45)	429.47(38)	646.25(38)	339.54(38)
Log-likelihood	-62.60	-357.74	618.44	-219.59	-937.70	1682.45
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.01	0.03	0.01	l		

The table reports the coefficients of the *Insider ownership percentage* variable of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. We instrument for *Insider ownership percentage* variable using the variable *Age*. The first stage regression is estimated using random effects regressions. Only the results of the second stage regressions are reported. We include all the control variables in both the first and second stage regressions. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

The strong negative coefficients of *Age* variables in the first stage regressions (the p-value is always less than 0.001), not reported to conserve space, confirm our conjecture that older firms have lower insider holding. More importantly, the positive and significant coefficients on *Insider ownership* percentage variable in subsamples formed by countries with low investor protection are consistent with our previous results. Therefore, the results obtained controlling for endogeneity confirm the *H.1* hypothesis. The results (unreported) also remain unchanged when we use the splits with the other country-level corporate governance variables.

Considering that as a measure of corporate governance at the firm-level we mainly use a proxy based on insider ownership, as noted by Leuz et al (2009), there may be a problem of "mechanical" negative correlation with our measures of foreign blockholding, given they are all scaled by total equity. To reduce these concerns, in a robustness check, we scale foreign blockholders' investment by a firm's total blockholding, i.e. the percentage of shares held by shareholders who have 5% or greater equity stake. In this way there is obviously a reduction in the sample, since in some firms there are no shareholders with shares exceeding 5%. However, the reduction of the observations is marginal. Thus, if we find that family/management ownership is again positively related to foreign blockholding in poor country-level corporate governance settings, our inference is particularly robust. We do so for the analysis in the subsamples obtained splitting by *Outside investor rights* and *Disclosure requirements*. For brevity, we report only the main coefficients of interest in table 3.10.

TABLE 3.10

Foreign blockholding and internal corporate governance — Dependent variables scaled by total blockholding

	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
			Panel A: Outsid	le investor rights		
		Low			High	
Insider ownership percentage	0.25*** (0.09)	0.31*** (0.10)	0.13*** (0.03)	-0.03 (0.06)	-0.05 (0.08)	-0.01 (0.02)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes

Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,016	2,016	2,016	5,300	5,300	5,300
Wald $\chi^2$	328.45(40)	373.29(40)	235.43(40)	563.81(42)	703.14(42)	408.45(42)
Log-likelihood	-828.45	-918.75	210.67	-2370.09	-2748.50	835.03
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.01	0.00	0.00	I		

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Panel	н.	1)150	losure	requirements	2
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		Low			High	
Insider ownership percentage	0.32*** (0.09)	0.40*** (0.10)	0.15*** (0.02)	-0.10 (0.07)	-0.14* (0.08)	-0.03 (0.02)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	1,963	1,963	1,963	5,353	5,353	5,353
Wald $\chi^2$	343.88(45)	397.30(45)	295.04(45)	545.88(38)	697.79(38)	374.36(38)
Log-likelihood	-809.17	-931.02	321.87	-2397.37	-2732.69	708.37
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.00	0.00	0.00	l		

The table reports the coefficients of the *Insider ownership percentage* variable of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

The results are largely consistent with those obtained for the original dependent variables, indicating that the "mechanical" bias does not significantly influence our results. The results (unreported) also remain unchanged when we use the splits with the other country-level corporate governance variables.

To provide another test of whether corporate governance problems at firm-level are at the core of our results, we use other proxies in the regression analysis, namely *Earnings management* and *Board dependence*. In fact, using alternative variables mitigates concerns that our previous

results are spurious. However, a limitation of the data related to these alternative variables is that we have a lower number of observations relating to them, so we use these proxies just for sensitivity analysis on the firms for which we have available data. For brevity, we report again only the main coefficients of interest in table 3.11.

TABLE 3.11

Foreign blockholding and internal corporate governance — Other proxies of firm-level corporate governance

	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
		Panel A: E	arnings manager	nent as explanato	ory variable	
	Low value of Outside investor rights			High value of Outside investor rights		
Earnings management	0.25* (0.15)	0.26* (0.15)	0.12* (0.07)	-0.02 (0.06)	-0.02 (0.08)	-0.02 (0.04)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	758	758	758	2,334	2,334	2,334
Wald $\chi^2$	102.68(34)	112.40(34)	102.75(34)	204.25(35)	331.00(35)	174.20(35)
Log-likelihood	-14.22	-131.42	217.35	176.72	-232.52	1063.3692
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.09	0.09	0.08	I		

Panel B: Board dependence as explanatory variable

	Low value	e of Outside inve	High value of Outside investor rights			
Board dependence	0.20** (0.09)	0.27** (0.12)	0.10** (0.05)	0.00 (0.04)	-0.03 (0.05)	0.00 (0.02)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes

N	851	851	851	2,480	2,480	2,480
Wald $\chi^2$	118.57(32)	133.12(32)	115.00(32)	223.65(34)	336.09(34)	189.49(34)
Log-likelihood	14.54	-126.90	279.57	109.76	-284.01	1006.37
<i>p</i> -value on Insider ownership percentage coefficient difference between subsamples	0.04	0.02	0.06	I		

The table reports the coefficients of alternative proxies of firm-level corporate governance variables of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors.

(\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Panel A of Table 3.11 reports results from Tobit regressions replacing the ownership-based governance proxies with the *Earnings management* variables. For the sake of brevity, we report only the findings splitting the sample by the level of *Outside investor rights*, that is our all-encompassing indicator. The results are very similar using the other split variables. Panel A shows that *Earnings management* proxy is significantly and positively associated with foreign blockholdings in the countries where *Outside investor rights* are weak. These findings suggest that, in these countries, foreign blockholders hold higher equity stakes in firms that are characterized by higher levels of *Earnings management*, consistent with our *H.1* hypothesis. In contrast, the coefficients are insignificant in countries with strong *Outside investor rights*.

Next, we repeat the same analysis in panel B of Table 3.11, using as proxy of internal corporate governance the level of *Board dependence*. For low *Outside investor rights* countries, the effect of *Board dependence* on foreign holdings is in fact significantly positive. Conversely, for high *Outside investor rights* countries, the effect is not significant.

These findings lend further credence to our previous results.

## 3.5.1.4 Foreign blockholders' identity

Although the obtained results already provide some important interpretations, it is crucial to consider if the identity of foreign blockholders matters, in order to enforce our conclusions. In particular, we focus on the two most important categories of foreign shareholders in the relation with corporate governance, namely foreign financial investors and foreign industrial corporations. Financial blockholders are defined as those whose primary operation is in the areas of banking,

insurance, investment banking, brokerage, mutual and pension fund management, and other noncollective investment schemes, while corporate blockholders are defined as any other foreign blockholder who does not fall into the financial classification, excluding government blockholders and natural-person blockholders (Liu et al. 2012). On the one hand, financial blockholders tend to hold less equity blocks, to be little involved in corporate governance (Douma et al, 2006), and favor setting with greater transparency (Chan et al, 2005; Ferreira and Matos, 2008), avoiding corporate governance problems. Financial investors prefer to invest as outside investors, and for this reason it is unlikely that they require a majority equity stake to protect themselves from possible expropriation by insiders in the case of weak corporate governance. In such situations, the best solution for foreign financial blockholder will be the exit. On the other hand, foreign corporate blockholders typically hold higher controlling blocks and prefer to be more active in firms governance respect to financial investors (Douma et al, 2006). More precisely, corporate blockholding may be more popular than non-financial blockholders in weaker governance environments, since in that situations they may not prefer the exit strategy, to non-give up the industrial synergies resulting from the entry into the business of the recipient firm. Therefore, foreign corporate blockholders may prefer to require a larger equity stake to compensate for the risk of expropriation by insiders. As a consequence, considerations concerning hypothesis H.1 may be mainly valid for foreign non-financial blockholding. Therefore, in the following regressions, we consider alternatively, as dependent variables, foreign blockholding by non-financial entity and foreign blockholding by financial investors in the case of context with weak corporate governance at country-level, to see if there are differences in the role of internal governance problems. The results are reported in Table 3.12.

TABLE 3.12
Foreign blockholding and internal corporate governance — Foreign blockholders' identity

	Non-	financial blockho	olders	Financial blockholders		
	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
		Panel .	A: Low value of	Outside investor	rrights	
Insider ownership percentage	0.09* (0.05)	0.10* (0.06)	0.03* (0.02)	-0.21 (0 .19)	-1.53* (0.88)	-0.35* (0.20)

Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes		
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
N	2,224	2,224	2,224	2,224	2,224	2,224		
Wald $\chi^2$	122.62(40)	122.66(40)	122.40(40)	70.28(40)	71.00(40)	64.40(40)		
Log-likelihood	-346.74	-474.36	191.34	-86.17	-85.70	-2.49		
	Panel B: Low level of Disclosure requirements							
Insider ownership percentage	0.15*** (0.05)	0.16*** (0.05)	0.06** (0.03)	-0.08 (0.12)	-0.47 (0.29)	-0.06 (0.04)		
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes		
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
N	2,155	2,155	2,155	2,155	2,155	2,155		
Wald $\chi^2$	187.94(45)	179.80(45)	174.10(45)	82.73(45)	86.08(45)	77.63(45)		
Log-likelihood	-292.35	-126.90	210.47	-82.59	-81.68	24.72		

The table reports the coefficients of the *Insider ownership percentage* variable of Tobit regressions, in which the dependent variable are, alternatively, three different proxies of non-financial and financial foreign blockholding, respectively. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

All of the models (splitting by both *Outside inverstor right* and *Disclosure requirements*) show that across the dependent variables which refer to the non-financial blockholders, the coefficient for *Insider ownership percentage* is positive and significant, indicating that corporate blocks are positively affected by weak internal corporate governance in weaker governance environments. Using the foreign blockholding measures for financial blockholders as alternative dependent variables, the coefficient of *Insider ownership percentage* is not significant or in some cases is negative, indicating that, in contrast to corporate blockholders, financial blockholders would prefer firms with stronger internal governance characteristics and greater transparency.

Overall, the results states that the *H.1* hypothesis is mainly driven by non-financial investors. As such, the foreign blockholding strategies in weak-governance settings are most amplified in the case of corporate blockholders. The other splits are not reported for the sake of brevity, but the results are the same.

## 3.5.1.5 Foreign blockholders' country of origin

In this sub-section we turn the attention to analyze whether a foreigner's source-country characteristics in terms of corporate governance can explain foreign blockholding investments. In fact, as well as it is important to deal with the identity of foreign blockholders, it is also relevant to consider the features, in terms of corporate governance, of their home country. In particular, foreign blockholders from countries with strong corporate governance that invest in countries with poor institutional setting may be more attracted by weak internal corporate governance since the foreignness enables them to "export" high quality institutions from their home countries, where it is necessary (Sudarat, 2006; Kim et al, 2010). In other words, in contexts characterized by weak governance, strong corporate governance at the origin countries encourages them to take up blockholdings overseas. These considerations have little sense for foreign blockholders from countries that are weak in terms of corporate governance. In fact, foreign blockholders may prefer weak governance markets because of the scope they allow for the introduction of stronger governance regimes, but the export of such regimes is dependent on the existence of strong governance in the foreign blockholders' home country. Similar to the previous sub-section, we consider different dependent variables, i.e. foreign blockholding by foreigners from countries with strong and weak investor protection, respectively, splitting the dependent variable according to the Anti-director rights index (La Porta et al, 2006) median value. By using these dependent variables, we are able to assess the role of source-country corporate governance factors in explaining foreign blockholdings. Table 3.13 presents the results.

TABLE 3.13

Foreign blockholding and internal corporate governance — Foreign blockholders' country of origin

	Blockholders from countries with strong CG			Blockholders from countries with weak CG		
	(1) Foreign largest blockholding	(2) Total foreign blockholding	(3) Herfindahl index for foreign blockholders	(4) Foreign largest blockholding	(5) Total foreign blockholding	(6) Herfindahl index for foreign blockholders
		Panel	A: Low value of	Outside investor	r rights	
Insider ownership percentage	0.12*** (0.04)	0.15*** (0.05)	0.08*** (0.02)	0.02 (0.07)	0.02 (0.08)	0.00 (0.03)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,224	2,224	2,224	2,224	2,224	2,224
Wald $\chi^2$	201.31(40)	209.44(40)	201.40(40)	103.21(40)	92.32(40)	73.45(40)
Log-likelihood	-62.61	-334.86	407.72	-383.77	-388.49	4.88
		Panel 1	B: Low level of I	Disclosure requir	rements	
Insider ownership percentage	0.16*** (0.04)	0.21*** (0.05)	0.09*** (0.02)	0.00 (0.040)	0.03 (0.05)	-0.01 (0.02)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,155	2,155	2,155	2,155	2,155	2,155
Wald $\chi^2$	248.04(45)	247.82(45)	220.00(45)	81.08(45)	78.64(45)	84.19(45)
Log-likelihood	-64.55	-273.90	527.01	-421.38	-409.95	-110.48
				1		

The table reports the coefficients of the *Insider ownership percentage* variable of Tobit regressions, in which the dependent variables are, alternatively, three different proxies of foreign blockholding hold by investors from country with strong and weak corporate governance, respectively. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are

one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

My empirical results (splitting by both *Outside investor right* and *Disclosure requirements*) suggest that foreign blockholders from countries with strong investor protection prefer weak governance firms because of the scope they allow for the introduction of stronger governance regimes. Consistent with these arguments, the *Insider ownership percentage* variable is positive and significant in explaining the source of blockholdings for foreigners from countries with strong investor protection. However, the *Insider ownership percentage* variable is not significant for foreign blockholders from countries with weak investor protection. Overall, the empirical results show that the governance of source countries is a key characteristic to explain the phenomena of foreign blocks. The ability of a foreigner to have benefits from its investment will be related to the strength of the corporate governance environment in his country of origin. The other splits are not reported for the sake of brevity, but the results are the same.

## 3.5.2 Foreign blockholding and performance

The following sub-section deals with the relationship between foreign blockholding and firm performance. This analysis is needed to fully understand the role of foreign blockholding with respect to their ability to limit the problems of a weak local governance. In fact, the results obtained in previous section do not completely clarify if foreign blockholders can have a relationship of substitutability with country-level governance. The analysis of the effect on performance, in this regard, in addition to assessing the activism of foreign blockholders, allows to understand if the value is positively influenced as a result of a greater monitoring activities by foreigners.

The relative specification (model 2) shown in sub-section 3.3.1 could strongly suffer from reverse causality phenomenon, where foreign blockholding level is in turn influenced by firm performance. The direction of causality may go from a foreign blockholding to changes in corporate performance as a result of shareholder activism, but, in contrast, the process can also be inverse, with foreign blockhoders selecting firms with certain performance. Therefore, we use the three stage least squares method (3SLS) to estimate a 2x2 system of equations where both foreign blockholding and firm performance are explicitly stated to be endogenous to the system<sup>30</sup>. The

<sup>&</sup>lt;sup>30</sup> The three-stage least squares estimator was introduced by Zellner and Theil (1962). It combines two-stage least squares (2SLS) with seemingly unrelated regressions (SURE).

3SLS method is asymptotically consistent and more efficient than a two stage least squares (Greene, 2000). The specifications of the equations of foreign blockholding are identical to those previously used; however, for reasons of brevity, we report only the results of the equations of performance. In addition, to reduce the concern of reverse causality, all independent variables are always one-period lagged.

# 3.5.2.1 Results for the full sample

The results of regression analysis on full sample are presented in Table 3.14.

TABLE 3.14

Foreign blockholding and performance — full sample of countries

	(1)	(2)	(3)
	M/B	M/B	M/B
Foreign largest blockholding	0.53*** (0.15)		
Total foreign blockholding		0.61*** (0.12)	
Herfindahl index for foreign blockholders			0.45* (0.25)
Cash holdings	2.46***	2.46***	2.47***
	(0.16)	(0.16)	(0.16)
Leverage	0.57***	0.58***	0.57***
	(0.11)	(0.11)	(0.11)
Capex	0.45***	0.45***	0.45***
	(0.13)	(0.13)	(0.13)
Intangibility	0.49***	0.48***	0.49***
	(0.14)	(0.14)	(0.14)
Size	0.07***	0.07***	0.07***
	(0.01)	(0.01)	(0.01)
Return	0.90***	0.90***	0.90***
	(0.04)	(0.04)	(0.04)
Stock price volatility	-1.97***	-2.00***	-1.96***
	(0.38)	(0.38)	(0.38)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes

Year Dummies?	Yes	Yes	Yes
N	7,819	7,819	7,819
$R^2$	0.18	0.18	0.18

The table reports the results of 3SLS SURE regressions of market to book ratio equations. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

The results using Foreign largest blockholding as proxy of foreign blockholding are presented in column 1. We observe that the coefficient of foreign blockholding is positive and statistically significant ( $\beta = 0.53$ , p < 0.01). The finding suggests that foreign block ownership positively affects firm performance. Also the coefficient of variable Total foreign blockholding in column 2 is positive and significant ( $\beta = 0.61$ , p < 0.01), as well as that of the variable Herfindahl index for foreign blockholders ( $\beta = 0.45$ , p = 0.08). Regarding the control variables, they all have a strong level of significance. In particular, across all regressions in Table 3.15, the coefficients of Cash holdings are all positively significant, as well as Leverage, Capex, Intangibility, Size and Return, whereas the control variable relative to Stock price volatility has a significant negative coefficient. The findings are consistent with a general positive influence exerted by foreign blockholdings. However, once again these results may be driven by specific external corporate governance settings, being foreign blockholders sensitive to the external environment of recipient firms.

## 3.5.2.2 Results segmented by country-level corporate governance parameters

After analysing the relationship between foreign blockholding and performance using the full sample, we implement the same analysis on the sub-samples obtained spitting by the value assumed by indicators of country-level corporate governance. In particular, this analysis allows to test whether among countries there is a difference in terms of competitiveness. We hypothesize that the relationship, that we have found to be positive for the full sample, is stronger, i.e. even more positive in countries with poor disclosure and investor protection rules (Hypothesis H.2). Therefore, in the following regressions we analyze how the relationship between foreign blockholding and firm performance is conditioned by country-specific variables. By estimating subsample models, we

explicitly allow for differences in all coefficients across the two subsamples. In particular, in Table 3.15 we use *Outside investor rights* variable to segment the sample.

TABLE 3.15
Foreign blockholding and performance — Outside investor rights

	(1) M/B	(2) M/B	(3) M/B	
	Panel A: Low value of Outside investor rights			
Foreign largest blockholding	1.25*** (0.22)			
Total foreign blockholding		1.22*** (0.18)		
Herfindahl index for foreign blockholders			1.27*** (0.39)	
Cash holdings	3.61*** (0.37)	3.60*** (0.37)	3.58*** (0.37)	
Leverage	0.92*** (0.18)	0.94*** (0.18)	0.91*** (0.19)	
Capex	0.34 (0.24)	0.34 (0.24)	0.35 (0.24)	
Intangibility	1.39*** (0.31)	1.36*** (0.31)	1.43*** (0.32)	
Size	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	
Return	0.85*** (0.08)	0.86*** (0.08)	0.85*** (0.08)	
Stock price volatility	-1.82*** (0.65)	-1.90*** (0.64)	-1.85*** (0.65)	
Industry Dummies?	Yes	Yes	Yes	
Country Dummies?	Yes	Yes	Yes	
Year Dummies?	Yes	Yes	Yes	
N	2,224	2,224	2,224	
$R^2$	0.22	0.22	0.21	

Panel B: High value of Outside investor rights

Foreign largest blockholding	0.03 (0.19)		
Total foreign blockholding		0.22 (0.15)	
Herfindahl index for foreign blockholders			-0.12 (0.33)
Cash holdings	2.24*** (0.18)	2.24*** (0.18)	2.24*** (0.18)
Leverage	0.48*** (0.14)	0.48*** (0.14)	0.48*** (0.14)
Capex	0.48*** (0.16)	0.48*** (0.16)	0.48*** (0.16)
Intangibility	0.26* (0.15)	0.26* (0.15)	0.26* (0.15)
Size	0.07*** (0.01)	0.07*** (0.01)	0.07*** (0.01)
Return	0.92*** (0.05)	0.92*** (0.05)	0.92*** (0.05)
Stock price volatility	-2.02*** (0.46)	-2.03*** (0.46)	-2.02*** (0.46)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	5,595	5,595	5,595
$R^2$	0.17	0.17	0.17
<i>p</i> -value on Foreign blockholding proxy coefficient difference between subsamples	0.00	0.00	0.01

The table reports the results of 3SLS SURE regressions of market to book ratio equations. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

In column 1 of Panel A, that consider the subsample of Low level of *Outside investor rights*, we find a positive and significant influence of *Foreign largest blockholding* ( $\beta = 1.25$ , p < 0.01) on M/B ratio. The coefficient of the variable is also positive and statistically significant in both column

2, using *Total foreign blockholding* proxy ( $\beta = 1.22$ , p < 0.01), and in column 3, using *Herfindahl index for foreign blockholders* proxy ( $\beta = 1.27$ , p < 0.01).

Results on the impact of foreign blockholding on performance among firms in countries with high level of *Outside investor rights* are presented in Panel B. The variables representing foreign blockholding in the three columns are found to not significantly influence firm performance.

The findings indicate that the positive influence attributed to foreign blockholders is in reality evaluable only for firms in countries with poor investor protection. It indicates that, in country with poor external corporate governance, foreign blockholding is used as a vehicle to exert influence on the affairs of the firm, increasing firm value.

Table 3.16 features our *Disclosure requirements* measure of shareholder protection.

TABLE 3.16

Foreign blockholding and performance — Disclosure requirements

	(1)	(2)	(3)			
	M/B	M/B	M/B			
	Panel A: Low level of Disclosure requirements					
Foreign largest blockholding	1.31*** (0.26)					
Total foreign blockholding		1.43*** (0.20)				
Herfindahl index for foreign blockholders			1.15** (0.45)			
Cash holdings	3.17***	3.18***	3.16***			
	(0.31)	(0.31)	(0.32)			
Leverage	0.54***	0.57***	0.54***			
	(0.20)	(0.20)	(0.20)			
Capex	0.35	0.35	0.35			
	(0.24)	(0.23)	(0.24)			
ntangibility	1.64***	1.60***	1.66***			
	(0.37)	(0.37)	(0.37)			
Size	0.09***	0.08***	0.09***			
	(0.02)	(0.02)	(0.02)			
Return	0.83***	0.84***	0.82***			
	(0.08)	(0.08)	(0.08)			
Stock price volatility	-0.87	-0.84	-0.89			
	(0.71)	(0.71)	(0.71)			

Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	2,155	2,155	2,155
$R^2$	0.27	0.28	0.27
	Panel B:	High level of Disclosure req	uirements
Foreign largest blockholding	0.18 (0.18)		
Total foreign blockholding		0.20 (0.14)	
Herfindahl index for foreign blockholders			0.10 (0.31)
Cash holdings	2.20*** (0.18)	2.19*** (0.18)	2.20*** (0.18)
Leverage	0.62*** (0.13)	0.62*** (0.13)	0.62*** (0.13)
Capex	0.45*** (0.16)	0.45*** (0.16)	0.45*** (0.16)
Intangibility	0.33** (0.15)	0.33** (0.15)	0.33** (0.15)
Size	0.06*** (0.01)	0.06*** (0.01)	0.07*** (0.01)
Return	0.92*** (0.05)	0.93*** (0.05)	0.92*** (0.05)
Stock price volatility	-2.33*** (0.45)	-2.35*** (0.45)	-2.33*** (0.45)
Industry Dummies?	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes
N	5,664	5,664	5,664
$R^2$	0.15	0.15	0.15
<i>p</i> -value on Foreign blockholding proxy coefficient difference between subsamples	0.00	0.00	0.05

The table reports the results of 3SLS SURE regressions of market to book ratio equations. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Panel A shows that the coefficients on our measures of foreign blockholding are always positive in the low *Disclosure requirements* subsample. In panel B, which reports results for the high *Disclosure requirements* subsample, we observe that all columns have foreign blockholding coefficients that are not significant. Again, we find that there is a difference in the foreign blockholding coefficients across subsamples.

The results of the investigation of the impact of foreign blockholding on firm performance in the different sub-sample according to the other external corporate governance variable are presented in Tables 3.17. We report only the result on foreign blockholding proxies coefficients for the sake of brevity.

TABLE 3.17

Foreign blockholding and performance — Other country-level corporate governance proxies

	(1) M/B	(2) M/B	(3) M/B	(4) M/B	(5) M/B	(6) M/B
			Panel A: I	egal origin		
		French Civil Law		N	o French Civil L	aw
Foreign largest blockholding	0.68*** (0.21)			0.20 (0.16)		
Total foreign blockholding		0.68*** (0.17)			0.29* (0.16)	
Herfindahl index for foreign blockholders			0.74** (0.36)			-0.02 (0.26)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	3,509	3,509	3,509	4,310	4,310	4,310
$R^2$	0.21	0.21	0.21	0.18	0.18	0.18
<i>p</i> -value on Foreign blockholding proxy coefficient difference between subsamples	0.07	0.09	0.09	1		

Panel B: Divergence voting rights-cash flow rights

		High			Low	
Foreign largest blockholding	1.02*** (0.29)			0.33** (0.17)		
Total foreign blockholding		0.84*** (0.23)			0.41*** (0.12)	
Herfindahl index for foreign blockholders			1.47*** (0.55)			0.13 (0.28)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	1,858	1,858	1,858	5,961	5,961	5,961
$R^2$	0.18	0.18	0.18	0.19	0.19	0.19
<i>p</i> -value on Foreign blockholding proxy coefficient difference between subsamples	0.04	0.09	0.03	I		

Panel C: Tax haven status

	Т	Tax haven countries			No Tax haven countries			
Foreign largest blockholding	1.39*** (0.42)			0.44*** (0.15)				
Total foreign blockholding		1.15*** (0.29)			0.54*** (0.13)			
Herfindahl index for foreign blockholders			1.28* (0.66)			0.16 (0.13)		
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes		
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes		
N	661	661	661	7,158	7,158	7,158		
$\mathbb{R}^2$	0.29	0.29	0.28	0.18	0.18	0.18		
<i>p</i> -value on Foreign blockholding proxy coefficient difference between subsamples	0.03	0.05	0.09	1				

Panel D: Financial market development

Low	High

Foreign largest blockholding	0.68*** (0.19)			0.20 (0.18)		
Total foreign blockholding		0.72*** (0.16)			0.33** (0.17)	
Herfindahl index for foreign blockholders			0.51** (0.21)			0.13 (0.09)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	3,584	3,584	3,584	4,235	4,235	4,235
$R^2$	0.19	0.20	0.19	0.18	0.18	0.18
<i>p</i> -value on Foreign blockholding proxy coefficient difference between subsamples	0.07	0.09	0.09	I		

The table reports the coefficients of the three proxies of foreign blockholding of 3SLS SURE regressions of market to book ratio equations. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Table 3.17 shows that the coefficients on foreign blockholding behave as predicted and as in our previous tables (3.15 and 3.16). In some cases it occurs that, even in contexts institutionally strong, foreign blockholding has positive effects on firm performance. The nature of such a relationship typically goes beyond the substitutability with the local corporate governance, and extends to, for example, provision of managerial expertise and technical collaborations. In fact, companies with foreign corporate shareholdings are endowed with superior technical, organizational and financial resources (Douma et al, 2006)<sup>31</sup>. However, we apply comparison t-tests between the corresponding sub-subsamples on the coefficients which are characterized by this

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<sup>&</sup>lt;sup>31</sup> For instance, Chibber and Majumdar, (1999) find that the extent of a foreign firm's control over a domestic firm is positively associated with the degree of resource commitment to technology transfer, while Djankov and Hoekman (2000) find foreign investment to be associated with the provision of knowledge. Furthermore, a study conducted by Dhar (1988) on foreign-controlled companies in India finds that most of these enterprises firms have business links beyond mere equity participation. They have technical collaborations, nominations of foreign directors on their boards, consultancy and marketing arrangements, trademarks, patent obligations, and managerial resource sharing.

results. We always find that the coefficients are significantly different and the impact is more positive in the poorer corporate governance systems.

Overall, our results broadly suggest that foreign blockholding increases firm performance when firms are in context with a weak external corporate governance, but this will not occur, or at least occurs to a lesser extent, in contexts with strong external corporate governance.

#### 3.5.2.3 Robustness checks

After performing the regressions on the basic model, to ensure that the results do not depend on the used performance proxy, we undertake some robustness checks. This includes the reestimation of the same regressions discussed earlier, by using a different measure of firm performance. In particular, to mitigate our concerns, we employ some specifications using *ROE* as dependent variable. We do so for the analysis in the subsamples obtained splitting by *Outside investor rights* and *Disclosure requirements*. Results are reported in table 3.18. For brevity, we report only the main coefficients of interest.

TABLE 3.18

Foreign blockholding and performance — ROE as dependent variable

	(1) ROE	(2) ROE	(3) ROE	(4) ROE	(5) ROE	(6) ROE
			Panel A: Outsid	le investor rights		
		Low			High	
Foreign largest blockholding	0.06** (0.03)			0.01 (0.01)		
Total foreign blockholding		0.05** (0.02)			0.01 (0.01)	
Herfindahl index for foreign blockholders			0.11** (0.05)			0.02 (0.02)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,224	2,224	2,224	5,595	5,595	5,595
$R^2$	0.19	0.19	0.19	0.13	0.13	0.13

<i>p</i> -value on Foreign blockholding
proxy coefficient difference
between subsamples

between subsamples

0.09

0.07

0.09

Panel B: Disclosure requirements Low High Foreign largest blockholding 0.05\*\* 0.01 (0.02)(0.01)Total foreign blockholding 0.04\*\* 0.00 (0.01)(0.02)0.08\*\* Herfindahl index for foreign blockholders 0.01 (0.04)(0.01)Control Variables? Yes Yes Yes Yes Yes Yes **Industry Dummies?** Yes Yes Yes Yes Yes Yes Country Dummies? Yes Yes Yes Yes Yes Yes Year Dummies? Yes Yes Yes Yes Yes Yes Ν 2,155 2,155 2,155 5,664 5,664 5,664  $R^2$ 0.14 0.14 0.14 0.18 0.18 0.18 p-value on Foreign blockholding 0.07 0.07 0.09 proxy coefficient difference

The table reports the coefficients of the three proxies of foreign blockholding of 3SLS SURE regressions of return on equity equations. The variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

In every case, the differential between the results of the subsample persists. The variable relative to foreign blockholding are positively related to *ROE* in weak local corporate governance sub-samples, while the relationship is not significant in strong corporate governance context. The results (unreported) also remain unchanged when we use the splits with the other country-level corporate governance variables. Overall, the findings reinforces our arguments regarding hypothesis *H.2*.

### 3.5.2.4 Foreign blockholders' identity

Both the presence and the type of foreign blockholders can play a central role in explaining differences in competitiveness between companies, varying in fact the effectiveness of the structures of governance and the orientation of value creation. Not only the examination of the percentage of shares held by the blockholders, but also the distinction of the different types of blockholders offers a complete view of the impact on performance. Therefore, it is important to disentangle the effects of foreign blockholding, distinguishing the case in which foreign blockholders are industrial corporation or financial investors. As mentioned before, financial blockholders are defined as those whose primary operation is in the areas of banking, insurance, investment banking, brokerage, mutual and pension fund management, and other non-collective investment schemes, while corporate blockholders are defined as any other foreign blockholder who does not fall into the financial classification, excluding government blockholders and natural-person blockholders (Liu et al. 2012). On the one hand, the incentives of the larger corporate shareholders are more aligned to perform a possible effective monitoring role (Douma et al, 2006), since corporate blockholders may be more inclined towards establishing a long-term relationship, respect to financial investors. The impact of foreign non-financial blockholders may go beyond financial contributions. Foreign financial institutional investors, on the other hand, can behave in a manner that is significantly different from that of foreign corporate investors. Foreign financial institutions have different investment horizons, and they often have the requisite incentives to sell their stakes unless a firm can maintain short-term capital market gains. Foreign institutional investors, even if they are blockholders, are unlikely to act as a cohesive block in enhancing corporate performance. As a result, the foreign financial investors are much more likely to sell the shares of an underperforming company (Douma et al, 2006). As before, we disaggregate foreign blockholding into its two main components. We distinguish between financial blockholders and corporate blockholders. Therefore, in the following regression we consider, as independent variables, foreign blockholding by nonfinancial entity and foreign blockholding by financial investors, in the case of context with weak country-level corporate governance. Table 3.19 provides the results.

TABLE 3.19
Foreign blockholding and performance — Foreign blockholders' identity

	Non-	financial blockho	olders	Financial blockholders		
	(1) M/B	(2) M/B	(3) M/B	(4) M/B	(5) M/B	(6) M/B
		Panel	A: Low value of	Outside investor	rights	
Foreign largest blockholding	1.32*** (0.23)			-1.50 (1.87)		
Total foreign blockholding		1.32*** (0.21)			-1.90 (1.86)	
Herfindahl index for foreign blockholders			1.39*** (0.44)			-6.51 (5.40)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,224	2,224	2,224	2,224	2,224	2,224
$R^2$	0.22	0.22	0.21	0.21	0.21	0.21
		Panel 1	B: Low level of I	Disclosure requir	ements	
Foreign largest blockholding	1.39*** (0.26)			-1.39 (2.42)		
Total foreign blockholding		1.54*** (0.23)			-1.47 (2.25)	
Herfindahl index for foreign blockholders			1.28*** (0.48)			-26.16 (19.26)
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes
N	2,155	2,155	2,155	2,155	2,155	2,155
$R^2$	0.27	0.28	0.27	0.27	0.27	0.27

The table reports the coefficients of the three proxies of foreign blockholding (distinguishing between non-financial and financial foreign blockholding) of 3SLS SURE regressions of market to book ratio equations. The variables are

described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

Looking to panel A, when foreign blockholding is broken up into investments by foreign corporations and those pertaining to foreign financial investors, an interesting picture emerges: the effect of the variable representing blockholding by foreign corporations is positive and significant, while the effect of blockholding by foreign financial institutions is not significant (low value of *Outside investor rights*). The same results are obtained in Panel B (low level of *Disclosure requirements*). The low and dispersed shareholdings of foreign financial investors, even if they are blockholders, suggest that the latter are unlikely to be in a position to monitor and significantly influence the performance of companies. For foreign corporations, the incentives and rewards to monitor insiders, as well as the degree of commitment, are higher. The other splits are not reported for the sake of brevity, but the results remain the same.

## 3.5.2.3 Foreign blockholders' country of origin

In this final sub-section, we turn the attention to analyzing whether foreigner's sourcecountry characteristics, in terms of corporate governance, can explain differences in firm performances. Foreign blockholders can improve performance through their beneficial association with good corporate governance "origin", particularly in weak corporate governance setting and information environment. Therefore, if foreign blockholders export good corporate governance to recipient firms (Sudarat, 2006; Kim et al, 2010), one should expect a greater positive effect of performance when foreign blockholders are from countries characterized by better external corporate governance. In fact, strong corporate governance at the origin countries of foreign blockholders may encourage the latter to take up blockholdings overseas as this facilitates their ability to export strong governance into foreign firms. This imply that foreign blockholdings may be an important mechanism for the exporting of strong governance standards around the world. The way to test the hypothesis is to see if the general results are especially driven by situations in which foreign blockholders from high investor protection countries invest in countries with weak investor protection. Similar to the previous sub-section, we consider different independent variables, i.e. foreign blockholding by foreigners from country with strong and weak investor protection, splitting the independent variable according to the Anti-director rights index (La Porta et al, 2006) median value. Table 3.20 presents the results.

TABLE 3.20
Foreign blockholding and performance — Foreign blockholders' country of origin

	Blockholders	s from country w	th strong CG	Blockholders from country with weak CG			
	(1) M/B	(2) M/B	(3) M/B	(4) M/B	(5) M/B	(6) M/B	
		Panel	A: Low value of	Outside investor	rights		
Foreign largest blockholding	2.45*** (0.29)			0.74*** (0.25)			
Total foreign blockholding		1.92*** (0.26)			0.69*** (0.24)		
Herfindahl index for foreign blockholders			1.89*** (0.60)			0.89* (0.49)	
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes	
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes	
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes	
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes	
N	2,224	2,224	2,224	2,224	2,224	2,224	
$R^2$	0.22	0.22	0.21	0.21	0.21	0.21	
		Panel I	3: Low level of I	Disclosure requir	ements		
Foreign largest blockholding	1.65*** (0.29)			1.26*** (0.32)			
Total foreign blockholding		1.61*** (0.26)			1.20*** (0.30)		
Herfindahl index for foreign blockholders			0.44* (0.24)			0.85 (0.66)	
Control Variables?	Yes	Yes	Yes	Yes	Yes	Yes	
Industry Dummies?	Yes	Yes	Yes	Yes	Yes	Yes	
Country Dummies?	Yes	Yes	Yes	Yes	Yes	Yes	
Year Dummies?	Yes	Yes	Yes	Yes	Yes	Yes	
N	2,155	2,155	2,155	2,155	2,155	2,155	
$R^2$	0.27	0.27	0.27	0.27	0.27	0.27	

The table reports the coefficients of the three proxies of foreign blockholding (distinguishing between investors from country with strong and weak corporate governance) of 3SLS SURE regressions on market to book ratio equations. The

variables are described in Appendix 3.1. Industry, country and time dummies are included in the model, but the coefficients are not reported. All explanatory variable are one-period lagged. The figures in brackets are standard errors. (\*) (\*\*) and (\*\*\*) indicate the statistical significance of each coefficient at levels of 10%, 5% and 1%, respectively.

My empirical results (splitting by both *Outside investor right* and *Disclosure requirements*) suggest that foreign blockholders from country with strong investor protection positively influence firm performance in weak governance settings, because of the opportunity to export stronger governance regimes. However, even in the case of foreign blockholders from countries with weak corporate governance, we have positive coefficients in almost all cases, but they are lower. Overall, the empirical results show that foreign blockholders from country with strong institutional setting utilize the governance of source countries to increase the competitiveness of the company in which they invest. The other splits are not reported for the sake of brevity, but the results are the same.

#### 3.6 Conclusions

This final chapter studies foreign blockholding in the European counties and their relationship with corporate governance. We argue that firms with problematic governance structures, particularly those with high levels of insider control and from countries with weak institutions, are likely to have more foreign blockholding, and that the effects of the latter on firm performance are more decisive, precisely in such contexts.

We conduct our tests on a sample of 3,886 firms from 26 countries. Using data from 2003 to 2009, we obtain a number of findings that deepen foreign blockholders' s role in value creation process, in relation with corporate governance, showing some important implications. We show that large foreign shareholders invest more in firms with higher levels of internal corporate governance problems. The variable on weak internal corporate governance is statistically significant and with the expected sign (+) in all regressions conditioned by low level of country-level corporate governance (external corporate governance mechanisms), i.e. weak investor protection against potential opportunistic behavior adopted by insiders, opaque corporate governance procedures, inefficient judicial system. These results are driven by cases in which foreign investors are not financial blockholders and when they come from countries with a strong system of corporate governance. On the other hand, the results on the relationship between foreign blockholding and business performance show that foreign blockholding positively affects firm performance and profitability in country with poor corporate governance system. The underlying reasoning is that foreign blockholders may pressure on family/manager owners to reduce the extraction of private

benefits of control, engaging in a managerial activism, by improving performance and increasing firm value. Therefore, there is a substitutability between local governance and foreign blockholders, so in the presence of weak institutional contexts the positive relationship is strengthened. This is consistent with the idea that foreign investors act as facilitators in weak institutional setting. These conclusions are reinforced in case of foreign investors that are not financial blockholders and when they come from countries with a strong system of corporate governance.

We have provided some evidence of the benefits of foreign blockholding based on their superior monitoring abilities, resource endowments and skills to use the institutional environment to their advantage. The substitutability between foreign blockholding and institutional corporate governance leads to the conclusion that the contexts in which there is a poor legal and enforcement system can also be a breeding ground for small investors, if there is the presence of large foreign investors. However, we do acknowledge that these shareholdings cannot be the solution to all problems of weak corporate governance. Regulators and governments must not fail in their duty to improve the institutional elements that give rise to opaqueness, such as weak property and investor rights. Strengthening the quality of accounting disclosure should be always the top priority of any financial reform.

In addition, our study demonstrates the necessity of disaggregating foreign blockholding into foreign financial and foreign corporate shareholdings. In fact, these two categories of blockholders need to be viewed and analyzed separately, since the underlying dynamics governing the investments by them are vastly different. The same reasoning applies to the importance of the corporate governance structure of origin of foreign blockholders.

We show that foreign blockholding is not simply a matter of a country's economic globalization, but appears to be directly related to a country's legal institutions, since the results of this chapter states that corporate governance influences the dynamics of the process of value creation by foreign blockholders. Taken together, these findings are consistent with the explanation that corporate governance play an important role in the decision of foreign blockholders about the entity of equity stake to hold and the foreigners activism.

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## **Conclusions of the thesis**

The aim of this Ph.D. dissertation is to contribute to the literature on firm ownership, by investigating the role of moderators and owners' identity in the relation between ownership concentration and firm value. The three essays that are included in the thesis not only make important contribution to the academic literature, but their results may also have implication both for practitioners and policy makers.

The objective of the first essay has been to verify the existence of a relationship between ownership concentration and performance, and then analyze it. In particular, through the tool of meta-analysis, a methodological approach able to synthesize the state of the art and the sources of heterogeneity among the studies on a given theme, the role of ownership in the process of governance and creation of firm value has been examined in depth. We have studied the direction and strength of the relationship between ownership and value, investigating the possible causes of controversial empirical results found in the literature. First, we present the analysis on the effect sizes, and then we show our meta regression models, analyzing the moderating factors. The results offer a number of suggestions for further research on the subject of investigation and, hopefully, ideas for actions to improve corporate governance.

The study reveals the extreme importance of ownership in the creation of value. With reference to the relationship between ownership concentration and value, there is a prevalence of a positive relationship; even in the presence of high levels of ownership concentration, effects resulting from entrenchment do not outweigh the benefits in terms of monitoring of the management by controlling shareholders. However, given the complexity of the issue, it is fundamental to use meta-regressions in the phase of quantitative analysis to test the influence of moderating variables on the intensity of the link between ownership and value. In fact, the second and most important output of the meta-analysis is provided by the meta-regressions, which show how the relationship between ownership and value is moderated by several factors. Much of the contradiction in the previous results derive from the fact that some researchers may not submit a non-significant result for publication, and editors may not publish non-significant results even if they are submitted. In fact, it is noted that the authors who publish their studies tend to demonstrate the significance of the relationship between ownership and performance. Additionally, it occurs that

the techniques and methods used by the authors affect the results, because the control for the endogeneity amplifies the effect of ownership on value. Moreover, the time factor, which can be a proxy of the growing availability of firm datasets, turns out to be relevant, since the relationship between ownership concentration and firm value is weakened when the period of analysis refers to the 80s compared to more recent years. Furthermore, the monitoring and incentive problems between owners and managers are major in listed firms, so the relationship between ownership concentration and performance, given the importance of blockholders in solving such types of problems, is stronger compared to unlisted firms. Finally, also the external environment determines the strength of the effect of ownership on value, since blockholders have a considerable importance where the protection of investors is not guaranteed, or in situations with the presence of entrenched managers. Future research should better investigate the role of these variables, as well as the possible moderating effect of other variables of governance, going more deeply into the question of the presence of relations of complementarity or substitutability between instruments of corporate governance.

It is necessary to take into account the capacity of the ownership structure to affect firm value, limiting potential conflicts of interest and opportunistic behavior, in addition to the direct impact in promoting virtuous processes of governance. However, benefits and costs of ownership not always occur in a univocal way, but according to the role played by other factors. Therefore, there is a need to develop a broader knowledge of how the potential benefits/costs, arising from ownership structure, can be influenced by moderating variables. Just the systematic examination of multiple studies allows to highlight how the results of a single study are random or due to a systematic error, reaching, through the analysis of the differences in the results, to new hypotheses for new empirical works.

Using Italy as an empirical setting, the second essay examines ownership concentration, highlighting its effects on business performance. In particular, the chapter focuses on the role of moderating variables at the firm-specific and context-specific levels in probing the link between ownership and performance. The innovative quality of the essay is its deeper analysis of the effect of ownership on firm performance, which is significantly influenced by the role of moderating variables. Ownership concentration appears in fact to be strictly affected by other moderating factors. In general, we must develop a greater sensitivity to ownership structure decisions and become aware of their economic or financial consequences and their influence on competition, as well as their direct and indirect effects on activities and governance processes.

The evidence we obtain generally indicates again the positive relationship between ownership concentration and operating performance. Although it is said that in Italy, a controlling shareholder can still "live like a king", blockholders can allow companies to attain positive performance.

Nevertheless, the relationship is actually moderated by several factors, and it can even become negative.

The positive effect of ownership concentration on performance decreases under high indebtedness and difficulty meeting commitments to creditors. Leverage influences corporate governance, changing how command is exercised and generating stringent financial constraints. The dependence of most Italian firms on external capital, which imposes stricter management rules, generates costs that are often difficult to pay in the long term. This dependency limits the propensity of firms to invest, and such investment may be critical for development and value creation. In fact, the major Italian companies have very high levels of leverage (e.g., Pirelli, Italmobiliare, Enel, Telecom, and Fiat), which allows controlling shareholders to do business primarily with other people's money (banks or small investors). The debt limits the incentives for large shareholders to act, reducing the discretionary decision making and the positive effect of ownership on corporate performance. In addition, the majority shareholders of firms with difficult financial circumstances seem to worsen such situations rather than improving them because the shareholders attempt to protect their investments even at the expense of firm performance. Therefore, we suggest that greater complexity in competitive and organisational contexts requires a redesign of the financial structures in combination with ownership.

Moreover, the influence of ownership is different where problems of opportunism are particularly pressing. As this empirical evidence indicates, higher levels of ownership encourage majority shareholders to achieve important goals and sustain virtuous processes of value creation. In other words, when the degree of opportunism is significant, ownership concentration has a more positive effect on corporate performance, and the role of majority shareholders, who can maintain the efficiency of governance and support firm performance, becomes central. A higher ownership concentration, which encourages a greater commitment and presence by the majority shareholder within the firm and increases his accountability to and identification with the firm, can facilitate value creation. Therefore, ownership structure appears capable of protecting value from opportunistic choices, and that offers incentives and control, ensuring the efficient allocation of resources through governance.

However, a higher ownership concentration decreases performance in family-controlled firms, indicating significant agency problems. Family governance therefore seems to accentuate the agency costs of equity, generating a negative effect on performance. In a context like the Italian one, which is characterised by a poor-quality legal environment and a high ownership concentration, the family, as the dominant shareholder, will be more inclined to expropriation. Future research might consider whether one can limit this effect, for instance, by reducing the involvement of family members in managing the board.

The status of a listed company also can influence the relationship between ownership and performance, as increasing ownership concentration in listed firms yields negative performance. It seems likely that inefficiency in the financial market and a lack of legislation and regulations may encourage the expropriation of value by large shareholders of listed first, disadvantaging small shareholders. The degree of development of the financial system, together with other institutional factors, is essential to whether listing can benefit the firm. Why are the best Italian companies not listed on the stock market? For instance, why are large firms such as Ferrero, Barilla and Armani not listed on the Italian stock market? In Italy, the decision to be listed is often not driven by the desire to access more rapidly available and less costly funding sources or to attract private and institutional investors. The decision is instead based on convenience or the desire to exercise control over sectors of the economy. The results obtained from the analysis have significant implications for firm management teams and for policy makers, suggesting the need for greater efforts to improve the efficiency of the Italian stock market. Our results contribute to the literature by providing additional guidance to policy makers engaged in the on-going debate regarding the proper role and design of corporate governance and legal institutions.

Additionally, new regulations and reforms that can improve the protection of minority shareholders and retail investors can reduce the role of large shareholders and their contribution to governance. In particular, the introduction of the TUF in 1998 and of subsequent reforms seems to have reduced the positive effect of ownership concentration on performance, limiting the centrality of the majority shareholder and the importance of the latter's contribution to firm performance. This result supports the concept that ownership concentration and legal protection are substitutable for one another as a means to resolve the problem of opportunism. The results is that shareholders, after the reforms, rely less on ownership concentration to protect their interests from managerial opportunism. Therefore, policy makers should improve governance systems and provide legal protection for outside investors by designing policies that reduce the costs of the information asymmetries associated with external finance. We should stress that protracted and slow reforms

imply that the probability of abuses of minority shareholders in the future remain high. Political links between firms, especially large holding companies, banks and all levels of the state are still very strong in Italy, and a intentionally insufficient legislative framework may also be a consequence of rent-seeking behavior of politicians who have strong formal and informal relations with influential shareholders.

This study suggests new research directions related to ownership structure, as it is clear that we must more deeply examine the effects of moderating variables on the relationship between ownership concentration and performance. Given the results of our analyses, we conclude that the value of ownership cannot be assessed unless the role of moderating variables is considered jointly with that of ownership. The essay suggests that the relationship between ownership and performance may need to be contextualised, with attention paid to particular firm-specific characteristics and environmental conditions. In addition, the work contributes to the debate on the effects of the new regulations inspired by the Anglo-Saxon model of corporate governance in European countries, since these new rules are based on those that are in force in Common Law countries. Regarding the limitations of the present work, we should note that the findings presented here are relevant to the Italian context, so they may be generalised most effectively to firms in countries that are similar to Italy in that they feature a bank-based financial system that is full of friction and has a poor corporate governance system. Future research should also explore the effect of other moderating variables; for example, it might be interesting to test the moderating role of context in the relationship between ownership concentration and performance in a cross-country analysis. Finally, one could investigate the role of moderating variables by also considering the value of other dimensions of ownership structure, such as managerial ownership.

The final essay studies foreign blockholding in the European counties and the relationship with corporate governance. We argue that firms with problematic governance structures, particularly those with high levels of insider control and from countries with weak institutions, are likely to have more foreign blockholding, and that the effects of foreign blockholding on firm performance are more decisive precisely in such contexts.

We obtain a number of findings that deepen foreign blockholders' s role in value creation process, in relation with corporate governance, showing some important implications. We show that large foreign shareholders invest more in firms with higher levels of internal corporate governance problems. The variable on family and/or managerial ownership is statistically significant and with the expected sign (+), conditioned by low level of corporate governance at country-level (external corporate governance mechanisms), i.e. weak investor protection against potential opportunistic

behavior adopted by insiders, opaque corporate governance procedures, inefficient judicial system. These results are driven by cases in which foreign investors are not financial blockhoders and when they come from countries with a strong system of corporate governance. On the other hand, the results on the relationship between foreign direct blockholding and business performance show that foreign blockholding positively affects firm performance and profitability in country with poor corporate governance system. The underlying reasoning is that foreign blockholders may pressure on family/manager owners to reduce the extraction of private benefits of control, engaging in a managerial activism, by improving performance and increasing firm value. Therefore, there is a substitutability between local governance and foreign blockholders, so in the presence of weak institutional contexts the positive relationship is strengthened. This is consistent with the idea that foreign investors act as facilitators in weak institutional setting. Even in this case, these conclusions are reinforced in case of foreign investors that are not financial blockhoders and when they come from countries with a strong system of corporate governance.

We have provided some evidence of the benefits of foreign blockholding based on their superior monitoring abilities, resource endowments and skills to use the institutional environment to their advantage. The substitutability between foreign blockholding and institutional corporate governance leads to the conclusion that the contexts in which there is a poor legal and enforcement system can also be a breeding ground for small investors, if there is the presence of large foreign investors. However, we do acknowledge that these shareholdings cannot be the solution to all problems of weak corporate governance. Regulators and governments must not fail in their duty to improve the institutional elements that give rise to opaqueness, such as weak property and investor rights. Strengthening the quality of accounting disclosure should be always the top priority of any financial reform.

In addition, our study demonstrates the necessity of disaggregating foreign blockholders into foreign financial and foreign corporate shareholdings. In fact, these two categories of blockholders need to be viewed and analyzed separately, since the underlying dynamics governing the investments by them are vastly different. The same reasoning applies to the importance of the corporate governance structure of origin of foreign blockholders.

We show that foreign blockholding is not simply a matter of a country's economic globalization, but appears to be directly related to a country's legal institutions, since the results of this chapter states that corporate governance influences the dynamics of the process of value creation by foreign blockholders. Taken together, these findings are consistent with the explanation

that corporate governance play an important role in the decision of foreign blockholders about the entity of equity stake to hold and the foreigners activism.

# **Appendices**

#### **APPENDIX 1.1**

#### Calculation of effect size

To calculate the effect size, the formulations proposed by Cooper and Hedges (1994) are applied.

$$r_{i} = \sqrt{\frac{t^{2}}{t^{2} + df}}$$
 (1) 
$$Z_{r_{i}} = \frac{1}{2} \ln \left( \frac{1 + r_{i}}{1 - r_{i}} \right)$$
 (2) 
$$\overline{Z}_{r} = \frac{\sum_{i=1}^{k} w_{i} Z_{r_{i}}}{\sum_{i=1}^{k} w_{i}}$$
 (3) 
$$SD_{(Zr)} = \sqrt{\frac{\left( Zr - \overline{Z}r \right)^{2}}{n}}$$
 (4)

Equation (1) proposes the first step to calculate effect size. r indicates the correlation coefficient determined for the study, t is the Student's t and df indicate the degrees of freedom. If the value of Student's t is not directly found in the study, it can be easily calculated through the relationship between beta and the standard error. If there is only the p-value, it is possible to apply a conversion formula. Equation (2) allows to standardize the correlation in a Z-score, which is comparable among different observations and that can be used to determine an average value (equation 3).

Concretely, the main ways to implement the process of meta-analysis are the fixed effects model and the random effects model. The fixed effects model assumes that the effect size is the same in all the studies, assuming that the population on which try to infer has one effect size in common. This situation is called *homogenous case*. Instead, conducting a meta-analysis using the random effects model means considering only a sample of all possible studies that have dealt with a certain theme, assuming that the effect size varies from study to study. In this case, called *heterogeneous case*, the effect sizes recorded are part of a sample of the possible effects, i.e. each effect size is referring to a specific population (Hedges, 1992).

In statistical terms, the main difference between the two models lies in the method of calculation of the standard deviation associated with the effect size. In the fixed effects model is only considered within variability of the studies assuming that other random elements do not affect the effect size (Hedges, 1992; Hedges and Vevea, 1998), precisely because it assumes that one is considering the entire universe of studies.

In contrast, in the random effects model, in addition to the within-study error, which consists of sampling error, it is necessary to take into account the error produced by the sample itself. For these reasons, we consider two elements of variability: the first arising from differences within different studies and a second related to differences between studies (Hedges and Vevea 1998).

Finally, supporting the results of the meta-analysis, it is possible to apply the test of homogeneity, that is Cochran's Q test, calculated as indicated in equation (5), which allows to measure the degree of heterogeneity among studies.

$$Q = \sum W_i (Z_r - \overline{Z}_r)^2 \qquad \sim \chi_{k-1}^2 \qquad (5)$$

If such test, which follows a  $\chi^2$  distribution with K-1 degrees of freedom, is statistically significant, the null hypothesis is rejected in favor of the hypothesis of heterogeneity among the studies.

# APPENDIX 1.2 Variable descriptions

Variable Name	Factors of heterogeneity	Description of the dummy variables
Published Dummy	Role of publication bias	Dummy equal to 1 if the study comes from a published article and 0 otherwise
Endogeneity Dummy	Role of econometric techniques used: consideration of endogeneity	Dummy equal to 1 for studies that have been monitoring problems of endogeneity (2SLS, 3SLS and GMM) and 0 otherwise
80s Dummy	Role of time period of analysis	Dummy equal to 1 when the analysis period falls in the decade indicated in the variable and 0 otherwise
Listed Dummy	Type of firm	Dummy equal to 1 for studies that concern listed companies and 0 otherwise
Small Dummy	Type of firm	Dummy equal to 1 if the study is based on small firms and 0 otherwise
Family Dummy	Type of owners	Dummy equal to a 1 if in the study is indicated the use of a variable of ownership concentration connected to family members and 0 otherwise
Civil Law Dummy	Role of the legal system	Dummy equal to 1 for studies related to Civil Law contexts and 0 with reference to Common Law contexts

## **APPENDIX 2.1**

# Variable descriptions

Variables	Calculation	
Ownership	Domantoga of shares directly around by the majority shareholder	
Concentration	Percentage of shares directly owned by the majority shareholder	
Ownership	Squared term of the variable Ownership Concentration	
Concentration <sup>2</sup>		
Ownership	Sum of the percentage of shares directly held by the first 3 shareholders	
Concentration 3		
Adj Cfroa	Indicator based on EBITDA/total asset ratio, adjusted for the specific sector by subtracting	
Auj_Ciroa	the average value obtained for firms in the same industry for each year of observation	
Leverage	Ratio of financial debt to financial debt and equity	
Tangibility	Ratio of tangible assets to total assets	
Growth opportunities	Percentage change in sales from year t to year t-1	
Year Dummies	30 dummy variables, one for each year in the period 1980-2009, that are equal to 1 if the	
real Dummies	observation refers to the corresponding year and 0 otherwise	
Size	Natural logarithm of total assets	
Age	Natural logarithm of firm age plus one	
	6 dummy variables, one for each type of industry (according to Pavitt's taxonomy), that are	
Industry Dummies	equal to 1 if the firm belongs to the particular sector to which the dummy refers and 0	
	otherwise	
Low EBITDA/Interests	Dummy that is equal to 1 when the ratio of the EBITDA to total short-term and long-term	
Dummy	financial interests is less than the median and 0 otherwise	
High Free cash flow	Dummy that is equal to 1 if net income plus the ratio of depreciation to total assets is more	
Dummy	than the median and 0 otherwise	
	Dummy that is equal to 1 for family firms, i.e. those in which family members control more	
Family Dummy	than 25% of the shares and/or have a role in the management or on the board; the value is 0	
	otherwise	
Institutional investors	Dummy that is equal to 1 for firms in which the sum of all institutional investors is more	
Dummy	than 15%; the value is 0 otherwise	
Listing Dummy	Dummy that is equal to 1 for publicly traded firms and 0 otherwise	
Diversification Dummy	Dummy that is equal to 1 when the firm is diversified and 0 otherwise	
Unrelated	Dummy that is equal to 1 when the firm diversifies into non-correlated assets and 0	
Diversification Dummy	otherwise	
TUF Dummy	Dummy that is equal to 1 for years equal to or later than 1998, the year when TUF came	
	into force, and 0 otherwise	
Bank Reform Dummy	Dummy that is equal to 1 for years equal to or later than 1990, when the Bank Reform Act	
	came into force, and 0 otherwise	
Bank development	Private credit by banks and other financial institutions over GDP (source: World Bank)	
Market development Crisis Dummy	Market capitalisation over GDP (source: Borsa Italiana - BitStat)  Dummy that is equal to 1 for the years 2008 and 2009 and 0 otherwise	

## **APPENDIX 3.1**

# Variable descriptions

Variables	Calculation
Foreign largest blockholder	Percentage of shares held by the largest foreign blockholder who owns at least 5% of firm common stock
Total foreign blockholding	Sum of the percentage of equity stake held by all foreign blockholders who own at least 5% of firm common stock
Herfindahl index of foreign blockholders' concentration	Sum of the squared percentage of equity stake held by all foreign blockholders who own at least 5% of firm common stock
M/B	Ratio of market value of equity to book value of equity
ROE	Ratio of fiscal year's net income to total book value of equity
Insider ownership percentage	Percentage of shares held by family and managers
Earnings management	Discretionary accruals from the Modified Jones model scaled by total assets
Board dependence	Percentage of independent directors on the board
Outside investor rights	Anti-director rights index (source: La Porta et al, 2006)
Disclosure requirements	Disclosure scores (source: La Porta et al, 2006)
Legal origin	Dummy that is equal to 1 for countries with a French Civil Law legal origin, and 0 otherwise
Divergence voting rights- cash flow rights	Dummy that is equal to 1 for countries in which the divergence between ownership and control is substantial, according to the classification of Faccio and Lang (2002), and 0 otherwise
Tax haven status	Dummy that is equal to 1 for countries that are tax havens, and 0 otherwise.
Financial market developmment	Number of listed companies in a given country on GDP (source: World Bank)
Adjusted total domestic ownership	Percentage of shares held by total domestic ownership exclusive of family/management domestic ownership
Cash holdings	Ratio of cash and cash equivalents on total assets
Leverage	Ratio of financial debt to financial debt and equity
Size	Natural logarithm of total assets
Return	1-year stock market return
Stock price volatility	1-year share price volatility based on monthly exchange
Capital expenditure	Ratio of change in fixed assets plus depreciation on total assets
Intangible assets	Ratio of intangible assets to total assets
Age	Natural logarithm of firm age plus one
Industry Dummies	19 dummy variables, one for each type of industry (according to 2 digit NACE industry code), that are equal to 1 if the firm belongs to the particular sector to which the dummy refers and 0 otherwise
Country Dummies	26 dummy variables, one for each country, that are equal to 1 if the firm is in the particular country to which the dummy refers and 0 otherwise
Year Dummies	7 dummy variables, one for each year in the period 2003-2009, that are equal to 1 if the observation refers to the corresponding year and 0 otherwise