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"ESSAYS IN INTERNATIONAL AND COMPARATIVE CORPORATE GOVERNANCE"

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DEDICATION

This thesis is dedicated to …

My dad, Francisco, and mom, Laila. It was from them that I learned the importance of education.

My wife, Mariana, and my daugthers, Ana Catarina and Maria Vitoria. My love.

ABSTRACT

Corporate governance relates to the ways in which firms' suppliers of resources may have a return on their investment. Therefore, Aoki (2001) defines corporate governance as a "structure of rights and responsibilities among the parties with a stake in the firm," which includes parties such as suppliers of finance (Shleifer & Vishny, 1997) and other groups and individuals who can affect or be affected by the firm's value creation and transfer (Freeman et al., 2010). Among these suppliers are the "owners" of the firm, persons – individuals or other firms - who share two fundamental rights. First, the cash flow (or economic) rights give to the owners the right to appropriate the residual earnings. And second, the control (or political) rights are associated with the voting rights and ultimately with the control of the firm and the residual claim to the decision-making. Even though it is well understood that owners have important implications for other corporate governance practices and for corporate strategy (Shleifer & Vishny, 1997), there are at least two unresolved questions in the corporate governance literature. First, what factors determine cross-national differences in corporate ownership patterns. In other words, what determine owners' decisions toward which rights (i.e., voting or cash flow) to concentrate their wealth, who are they and where they come from, and ultimately, what are their interests on firms.

Second, what are the consequences of these corporate ownership patterns on other governance practices such as the structure, functions and behaviour of the board of directors. Scholars from different disciplines have stepped in to answer these questions, including politics (Gourevitch, & Shinn, 2005), law (Gilson, 2006; Hansmann, 1996), economics (Demsetz & Lehn, 1985), finance (Shleifer & Vishny, 1997) and strategy (Folta, 1998; Pedersen & Thomsen, 1997) but have not reached a unified conclusion. Moreover, most of this literature has focused on U.S. and U.K. firms. Therefore, the purpose of this study is to explore the antecedents and consequences of ownership structure.

Three essays compose this dissertation on International and Comparative Corporate Governance, seeking to better understands corporate ownership, their patterns and consequences, across multiple countries - we move away from the Anglo-American context to incorporate emerging markets in Latin America and

Western European economies - and over time. In essence, all of them bring into play the Agency and Institutional Theory as primarily background in which the hypotheses are developed.

Chapter 1. In the first chapter, we start examining the ownership concentration of publicly listed companies in the seven largest Latin American economies. Latin American countries present similar patterns of ownership concentration. For example, the ownership concentration of the largest shareholders appears to be high in the region where the average value rises above 53%. This is higher than the ownership concentration is continental European (Faccio & Lang, 2002; Thomsen & Pedersen, 2000) and Eastern Asian firms (Claessens, Djankov, Fan & Lang, 2000). Another key dimension of corporate governance goes beyond of how much someone owns and shifts to understanding who owns the firm. Therefore, we also explore what are the characteristics of the largest shareholders not only to account for their typology but also from which country they come from, which may drive their behavior toward what are the means to achieve control over the firm. Indeed, in Latin America, when governments are the largest shareholder they tend to hold more than 50% of voting shares as a way to keep control of the firms. And, although the foreign investments are growing in the region, the most important shareholders are still the domestic investors, which accounts for more than 80% of the number of the largest shareholders.

Then, we aim to explain what are the means by which owners gain control rights in excess of ownership rights. In particular, we focus on the analysis of the determinants of the dual (or multiple) class shares issuance in Latin American firms, as mean to deviate from one-share one-vote. Our analyses demonstrate that (a) type and origin of the largest shareholder are significant predictors of both dual-class shares and wedge ratio between voting and cash-flow rights (b) the country-level investor protection is positively related with the existence of dual-class shares, and (c) the firm-level characteristics are also significant to explain dual-class decisions and control leverage behavior of largest controlling shareholders in Latin America.

Chapter 2. Drawing on agency and institutional theories, in this chapter, we have developed a multidimensional framework that accounts for the effect of different sources of uncertainties on the

investor's decision towards the level of the ownership concentration. We propose that the ownership concentration is a mitigation mechanism, which the largest shareholder may exercise to decrease the exposure to unpredictable situations affecting organizational outcomes. We then applied the uncertainty-ownership framework to a sample of 4,952 firms across seven Latin American countries. We find that firm and country level uncertainties influence and help to explain differences in ownership concentration of the largest shareholders in Latin America.

Our empirical analysis first shows that high ownership concentration continues to be a common pattern in Latin American firms and firms facing higher uncertainty have a higher concentration of ownership. Additionally, firms where the largest shareholder is a strategic block-holder or a private investor have more concentrated ownership than institutional investors; the largest shareholder tends to transfer its home-country governance systems and the uncertainty of formal institutions and individuals willingness to uncertainty matter. This study contributes to the comparative corporate governance literature by demonstrating the importance of firm-level and country-level uncertainty factor on the largest shareholder ownership behavior.

Chapter 3. In this chapter, we examine the lack of compliance with corporate governance codes by listed firms. We propose a framework that helps to explain why no "one best way" exists to achieve effective corporate governance. This framework accounts for the under-contextualized agency arguments by positing that agency problems are related to a particular institutional setting in which firms are embedded. Our theory and findings indicate that ownership concentration is the underlying mechanism that drives non-compliance behavior of firms. We demonstrate that higher levels of ownership concentration have especially positive effects on non-compliance with corporate governance codes. This is because the bundle of governance practices enacted by the codes' interacts with ownership structure in a way that one may substitute another as a management monitoring mechanism. Second, understanding non-compliance allows contributing to the compliance theory where the deterrence theory has been the predominant academic perspective. Our theory and results highlight that non-compliance is contingent to regulated entities context, and specifically, to their decision-makers identities. Therefore, second order amendments

that transform voluntary provisions in mandatory regulations such as the 2009's German mandatory reform law on directors' remuneration (Aguilera et al., 2011; Hopt, 2011) has a downside effect to forcefully homogenize heterogeneous firms

The implications of understanding the causes and consequences of corporate ownership are twofold. First, in terms of corporate law and regulations, it helps government agencies to develop better regulatory mechanisms to enhance economic wealth, not only to prevent monopolist behavior but also to ensure transparency and good corporate governance practices. And second, this study presents how ownership across countries impacts their corporate practices. Our results do not support the argument of convergence in corporate governance, at the firm-level, as a mechanism to improve governance practices. Firms adapt their behavior to fit their goals and adjust themselves to the institutional settings in which they operate. Hence, in order to predict changes in corporate governance behavior, it is imperative to start by understanding firm's external institutional environment as well as their internal dynamics.

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Chapter 1

Corporate Ownership in Latin American Firms: A Comparative Analysis of Dual-Class Shares

INTRODUCTION

Most of the analysis of the *Modern Corporation* has focused on conflicts of interest between managers and owners. Recent literature, however, adds minority - majority shareholders conflict where more concentrated ownership structures takes place (La Porta, López-de-Silanes, & Shleifer, 1999; Villalonga & Amit, 2009; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). This *new* agency problem, so-called, *principal-principal*, is particularly salient in emerging markets, where weak governance rights and underdeveloped institutions may account for high levels of ownership concentration (Dharwadkar, George, & Brandes, 2000; Khanna & Palepu, 2000a; Peng, Wang, & Jiang, 2008; Young, et al., 2008). In this context, shedding light into the corporate ownership in Latin America can play a positive role to disentangle the ownership puzzle. It is because, despite the some literature on corporate ownership (Chong & López-de-Silanes, 2007; Gutierrez, Pombo, & Taborda, 2008) scholars has not progressed very far to explain the ownership diversity and we still lack a comparative perspective that systematically evidences the ownership patterns of publicly listed firms in Latin America (Vassolo, De Castro, & Gomez-Mejia, 2011).

This paper seeks to contribute to the quintessential problem of ownership and control by answering two broad questions: (1) *who are the owners of significant voting rights across Latin American countries?* and (2) *whether these large owners use the dual-class mechanism to enhance their voting power on firms?* We draw on existing theories of corporate control, in politics and finance, to identify and test explanatory factors on the separation of ownership and control in the context of publicly traded companies in seven Latin American countries (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela). We start tackling the question of *whom are the owners of significant voting rights*. To do so, we examine the identity and origin of the largest shareholder of direct voting rights[1]. Latin American countries present similar patterns of ownership concentration. For example, the average ownership stake of the largest

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[1] Previous literature on ownership and control aimed to tackle the ultimate shareholder (Claessens, Djankov, & Lang, 2000; Faccio & Lang, 2002; La Porta, López-de-Silanes, & Shleifer, 1999) with some methodological problems that we aim to avoid by analyzing the direct ownership from which we may theorize without losing generality. In the Appendix 1 we discuss in more detail the potential issues regarding direct versus ultimate control rights and offer a deeper analysis for a sub-sample of Brazilian firms that we are able to track the ultimate owner.

shareholders rises above 54 per cent. This is higher than the ownership concentration in the U.S. (Holderness, 2009), continental European (Thomsen & Pedersen, 2000) and Eastern Asian firms (Claessens, Djankov & Lang, 2000). Beyond of how much someone owns another key dimension shifts to understanding who owns the firm. Various types of shareholders (e.g., banks, pension funds, individuals, industrial companies, families, etc.) can possess different interests, time horizons, and strategies (Aguilera & Jackson, 2003; Aguilera & Jackson, 2010; Jackson, 2000). Most of ownership literature tends to go outside the foundations of agency theory when looking at the strategic interests of ownership, other than purely financial interests. Therefore, we also explore what are the characteristics of the largest shareholders not only to account for their typology but also from which country they come from, which may drive their behavior to achieve control over the firm.

First, strategic interests are prevalent when non-financial goals such as control rights motivate investment (Gerlach, 1992; Keister, 2002; Whitley, 2009). Therefore, governance struggles between different groups of shareholders that try to impose their preferences and to offer a more attractive explanation for changes in strategic directions of firms (Goyer, 2010). For example, on one hand, banks, as the largest shareholder of a firm, can be long term focused to provide financial services rather than maximizing short-term shareholder returns (Dittmann, Maug, & Schneider, 2010). On the other hand, governments may use their control of firms as an instrument to pursue social objectives, such as to curb unemployment, keep low prices of services of general interests, and provide universal services (Bortolotti & Faccio, 2009). Indeed, in Latin America, when governments are the largest shareholder they tend to hold more than 50% of voting shares as a way to keep control of the firms. Although the foreign investments are growing in the region (Schneider, 2008), the most important origin of shareholders is still the domestic investors, which accounts for more than 80% of the number of the largest shareholders.

Second, we argue that the origin of the largest shareholder constitute other significant variable to account for governance behavior of the largest shareholder. This is because investors are embedded in their home-country institutional arrangements that reflect legitimacy concerns about the role of shareholders on governance matters (Roe, 2000). For example, Aggarwal, Erel, Ferreira, and Matos (2011) conclude that

foreign investors from countries with strong shareholder protection play a role in promoting governance improvements outside of their boarders.

Next, we analyze *whether these large owners leverage their voting rights through dual-class shares mechanism.* In short, a dual-class share is an ownership device where the focal firm issues two or more class of publicly traded shares. Usually, in one class of stock the one share-one vote prevails (i.e., ordinary or common shares) while, in others there is a preferred position on economic rights, for example, priority over common stock in the payment of dividends, alongside no voting rights (i.e., preferred shares). Therefore, controlling shareholders are able to leverage their control over and above their total equity stake using preferred shares to produce a significant wedge between voting and cash-flow rights. This leads us to look at the presence and prevalence of the dual-class shares. We seek to understand what firm, industry and country characteristics' closely relate to, and ultimately, might explain the presence of dual-class shares.

Our analyses demonstrate that the type and the origin of the largest shareholder are significant predictors of both dual-class shares and wedge ration between voting and cash-flow rights. In addition, the country-level investor protection is negatively related with the existence of dual-class shares. In part, it corroborates previous literature on the positive effect of country-level investor protection indices and shareholder value (La Porta, López-de-Silanes, Shleifer, & Vishny, 1998). If we look at the dual-class shares in a positive point of view as De Angelo and De Angelo's (1990) does, then we may consider that policy-makers allow dual-class shares in Latin American as a way to enable alternatives mechanisms to finance firms while increasing the minority investor protection to balance potential private benefits of control of controlling shareholders. Third, firm-level characteristics are significant to explain dual-class decisions and wedge between cash-flow and voting rights of largest shareholders in Latin American firms.

Our findings have important implications for both corporate governance theory and practice. On the theoretical perspective, Latin American ownership patterns may enhance the geographical scope of established theories drew in developed economies. In particular, the political approach to corporate

governance argues that corporate ownership evolves through a dynamic process where competing interests and processes are shaped by political institutions (Gouverich & Shinn, 2005; Pagano & Volpin, 2005; Roe, 2000). If this is the case, we should expect significant shifts on corporate ownership forms in Latin America after the period of democratization in 1980s, which have yet to be seen (Schneider, 2008). On the practical side, despite the shift from state to private through the privatization process of state-owned firms in 1980s and 1980s and market-oriented reforms, many governance practices persisted including high ownership concentration in the hand of national business groups. These results dispute the accepted notion that concentrated ownership exists at any point in time because of institutional voids (Khanna & Palepu, 2000b).

This study has two sets of analyses. The first is essentially descriptive and is useful to understand who are the largest shareholders in Latin America. It serves as an important input for the second stream of analyses, which attempt to shed some light on the determinants of wedge between voting and cash-flow rights due to dual-class shares mechanism, and is the main contribution of the paper. In doing so, the next section reviews the literature on ownership and control of Latin American corporations. Then, we describe the data and define the main ownership variables. The next section describes the structure of voting rights in Latin American. Following we outline the literature on dual-class shares and advance potential determinants for the separation between ownership and control in dual-class shares firms. Next, we test our hypotheses on the determinants of the separation between voting and cash-flow rights through dual-class shares in Latin American firms. We finalize with a discussion and conclusion section.

CORPORATE OWNERSHIP IN LATIN AMERICAL STYLIZED FACTS

Reliable, comparable data on corporate ownership across Latin American firms are scarce and, in part, explain why there is little systematic research about the patterns of ownership structure in the region. Several case studies, however, attempted to understand single-country ownership structure. Bebczuk (2007) analyzes ownership patterns on 56 public-listed firms in Argentina and finds that the most frequent largest shareholder are foreign investors (i.e., in 52 per cent of the firms), followed by families (42 per

cent) and government (3 per cent). This study also reports that pyramidal structures are common in Argentina where one-third of the firms is directly related to business groups through ownership chains.

In Brazil, Aldrighi and Postali (2011) reveal that, in 78 per cent of their sample of public-listed firms, the largest shareholder holds more than 50 percent of the firms' voting shares. Leal and Carvalhal-da-Silva (2007), using a dataset from the Brazilian Stock Exchange Commission (Commisão de Valores Mobiliários, CVM) for the period between 1998 and 2002, report that 69 per cent of direct voting shares are owned by the largest shareholder, being the average value of 87 per cent when account for the three largest shareholders. Lefort and Urzua (2008) use a sample of 161 firms listed in the Santiago Stock Exchange from 2000 to 2003 and reports that the total ownership concentration (i.e., the total amount of shares hold by identified shareholders), on average, is higher than 60 per cent in Chile.

In the case of Mexico, working with a sample of 121 non-financial firms in the Mexican Stock Exchange, Babatz (1997) reports that, in 1996, more than 79 percent of firms have an insider shareholder with more than 50 percent of voting shares. In Colombia, Gutierrez and Pombo (2009) conclude that the structure of voting control, for a sample of 233 non-financial listed firms in Colombia between 1996 and 2004, is characterized by high ownership concentration and blockholder power, which implies low separation ratios between cash flow rights and voting rights. On average, the four largest shareholders have more than 51 per cent of a firm's cash flow rights. Finally, in Venezuela, Garay and González (2008) show that the largest shareholder, on average, holds 60 percent of voting shares in firms listed in the Caracas Stock Exchange (CSE) as of the end of 2004.

These single-country studies provide insights of corporate ownership and control in Latin America, suggesting that the high ownership concentration is a common pattern and business groups are powerful economic agents in the region. However, this literature does not allow for cross-country comparisons to the extents that methodologies, period of analysis and sources of information differ. The recent contribution of Chong and Lopez-de-Silanes, (2007), Lefort (2005) and Santiago-Castro & Brown (2007) look at cross-country samples.

Chong and López-de-Silanes' (2007) introductory chapter, based on existing individual country studies, argue that the high ownership concentration observed in Latin America, compared to developed countries, is a consequence of inadequacies of the legal institutions, reinforcing their hypothesis that countries without "entrepreneur better terms" are not likely to have widely held corporations. Lefort's (2005) analyzes 980 firms in Argentina, Brazil, Chile, Colombia, Mexico and Peru, and reports that the largest shareholder, on average, holds 53 percent of shares. Colombia is the country where the largest shareholder presents the lower concentration with 44 per cent on average, and Argentinian ADRs are the highest, with 61 per cent. When it comes to the sum of the three largest shareholders the average concentration increases to 73 per cent. Santiago-Castro and Brown (2007) analyze 97 ADRs from firms in Brazil, Chile and Mexico using ownership data from the SEC's 20-F reports between 2000 and 2002. They report that 74 percent of the sample firms is affiliated with business groups, dual- class shares are used by 24 percent of the firms, and the total concentration of ownership, measured by the Herfindahl Index, is 40 percent on average.

In this paper, we improve their sample to include the seven largest economies in Latin America and investigate who are the *owners of significant voting rights* and *whether they use the dual-class shares mechanism to leverage their voting shares position* as follows.

OWNERSHIP DATA

Construction of the data

Some previous studies of corporate ownership and control in Latin America such as Lefort (2005) and Céspedes, González, and Molina (2010) rely primarily on Economatica database. However, ownership data from Argentina and Mexico are not included in this dataset, which forces us to look at other sources of information. For example, Lefort (2005) uses annual reports from various companies and the 20-F forms filled with the SEC by Latin American companies listed in the U.S. markets (ADRs) in order to cover Argentina and Mexico, while Céspedes et al. (2010) include that from Reuters.

This paper is based on a new database of immediate corporate ownership structure of publicly listed firms in the seven largest Latin American economies. For each country, our initial sample considered all public

listed firms in the respective stock exchange. As the starting-point in the data collection, we rely on Economatica database, which provides the names and direct shareholdings, both voting and cash-flow rights, of the main shareholders of a given company. Disclosure requirements vary from country to country. For example, in Brazil, the stock exchange discloses information of shareholders that hold more than 5% of shares, otherwise they categorize and others (i.e., free-float). As mentioned early, Economatica lacks data on Argentina and Mexico. We then supplemented the ownership information with data from Osiris (a Bureau van Dijk database) and Thomson One Banker. On one hand, Osiris ownership database intends to track voting rights rather than cash-flow rights. Therefore, when there is more than one category of shares - separated into voting and non-voting shares - the percentages that are recorded are those attached to the voting shares category (Bureau van Dijk, 2004). On the other, Thomson One Banker record those shares attached to the most liquid category of shares. Thus, when there is more than one category of shares we consider only those of voting rights. In all cases, we collected direct ownership structure data from a period between 2004 and 2009. We excluded firms with no ownership information, and remained with a final sample of 1,322 firms with sufficient direct ownership information.

One may be concerned about how direct ownership may be affected by potential pyramid structures and cross-shareholdings reported in previous studies in Latin America. In Appendix 1, we discuss in more detail how it could affect our analyses and present a robustness test with Brazilian data.

The coverage of our sample differs somewhat across the seven countries[2]. Nevertheless, we cover about four-fifth of the public listed firms in Latin America, which is a substantial improvement over other comparative studies in Latin America (Céspedes et al., 2010; Chong & López-de-Silanes, 2007; Lefort, 2005; Santiago-Castro & Brown, 2007).

When it comes to the analysis of dual-class shares our sample reduces to 960 firms. This sample is smaller than the previous (1,322) as we could not have access to cash-flow rights data from 362 firms. This reduction mostly affected Argentina and Mexico where our sources lack both voting and cash-flow rights at the same time.

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[2] See Table 2.

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We start examining whether the time series has an effect on ownership concentration. To do so, we take the average of six years of our sample and compare this value with the year 2009. We carried out a test of equality of means (with and without homoscedasticity assumption) which does not reject the null hypothesis that states that the average and 2009 concentration of ownership are equal. That is, there is no statistical significant difference, at a 5% level, between largest shareholder ownership behavior in 2009 and the polled data. Thus, throughout the paper we are going to use the average value across years. We next analyze the voting and cash flow rights of companies by primarily studying the largest shareholders.

Definition of variables

The corporate governance literature distinguishes, primarily, between two types of rights related to the corporate ownership. First, *cash flow rights give owners the priority on payout policies and thus the residual claim to dividends*. And second, *voting rights are associated with corporate decisions and ultimately with the control of the firm and the residual claim to the decision-making.* To better understand the separation of ownership due to the dual-class shares, we illustrate with one simple example from the data. Table 1 describes the ownership structure of the Suzano Papel and Celulose S.A. in 2008. Note that the largest voting shareholder, Suzano Holding S.A., holds 87.54% of the voting rights and just 35.69% of cash-flow rights. This separation between voting and cash-flow rights is due to the existence of dual-class shares. It is because while Suzano Holding S.A. holds 87.54% of the common shares, it has just 0.35% of the preferred shares. On the contrary, minority shareholders not hold voting shares but 90.81% of preferred shares with no voting rights.

It follows that although the definition of cash-flow rights is straightforward, that of control rights is not because the control of a firm may depend on several factors. It this regard, the international accounting standards (henceforth, IAS), defines control as *"the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities."* According to this international standard (IAS 27.13), control is presumed when the *shareholder* acquires more than half of the voting rights of the entity. Under this definition control is closely related to voting rights, and, therefore, we define control rights as voting rights when it exceeds the 50% threshold. As a matter of fact, in our sample, in 56% of

firms, the largest shareholder holds more than one half of voting rights and, therefore, is presumed to be the controlling shareholder. In any case, the definition of control is not strictly necessary to our analyses since we aim to answer (a) who are the owners of the largest voting stakes on Latin American firms, and (b) whether the largest shareholder use the dual class shares mechanism to separate cash flow and voting rights which are not dependent on control rights definition.

TABLE 1

Ownership structure of Suzano Papel e Celulose S.A. (Brazil, 2008)

Type of shares	Common shares (#)	Common shares (%)	Preferred shares (#)	Preferred shares (%)	Total (#)	Total (%)	Wedge-ratio
Rights	Voting + Cash flow	Voting + Cash flow	Cash flow	Cash flow	Cash flow	Cash flow	Cash flow/ Voting
Suzano Holding S.A.	94,382	87.54%	560	0.35%	94,942	35.69%	0.41
IPLF Holding S.A.	8,000	7.42%	0	0.00%	8,000	3.01%	
Fanny Feffer	3	0.00%	11,451	7.24%	11,454	4.31%	
Treasury	5,429	5.04%	2,536	1.60%	7,965	2.99%	
Free-float	0	0.00%	143,668	90.81%	143,668	54.00%	
Total	107,814	100.00%	158,215	100.00%	266,029	100.00%	

Since the main purpose of this paper is to understand the potential determinants of the separation between cash-flow and voting rights due to dual-class shares, we work with *direct measures of voting and cash-flow rights of the largest shareholder*. While we do not account for possible pyramidal structures as a way to separate between cash-flow and voting rights, our measures are in a way more conservative because it captures the way by which the largest shareholder directly owns and controls the firm.[3]

Consistent with the literature on dual-class shares and control-enhancing mechanisms (Claessens et al., 2000; Faccio & Lang, 2002; Villalonga & Amit, 2009), we measure the wedge between the cash-flow and voting rights by taking the ratio of the percentage of cash-flow rights to the percentage of voting rights held by the largest shareholder.

Type of the largest shareholder. We classify the largest shareholder into the following six types. *Bank* includes both retail, savings and investment banks; *government* captures the holdings from a national

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[3] See Appendix 1 for further detail on direct versus ultimate shareholding differences.

(domestic or foreign) government or agency/department/ ministry; *individuals or families*, identifies a family, including an individual; *industrial firms* categorize the largest shareholder as a non-financial corporation; *institutional investors* include mutual funds, pension funds, hedge funds, insurance companies, and other non-banking organizations investing their members' capital in public listed shares; and finally *private equity funds.*

Origin of the largest shareholder. We classify the largest shareholder by six geographic regions. *Domestic* refers to when the largest owner is from the same country of the firm. Alternatively, we consider five different origins when the largest shareholder is a foreign investor. *Caribe* identifies those shareholders from Caribbean Island tax havens, such as The Bahamas or Cayman Islands, frequent destinations for shareholders to reduce taxes. *Latin America* categorizes the largest shareholder when it comes from a non-domestic Latin American country. *North America* identifies American and Canadian investors, and *Europe* all continental European and *British* investors (including Ireland). Finally, miscellaneous capture all other countries including Asia or Oceania.

THE STRUCTURE OF VOTING RIGHTS IN LATIN AMERICA

Table 2 analyzes the largest shareholders of Latin American firms compared with their peers in emerging countries in East Asia (Claessens et al, 2000; Fan & Wong, 2002; Nenova, 2003) and Europe (Faccio & Lang, 2002). It is worth noting that, in all regions, the voting rights are highly concentrated in the largest shareholder. In Latin America, on average, the largest shareholder holds 53.9 per cent of voting rights, while, in East Asian firms, it is about 30 per cent. However, there is a sharp division between voting rights patterns in continental Europe and in the UK and Ireland. In the U.K and Ireland, the largest shareholder holds around 20 per cent, while the continual European average is over 44 per cent.

From a corporate governance perspective, the concentration of voting rights has two crucial consequences. First, controlling owners may have the power and incentives to enhance firm value and to monitor managerial behavior reducing agency costs, the incentives effect (Claessens, Djankov, Fan & Lang, 2002). Second, this concentrated control can lead to a range of other agency problems, where majority shareholders may extract private benefits at the expense of minority shareholders, the

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entrenchment effect (Morck, Wolfenzon & Yeung, 2005). This is because the concentration of voting rights enables to determine firms' strategies such as dividend policies, investments, capital allocation, etc. and, as the orientation of the largest shareholder's behavior (if towards incentive or entrenchment) is not predictable *ex-ante,* one can not assure if those strategies are chosen in the best interest of the firm.

Among several controlling enhancing mechanisms (see Capresse et al., 2007, for a survey in Europe) we explore one particular mean by which the largest shareholder strengthens its control position, that is, *the use of dual-class shares*. Although, this is a common mechanism to separate between ownership and control in Latin America and Europe, dual-class shares are rare in East Asia (see Table 2). Among the seven East Asian economies that we use to compare with Latin America, only South Korea allows dual-class listings. In Hong Kong and Singapore, they are completely prohibited (Fan & Wong, 2002). In Indonesia, Malaysia, Philippines, and Thailand, they allow certain preferred shares to have dual-class characteristics. However, these shares have a fixed dividend and are redeemable which make them closer to debt than equity (Nenova, 2003).

As shown in Table 2, the share of the largest shareholder is a fairly good measure of ownership structure because of its generally high level of concentration not only in the Latin American firms but also in other emerging markets and European countries. Therefore, in Table 3 we present a breakdown of our sample by identity and voting share of the largest shareholder while comparing with related results in continental European companies from Thomsen and Pedersen (2000). First, a noteworthy fact is that, although in Europe the voting shares are fairly distributed over the 0 to 100 per cent scale, in Latin America the distribution is highly skewed to the right. In other words, in more than 56 per cent of firms the largest shareholder holds more than 50 per cent of voting shares in Latin America. This pattern shows that even with high levels of ownership concentration in both regions, in Latin America this behavior is much more pronounced than in Europe.

TABLE 2

Voting rights of the largest shareholder across countries[1]

Country	Number of firms	Mean voting rights (%)	Standard deviation (%)	Dual-class shares (%)
Panel A: Latin America				
Argentina	87	45.7	24.5	27.6
Brazil	532	60.9	25.0	80.1
Chile	237	50.6	25.4	10.5
Colombia	86	41.2	22.8	54.7
Mexico	124	33.6	20.6	28.2
Peru	223	61.7	28.7	52.5
Venezuela	33	43.7	31.5	54.5
Total	1,322	53.9	27.0	52.3
Panel B: East Asia[2]				
Hong Kong	330	31.8	11.4	0.0
Indonesia	178	36.5	11.9	0.0
Malaysia	238	31.5	11.2	0.0
Philippines	120	27.9	12.0	0.0
Singapore	221	29.9	10.9	0.0
South Korea	345	21.2	10.8	18.8
Thailand	167	38.5	13.4	0.0
Total	1,599	30.1	12.7	4.1
Panel C: Western Europe[3]				
Austria	99	51.4	24.7	23.2
Belgium	130	37.0	24.7	0.0
Finland	129	34.7	23.5	37.6
France	607	47.7	26.4	2.6
Germany	704	53.3	29.7	17.6
Ireland	69	21.2	16.5	28.1
Italy	208	47.3	22.4	41.3
Norway	155	30.3	20.7	13.2
Portugal	87	40.5	19.6	0.0
Spain	632	42.1	30.9	0.2
Sweden	245	30.8	22.4	66.1
Switzerland	214	40.9	29.1	51.2
UK	1,953	20.5	19.2	23.9
Total	5,232	35.0	27.5	19.9
Total without UK and Ireland	3,210	44.2	28.1	17.2

[1] Our sample includes newly assembled data for 1,322 public traded firms (including both financial and non-financial) in the seven largest economies in Latin America from 2004 to 2009. The table presents the average (and standard deviation) of control rights of the largest shareholder from Latin America, compared with East Asian and European countries. It also reports the percentage of firms in each country that issue dual-class shares.

[2] Claessens et al., 2000; Nenova, 2003; Fan & Wong, 2002.

[3] Faccio & Lang, 2002.

TABLE 3

Firms by type and voting rights of the largest shareholder[1]

Voting rights	Bank	Government	Individual/ families	Industrial firms	Institutional investors	Private equity funds	Free-float	Number of firms	Percentage of firms	Europe[2]
0-10 %	9	-	11	10	31	-	61	61	4.6%	16.3%
10-20 %	4	1	19	37	30	1	92	92	7.0%	9.0%
20-50 %	51	2	58	227	79	5	422	422	31.9%	29.4%
50-75 %	35	15	17	276	60	5	408	408	30.9%	22.8%
75-100 %	48	16	20	204	50	1	339	339	25.6%	22.5%
Number of firms	147	34	125	754	250	12	1,322	1,322	100.0%	100.00%
Percentage of firms	11.1%	2.6%	9.5%	57.0%	18.9%	0.9%	100.0%	100.0%		
Percentage of firms, Europe[3]	6.4%	17.0%	24.8%	35.2%	16.6%	-	-	100.0%		
Average ownership of the largest shareholder (%)	57.0%	69.1%	40.1%	58.1%	45.0%	49.9%	-			
Average ownership by type of owners (%)	8.8%	2.3%	7.1%	44.0%	13.0%	0.6%	24.2%	100.0%		

[1] Our sample includes newly assembled data for 1,322 public traded firms (including both financial and non-financial) in the seven largest economies in Latin America between 2004 and 2009. The table presents a breakdown of the sample by identity and voting rights of the largest owner. We distinguish among six ownership categories and compare Latin American with European firms from Thomsen & Pedersen (2000). It also reports the average voting rights that the largest shareholder holds across ownership categories, and how much each type of shareholder represent.
[2,3] Thomsen & Pedersen (2000).

TABLE 4

Firms by origin and voting rights of the largest shareholder[1]

Voting rights	Domestic	Caribe	Latin America	North America	Europe	Miscellaneous	Number of firms	Percentage of firms
0-10 %	45	-	1	3	12	-	61	4.6%
10-20 %	77	1	5	6	3	-	92	7.0%
20-50 %	342	6	19	22	31	2	422	31.9%
50-75 %	332	7	18	11	37	3	408	30.9%
75-100 %	271	7	12	14	34	1	339	25.6%
Number of firms	1,067	21	55	56	117	6	1,322	100.0%
Percentage of firms	80.7%	1.6%	4.2%	4.2%	8.9%	0.5%	100.0%	
Average ownership of the largest shareholder (%)	54.3%	62.9%	55.5%	46.1 %	55.8%	44.7%	54.2%	

[1] Our sample includes newly assembled data for 1,322 public traded firms (including both financial and non-financial) in the seven largest economies in Latin America between 2004 and 2009. The table presents a breakdown of the sample by origin and 3 share of the largest owner. We distinguish among six origin categories. It also reports the average of voting rights held by the largest shareholder across different origin categories.

When it turns to the identity of the largest shareholder, the results are even more dissimilar. After the intense privatization process in the 1990s (Schneider, 2008), state-controlled firms reduced their participation to 2.6 per cent of our sample. In contrast, European governments are the largest shareholders in 17 per cent of firms (Faccio and Lang (2002) report that the State is the controlling owner, at the 20% threshold, in 6.68 per cent of European firms). In addition, individuals, and families are present in one-quarter of European firms as the largest shareholder, whereas in Latin America they represent only 9.5% of direct shares[4]. One important similarity is regarding the behavior of institutional investor, in both Europe and Latin America, when they are the largest owners they tend to hold small shares. In contrast, non-financial corporations (i.e., industrial firms) hold quite large voting power on average, both in Latin America and Europe, with respectively 58.5% and 48%, and are fairly common in the sample (57% of the sample in Latin America and 35.2% in Europe).

Other important aspect of corporate ownership is the origin of the largest shareholder, since shareholders tend to export their governance practices around the world (Aggarwal et al., 2011). Therefore, in a context of increasing internationalization of capital and financial markets, it is important not only to understand who are they but also where they come from as governance practices are embedded at the national level (Doidge, Karolyi, & Stulz, 2007). In Table 4, we examine the voting shares across different origins of the largest shareholders. First, domestic investors are the largest shareholders in more than 80 per cent of our sample. This is an example of the so-called "home bias"[5] phenomenon where investors prefer to hold equity domestically instead of diversify internationally. Second, European investors control almost 9 per cent of firms, which is a partially explained by the privatization process in attracting foreign investment in the 1990s (Chong & Lopez-de-Silanes, 2005). Third, together Latin and North America, represent 8.4% of firms.

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[4] One may claim that this difference is, in part, explained by the intensively use of pyramidal structures in Latin America. However, as reported by Faccio and Lang (2002), pyramidal structures are also common in European corporations, which make these results comparable.

[5] The "home bias puzzle" refers to the investment behavior where investors appear to invest more in their home country, virtually ignoring foreign opportunities, despite the potential gains from international diversification (Coval & Moskowitz, 1999).

In contrast to these differences, on average, we face a slightly variation on the level of ownership concentration across geographic regions. One exception occurs when the largest shareholder comes from the U.S. or Canada. In those cases, they hold substantially lower control rights than other regions. On the other extreme, we have largest shareholder from Caribbean Island tax haven. They hold on average more than 60 per cent of shares which, at some extent, suggest that the motivation to incorporate in this region is explained by tax reduction since there is no industry or further economy activities besides tourism and offshoring financial center. We leave the analysis of this issue for future research.

DUAL-CLASS SHARES: BACKGROUND AND DETERMINANTS

The dominant view in the recent corporate governance literature is that the "one share-one vote" principle is desirable. It resides on the argument that the power of control may reflect the capital at risk (Adams & Ferreira, 2008). This literature argues that concentrated control in the hands of a few may lead to an agency and an entrenchment problem with serious consequences both at firm (i.e., distorted investment decisions) and country levels (i.e., underdeveloped capital markets) (Bebchuk, Kraakman & Triantis, 2000; Morck et al., 2005). However, whether mandating "one share-one vote" improves the quality of corporate governance is an open question, as surveyed in Burkart and Lee (2008). This is because the separation between ownership and control reflects an important corporate governance trade-off between empowering blockholders or managers. As previously mentioned, on one hand, deviations from one share-one vote create a wedge between economic and political interests, which induces a controlling shareholder to pursue non-optimal actions at the expense of minority shareholders including tunneling, perquisites consumption or other forms of mechanism of private benefits that reduce firm value (Bebchuk et al., 2000; Johnson et al., 2000).

On the other hand, one share-one vote does not come without costs. First, in a situation where all shares carry equal cash-flow and voting rights the private cost of issuing equity is higher, and the natural consequence is to prevent entrepreneurial firms to go public since their founders may consider not to lose control. Examples from anecdotal evidences are the recent IPOs in the U.S. firms such as Facebook, Zynga, or LinkedIn, which allow unusual degrees of control in the hands of their entrepreneur-founders

through dual-class shares. In the absence of this alternative, it would be unlikely that they would use the IPO as a mechanism to finance the company, forcing them to use alternative, and more expensive, forms of finance that could constrain their growth. Second, the one share-one vote mechanism makes corporate control more expensive to acquire and exercise (Burkart & Lee, 2008). It increases the dispersion of shares, and consequently, the free-rider problems associate with a high number of small shareholders. Thus, the cost of monitoring managerial behavior spreads while the incentives to do so declines, empowering managers and increasing agency costs.

It follows that when analyzing the theoretical grounds to impose limitations on the allocation of voting rights across shares, one should analyze not only the costs and benefits of restricting large shareholders opportunism but also the costs and benefits of managerial opportunism. For instance, different institutional environments, in particular their regulatory framework (Capresse et al., 2007), different sectors which vary in terms of capital needs, ease of management monitoring, or potential to extract private benefits (Gompers, Ishii, & Metrick, 2010) and, more importantly, the role and activism of large shareholders (Burkart & Lee, 2008) may define what is a feasible solution to achieve overall efficiency.

An additional complication to analyze the causes and effects of disproportional ownership is that there are several mechanisms to separate cash-flow from voting rights. For example, Capresse et al. (2007) surveyed 13 control-enhancing mechanism[6] (hereafter, CEM) in 19 European countries. The wedge between votes and cash-flow rights can arise not only through mechanisms where blockholders leverage their voting power such as multiple or non-voting shares and pyramidal structures, but also through lock-in control as priority shares or voting ceilings, and shareholders agreements or fiduciary voting (Adams & Ferreira, 2008). Therefore, an interesting question that arises is whether the cost and benefits of deviation from one share-one vote is a function of the disproportionality itself or the mechanism used. Trying to address this question Bennedsen and Nielsen (2008) call attention to the fact that different mechanisms may serve different goals. For instance, dual-class shares may benefit IPO strategies while pyramidal

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[6] Control-enhancing mechanism are ways by which firms or shareholders may deviate from the 'one share-one vote' principle.

structures are beneficial as a takeover protection device. Moreover, Villalonga and Amit (2009) point out that the different mechanisms are also a function of the type of the largest shareholder. In particular, they report that founding families are the only blockholders whose control rights exceed their cash-flow rights in a sample of U.S. firms, and they do so by using primarily dual-class shares and voting agreements among shareholders.

Given that there is no one single way to explain the determinants of the distribution of the separation between cash-flow and voting rights since different mechanisms may interact to affect these decisions, we decide to focus our research on *the dual-class shares*. Differently from pyramidal structures, which may carry other motivations besides enhancing control (Almeida, Park, Subrahmanyam, & Wolfenzon, 2010; Almeida & Wolfenzon, 2006; Villalonga & Amit, 2009), dual-class share is a 'pure' control-enhancing mechanism.

We now investigate possible determinants of disproportional voting structures. To do so, we follow previous literature on dual-class shares starting with De Angelo and De Angelo (1985), with important contributions from Lehn, Netter and Poulsen (1990), and more recently, Gompers et al. (2010).

Determinants of wedge between cash-flow and voting rights due to dual-class shares

While it is unequivocal that votes are valuable (Dyck & Zingales, 2004; Nenova, 2003), it less clear the determinants of disproportional ownership in dual-class firms (Adams & Ferreira, 2008). However, the literature on dual-class shares presents some robust evidence that the protection of private benefits of controlling shareholders (Villalonga & Amit, 2009) as well as the desire to retain control without bearing proportional cash-flow risk (De Angelo & De Angelo, 1985) are reasons for choosing a dual-class mechanism. Therefore, we aim to answer *whether the largest shareholder uses the dual-class mechanism to enhance their voting power on firms?* This means to understand to what kind of firms the benefits of control are larger, and for which controlling shareholders the desire to retain control is more likely. To answer this question we propose the following hypotheses.

Type of the largest shareholder

Corporate governance literature has long noted the influence of different types of shareholders on corporate affairs (Aguilera & Jackson, 2010). It is also documented that the preferences of the largest controlling shareholder in particular differs on which mechanism to use when to enhance control positions in a firm. For example, family-founders usually prefer to retain control through dual-class shares in the U.S. (De Angelo & De Angelo, 1985; Villalonga & Amit, 2009). While institutional investors may use other forms of separation between cash-flow and voting rights, which are not readily observable such as empty voting and hidden ownership[7] (Hu & Black, 2006).

Prior literature proposes two main motivations for shareholders to enhance control, they are the *incentive* and the *entrenchment* effects of controlling shareholders (Claessens et al., 2002; Demsetz & Lehn, 1985; La Porta et al., 1999; Shleifer & Vishny, 1997). On one hand, the incentive effect refers to the case where the largest shareholder may desire to retain control to exert greater monitoring towards managerial behavior aiming to reduce agency problems and maximize firm value. On the other, the entrenchment effect emerges when the largest shareholder control reaches a level where the incentives to pursue private benefits at the expense of outside investors outweigh the benefits of monitoring. The theory suggests that the incentives to *entrench vary with cash-flow rights* (Jensen & Meckling, 1976; Stulz, 1988) as there is an associated risk to bear economics rights that may be reduced by using control enhancing mechanism such as the dual-class shares. Therefore, to what type of shareholder is the entrenchment effect through the dual-class share mechanism more likely?

We propose that some types of shareholders are better off by entrenching themselves in a firm. For example, if a firm's largest shareholder is an *individual/ family*, it is likely that, in order to keep family members in position of management or simply to guarantee the continuation of firm in the hands of future

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[7] Empty voting is a generic term embracing a variety of factual circumstances that result in a partial and often total separation of the right to vote at a shareholders' meeting from beneficial ownership of the shares on the meeting date, where an investor's voting rights in a company exceeds his underlying economic exposure (Lathatm & Watkins LLP, 2007). Hu and Black (2006:812) call 'hidden ownership' the situation where investors hold more economic ownership than votes, though "often with 'morphable' voting rights-the de facto ability to acquire the votes if needed," and where economic ownership and (de facto) voting ownership are often not disclosed.

generations they may seriously consider to leverage its control position through dual-class shares (Amoako-Adu & Smith, 2001; De Angelo & De Angelo, 1985; Villalonga & Amit, 2009). On the same pace, *governments* may strength their voting power in firms that they have a strategic interest such as sector of natural monopolies (i.e., oil and gas, or utilities) and use control-enhancing mechanism to resist takeover bids. In such cases, State may use firms to pursue other objectives including political goals, while the public bear the risks (La Porta el al. 1999; Shleifer & Vishny 1994). Another type of largest shareholders is other *industrial firms* that may desire to retain control as to develop a business group which provide internal source of finance and strategic resources (Colpan, Hikino & Lincoln, 2010; Khanna & Rivkin, 2001). This is particularly salient in emerging markets where the underdeveloped institutional environment makes business groups an efficient response to reduce the cost of transacting in the market (Khanna & Palepu, 2000a).

Banks also play a central role as important shareholders in Latin America. As we show in the descriptive section, they are the largest shareholders in more than 11% of firms. This is, in part, because Latin American business groups were organized around major banks in 1990s and, even recently, many business groups have subsidiaries in finance to develop internal financial markets (Schneider 2008).

Contrary to other types of shareholders, private equity funds are more likely to increase their voting shares with an *incentive* purpose, and therefore are not expected to separate cash-flow from voting rights through dual-class shares mechanisms. This is because, if any, they acquire control in companies to ensure that their strategic decisions can be implemented without disruption (Cornelli & Karakas, 2008). Due to their limited time horizon, private equity funds rely on ownership control to modify the company's strategies, which include dismissing underperforming executives, appointing a new management team, or at a minimum, oversight the firm through a higher board representation (Gong & Wu, 2011; Masulis & Thomas, 2009). Thus, as soon as they realize an acceptable return on their investments, they exercise the exit strategy which not favors managerial entrenchment.

Finally, there could be the case that the largest shareholder is an institutional investor. The literature usually classifies these owners as widely held financial institutions (see La Porta et al., 1999), which

includes hedge and pension funds, and insurance companies. Not only domestic but also foreign institutional investors are becoming more frequent in the international capital markets (Brickley, Lease, & Smith, 1988). When deciding to invest, institutional investors tend to avoid poorly governed firms, that is, firms with large block ownership by insiders (Doidge, Karolyi, Lins, Miller, & Stulz, 2009; Leuz, Lins, & Warnock, 2009) and dual-class shares firms (Li, Ortiz-Molina, Zhao, 2008). Moreover, the major common drivers of institutional ownership are the size of the firms and its openness in terms of concentration of shares (Ferreira & Matos, 2008).

There are at least two main reasons for this behavior. First, it is consistent with the *prudent man law* that managers of 'others peoples' money' are likely to follow (Del Guercio, 1996). That is, they invest to achieve positive financial returns of a diversified portfolio and to reduce the risks in the best interest of their investors (i.e., employees, or insurers) (Dam & Scholtens, 2012). Second, if any, institutional investors may unbundle voting and cash-flow rights using alternative mechanisms that are less likely to affect the prices of shares including vote sales, fiduciary ownership and hedging (Adams & Ferreira, 2008).

We propose, therefore, that, expect for private equity funds, private benefits of control or, in other words, the entrenchment effect, is higher for shareholders other than institutional investors, and hypothesize:

> Hypothesis 1: Banks, industrial firms, individuals and families, and governments are expected to have
> higher wedge ratios between cash-flow and voting rights than institutional investors.

Origin of the largest shareholder

Although there is a substantial research that shows that investors tend to invest locally, a phenomenon commonly called the 'home bias' (see, for example, Coval & Moskowitz, 1999; Chan, Covrig, & Ng, 2005), when they do cross their borders they may have a different behavior than domestic investor in the host country. Indeed, Gillan and Starks (2003) and Aggarwal et al. (2011) report that foreign institutions from countries with strong shareholder protection play a role in promoting governance improvements outside their countries, while those institutions based in countries with weak shareholder rights do not. That is to say, the origin of the investors also matters to corporate governance. Therefore, to what

shareholders' origin should the entrenchment effect prevails? In other words, does foreign ownership matter for the wedge of voting and cash-flow rights?

Ferreira and Matos (2008) find that foreign investors from countries with high investor protection have a strong bias for firms in the Morgan Stanley Capital International (MSCI) World Index, firms that are cross-listed on the U.S. stock exchange, and firms that have higher analyst coverage. This is, in part, because of those firms that are likely to abide with stringent governance practices. Therefore, this largest foreign shareholder is less likely to entrench himself using dual-class shares mechanism. In addition, Aggarwal et al. (2011) find that, in countries with weak shareholder protection, the main role in improving governance is played by foreign shareholders. Gillan and Starks (2003) highlights that foreign investors usually have a more active posture towards better governance practices than domestic shareholder because of their lack of closely relational ties that would, otherwise, compel them to be loyal to local management. For example, Davis and Kim (2007) find that U.S. mutual funds, with heavy business ties, may adopt voting policies and guidelines that lead to fewer votes against management, while Aggarwal et al. (2011) report that they are more aggressive on governance issues when going abroad. Therefore, we propose that in firms where the largest shareholder comes from countries with strong investor protection - in relation to the Latin American countries - are less likely to issue dual class shares, and when they do, the largest shareholder is expect to have lower levels of wedge than domestic investors[8]. Therefore, we hypothesize:

Hypothesis 2: A foreign largest shareholder from countries with stronger investor protection than Latin American countries is expect to have lower wedge ratios between cash-flow and voting rights than domestic shareholders.

DUAL-CLASS SHARES IN LATIN AMERICA

Before we test our predictions, it is worth to describe the characteristics of dual-class shares in our sample countries. Table 5 shows that, in general, there is no restriction for companies to issue more than one class

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[8] An assessment of the law and order tradition in each country produced by the International Country Risk Guide report similar converges to the results of La Porta et al. (1998). That is, Europe, US and Canada have, on average, better institutions to protect investor rights than Latin American countries.

TABLE 5

Legal restrictions on issuing dual-class shares in Latin American (2004-2009)

Country	Restriction	Restriction detail	Normative	Dual-class shares (%)
Argentina	Preferred shares may vote on particular issues	Preferred shares are non-voting stocks, except in the following issues: (a) change of incorporation location; (b) fundamental change in the objective of the firm; (c) firm dissolution and (d) buyout.	Corporate Law (19.550/84), art 217-244; Stock Exchange Regulation, art 3	27.6
Brazil	Proportion of non-voting stocks capped	Non-voting (and limited voting) capital may not exceed 50% of stock capital.	Corporate Law (10.303/01), art 15 §2	80.1
Chile	Unrestricted	-	Corporate Law (18.046/81), art 21; Capital Market Law (20.190/07), art 437	10.5
Colombia	Preferred shares may vote on particular issues	Preferred shares are non-voting stocks, except in the following issues: (a) in the case changes that may reduce any associated right with these shares; (b) when preferred shares are going to be convertible to voting shares, and (c) other cases defined in the articles of incorporation.	Corporate Law (222/95), art 61-66	54.7
Mexico	Proportion of non-voting stocks capped	Non-voting (and limited voting) capital may not exceed 25% of stock capital. Governmental approval needed for exceptions.	Stock Market Law, art 54.	28.2
Peru	Unrestricted	-	Corporate Law (26.887/97), art 82-106	52.5
Venezuela	Unrestricted	-	Capital Market Law (36.565/98)	54.5

of shares. Differences between voting and non-voting shares are stated by the corporate or capital market law or stock exchange regulations. In particular, in Chile, Peru and Venezuela regulators allow firms put out shares with different economic and political rights and only ask firms to define the same rights in a specific class of shares (i.e., there is no difference within the same type of share). In Brazil and Mexico, the legislation allows companies to issue non-voting shares in an amount up to a threshold. In the former, it may not exceed one-half of the of the total capital, while, in the latter, it is restricted to 25 per cent of the stock capital and allows exceptions under government approval. Finally, in Argentina and Colombia the lawmaker extended to voting rights of preferred shares to certain issues including changes of incorporation location, fundamental changes in the objective of the firm, firm dissolution and leverage buyouts or other cases specified in the corporate charter[9].

In Table 5, the last column presents the proportion of firms that issue dual-class shares, and its worth note that differential voting rights are extensively used in Brazilian firms, even considering that, in 2001, the government passed new legislation to reestablish several rights for minority shareholders such as a mandatory bid rule for voting shares (Carvalhal-da-Silva & Subrahmanyan, 2007). Other salient point emerges from Chile where, even under a permissive jurisdiction on dual-class shares, just a few firms use this mechanism to enhance control.

In Table 6, we report the descriptive statistics on the separation of cash-flow and voting rights in Latin American corporations due to dual-class shares. This sample is smaller than the previous (1,322) as we could not have access to cash-flow rights data from 362 firms. It shows that, on average, the largest shareholder holds 52.3 per cent of cash-flow rights and 58.3 per cent of voting rights. The largest shareholder averages the highest cash-flow rights in Argentina (73.3%) and Peru (62%), while Brazilian firms have the least concentration of ownership (49.9%).

The concentration of control rights in the hands of the largest shareholder is somewhat different. Brazilian corporations report an average value of 61.8 per cent, while control rights in Argentina (73%) and Peru (62%) still remain at the top among Latin American countries. In Table 6, Panel C shows the ratio of

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[9] In Appendix 2 we discuss the differences and similarities across countries regarding the class of shares.

TABLE 6

Separation between cash-flow and voting rights through dual-class shares in Latin American[1]

Country	Number of firms	Mean	Standard deviation	Median	1st quartile	3rd quartile
Panel A. Cash-flow rights						
Argentina	6	73.3	18.0	71.2	56.4	94.0
Brazil	478	49.9	25.7	46.7	28.3	67.8
Chile	227	50.7	25.2	49.4	30.9	69.6
Colombia	49	42.5	25.5	38.1	20.1	66.8
Peru	184	62.0	29.4	62.1	34.7	91.2
Venezuela	16	60.2	29.8	56.0	40.8	89.6
Latin America	960	52.3	26.9	50.0	29.8	74.0
East Asia[2]	1,595	25.5	13.0	24.0	15.0	33.0
Europe[3]	4,814	34.6	26.8	25.9	13.0	51.0
Europe without UK and Ireland	3,118	41.0	28.6	36.1	16.9	60.0
Panel B. Voting rights						
Argentina	6	73.3	18.0	71.2	56.4	94.0
Brazil	478	61.8	25.6	61.1	43.1	84.5
Chile	227	50.7	25.2	49.4	30.9	69.6
Colombia	49	42.9	25.7	38.6	20.1	67.8
Peru	184	62.0	29.4	62.1	34.7	91.2
Venezuela	16	61.9	29.2	57.7	45.7	89.6
Latin America	960	58.3	26.9	57.1	36.2	80.8
East Asia[2]	1,595	30.2	12.7	31.0	22.0	41.0
Europe[3]	4,814	38.4	26.1	30.0	15.9	54.0
Europe without UK and Ireland	3,118	45.7	27.0	43.9	23.7	64.3
Panel C. Ratio of cash-flow to voting rights						
Argentina	6	1.00	0.00	1.00	1.00	1.00
Brazil	478	0.81	0.23	0.92	0.63	1.00
Chile	227	1.00	0.00	1.00	1.00	1.00
Colombia	49	0.99	0.05	1.00	1.00	1.00
Peru	184	1.00	0.00	1.00	1.00	1.00
Venezuela	16	0.97	0.10	1.00	1.00	1.00
Latin America	960	0.91	0.18	1.00	0.92	1.00
East Asia[2]	1,595	0.85	0.23	1.00	0.70	1.00
Europe[3]	4,814	0.87	0.26	1.00	0.85	1.00
Europe without UK and Ireland	3,118	0.86	0.27	1.00	0.81	1.00

[1] The newly assembled data for 960 public traded firms for the separation between ownership and control of the largest shareholder through dual-class shares between 2004 and 2009. This sample is smaller than the previous (1,322) as we could not have access to cash-flow rights data from 362 firms. We differ from Claessens et al. (2000) and Faccio and Lang (2002) because they look at the separation of ultimate cash-flow and voting rights, which includes, direct, cross-holdings, and pyramidal structures, while we look at dual-class shares.
[2] Claessens et al. (2000).
[3] Faccio & Lang (2002).

cash-flow to voting rights. Note that the separation is the highest in Brazil, which is consistent with the extremely use of this mechanism reported in Table 5. That is to say, in Brazil firms not only deeply use the dual-class share but also, when they do, the main purpose seems to be the leverage of control positions. On the other extreme, Chilean corporations even when issuing dual class shares, they do not use this mechanism to separate ownership from control.

At the bottom of the each Panel, in Table 6 we also report similar results from East Asia and Europe as describe by Claessens et al. (2000) and Faccio and Lang (2002). Although there are some methodological differences, since both studies tackle the separation of one share-one vote through the ultimate ownership which consider pyramidal structures and cross-shareholdings, the bottom line is that in all regions the one share-one vote is not the rule, and the control rights are highly concentrated in the hands of the largest shareholder.

Table 7 breaks down our sample by wedge ratio identity of the largest shareholder. We split our sample into two groups of firms. They are: (a) firms that separate voting and non-voting shares which present a wedge ration less than one and (b) firms where the ratio of voting and non-voting shares is equal to one. First, it is worth noting that, for more than two-thirds of the sample, the largest shareholder has equal voting and cash-flow rights. In those firms, the concentration of control rights is the highest for governments, where in 16 firms they hold more than 70 per cent of shares.

Second, the average wedge ratio among firms that separate voting and cash-flow rights is 0.71. In other words, on average, in those firms the largest shareholder holds 1.42 times more voting rights than cash-flow rights. The wedge ratio is very pronounced when the largest shareholder are families, where the wedge ratio is 0.67. Families, on average, hold 1.5 times more voting rights than cash-flow rights. On the contrary, the wedge ratio is less noticeable in private equity funds (0.95). Finally, although they are exceptional cases, 6 firms in our sample present wedge ratios greater than 1.1. This means that the largest shareholder holds more cash flow than voting rights. In 4 cases, the largest shareholder is a bank and, in other 2, the largest shareholder is an institutional investor. These findings are consistent with Hu and Black (2006) arguments about financial investors behavior. They claim that sometimes investors hold

TABLE 7

Cash-flow, control rights and ratio of cash-flow to voting rights across largest shareholder's type[1]

Ratio cash-flow/ voting rights	Variables	Bank	Government	Individuals/ families	Industry firms	Institutional investors	Private equity funds	Total
Ratio < 1	Cash-flow	48.83	54.27	29.46	48.65	46.01	39.27	46.94
	Voting	64.91	75.29	46.27	68.72	58.83	43.66	65.24
	Ratio	0.72	0.72	0.67	0.69	0.80	0.95	0.71
	Nº of firms	59	12	27	188	28	3	317
Ratio =1[‡]	Cash-flow and Voting	58.06	77.48	37.24	57.02	51.64	56.43	54.97
	Nº of firms	53	16	48	380	139	7	643
Total	Cash-flow	53.20	67.53	34.44	54.25	50.70	51.28	52.32
	Voting	61.42	76.54	40.43	60.88	52.75	52.60	58.30
	Ratio	0.86	0.88	0.88	0.90	0.97	0.99	0.91
	Nº of firms	112	28	75	568	167	10	960

[1] This table includes data relating to cash-flow and voting rights of the largest shareholder on 960 public traded firms (including both financial and non-financial institutions) between 2004 and 2009. This sample is smaller than the previous (1,322) as we could not have access to cash-flow rights data from 362 firms. Cash-flow rights represent the economic rights measured by the total ownership held by the largest controlling shareholder. Voting rights measure the percentage of votes controlled by the largest shareholder.

[‡] There are some firms in which the ration between cash-flow and voting rights are greater than 1. Although they are exceptional cases, 6 firms in our sample present ratios greater than 1.1. In 4 cases, the largest shareholder is a bank, and, in other 2, the largest shareholder are institutional shareholders. These findings are consistent with the literature on financial investor which state that such investor usually holds more economic than political rights, and when necessary, they borrow votes the exercise their voice.

more economic ownership than votes, and acquire or borrow votes if needed. They call this situation "'hidden ownership' because the economic ownership and (de facto) voting ownership are often not disclosed (Hu & Black, 2006: 812)."

Table 8 shows a cross-tabulation of wedge ratio and the origin of the largest shareholder. As in Table 4, domestic investor represents more than 80 per cent of the sample, and reports greater wedge ratio among shareholder's origin (0.70). That is, 1.42 times more voting than economic rights. On the other extreme are North American, and European investors, where only 20 per cent decouple voting rights from economic ownership.

TABLE 8

Cash-flow, voting rights and ratio of cash-flow to voting rights across largest shareholder's rigin[1]

Ratio cash-flow/ voting rights	Variables	Domestic	Caribe	Latin America	North America	Europe	Miscellaneous	Total
Ratio < 1	Cash-flow	45.98	43.48	37.48	52.82	66.58	55.57	46.94
	Control	64.91	49.39	60.07	64.29	74.00	77.32	65.24
	Ratio	0.70	0.89	0.74	0.81	0.87	0.73	0.71
	Nº of firms	289	1	4	8	13	2	317
Ratio =1	Cash-flow and Control	53.63	67.94	51.97	55.79	63.15	84.62	54.97
	Nº of firms	501	14	33	32	61	2	643
Total	Cash-flow	50.83	66.31	50.41	55.20	63.75	70.09	52.32
	Control	57.71	66.70	52.85	57.08	65.06	80.97	58.30
	Ratio	0.89	0.99	0.97	0.97	0.98	0.86	0.91
	Nº of firms	790	15	37	40	74	4	960

[1] This table includes data relating to cash-flow and voting rights of the largest shareholder on 960 public traded firms (including both financial and non-financial institutions) between 2004 and 2009. This sample is smaller than the previous (1,322) as we could not have access to cash-flow rights data from 362 firms. Cash-flow rights represent the economic rights measured by the total ownership held by the largest controlling shareholder. Voting rights measure the percentage of votes controlled by the largest shareholder.

RESEARCH DESIGN

Model structure

Our dependent variable measures the ratio of cash-flow to voting rights (i.e., wedge) of the largest shareholder due to dual-class shares, which by definition is equal one if the firm does not issue dual-class shares. In order to be consistent with our conceptual model, we carry out a linear transformation of the wedge ratio as follows: (1-cash-flow rights/ voting rights). Therefore, when there is no difference between the largest shareholder's voting and cash-flow rights the dependent variable takes the value zero.

Moreover, those firms that choose not to issue dual-class shares will have by definition a zero wedge between voting and cash-flow rights. That is to say that the zero wedge are not randomly selected because there is a decision to issue dual-class shares in the first place, and then the largest shareholder decide what would be the level of separation between voting and cash-flow rights. Then, the results of an ordinary least square estimator suffer from selection bias (Cameron &

Trivedi, 2009). As a precaution against this problem, and considering that the maximum likelihood (MLE) is superior to Heckman two-step estimator (Kennedy, 2008; Nawata, 1994), we estimate a MLE model to control for selection bias for dual-class shares firms as follow.

(1) Selection equation: dual class$_i^*$ = $w_i\gamma$+u_i, Dual class$_{it}$=$\begin{cases}1 \text{ if Dual class}_i^*=1 \\ 0 \text{ if Dual class}_i^*=0\end{cases}$

(2) Outcome equation: wedge$_i$=$\begin{cases}x_i\beta+\epsilon_i & \text{ if Dual class}_i^*=1 \\ 0 & \text{ if Dual class}_i^*=0\end{cases}$

Where dual-class is a dummy variable equal to 1 if a firm i is a dual-class share firm and 0 otherwise, and wedge is 1 minus the ratio of cash-flow to voting rights of the largest shareholder. x_i and w_i are vectors of firm, largest shareholder, industry, and country characteristics.

As components of explanatory variables, we include dummy variables for five types of largest shareholders that are: banks, industrial firms, individuals/families, private equity funds and government, and omit the *institutional investor* as a reference category to test, empirically, the hypothesis 1. To test hypothesis 2, we include five different geographic origins of the largest shareholder, including Caribe, Latin America, North America, Europe and miscellaneous, and omit the *domestic* category as the reference group.

In all our analyses, we use cluster-robust estimates for standard errors because firms are embedded in countries which may present some correlation within a country but not across countries. This is particularly important to control for because our country variables are invariant within the country.

Exclusion restriction variables

For more robust identification, Wooldridge (2003) and Cameron and Trivedi (2009) recommend imposing exclusion restriction, otherwise if the same regressors are used in both equations the model identification is based only on the non-linearity of the first stage (i.e., probit regression). In our case, the exclusion restriction includes exogenous variables that explain why a focal firm may issue dual-class shares and do not affect the outcome variable (i.e., wedge ratio) directly.

First, we include two firm-level variables that are: cross-listing in the U.S and the level of voting shares of the largest shareholder. On one hand, recent corporate governance studies have proposed that U.S. cross-listing may limit the ability of controlling shareholders to extract private benefits from firms they control (Doidge, Karolyi, Lins, Miller, & Stulz, 2009). On the other, to the extent that the largest shareholder demonstrates a string preference for control (Amoako-Adu & Smith, 2001), it is expected that this preference may affect their behavior towards issuing different types of shares as a way to retain control of the firm.

Second, we include two country-level variables in order to control for any differences across countries in the selection model –the ratio of stock market capitalization to GDP and the natural logarithm of GDP per capita. Since financial development helps explain the efficiency of capital allocation across firms (Beck, Demirguç, & Levine, 2003) we believe that, in countries where the capital market is more developed, controlling shareholders are less likely to engage in governance mechanisms that enhance their control positions when they need to finance the firms they invest. For instance, in the U.S. Gompers et al. 2010 find that 6% of all Compustat firms have more than one class of shares, while we report an average value of 52.3% in Latin America. Moreover, Doidge, Karolyi, and Stulz (2007) reports that in less-developed countries, measured by GDP per capita, country institutional variables are more important to explain variation on firms' governance practices than firm-level variables. Therefore, we include this variable as an additional exclusion restriction. It is worth noting that, in empirical terms, the exclusion restriction should be correlated with the selection variable and not correlated with the outcome variable. In our case, one can note from Table 10 that our selected variables hold these conditions.

Control variables

Country. One possible determinant for the wedge between voting and cash-flow rights is the institutional environment in which firms are listed. In particular, country-level minority investors' protection may be related to the likelihood and level of wedge. Indeed, La Porta, López-de-Silanes, Shleifer and Vishny' (2002) results support this alternative showing that investors are better off

when countrywide indices of investor protection are higher. Therefore, to control for investor protection, we rely on the law and order variable from the International Country Risk Guide (ICRG) to proxy for 'rule of law.' We propose that the better the rule of law (proxy by the ICRG's indices of law and order) the lower the wedge (and the probability of dual-class shares).

Industry. Dual-class shares, in the first place, and the wedge of voting to cash-flow rights are powerful anti-takeover device. And because private benefits of control are likely to vary across industries, we also classify firms and control for industry sectors, which include primary, construction, manufacturing, utilities, trade, financial services, and services. As shown in the literature on business groups in Latin America (Colpan et al., 2010; Schneider, 2009), family-founders are entrenched in rather diversified approach mainly because of risk reduction goals. It is not uncommon to see groups diversifying into sectors that are as unrelated as possible, like services and mining, or steel and banking. Therefore, we do not have an *a-priori* prediction on which sector might have a larger effect on the wedge of voting and cash-flow rights.

Firm characteristics. Most of the variables are identified from both theoretical and empirical literature on dual-class shares (Adams & Ferreira, 2008; Amoako-Adu & Smith, 2001; Burkart & Lee, 2008; Gompers et al., 2010; Lehn et al., 1990; Taylor & Whittred, 1998). First, one may consider using *the largest shareholder voting rights.* As one of the main outcomes of separating voting and cash-flow rights is to retain control, we expect that firms where the largest shareholder has more voting shares are more likely to present higher wedges. However, by using the largest shareholder voting rights we may incur in two empirical problems. First, we use the largest shareholder voting rights as one exclusion restriction, and, thus, it must not be included in the outcome model. Second, we are exposed to a *hidden identity* (Firebaugh & Gibbs, 1985) problem. The unmeasured causes of wedge - represented by the error term, ϵ_i – may affect the wedge (1-cash flow/ voting) through voting shares. If so, because voting shares is an independent variable in equation 2, a fundamental assumption of regression analysis (i.e., the error term is uncorrelated with the independent variable) is violated. To overcome these problems we use the free-float as a proxy

for the dispersion of the shares. We expect that the larger the free-float the lower is the concentration of shares in the hands of the largest shareholder, and as a consequence, he/she will be less likely to leverage his/her voting position (i.e., a negative effect between free-float and the wedge).

Second, *size* has been described as consistently related to the likelihood of takeovers (Amoako-Adu & Smith, 2001). Therefore, considering that the wedge is a mechanism to discourage hostile takeovers it should be included in our analysis. Third, *age of the firm* (since incorporation) is included as a proxy for the presence of the founder, and we expect that the founder wants to retain control of the firm to undertake personal projects (Burkart & Lee, 2008). Fourth, *leverage* is considered as an alternative control mechanism in dual-class firms (Moyer, Rao, & Sisneros, 1992). Therefore, we control firm's debt. Finally, we include firm performance as measured by the *return on assets*.

Summary statistics

Table 9 presents some differences between dual-class and single-class firms. The average dual-class company has US$ 1,856 million in assets while the single-class US$ 1,096. The difference is less apparent when we compare the medians. The dual-class firm has US$ 311 million versus US$ 238 million for the median single-class firm. As in Gompers et al. (2010) dual-class firms are significantly more levered and older than single-class, both in the means and medians. On average (median), the dual-class firm has a 0.53 (0.53) of debt-to-assets ratio while a single-class company has 0.44 (0.44). We measure the age from the date of incorporation. The average (median) age of dual-class firms is 46 (45) years versus 34 (26) years for single-class counterparts. Table 10 reports the pairwise correlation.

TABLE 9

Differences between dual- and single-class firms

Variable	Statistic	Dual-class	Single-class	Difference (p-value)
Total Assets	Mean	1,856.57	1,096.50	760.07**
	Median	311.08	238.53	(0.0185)
Age	Mean	46.50	34.37	12.13***
	Median	45.00	26.00	(0.000)
Debt/ Assets	Mean	0.53	0.44	0.09***
	Median	0.53	0.44	(0.000)
Return on Assets	Mean	0.27	0.14	0.13
	Median	0.06	0.06	(0.6293)
	N	244	349	

This table reports means and medians of firm characteristics for dual and single class observations (firm-year). Significant differences for the means are indicated at the 10%, 5%, and 1% levels by *, **, ***. The Wilcoxon rank-sum test p-values for the medians are given in parenthesis in the last column.

TABLE 10

Summary statistics and correlation matrix

	Variables	Mean	S.D.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1)	Wedge ratio (1-cash-flow/voting)	0.24	0.24	-0.39	0.67	1.00											
(2)	Dual class (0: single class/ 1: dual-class)	0.41	0.49	0.00	1.00	0.60	1.00										
						(0.00)											
(3)	Bank	0.11	0.31	0.00	1.00	0.10	0.16	1.00									
						(0.12)	(0.00)										
(4)	Institutional Investors	0.17	0.37	0.00	1.00	-0.07	-0.12	-0.16	1.00								
						(0.26)	(0.00)	(0.00)									
(5)	Industrial firms	0.61	0.49	0.00	1.00	-0.02	-0.08	-0.44	-0.55	1.00							
						(0.76)	(0.07)	(0.00)	(0.00)								
(6)	Individuals/families	0.08	0.28	0.00	1.00	0.00	0.06	-0.11	-0.13	-0.37	1.00						
						(0.94)	(0.14)	(0.01)	(0.00)	(0.00)							
(7)	Private equity funds	0.01	0.09	0.00	1.00	-0.10	0.04	-0.03	-0.04	-0.11	-0.03	1.00					
						(0.10)	(0.39)	(0.43)	(0.32)	(0.01)	(0.50)						
(8)	Governments	0.03	0.16	0.00	1.00	0.02	0.07	-0.06	-0.07	-0.21	-0.05	-0.02	1.00				
						(0.73)	(0.08)	(0.15)	(0.07)	(0.00)	(0.22)	(0.71)					
(9)	Domestic	0.82	0.39	0.00	1.00	0.23	0.05	-0.03	-0.04	-0.04	0.11	-0.00	0.08	1.00			
						(0.00)	(0.24)	(0.50)	(0.37)	(0.32)	(0.01)	(0.92)	(0.06)				
(10)	Caribe	0.02	0.15	0.00	1.00	-0.06	-0.02	0.05	-0.04	0.03	-0.05	-0.01	-0.03	-0.33	1.00		
						(0.37)	(0.68)	(0.22)	(0.34)	(0.40)	(0.26)	(0.73)	(0.53)	(0.00)			
(11)	Latin America	0.05	0.23	0.00	1.00	-0.11	-0.03	-0.01	-0.05	0.07	-0.02	-0.02	-0.04	-0.51	-0.04	1.00	
						(0.08)	(0.42)	(0.75)	(0.26)	(0.09)	(0.67)	(0.59)	(0.33)	(0.00)	(0.37)		
(12)	North America	0.04	0.20	0.00	1.00	-0.18	0.06	0.01	0.16	-0.09	-0.06	0.07	-0.03	-0.44	-0.03	-0.05	1.00
						(0.01)	(0.12)	(0.89)	(0.00)	(0.03)	(0.13)	(0.08)	(0.40)	(0.00)	(0.43)	(0.22)	
(13)	Europe	0.05	0.22	0.00	1.00	-0.06	-0.10	0.02	0.02	0.03	-0.07	-0.02	-0.04	-0.49	-0.04	-0.06	-0.05
						(0.34)	(0.02)	(0.69)	(0.60)	(0.48)	(0.09)	(0.60)	(0.35)	(0.00)	(0.38)	(0.18)	(0.24)
(14)	Miscellaneous	0.01	0.11	0.00	1.00	-0.00	0.00	0.01	-0.05	0.06	-0.03	-0.01	-0.02	-0.23	-0.02	-0.03	-0.02
						(0.96)	(0.93)	(0.79)	(0.24)	(0.17)	(0.43)	(0.81)	(0.66)	(0.00)	(0.68)	(0.53)	(0.58)
(15)	Law & Order	3.10	1.27	1.00	5.00	-0.44	-0.49	-0.27	0.07	0.20	-0.11	0.05	-0.10	0.04	0.02	0.05	-0.05
						(0.00)	(0.00)	(0.00)	(0.07)	(0.00)	(0.01)	(0.22)	(0.02)	(0.36)	(0.58)	(0.27)	(0.19)
(16)	Capital market development (Market cap./ GDP)	80.72	29.82	2.72	130.22	-0.06	-0.24	-0.16	0.09	0.08	-0.09	0.08	-0.04	0.24	-0.09	-0.17	-0.02
						(0.39)	(0.00)	(0.00)	(0.02)	(0.05)	(0.03)	(0.04)	(0.32)	(0.00)	(0.04)	(0.00)	(0.54)
(17)	Country wealth (GDP per capita)	11073.00	2077.72	8074.29	14677.01	0.04	-0.29	-0.14	0.10	0.08	-0.12	0.07	-0.05	0.25	-0.12	-0.16	-0.04
						(0.55)	(0.00)	(0.00)	(0.01)	(0.05)	(0.00)	(0.07)	(0.18)	(0.00)	(0.01)	(0.00)	(0.39)

TABLE 10

Summary statistics and correlation matrix (continued)

	Variables	Mean	S.D.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(18)	Size (Log Total Assets)	5.47	2.06	1.03	9.59	-0.02	0.11	0.10	-0.04	-0.04	-0.09	-0.01	0.17	0.02	-0.02	-0.08	0.03
						(0.78)	(0.01)	(0.02)	(0.39)	(0.35)	(0.02)	(0.78)	(0.00)	(0.62)	(0.70)	(0.04)	(0.43)
(19)	Performance (ROA)	0.20	1.24	0.00	21.10	0.07	0.05	0.07	-0.01	-0.01	-0.02	-0.01	-0.02	0.03	-0.01	-0.02	0.00
						(0.26)	(0.20)	(0.11)	(0.80)	(0.73)	(0.58)	(0.79)	(0.66)	(0.52)	(0.81)	(0.59)	(0.93)
(20)	Debt (Total Liabilities over Assets)	0.48	0.24	0.00	0.97	0.12	0.20	0.16	-0.12	-0.02	-0.01	-0.03	0.05	0.05	-0.00	-0.04	-0.07
						(0.07)	(0.00)	(0.00)	(0.00)	(0.70)	(0.80)	(0.52)	(0.22)	(0.24)	(0.96)	(0.34)	(0.08)
(21)	Age (Log Age)	3.30	0.99	0.00	5.30	0.18	0.22	0.04	-0.09	-0.03	0.09	-0.01	0.06	0.08	0.02	0.04	-0.16
						(0.00)	(0.00)	(0.39)	(0.04)	(0.51)	(0.03)	(0.80)	(0.14)	(0.04)	(0.60)	(0.39)	(0.00)
(22)	Cross-listing in the US	0.17	0.37	0.00	1.00	0.07	0.09	0.07	0.08	-0.13	-0.00	-0.04	0.12	-0.04	-0.04	-0.03	0.13
						(0.29)	(0.03)	(0.09)	(0.06)	(0.00)	(0.92)	(0.31)	(0.00)	(0.28)	(0.33)	(0.50)	(0.00)
(23)	Votes of largest shareholder	54.67	26.38	3.75	100.00	0.07	0.15	0.00	-0.07	0.14	-0.21	0.03	0.09	-0.04	0.02	0.01	-0.06
						(0.28)	(0.00)	(0.97)	(0.09)	(0.00)	(0.00)	(0.49)	(0.03)	(0.30)	(0.64)	(0.80)	(0.13)
(24)	Free-Float	19.05	17.82	0.00	91.99	-0.12	-0.13	0.01	0.14	-0.15	0.12	-0.05	-0.05	0.05	-0.04	-0.01	0.05
						(0.07)	(0.00)	(0.82)	(0.00)	(0.00)	(0.00)	(0.20)	(0.25)	(0.26)	(0.36)	(0.72)	(0.19)

	Variables	Mean	S.D.	Min	Max	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
(14)	Miscellaneous	0.01	0.11	0.00	1.00	-0.03	1.00										
						(0.54)											
(15)	Law & Order	3.10	1.27	1.00	5.00	-0.08	-0.00	1.00									
						(0.05)	(0.95)										
(16)	Capital market development (Market cap./ GDP)	80.72	29.82	2.72	130.22	-0.12	-0.08	0.70	1.00								
						(0.00)	(0.07)	(0.00)									
(17)	Country wealth (GDP per capita)	11073.00	2077.72	8074.29	14677.01	-0.12	-0.10	0.67	0.85	1.00							
						(0.00)	(0.02)	(0.00)	(0.00)								
(18)	Size (Log Total Assets)	5.47	2.06	1.03	9.59	0.04	-0.02	-0.19	0.01	0.01	1.00						
						(0.34)	(0.68)	(0.00)	(0.90)	(0.90)							
(19)	Performance (ROA)	0.20	1.24	0.00	21.10	-0.02	-0.00	-0.06	-0.03	-0.02	-0.17	1.00					
						(0.66)	(0.91)	(0.13)	(0.45)	(0.55)	(0.00)						
(20)	Debt (Total Liabilities over Assets)	0.48	0.24	0.00	0.97	0.03	-0.01	-0.24	-0.13	-0.15	0.50	-0.18	1.00				
						(0.52)	(0.89)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)					
(21)	Age (Log Age)	3.30	0.99	0.00	5.30	-0.04	-0.02	0.02	-0.02	0.04	-0.03	-0.01	0.10	1.00			
						(0.31)	(0.71)	(0.65)	(0.67)	(0.39)	(0.42)	(0.76)	(0.01)				
(22)	Cross-listing in the US	0.17	0.37	0.00	1.00	0.02	-0.01	-0.23	-0.04	-0.05	0.43	-0.03	0.14	-0.20	1.00		
						(0.64)	(0.85)	(0.00)	(0.37)	(0.21)	(0.00)	(0.40)	(0.00)	(0.00)			
(23)	Votes of largest shareholder	54.67	26.38	3.75	100.00	0.07	0.08	-0.09	-0.09	-0.13	-0.01	0.04	0.03	-0.02	-0.08	1.00	
						(0.11)	(0.04)	(0.02)	(0.03)	(0.00)	(0.75)	(0.28)	(0.49)	(0.69)	(0.04)		
(24)	Free-Float	19.05	17.82	0.00	91.99	-0.06	-0.06	-0.06	-0.03	0.05	0.13	-0.04	-0.04	-0.07	0.21	-0.65	1.00
						(0.15)	(0.12)	(0.16)	(0.46)	(0.23)	(0.00)	(0.35)	(0.34)	(0.09)	(0.00)	(0.00)	(0.00)

We report in parentheses the significance level of each pairwise correlation.

MULTIVARIATE RESULTS

The results of our estimations are given in Table 11. Since there is no change on the status of dual-class shares during our sample period, we compute average values of variables across years. In the OLS regression we find significant coefficients of type and origin of the largest shareholder, country and firm-level characteristics. Consistent with the intuition outlined above, if a the largest shareholder is a bank or an industrial firm we expect higher levels of separation between voting and cash-flow rights than institutional investors. In addition, when the largest shareholder comes from a country with higher investor protection such as the US or Canada, the separation of voting to cash-flow rights is reduced and it is statistically significant at 1% level. For the *age* (i.e., proxy for the presence of the founder) coefficient, the sign is positive. The interpretation is that when the founder, or its family, is still on the control of the firm they will increase the wedge of voting to cash-flow rights. Moreover, profitable firms are expected to have higher levels of wedge. Perhaps because largest shareholders have more incentives to entrench in more profitable firms where they can extract private benefits.

In a perfect world, the OLS would be the best linear unbiased estimator (BLUE). However, we have a sample selection bias because we can only observe wedge between voting and non-voting rights for dual-class shares firms. We handle this problem using a MLE estimator as discussed above. In Table 11, the last two columns report both the selection and outcome models respectively.

First, on the selection model, we find positive and significant results for the coefficients of *banks*, *industrial firms* and *private equity funds*. When banks and industrial are the largest shareholder firms are more likely to issue dual-class shares relative to institutional investors. This is consistent with the previous case studies on business groups in Latin America that demonstrate that some family-controlled business groups were formed around banks and industrial business groups (Colpan et al., 2010; Schneider, 2009). We also find positive coefficients for private equity funds which are more likely to issue dual-class shares relative to institutional investors, and is not consistent with our hypothesis 1. One possible explanation is that private equity funds retain control in companies to ensure that their strategic concerns can be implemented and potentially sell their stake in the market at higher prices (Cornelli &

TABLE 11

Determinants of wedge between voting and cash-flow rights due to dual-class shares

Explanatory variables	Model 1 OLS	Model 2 Selection Model	Model 3 Outcome Model
Bank	0.027*	0.403*	0.081**
	(3.573)	(2.111)	(2.997)
Industrial firms	0.016+	0.330+	0.059*
	(2.337)	(1.905)	(2.179)
Individuals/families	0.004	0.22	0.049+
	(0.394)	(1.359)	(1.924)
Private equity funds	-0.064	0.623***	0.053
	(-0.670)	(5.483)	(0.527)
Governments	0.01	0.191	0.018
	(0.745)	(0.828)	(0.528)
Caribe	-0.011	-0.101	-0.011
	(-1.424)	(-0.445)	(-0.314)
Latin America	0.002	0.037	0.03
	(0.120)	(0.160)	(0.403)
North America	-0.044**	0.354	0.061
	(-5.852)	(1.109)	(0.862)
Europe	-0.066	-1.083***	-0.252***
	(-1.729)	(-6.602)	(-12.422)
Miscellaneous	0.022	-0.061	0.035
	(0.677)	(-0.368)	(0.482)
Control variables			
Law & Order	0.171+	-0.783***	-0.267***
	(2.386)	(-13.265)	(-3.677)
Size (Log Total Assets)	-0.004*	0.026	-0.009
	(-3.892)	(0.911)	(-1.412)
Performance (ROA)	0.006***	0.024	0.013***
	(13.966)	(1.257)	(3.952)
Debt (Total Liabilities over Assets)	0.063+	0.322	0.235***
	(2.530)	(1.227)	(5.558)
Age (Log Age)	0.036*	0.309**	0.072**
	(2.733)	(3.062)	(3.012)
Free-float	-0.001	-	-0.001
	(-1.757)	-	(-0.583)
Exclusion restrictions			
Capital market development (Market cap./ GDP)	-	0.007	-
	-	(0.495)	-
Country wealth (GDP per capita)	-	-5.53e-06	-
	-	(-0.033)	-
Votes of largest shareholder	-	0.005	-
	-	(1.210)	-
Cross listing in the U.S.	-	-0.105**	-
	-	(-3.209)	-
Constant	-0.237	0.084	0.360+
	(-1.829)	(0.097)	(1.917)

TABLE 11

Determinants of wedge between voting and cash-flow rights due to dual-class shares (continued)

	Model 1 OLS	Model 2 Selection Model	Model 3 Outcome Model
athrho	-	2.122***	-
	-	(3.571)	-
lnsigma	-	-1.272***	-
	-	(-17.916)	-
rho	-	0.972	-
Industry fixed effects	Yes	Yes	Yes
Country fixed effects	Yes	No	Yes
Observations	593	593	593

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001. Wald test reject the null (chi-squared equals 12.75), this clearly justifies the Heckman selection equation with these data.

Karakas, 2008). Therefore, to pursue this strategy dual-class firms are more feasible to take (i.e., (hostile) takeovers and sell control (i.e., IPOs).

We find significant and negative coefficients (not reported) for all countries in relation to Brazil (the reference category). This is consistent with the results on Tables 1 and 4, that is, Brazilian firms extremely use the dual-class shares mechanism. At the country level, Table 11 shows a negative and significant at 0.1% level effect for the coefficient of law and order on the probability of dual-class shares. Previous corporate governance literature relates the separation between ownership and control to under-developed legal institutions and poorly protected investor's rights (La Porta et al., 1998) and our results corroborate these findings. One explanation is that, because of its under-developed capital markets, legislators in Latin America allow dual-class devices as a way to increase the likelihood of entrepreneurs to list their firms (i.e., go public) while guaranteeing the rights for minority shareholders in case of potential expropriations. Finally, and in line with dual-class literature (Amoako-Adu & Smith, 2001; Boehmer, Sanger & Varshney, 2004; Burkart, Gromb, & Pannunzi. 1997), at the firm level, we find significant and positive effects at the1% level for age on the probability of a firm to issue dual-class shares.

Second, and most importantly, the outcome model reports the results of our hypotheses sketched above on the determinants of wedge between voting and cash-flow rights due to dual-class shares. With respect to the type of the largest shareholder, the coefficient of *banks* and *industrial firms* are positive and significant at 1% and 5% level respectively. Taking this result and the selection model, we can say that when *banks* and *industrial firms* are the largest shareholder firms not only they are more likely to issue dual-class shares, but also, when they do, they have higher wedge between voting and non-voting shares relative to institutional investors. One interesting result is the positive and significant coefficient for individuals and families. It shows that individuals and families do not behave differently from institutional investors in Latin American countries when it comes to issue dual class shares, but when families do, they use these governance mechanism to leverage their voting position significantly more than institutional investors. This result supports our hypothesis 1. The outcome model also reports that when the largest shareholder comes from a European country, countries where the investor protection is higher than in Latin America (see La Porta et al., 1998), the wedge ratio tend to be lower than a domestic shareholder, which in line with our prediction. As in the selection model, the law and order coefficient is negative and statistically significant at the 0.1% level. This result supports our prediction that states that the better the investor protection in a country the lower the wedge ratio.

Furthermore, at the firm level, the coefficients for performance, debt and age are positive and significant (at 0.1%, 0.1% and 1% levels). In line with summary statistics, not only dual-class shares firms are older than single-class counterparts, but also, largest shareholders tend to leverage voting power more in older profitable and leveraged firms. This result is aligned with the argument that dual-class firms are less prone to engage in equity offerings in order not to dilute control, therefore they tend to increase leverage as an alternative source of finance and, consequently, to retain control (Gompers et al., 2010; Cronqvist & Nilsson, 2005).

DISCUSSION AND CONCLUSIONS

In this study we construct and analyze a unique and comprehensive sample of corporate ownership in Latin American between 2004 and 2009. We use these data to carry out two sets of analyses aiming to ask two questions: (1) *who are the owners of significant voting rights?* and (2) *whether and how these large owners use the dual-class mechanism to enhance control of firms*?

To do so, we describe the prevalence of high ownership concentration across largest shareholders in the seven largest economies in Latin America, and compare our findings with related literature in other emerging markets (Claessens et al, 2000) as well as developed countries (Faccio & Lang, 2002). The bottom line is that, despite some methodological differences, the largest shareholder in Latin America concentrates more voting rights than any other region. Then, we analyze who are the main owners in the region. We compare our sample with European data from Thomsen and Pedersen (2000) to show that industrial firms are the central player in Latin America, as they are in Europe. Next, we look at the origin of the largest shareholder. Not surprisingly, we confirm the finance literature (Coval & Moskowitz, 1999) and show that the 'home bias' phenomenon is also common pattern in Latin America. In other words, domestic investors represent more than 80 per cent of our sample.

Then, we use the classification of dual-class shares to analyze the determinants of wedge ratio between voting and cash-flow rights. Our theoretical and empirical analyses provide a new way to approach the decision to separate ownership and control through dual-class shares mechanism. First, we present a contrasting view to the usual perspective that the issuance of dual-class shares leads to the separation between ownership and control. We provide evidence that multiple classes of shares is a necessary but not a sufficient condition to leverage voting rights. For example, firms may issue dual-class shares which allows more flexible way to finance their growth projects but ultimately do not use this mechanism to separate voting from cash-flow. Indeed, Aggarwal et al. (2011) does not find a relationship between institutional investors and firms' choices of multiple

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class structures (first decision), but probably would find some relationship with wedge ratios (second decision), as we do.

Second, we shed new light to this problem and show that, even controlling for firm and country level alternative explanations, the type and the origin of the largest shareholder are important predictors of the wedge behavior. As Hambrick, Werder, and Zajac (2008) and Bebchuk and Hamdani (2009) note, although the corporate governance literature is aware of the different shareholder types, the quest for global governance standards should consider the heterogeneity of shareholders, in particular if they are in controlling positions. This is because their ability to control the firm and the mechanisms they use to achieve such controlling positions has an important impact to corporate governance policies. Particularly, because there is no theoretical or empirical consensus whether mandatory 'one share-one vote' improves corporate governance in the first place, and firm value as a consequence (Adams & Ferreira, 2008; Burkart & Lee, 2008).

Our emphasis on the two-stage decision process and on the identity and origin of the largest shareholder has important policy and managerial implications since the largest controlling shareholder has the rights and power to decide who to use the firms' resources which will have a direct effect on organization outcomes. First, policymakers in Latin America aimed to develop the capital markets and foster financial liquidity enacting regulation that allowed firms to issue multiple shares. Their argument assumes that there are two classes of shareholders. On the one hand, those who are primarily interested in controlling the firm; and on the other, those looking to get a return on their investments without seeking to run the business. Therefore, by allowing controlling shareholders to issue multiple classes of shares, usually without voting power, they permit insider to keep control of the firm and, at the same time, satisfy the outsider investors fostering liquidity and capital market development. For example, in Brazil, in order to preserve the control power of founding families and to foster the development of national "champions" business groups, the corporate law (Law 6.404/ 1976) allowed that firms that decided to go public to issue non-voting shares while protecting minority investors with preferences in payout policies and by creating the

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stock exchange commission as a regulatory and supervisory body to oversee controlling shareholders (Salama & Prado, 2011). This rule was part of a more general public policy that aimed to align the corporate law with economic development model, which at that time were based on the import substitution model (Salacuse, 1999).

Today, however, these countries are in a different pace on the development process that, in part, calls for different governance models and policies. Indeed, Brazilian stock exchange commission, after noticing the number of listed companies plummeting in the 2000s, decided to change the listing requirements to create the "Novo Mercado"(Aguilera, Kabbach-de Castro, Lee, & You, 2012). This new regulation raises the bar for corporate governance standards while allowing traditional and less stringent practices in a separate market (i.e., "Traditional Market"). Therefore, from a corporate governance perspective, we show that corporate control conditions, in particular, the goals of the largest shareholder define the level of the separation between ownership and control, and policymakers should take this into account when proposing new regulations.

Second, considering that the level of separation of voting and cash-flow rights is public information, investors that are more aggressive on governance issues will discount this information to adjust market value while those that are relatively acquiescent will not. Therefore, firms' decisions towards disproportionate voting power to cash flow should be seeing the light of the cost and benefits of such governance issues. This is because if outside investors consider that this separation reduces managerial accountability and therefore increase entrenchment (Harris & Raviv, 1988; Grossman & Hart, 1988), they will be more prone to discount. Otherwise, if they realize that the use of this control-enhancing mechanism is motivated by the purpose to boost firm value, it may have a positive impact on firms (Claessens et al., 2002).

This study is not without limitations. As is common in corporate governance research, analyses of firm level decisions may suffer from endogeneity biases. We tried to preserve the causal inference with an appropriate method and a carefully selected model, but it does not avoid all possible alternatives explanations since we lack other control enhancing mechanisms (Capresse et al., 2007)

to control for. Therefore, our causal relations are not definite. Additionally, considering our short-time period (2004-2009), and that ownership and governance decisions are not likely to change from one year to another, we use the average values to reduce the confounding effect of short-term variance in the observed variables. Future research should solve this shortcoming by improving the sample selection period and the number of observations

A natural extension of this research is to tie these antecedents of ownership concentration to the firm valuation in order to disentangle the ownership-value puzzle. An interesting avenue for future research is to look at firms that switch from a dual to a single class structures, and vice-versa. The decision to switch and structural shifts in firms' governance practices could help to disentangle the effects of the separation between voting and cash-flow rights. For example, outside investor pressure for higher accountability and transparency could encourage a switch from dual to a single class structure. However, the opposite switch from single to dual class is more likely to be initiated by insiders for different reasons that not necessarily divert resources from the firm at the expenses of outsiders.

APPENDIX 1: DIRECT VERSUS ULTIMATE SHAREHOLDINGS

Corporate governance literature (Capresse et al., 2007) has listed at least 13 mechanisms by which shareholders may enhance their control positions. This is to say that, in the absence of a definite measure of control rights and in order to be convincing, the conclusions of empirical studies of the effects of the conflict of interest between controlling and non-controlling owners must be robust all these mechanisms. In order to make inferences on the separation between ownership and control, recent literature in corporate governance assumes that control rights is equal to voting rights (Claessens et al., 2000; Faccio & Lang, 2002). If this is the case, shareholders have at least five main *ownership-related* forms to deviate from the one share-one vote principle: (a) voting rights caps, that limit the amount of votes any shareholder may cast regardless of the total number of stocks held; (b) priority voting rights, which award multiple voting rights to specific categories of shareholders (for example, golden shares entitle governments to appoint board members); (c) non-

voting shares (i.e., dual-class), which (frequently) provide fixed dividends payments at the expense of participation in the affairs of the company; (d) pyramid structures and (e) cross-shareholdings (Aguilera, Goyer, & Kabbach-Castro, 2012; Burkart & Lee 2008; Edwards & Weichenrieder, 2009; Goergen, Martynova, & Renneboog, 2005).

In light of these alternatives, we analyze our sample to check for the existence of these mechanisms. First, by analyzing the ownership regulation in Latin American countries and double-checking our sample we can rule out the presence of voting caps and priority voting. Then, we turn to pyramids and cross-shareholdings. We know from previous studies in Latin American firms (Chong & López-de-Silanes, 2007) that such mechanisms are common in the region. Therefore, how it should affect our results?

In our sample, we measure cash-flow and voting rights for immediate shareholders which does not capture any information of potential pyramid structures or cross-ownership (i.e., multiply chains according to Claessens et al. 2000). To better understand the problem, we take an example from our sample. Figure A1 shows the ownership structure of the Suzano Papel e Celulose S.A. In this example, we say that the largest shareholder of voting rights is Suzano Holding S.A. However, if we consider the ultimate shareholder, we would say that the largest shareholder of voting rights is Feffer Family. Therefore, for those firms were the immediate largest shareholder is other closely held firm or a firm that is unlisted on any stock exchange we miscategorize the type of the largest shareholder. Indeed, Faccio and Lang (2002) face the same problem and proxy those firms as family. Considering our categorization of the largest shareholder, we may problem may occur mainly in *banks*, and *industrial firms*. This is because governments and individuals/families, by definition, have no owners and institutional investors and private equity funds are considered as widely held corporations.

To understand how this miscategorization may affect our results, particularly in respect the hypothesis 1, we gather information of ultimate shareholders for Brazilian public-listed firms, which are available from the Brazilian Stock Exchange Commission (http://

). We use data from 244 firms listed in the BMF&Bovespa in 2008. In Table A.1 we report differences in means of voting shares by type of shareholder for direct and ultimate shareholdings. In all type of shareholders but governments, we cannot reject the null that states that the average of ultimate and direct shareholdings are equal. As expected, on one hand, *banks* observations reduce from 94 to 8 which means that most of the banks as the largest shareholders are the last link of a pyramid or cross-ownership chain. Indeed, Schneider (2008: 386) claim "about half the *grupos* […] had subsidiaries in finance, which suggests a continuing advantage

TABLE A.1

Differences between direct and ultimate shareholdings by type of owners in Brazil, 2008

Type of shareholder		Direct Shareholder (D)	Ultimate Shareholder (U)	Ho: mean(D) - mean(U)= 0	
				t	Pr(|T| > |t|)
Banks	N	94	8		
	Mean	0.49	0.39	0.78	0.46
	Std Dev	0.22	0.34		
Institutional investors	N	24	29		
	Mean	0.37	0.28	1.49	0.14
	Std Dev	0.22	0.20		
Industrial firms	N	78	90		
	Mean	0.47	0.52	-1.39	0.17
	Std Dev	0.22	0.28		
Individuals/ families	N	34	101		
	Mean	0.34	0.40	-1.45	0.15
	Std Dev	0.19	0.25		
Private equity	N	0	2		
	Mean	-	0.12		
	Std Dev	-	0.05		
Governments	N	14	14		
	Mean	0.54	0.78	-2.40	0.03
	Std Dev	0.31	0.21		

Source: Brazilian Stock Exchange Commission.

to internalizing some banking functions." On the other, individuals/family observations i ncrease from 34 t o 101 . And, g overnments, institutional i nvestors and pr ivate equity f und ob servations roughly do no t change. Regarding the i ndustrial firms, t he num ber of ob servations s lightly increases, i t is because of internal business group's arrangements, where industrial firms of the same business group own some of 94 banks.

In h ypothesis 1, we predict d ifferences in t he ownership b ehavior be tween i nstitutional investors and other types of l argest sha reholders. From t he exposed, we can se e that t here is no st atistical difference within types o f sh areholders on t heir b ehavior w hen they a re direct or ul timate shareholder. Therefore, without l osing generalization, w e expect t hat the same results would ho ld for other countries as well.

FIGURE A.1

Ownership structure of Suzano Papel e Celulose S.A. (Brazil, 2008)
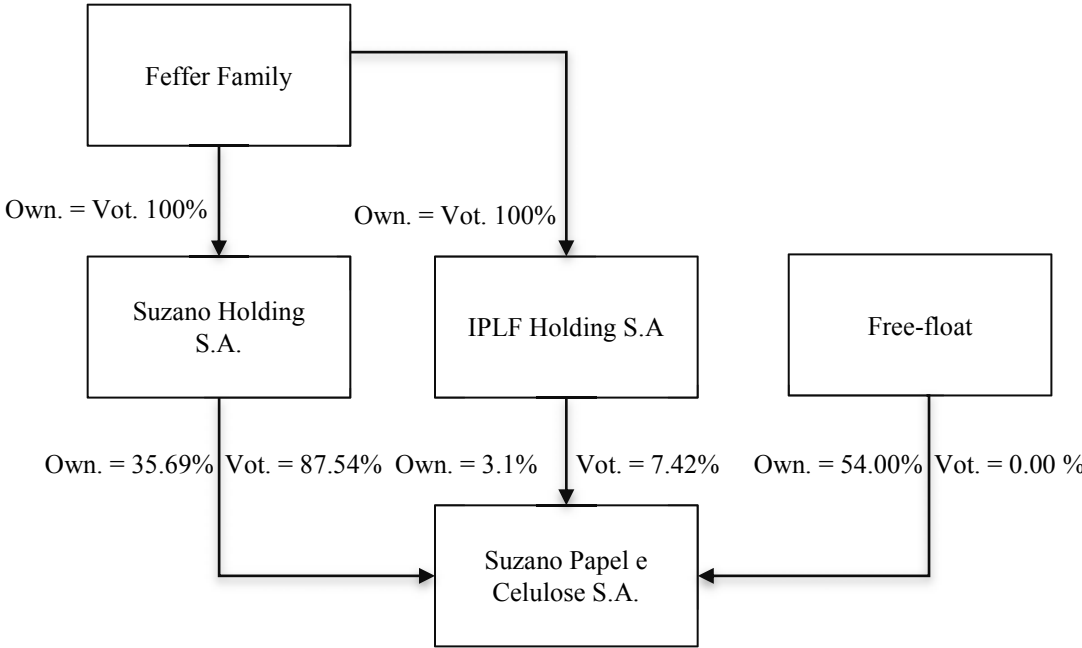
APPENDIX 2: CLASSES OF SHARES IN LATIN AMERICAN COUNTRIES

Argentina

Firms in Argentina may issue common and preferred shares. Common shares grant voting rights and have equal economic rights in proportion to their participation in the capital. In principle each ordinary share is entitled to one vote, but the statutes can create classes that recognize up to five votes per common share. Nevertheless, after having been authorized to make a public offer of shares companies cannot issue privileged voting shares. Preferred shares give financial preference over dividend payment in respect to common shares. Usually, it does not have voting rights except in the following matters: transfer of residence abroad, fundamental change of the objective of the firm, firm's liquidation and total or partial reinstatement of capital. They are entitled to vote provided in the case that firms stop to pay dividends or withdraw the authorization to trade their shares (Corporate Law, 19.550/84; Stock Exchange Regulation, art 3).

Brazil

Firms may issue common and preferred shares. The preferred shares, no matter what type they are, give priority to the shareholder to receive dividends (usually a percentage higher than that paid to common shares) and priority in capital reimbursement in the event of liquidation. If the firm does not distribute dividends after three fiscal years, the preferred shareholders are automatically converted into voting shares (i.e., common). The preferred shares can be divided into classes such as class "A", "B" and so on. The rights of each class listed in the firms' statutes (Corporate Law, 10.303/ 2001).

Chile

In Chile, each shareholder shall have one vote for each share he/she holds or represents. However, the statutes may provide a series of preferred shares without voting rights or limited voting rights, while it is not allowed to issue multiple voting rights shares (Corporate Law, 18.046/ 1981; Capital Market Law, 20.190/ 2007).

The regulator also allows firms statutes to establish preferences that entitle preference in the control of the firm for a maximum period of five years. This preference can only be extended by a general meeting decision.

Colombia

According to the Colombian corporate regulation, companies' may define different classes of shares with voting and non-voting rights. Therefore, firms may issue *preferred shares* which have only voting rights to specific issues such as, (a) in case of changes that may harm their current rights, or (b) when the firms is deciding to convert the preferred shares into common stocks, which entitle voting rights; while assuring financial preferences in the payout policies or a preferential right to refunds in the event of liquidation. These shares may not represent more than fifty percent of the subscribed capital (Law 222/ 1995, art. 60-66).

The objective of this amendment to the corporate law (Law 410/ 1971) was to foster the capital markets and increase liquidity while protecting investor rights with preferences in economics rights. Indeed, in the statement of reasons for creating this amendment, the Colombian Stock Exchange Commission, assumed that there are two classes of shareholders. On the one hand, those who are primarily interested in controlling the firm; and on the other, those looking to get a return on their investments without seeking to run the business.

Mexico

In Mexico, the company law states that one share carries one vote (Corporate Law/ 1934, last amendment in 2011). Nevertheless, it allows firms to issue limited voting shares, those that has just the right to vote in particular issues such as the liquidation of the firm, change in its objectives, or increasing or reducing total equity. These shares, on the other hand, have financial preferences in payout policies (i.e., dividends) and, have priority payment in case of liquidation.

Peru

The Peruvian "new" company law (26.887/1997) admits firms to issue non-voting shares which, in one hand, lacks voting rights, but entitles preferences regarding dividends payments. These shares

recover their voting power in special circumstances where the rights of their shareholders are violated, or when the firm aims to change the rights associated with these shares.

Venezuela

In Venezuela there is no restriction for firms to issue different type of shares. The only restriction is that should not have differences in rights within each class of shares (Capital Market Law, 36.565/1998).

REFERENCES

Adams, R. & Ferreira, D. 2008. One share-one vote: The empirical evidence. *Review of Finance*, 12: 51-91.

Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. 2011. Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1): 54-181.

Aguilera, R.V., & Jackson, G., 2003. The cross-national diversity of corporate governance: dimensions and determinants. *Academy of Management Review*, 28(3): 447-465.

Aguilera, R. V., & Jackson, G. 2010. Comparative and international corporate governance. *Annals of the Academy of Management*, 4: 485-556.

Aguilera, R.V., Goyer, M., & Kabbach-Castro, L.R. (forthcoming). The evolution of corporate governance regulation. In M. Wright, D. S. Siegel, K. Keasey, & I. Filatotchev (Eds.), *Handbook of corporate governance*. Oxford: Oxford University Press.

Aguilera, R.V., Kabbach-Castro, L.R., Lee, J., & You, J. 2012. Corporate Governance in Emerging Markets. In G. Morgan and R. Whitley (Eds.), *Capitalisms and Capitalism in the 21st Century*. Oxford: Oxford University Press.

Aldrighi, D., & Postali, F.A.S. 2010. Business groups in Brazil. In A. Colpan, T. Hikino, & J. Lincoln (Eds.), *The Oxford handbook of business groups*: 353-386. New York: Oxford University Press.

Almeida, H., & Wolfenzon, D. 2006. A theory of pyramidal ownership and family business groups. *Journal of Finance*, 61: 2637-2681.

Almeida, H., Park, S.Y., Subrahmanyam, M. & Wolfenzon, D. 2010. The structure and formation of business groups: Evidence from Korean chaebols. *Journal of Financial Economics*, 99: 447-475.

Amoako-Adu, B., & Smith, B.F. 2001. Dual class firms: Capitalization, ownership structure and recapitalization back into single class. *Journal of Banking and Finance*, 25: 1083-1111.

Babatz, G. 1997. *Ownership structure, capital structure and investment in emerging markets: The case of Mexico*. Unpublished doctoral dissertation, Harvard University, Cambridge.

Bebchuk, L.A, & Hamdani, A. 2009. The elusive quest for global governance standards. *University of Pennsylvania Law Review*, 157: 1263-1317.

Bebchuk, L.A., Kraakman, R. & Triantis, G. 2000. Stock pyramids, cross-ownership and dual class equity. In R.K. Morck (Ed.), *Concentrated corporate ownership*: 295-318. Chicago: Chicago University Press.

Bebczuk, R. 2007. Corporate governance, ownership and dividend policies in Argentina. In A. Chong, & F. López-de-Silanes (Eds.), *Investor protection and corporate governance: Firm-level evidence across Latin America*: 157-211. Washington, D.C.: World Bank.

Beck, T., Demirguç, A., & Levine. 2003. Law, endowments, and finance. *Journal of Financial Economics*, 70: 137-181.

Bennedsen, M., & Nielsen, K. 2008. *The principle of proportional ownership, investor protection and firm value in Western Europe*. ECGI Finance Working Paper.

Boehmer, E., Sanger, G.C. & Varshney, S.B. 2004. Managerial bonding and stock liquidity: An analysis of dual-class firms. *Journal of Economics and Finance*, 28 (1): 117-131.

Bortolotti, B., & Faccio, M. 2009. Government control of privatized firms. *The Review of Financial Studies*, 22 (8): 2907-2939.

Brickley, J., Lease, R., & Smith Jr., C. 1988. Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics*, 20: 267–291

Burkart, M. & Lee, S. 2008. One Share -One Vote: the Theory. *Review of Finance*, 12: 1-49.

Burkart, M., Gromb, D., & Pannunzi, F. 1997. Large shareholders, monitoring, and the value of the firm. *Quarterly Journal of Economics*, 112(3): 693-728.

Cameron, A.C., & Trivedi, P.K. 2009. *Microeconometrics using Stata.* College Station, TX: Stata Press.

Capresse, J.N., Clerc, C., & Becht, M. 2007. *The report on the proportionality principle in the European Union*. Brussels: European Commission.

Carvalhal-da-Silva, A., & Subrahmanyan, A. 2007. Dual-class premium, corporate governance, and the mandatory bid rule: Evidence from Brazilian stock market. *Journal of Corporate Finance*, 13: 1-24.

Céspedes, J., González, M., & Molina, C.A. 2010. Ownership and capital structure in Latin America. *Journal of Business Research*, 63(3): 248-254.

Chan, K., Covrig, V. & Ng, L. 2005. What determines the domestic bias and foreign bias? Evidence from mutual fund equity allocations worldwide. *Journal of Finance*, 60(3): 1495-1534.

Chong, A., & López-de-Silanes, F. (Eds.) 2005. *Privatization in Latin America: Myths and realities*. Washington, D.C.: World Bank.

Chong, A., & López-de-Silanes, F. (Eds.) 2007. *Investor protection and corporate governance: Firm-level evidence across Latin America*. Washington, D.C.: World Bank.

Claessens, S., Djankov, S., & Lang, L.H.P. 2000. The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58(1-2): 81-112.

Claessens, S., Djankov, S., Fan, J.P.H & Lang, L.H.P. 2002. Disentangling the incentive and entrenchment effects of large shareholders. *Journal of Finance*, 57(6): 2741-2771.

Colpan, A., Hikino, T., & Lincoln, J. (Eds.) 2010. *The Oxford handbook of business groups.* New York: Oxford University Press.

Cornelli, F., & Karakas, O. 2008. Private equity and corporate governance: Do LBOs have more effective boards? In J. Lerner, & A. Gurung (Eds.), *The global impact of private equity report 2008* Globalization of Alternative Investments, Working Papers Vol. 1: 65-84. Geneva, Switzerland: World Economic Forum.

Coval, J.D., & Moskowitz, T.J. Home bias at home: Local equity preference in domestic portfolios. *Journal of Finance*, 54: 2045-2073.

Cronqvist, H., & Nilsson, M. 2005. The choice between rights offerings and private equity placements. *Journal of Financial Economics*, 78: 375-407.

Dam, L., & Scholtens, B. 2012. Does ownership type matter for corporate governance responsibility. *Corporate Governance: An International Review*, forthcoming.

Davis, G. F, & Kim, E.H. 2007. Business ties and proxy voting by mutual funds. *Journal of Financial Economics,* 85: 552-570.

De Angelo, H., & De Angelo, L.1985. Managerial ownership of voting rights. *Journal of Financial Economics*, 14: 33-69.

Demsetz, H., & Lehn, K. 1985. The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93: 1155-77.

Del Guercio, D. 1996. The distorting effect of the prudent-man laws on institutional equity investments. *Journal of Financial Economics*, 40(1): 31-62.

Dharwadkar, R., George, G., & Brandes, P. 2000. Privatization in emerging economies: An agency theory perspective. *Academy of Management Review*, 25(3): 650-669.

Dittmann, I., Maug, E., & Schneider, C. 2010. Bankers on the board of German firms: What they do, what they are worth, and why they are (still) there? *Review of Finance*, 14: 35-71.

Doidge, C., Karoly, G.A., Stulz, R.M. 2007. Why do countries matter so much for corporate governance? *Journal of Financial Economics*, 86:1-39

Doidge, C., Karolyi, A., Lins, K., Miller, D. & Stulz, R. 2009. Private benefits of control, ownership, and cross-listing decision. *Journal of Finance*, 64(1): 425-466.

Dyck, A., & Zingales, L. 2004. Private benefits of control: An international comparison. *Journal of Finance*, 59(2): 537-600.

Edwards, J., & Weichenrieder, A.J. 2009 Control rights, pyramids, and the measurement of ownership concentration. *Journal of Economic Behavior & Organization*, 72: 489-508.

Faccio, M., & Lang, L. H. P. 2002. The ultimate ownership of Western European Corporations. *Journal of Financial Economics*, 65(3): 365-395.

Fan, J., & Wong, T.J. 2002. Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33: 401-425.

Ferreira, M.A., & Matos, P. 2008. The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88: 499-533.

Firebaugh, G., & Gibbs, J.P. 1985. User's guide to ratio variables. *American Sociological Review*, 50(5): 713-722.

Garay, U., & González, M. 2008. Corporate governance and firm value: The case of Venezuela. *Corporate Governance: An International Review*, 16(3): 194-209.

Gerlach, M.L. 1992. *Alliance capitalism: The social organization of Japanese business*. Berkeley: University of California Press.

Gillan, S., & Starks, L., 2003. Corporate governance, corporate ownership, and the role of institutional investors: a global perspective. *Journal of Applied Finance*, 13: 4-22.

Goergen, M., Martynova, M., & Renneboog, L. 2005. Corporate governance convergence: Evidence from takeover regulation reforms in Europe. *Oxford Review of Economic Policy*, 21: 243-268.

Gompers, P.A., Ishii, J., & Metrick, A. 2010. Extreme governance: An analysis of dual-class firms in the United States. *Review of Financial Studies*, 23(3): 1051-1088.

Gong, J. J., & Wu, S. Y. 2011. CEO Turnover in private equity sponsored leveraged buyouts. *Corporate Governance: An International Review*, 19 (3): 195-209.

Gourevitch, P.A., & Shinn, J. 2005. *Political power and corporate control: The new global politics of corporate governance.* Princeton: Princeton University Press.

Goyer, M. 2010. Corporate governance. In G. Morgan, J. Campbell, C. Crouch, O. Pedersen, & R. Whitley (Eds.), *The Oxford handbook of comparative institutional analysis*: 423-452. Oxford: Oxford University Press.

Grossman, S. & Hart, O. 1988. One share-one vote and the market for corporate control. *Journal of Financial Economics*, 20:175-202.

Gutiérrez, L.H., & Pombo, C. 2009. Corporate ownership and control contestability in emerging markets: The case of Colombia. *Journal of Economics and Business*, 61(2): 112-139.

Gutiérrez, L.H., Pombo, C., & Taborda, R. 2008 Ownership and control in Colombian corporations. *Quarterly Review of Economics and Finance*, 48: 22-47.

Hambrick, D.C, Werder, A., & Zajac, E.J. 2008. New directions in corporate governance research. *Organization Science,* 19(3): 381-385.

Harris, M. & Raviv, A. 1988. Corporate governance: Voting rights and majority rules. *Journal of Financial Economics*, 20: 203-235.

Holderness, C. G. 2009. The myth of diffuse ownership in the United States. Review of *Financial Studies*, 22 (4): 1377-1408.

Hu, H., & Black, B. 2006. The new vote buying: Empty voting and hidden (morphable) ownership. *Southern California Law Review*, 79(4): 811-908.

Jackson, G. 2000. Comparative corporate governance: Sociological perspectives. In A. Gamble, G. Kelly, & J. Parkinson (Eds.), *The political economy of the Company*: 265-287. Oxford: Hart.

Jensen, M.C., & Meckling, W.H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305-360.

Johnson, S., La Porta, R., López-de-Silanes, F., & Shleifer, A. 2000. Tunneling. *American Economic Review*, 90: 22–27.

Keister, L.A. 2002. Financial markets, money, and banking. *Annual Review of Sociology*, 28: 39-61.

Kennedy, P. 2008. *A guide to econometrics*. Malden, MA: Blackwell Publishing.

Khanna, T., & Palepu, K. 2000a. Emerging market business groups, foreign investors, and corporate governance. In R. K. Morck (Ed.), *Concentrated corporate ownership*: 265-294. Chicago, IL: The University of Chicago Press.

Khanna, T., & Palepu, K. 2000b. The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43(3): 268-285.

Khanna, T., & Rivkin, J. W. 2001. Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22: 45-74.

La Porta, R., López-de-Silanes, F., Shleifer, A., & Vishny, R.W. 1998. Law and finance. *Journal of Political Economy*, 106(6): 1113-1155.

La Porta, R., López-de-Silanes, F., & Shleifer, A. 1999. Corporate ownership around the world. *Journal of Finance*, 54(2): 471-517.

La Porta, R., López-de-Silanes, F., Shleifer, A., & Vishny, R. 2002. Investor protection and corporate valuation. *Journal of Finance* 57: 1147-1170.

Lathatm & Watkins LLP. 2007. Empty voting and other fault lines undermining shareholder democracy: The new hunting ground for hedge funds.

Leal, R.P.C.,& Carvalhal-da-Silva, A. 2007. Corporate governance and value in Brazil (and in Chile). In A. Chong, & F. López-de-Silanes (Eds.), *Investor protection and corporate governance: Firm-level evidence across Latin America*: 213-287. Washington, DC: World Bank.

Lefort, F. 2005. Ownership structure and corporate governance in Latin America. *Revista Abante*, 8(1): 55-84.

Lefort, F., & Urzua, F. 2008. Board independence, firm performance and ownership concentration: Evidence from Chile. *Journal of Business Research*, 61: 615-22.

Lehn, K., Netter, J., & Poulsen, A. 1990. Consolidating corporate control: Dual-class recapitalizations versus leveraged buyouts. *Journal of Financial Economics*, 27:557-580.

Leuz, C., Lins, K. & Warnock, F. 2009. Do foreigners invest less in poorly governed firms? *Review of Financial Studies*, 22(8): 3245-3285.

Li, K., Ortiz-Molina, H., & Zhao, X. 2008. Do voting rights affect institutional investment decisions? Evidence from dual-class firms. Financial Management, 37(4): 713-745.

Masulis, R., & Thomas, R. 2009. Does private equity create wealth? The effects of private equity and derivatives on corporate governance. *University of Chicago Law Review*, 76: 219-20.

Morck, R., Wolfenzon, D., & Yeung, B. 2005. Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature*, 43: 657-722.

Moyer, C., Rao, R. & Sisneros, P. 1992. Substitutes for voting rights: Evidence from dual-class recapitalizations. *Financial Management*, 21: 35-47.

Nawata, K. 1994. Estimation of sample selection bias models by the maximum likelihood estimator and Heckman's two-step estimator. *Economics Letters*, 45(1): 33-40.

Nenova, T. 2003. The value of corporate voting rights and control: a cross-country analysis. *Journal of Financial Economics*, 68: 325-351.

Pagano, M., & Volpin, P. 2005. Managers, workers, and corporate control. *Journal of Finance*, 60: 841-868.

Roe, M. J. 2000. Political preconditions to separating ownership from control. *Stanford Law Review*, 53(3): 539-606.

Peng, M., Wang, D. & Jiang, Y. 2008. An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies*, 39: 920-936.

Renneboog, L., Simons, T., & Wright, M. 2007. Why do public firms go private in the UK? *Journal of Corporate Finance*, 13: 591-628.

Salacuse, J. W. 1999. From developing countries to emerging markets: A changing role for law in the third world. International Lawyer, 33: 875-890.

Salama, B., & Prado, V.M. 2011. Legal protection of minority shareholders of listed corporations in Brazil: Brief history, legal structure and empirical evidence. *Journal of Civil Law Studies*, 4: 147-185.

Santiago-Castro, M., & Brown, C. J. 2007. Ownership structure and minority rights: A Latin American view. *Journal of Economics and Business*, 59: 430-42.

Schneider, B.R. 2008. Economic liberalization and corporate governance: The resilience of business groups in Latin America. *Comparative Politics*, 40(4): 379-397.

Schneider, B.R. 2009. A comparative political economy of diversified business groups, or how states organize big business. *Political Economy*, 16(2): 178-201.

Shleifer, A. & Vishny, R. 1994. Politicians and firms. *Quarterly Journal of Economics*, 109: 995-1025.

Shleifer, A., & Vishny, R. 1997. A survey of corporate governance. *Journal of Finance* 52: 737-783.

Stulz, R. M. 1988. Managerial control of voting rights: Financial policies and the market for corporate control. *Journal of Financial Economics*, 20: 25-54.

Taylor, S., & Whittred, G. 1998. Security design and the allocation of voting rights: Evidence from the Australian IPO market. *Journal of Corporate Finance*, 4: 107-131.

Thomsen, S. and Pedersen, T. 2000. Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6): 689-705.

Vassolo, R.S., De Castro, J., & Gomez-Mejia, L.R. 2011. Managing in Latin America: common issues and a research agenda. *Academy of Management Perspectives*, 25(4): 22-36.

Villalonga, B., & Amit, R. 2009. How are U.S. family firms controlled? *Review of Financial Studies*, 22 (8): 3047-3091.

Whitley, R. 2009. U.S. capitalism: A tarnished model? *Academy of Management Perspectives*, 23(2): 11-22.

Wooldridge, J. M. 2003. *Econometric analysis of cross section and panel data*. Cambridge, MA: MIT Press.

Yermack, D. 2010. Shareholder voting and corporate governance. *Annual Review of Financial Economics*, 2: 103-125.

Young, M.N., Peng, M.W., Ahlstrom, D., Bruton, G.D., & Jiang, Y. 2008. Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies*, 45(1): 196-220.

Chapter 2

Corporate Ownership and Uncertainty: Evidence from Emerging Markets

INTRODUCTION

Since international competition is rising, and emerging and developing economies are growing fast, stakeholders continue to face high uncertain environments to conduct business (Cuypers & Martin, 2010). In this context, corporate governance plays a key role in assuring that different investors get a return on their investments. Effective corporate governance around the world entails mechanisms to ensure the rights and responsibilities of company stakeholders (Aguilera, Filatotchev, Gospel & Jackson, 2008). One key mechanism is the corporate ownership structure as it refers to governance parameters such as the degree of concentration of ownership, types of owners, shareholder rights, and corporate control (Aguilera & Jackson, 2010). Even though it is well understood that ownership structure has important implications for other corporate governance practices and for corporate strategy (Shleifer & Vishny, 1997), an unresolved question is what factors determine cross-national differences in corporate ownership patterns. To answer this question, scholars from different disciplines have stepped in, including politics (Gourevitch, & Shinn, 2005), law (Gilson, 2006; Hansmann, 1996), economics (Demsetz & Lehn, 1985), finance (Shleifer & Vishny, 1997) and strategy (Folta, 1998; Pedersen & Thomsen, 1997) but have not reached a unified conclusion.

Corporate ownership research initially developed in the U.S. context (Demsetz & Lehn, 1985), where capital markets are liquid and deep, and quickly moved to examine cross-national patterns. We outline five among the most relevant cross-country comparative studies. La Porta, López-de-Silanes, & Shleifer (1999) are the first to systematically document ownership and control structures from a comparative perspective finding that, except in countries with strong minority shareholder protection (i.e., U.K. and U.S.), most firms have owners with high ownership concentration. Thomsen & Pedersen (2000) consider the 100 largest nonfinancial firms across 12 European countries and assess the impact of ownership structure on firm performance. They show that the identity of the owner determines the positive effect of ownership concentration on shareholder value. Claessens, Djankov, and Lang (2000) follow 2,980 firms in nine East Asian countries and illustrate that more than two-thirds of the firms are controlled by a single shareholder (often families), typically through pyramidal structures and cross-shareholdings, contrasting

sharply with traditional Anglo-American ownership structures. Faccio and Lang (2002) trace the ultimate owner and control of 5,232 publicly traded firms in 13 European countries. They report the reliance on dual class shares and pyramids as mechanisms to improve the largest shareholders' control, although only a few countries display significant differences between ownership and control. Finally, Lubatkin, Lane, Collin and Very (2005), comparing the U.S., French and Swedish corporate governance systems demonstrate that ownership is highly embedded in country-level characteristics suggesting that it is difficult for any given country to import or imitate another country's corporate governance practices.

These comparative studies find as a common empirical denominator high degrees of firm ownership concentration (that is the presence of a large owner) in contrast to the commonly dispersed ownership structure of Anglo-Saxon listed firms. But again, there is no consensus on identifying the factors that lead this largest owner to choose or be forced to concentrate firm's shares. We argue that part of this choice is determined by the largest owner's multiple uncertainties, which in turn will influence his/her decision on how much to invest. Thus, in this article, *we seek to examine the determinants of ownership concentration contingent on the uncertainties faced by the largest shareholder at the firm and country level.* Our proposed "uncertainty-ownership" relationship is particularly salient in emerging markets, where weak governance rights and underdeveloped institutions may account for high levels of ownership concentration (Dharwadkar, George, & Brandes, 2000; Khanna & Palepu, 2000a; Peng, Wang, & Jiang, 2008; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008).

The underlying assumption in our "uncertainty-ownership" is that owners will accumulate more or less shares in a given firm contingent on how much control they want to have over firms' outcomes (or have much unpredictability they are willing to cope with), given different degrees of firm and contextual uncertainty. In other words, we claim that when owners want to minimize firm and contextual uncertainties, they will accumulate more shares to gain more control over firm strategies, managerial decisions, liabilities of foreignness, and unpredictability about country-specific governance and cultural idiosyncrasies. We look at the largest owners because their decisions have the highest strategic impact and, the amount of their stakes defines the ownership concentration in emerging markets. We draw on

two theoretical lenses to analyze the role of uncertainty in shaping ownership patterns. First, we use *agency theory* to conceptualize how ownership concentration decisions are taken to maximize the largest shareholders' value by minimizing agency costs coming from monitoring or reducing imperfect information. In this view, we assume that the largest shareholders "can influence the success of their firms and that all outcomes are neither completely random nor completely foreseeable" (Demsetz and Lehn (1985: 1159) driving to efficient structures that decline agency costs (Jensen & Meckling, 1976). We propose that the benefits gained through more monitoring of managerial behavior by the largest shareholder (i.e., high ownership concentration) will depend on the type of the largest shareholder. We expect that different types of largest shareholders will have different incentives and will seek different outcomes from their investments (i.e., short-term returns, liquidity, strategic positions, family control, etc.), which will have an effect on the level of ownership concentration. Second, in order to overcome some of the under-contextualization limitations of agency theory (Aguilera & Jackson, 2003), we use the *new institutional economics literature* (North, 1990; Williamson, 2000) to explore how the country of origin of the largest shareholder, as well as the formal and informal institutions in the investing country, will influence owners' uncertainty and, consequently, their desired degree of ownership concentration. Our multi-dimensional "uncertainty-ownership" framework is tested for a unique, comprehensive and representative dataset on publicly listed firms in the seven emerging economies in Latin America (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela) between 2004 and 2008.

Our conceptual framework and empirical findings bring three main contributions to international business research and, particularly, to the comparative corporate governance literature. First, we articulate uncertainty as a multi-dimensional construct and argue that investors are aware of different sources of uncertainties which ultimately drive their investment decisions - particularly, in countries where capital markets are emerging, information asymmetry among shareholders is high and the legal protection of minority shareholders is weak. Second, we construct a unique, reliable and highly representative dataset of publicly listed firms in Latin America, which allows us to engage with the comparative corporate ownership debate and test our proposed framework. And third, from a policy perspective, our findings

also speak to whether the Latin American market-oriented reforms of the past two decades have had their intended results regarding the ownership structure of publicly listed firms.

THEORY AND HYPOTHESES

Even though there is extensive research in international business, strategy and economics on uncertainty, no single universal concept defines and separates risk from uncertainty (Miller, 1992; White & Fan, 2006). Uncertainty entails unpredictability of environmental or organizational variables due to the inadequacy of information, and has an impact on corporate performance (Duncan, 1972; Miller, 1992). This implies, on the one hand, that it is feasible to characterize organizations and environments in terms of how uncertain they are. On the other hand, it indicates that uncertainty is essentially in the eye of the decision-maker (Milliken, 1987). We define uncertainty as a firm's operational environment stemming from institutional forces, competitive dynamics within the industry and shareholder-specific factors that reduce the predictability of company outcomes (Lee & Makhija, 2009; Miller, 1992). Our definition is consistent with: (a) the uncertainty approach in the agency theory, which is determined by the principal and agent's actions under different states of nature (Eisenhardt, 1989; Nilakant & Rao, 1994); and (b) the uncertainty in institutional theory, which is determined by formal and informal environmental hazards (Henisz & Williamson, 1999; North, 1990; Yamagishi & Watabe, 1998).

It is noteworthy that investors are aware of different sources of uncertainty when deciding to allocate financial capital in emerging economies. Young et al. (2008) present a conceptual framework where formal and informal institutions, and their intrinsic uncertainties, are the primary antecedents to high levels of ownership concentration observed in emerging economies. They claim that institutional conditions in emerging economies create an uncertain environment that amplifies the costs of monitoring and enforce contracts. Therefore, ownership concentration is an effective corporate governance mechanism that shareholders rely on to guarantee the return of their investments. Implicit in their model is that institutional differences across countries explain variation in ownership concentration. Although their framework is useful to start the conversation on the antecedents for ownership concentration, we argue that institutional variation supplies only a partial answer to the ownership puzzle. It neglects firm-

level characteristics, which might account for within country ownership variation. That is to say, ownership concentration is a mechanism to mitigate not only country institutional uncertainties but also other sources of uncertainties at the firm level.

We develop a framework that captures this multi-dimensional nature of uncertainty both at firm and country level, as proposed in Table 1. We argue that the largest shareholders of publicly listed firms bear different sources of uncertainty which shape their investment decisions and, consequently, affect their degree of firm ownership concentration. On one hand, the agency perspective helps explain the effects of differences among type of owners on ownership concentration. On the other hand, institutional theory supports the idea that there tends to be diffusion in the governance practices across countries to reduce uncertainty in the foreign investment location and that the characteristics of the formal and informal institutions of the host country will influence the owners' uncertainty towards seeking more or less ownership in a given firm.

Our framework is consistent with the corporate governance literature on ownership concentration in emerging markets that postulates that concentrated ownership exists "because of institutional voids and the absence of specialized intermediaries in capital markets" (Khanna & Palepu, 2000a: 283) which prevents the efficient-based portfolio theory to hold in countries with poor investor protection (Almeida & Wolfenzon, 2006).

TABLE 1

Sources of uncertainty influencing ownership concentration

Uncertainty Framework		Agency Theory	Institutional Theory
Uncertainty levels	Firm	Type of the largest shareholder (H1)	Origin of the largest shareholder (H2)
	Country	---	Formal institutions (H3a) Informal institutions (H3b)

Uncertainty at the firm level

The type of the largest shareholder. The classic agency problem assumes that both the agent and the principal pursue different objectives. Therefore, corporate governance literature has proposed at least two main mechanisms to align agent and principal interests. First, management incentives may influence strategic choices and may affect how managers respond to institutional forces (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010; Gomez-Mejia, 1992). Therefore, since managerial behavior cannot be readily evaluated, performance-based incentives and stock options are prescribed to align agent and principal's interests (Devers, Cannella, Reilly, & Yoder, 2007). Secondly, direct shareholder monitoring is a central mechanism to align management towards shareholders objectives, which is contingent on the amount of shares they hold on a focal firm (Hart, 1995) and their abilities and strategies to monitor management (La Porta et al., 1999). This is because the identity of the largest shareholder defines their intrinsic uncertainty – the one associated with their abilities and experience on running a particular kind of business and/or monitoring management - impacting the agency relationship and, ultimately, defining their levels of ownership concentration. Indeed, scholars studying corporate ownership (Aguilera & Jackson, 2010; Colpan, Yoshikawa, Hikino & Del Brio, 2011; Holderness & Sheehan, 1988) show that different types of owners (i.e., principals) follow different strategies because they seek different goals in the firm. For example, Colpan et al. (2011) examine the effects of three different types of shareholders on the strategic direction of their invested firms. They illustrate that financial and institutional investors are concerned with conservative capital commitment and focus on product portfolio, while corporate investors seek to maintain relational business ties with invested firms. Holderness and Sheehan (1988) also uncover significant differences between corporate and individual blockholders regarding their respective investment policies, and conclude that the identity of the largest blockholder is a key factor to explain ownership concentration. We argue that when investors decide to have a controlling position over the assets of the firm, they have incentives to assess the cost and benefits of the monitoring-ownership equation contingent on their intended strategies (i.e., utility function) and on their tolerance towards the unpredictability of firms' outcomes.

The existing literature (Aggarwal, Erel, Ferreira, & Matos, 2011; Grinstein & Michaely, 2005; Thomsen & Pedersen, 2000) identifies three types of owners according their goals: (1) institutional investors, (2) strategic blockholders, and (3) private investors. We propose that the identity of this largest shareholder is likely to influence the degree of ownership concentration in the following ways. *Institutional investors* such as mutual funds, pension funds, hedge funds, insurance companies, and other non-banking organizations investing their members' capital in shares and bonds have a common characteristic that is to perform strategic portfolio investments (e.g., Dalton et al., 2007; Grinstein & Michaely, 2005). As such, their main goal is to maximize the value from a portfolio of investments while keeping the potential liquidity of their shares (Aggarwal et al., 2011; Thomsen & Pedersen, 2000). To accomplish this goal and minimize the unpredictability of their investments, institutional investors tend to be at an arm's-length relation with the firms they invest in, and follow two main strategies. They either choose to exercise their voice in the boardroom to safeguard their interests, or sell their shares in under-performing firms. These strategies are not only consistent with their portfolio strategies but also with their lack of managerial abilities to run an industrial business reflecting an uncertainty among institutional investors about what management will do. In this regard, the agency costs for lack of full information and the need for control are fairly low.

The second type of owner, *strategic blockholders*, includes banks, governments and industrial firms. These owners are grouped together because their interests in the firm typically go beyond financial outcomes and fall in the category of strategic goals. Even though, bank ownership is restricted in the U.S. and the U.K. (Charkham, 1994), it plays a key strategic role in other parts of the world (Zysman, 1983), particularly in environments with emerging capital markets. In these countries, banks often have multiple ties with firms in which they own shares, and their equity stake primarily serves to reinforce long-term business relationships with the firm (Roe, 1994). This entails that when banks are the firm's largest shareholders, they tend to offer also financial services, rather than seeking to maximize short-term shareholder returns (Dittman, Maug, & Schneider, 2010). In the case of the government as the controlling shareholder, previous literature has shown that, in addition to financial gains, state ownership is an

instrument to pursue social-political objectives, such as to have control over national strategic sectors, to curb unemployment, and to offer universal services (Bortolotti & Faccio, 2009; Shleifer, 1998). Finally, industrial firms usually rely on cross-shareholdings and pyramidal structures to obtain gains of scope, reduce uncertainty through diversification and strengthen internal labor markets (Colpan, Hikino & Lincoln, 2010; Khanna & Rivkin, 2001). Strategic blockholders are therefore concerned in achieving certain goals with predictability in firm outcomes. As such, a high level of ownership concentration is a mechanism to achieve control over the firm outcomes and reduce the agency costs. It allows strategic blockholders to hold long-term and senior management positions on firms, to increase their understanding of the firm's wealth-creation and access to internal information that, ultimately, reduce their monitoring costs compared to institutional investors.

A third category of largest shareholder includes individuals/families and private equity funds under the rubric of *private investor*. Unlike strategic blockholders, private investors act on their own behalf and, since they have specific human and financial capital at stake in the firm, they are more likely to gain as much firm control as they can to minimize agency costs (Thomsen & Pedersen, 2000). Family owners typically seek to keep majority ownership in the firm as a way to minimize unpredictability and lack of control in firm outcomes such as securing family succession (Anderson, Mansi, & Reeb, 2003). In a similar fashion, private equity funds acquire control in companies to ensure that their strategic concerns can be implemented with minimal uncertainty from managerial actions and maximum information (Cornelli & Karakas, 2008). They rely on their ownership control to swiftly modify company policies, to remove underperforming executives, or challenge management to perform better (Masulis & Thomas, 2009). Given strategic and private investors' objectives, we propose that, when they are the largest shareholder in the firm, they are likely to seek higher ownership concentration than institutional investors to reduce agency uncertainties, and hence we hypothesize:

Hypothesis 1. Strategic blockholders and private investors as largest shareholders are expected to have higher ownership stakes than institutional investors.

The origin of the largest shareholder. Comparative corporate governance research drawing on national institutions identifies two dichotomous ideal type models of corporate governance, *outsider* and *insider* models. These two models are intended to capture the distinct institutional characteristics such as property rights, strength of the law, nature of labor market, access to corporate financing, corporate governance practices, etc. (Aguilera & Jackson, 2010). The structure of corporate ownership is at the core of these two models (Aguilera & Jackson, 2003; Franks & Mayer, 1990). The ownership structure of the insider model has a single or a few shareholders that control the firm, which is the case in most of continental Europe and emerging markets (Barca & Becht, 2001; Chong & López-de-Silanes, 2007; Young et at., 2008). The outsider model is characterized by dispersed ownership amongst a large number of small shareholders. Both the U.S. and the U.K. are examples of the outsider system. [10]

We are interested in understanding the influence of these home-country models when large investors acquire ownership in a foreign firm. When going abroad, investors are confronted with two sets of isomorphic pressures. On the one hand, foreign investors will encounter host country pressures to adopt local governance practices, including ownership patterns, and become isomorphic with the host country institutional context (DiMaggio & Powell, 1983). It can also be the case that the regulatory environment (e.g., host country investment laws and regulations) compels foreign investors to follow certain ownership patterns due, for instance, to caps on foreign ownership (Contractor, 1990). On the other hand, investors might prefer to replicate their home-country strategic practices, including patterns of ownership, with which they are familiar and are legitimate to them in order to minimize their institutional uncertainty (Kristensen & Zeitlin, 2005; Westney, 2005; Zaheer, 1995). In fact, we know from the existing literature that foreign investors, who have become significant shareholders all over the world, are likely to transplant their home-country corporate governance systems when they invest abroad (Ahmadjian & Robbins, 2005; Fiss & Zajac, 2004; García-Canal & Guillén, 2008; Goyer, 2011).

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[10] Although this dichotomy between Anglo-American and Continental European models only partially accounts for the governance realities in these countries (Aguilera & Jackson, 2007), it captures the fundamental level of analysis that we aim to explain, that is the corporate ownership concentration.

The likelihood of transplanting home-country governance practices together with the dual models of corporate governance—with Latin America falling in the insider model—offers two alternative possibilities that foreign investors may choose. First, when host- and home-country corporate governance models are the same, the foreign investor will face, in principal, fewer uncertainties. Hence they are likely to replicate the main practices from the insider model, including ownership concentration, because this is what investors know. This would be the case of a Spanish firm investing in Argentina. Conversely, it may be the case that the foreign investor is from an outsider model country investing in an insider model country, having to make a choice on whether to transplant or to adapt. We argue that this foreign investor from an outsider model country, even when being the largest owner in an insider country firm, is more likely to have lower levels of ownership concentration than host-country investors. Consistent with diffusion research, owners will likely minimize their uncertainty and keep doing what they know. Thus, we propose that the level of ownership concentration of a foreign investor will keep the home-country corporate governance model when investing in a foreign country with insider corporate governance model. Specifically:

> *Hypothesis 2a. A foreign largest shareholder from an outsider corporate governance model country is expected to have lower ownership concentration than when the largest owner is domestic when both are investing in an insider corporate governance model country.*

> *Hypothesis 2b. A foreign largest shareholder from an insider corporate governance model country and a domestic largest shareholder do not differ in their average ownership concentration when both are investing in an insider corporate governance model country*

Uncertainty at the country level

Institutions are "rules and procedures, formal or informal that structure social interaction by shaping and constraining actors' behavior" (Helmke & Levitsky, 2004: 727). As such, they play an important role in a market economy because they are developed to reduce the transaction and production costs in economic exchanges (North, 1990; Williamson, 2000). On one hand, institutions may provide strong property rights, and, when this is done, resources are allocated to their highest value and the market mechanism

works effectively (Williamson, 2000). On the other hand, institutions may fail to ensure the necessary conditions to exchange in the market, driving investors to align their transactions with other governance structures (Williamson, 1988). Institutional differences are particularly critical in the context of emerging economies where markets malfunction is ubiquitous, property rights are not always protected, and there is weak contract enforcement (Chakrabarti, Singh, & Mahmood, 2007; Meyer, Estrin, Bhaumik, & Peng, 2009; North, 1990). In the next section, we argue that the quality of countries' rules and values (formal and informal institutions) will influence the degree of predictability of investors' strategies, suggesting that when uncertainty is high, investors are more likely to minimize unpredictability of organizational outcomes by having greater control in the firm (i.e., engaging in higher ownership concentration).

Formal institutions include, but are not limited to, legal frameworks securing property rights, contract enforcement mechanisms, and the strength of the rule of law. Research shows that under weak laws and lack of contract enforcement, shareholders have little incentives to allocate financial resources on capital markets and, therefore, tend to accumulate high concentration of shares (Young et al., 2008). Conversely, a more effective legal and judicial system can limit insiders' private benefits of control by making wealth expropriation legally riskier and more expensive, ensuring the effective functioning and predictability of market mechanisms (Meyer et al., 2009). This implies that the well functioning and strength of country's formal institutions may shape the degree of corporate ownership.

Henisz and Williamson's (1999) develop, from the new institutional economics perspective, a theory to assess the impact of a country's formal institutional context on governance choices. They claim that contractual hazards arise when one party in the transaction may have an opportunistic behavior that cannot be solved through a contract (i.e., incomplete contracts), particularly in conditions of uncertainty (i.e., bounded rationality) and asset specificity (Williamson, 1985). Therefore, as contractual uncertainty builds up, transactions will be organized in markets (i.e., low ownership concentration). Otherwise, they will move towards unified ownership (i.e., high ownership concentration).

From a cross-national perspective, countries with more secure property rights regimes will bring out lower ownership concentration, since investors face lower contractual hazards. Strengthening contract law

improves the quality of enforcement and reduces governance costs of market transactions and, therefore, it will shift downward the average level of ownership concentration. Indeed, empirical research in emerging markets (Khanna & Palepu, 2000a; Young et al., 2008) has demonstrated that, when there is a lack of credibility on the institutional stability of the rules of the game, investors are less prone to finance through capital markets and are more likely to horde shares to sustain control and predictability of organizational outcomes.

Thus, formal institutions can influence corporate ownership concentration in several ways. First, the absence of strong external governance mechanisms guaranteeing property rights and contract stability increases institutional uncertainty and market transaction costs shifting corporate ownership towards more concentrated levels. Second, credible political commitment is necessary to ensure that nominal institutions are equal to *de facto*. Otherwise, investors act strategically and, anticipating policy changes, move from capital markets, reducing market liquidity and increasing ownership concentration. Third, a largest shareholder may amplify his control position to strengthen his power toward other shareholders. This is because in uncertain environments, where there are no clear "rules of the game," being a powerful player raises the opportunities for economic payoffs (Skaperdas, 1992). Fourth, deficient formal institutions fuels capital markets imperfections. Therefore, in weak external capital markets, firms have to depend on internal capital markets increasing equity positions and seeking high ownership concentration. Therefore, we propose that:

Hypothesis 3a. The weakness of the formal institutions in a country is positively related to the ownership concentration of the largest shareholder.

Informal institutions include codes of conduct, conventions, traditions, moral values, and all other informal norms of behavior. These informal values and rules embodied in country environments exist to facilitate the exchange through predictable human behavior in a world of uncertainty and incomplete knowledge (North, 1990; Scott, 2008). North (1990) argues that, although informal constraints are not directly observable, the established contracts and their actual trading cost offer evidence of informal constrictions, such as the underlying national cultural values. The international business literature shows

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that informal institutions are particularly salient in emerging markets to fill in formal institutional voids (Black 2001, Khanna & Palepu, 2000b; Jackson & Deeg, 2008). It has also demonstrated a direct link between national cultural systems and firm level behavior (Kwok & Tadesse, 2006; Shao, Kwok & Guedhami, 2010). Hofstede's (1980) national culture research introduces the cultural dimension of uncertainty avoidance—defined as the "extent to which the members of a culture feel threatened by uncertain or unknown situations" (Hofstede, 1991: 113). As future events cannot be perfectly predicted, the uncertainty avoidance dimension assesses how individuals handle unpredictability. Individuals in societies with high levels of uncertainty avoidance perceive uncertainty as a continuous threat that must be tackled (De Jong & Semenov, 2006).

Research in international business illustrates the direct relationship between management practices and investors' behavior seeking to avoid uncertainty. For example, Kwok and Tadesse (2006) and Shao et al. (2010) show that national culture's uncertainty avoidance shapes national financial system configurations which in turn influences firms' financing decisions and capital structure. In addition, De Jong and Semenov (2006) conclude from their 27 country comparative study that differences in investors' attitude towards uncertainty have the most significant impact on ownership patters.

One mechanism to minimize uncertainty is to develop a sense of trust as a strong informal institution. Trust is defined as "conformity with accepted norms of behavior in the absence of explicit incentives or penalties to do so. It can derive from repeated interactions, moral and ethical codes, or the social conventions and networks ties" (Franks et al., 2009: 4040). Without strong formal institutions governing business transactions, the opportunism of managers could be considerably high favoring relational contracting (Peng & Heath, 1996). That is, uncertainty-avoiding owners, for whom trust is an essential condition, will rely on informal institutions to reduce uncertainty and combat opportunism. As a consequence, family-related business, business groups' structures, and cross-shareholdings are mechanisms to reinforce trust and grant predictability in organizational outcomes (Peng & Heath, 1996), while increasing the ownership concentration.

Therefore, informal institutions in general, and individual's trust in particular, may affect the level of ownership concentration in different ways. First, with weak formal institutions, investors will develop their own informal safeguards to ensure appropriate returns of their investments and to reduce uncertainty towards their property rights. In emerging countries, the reliance of network relationships of trust is well documented (Claessens et al. 2002; Khanna & Palepu, 2000a, 2000b). For example, Young et al. (2008) assert that, in the absence of effective formal institutions, large shareholders use relational ties, government contacts, and other informal mechanisms to achieve their interests. Second, reciprocal confidence (e.g., trust) is a quintessential condition for doing business (Arrow, 1972), and one of the pillars of a country's culture. In the absence of trust and the presence of uncertainty, investors, and particularly uncertainty avoiding investors, are likely to hold more shares in a given firm as a mechanism to protect themselves from expropriation. Hence, we propose that the levels of trust is an instrument to reduce investor's uncertainty towards economic outcomes and can work as a complement to formal institutions in protecting their investments. And, we hypothesize that:

Hypothesis 3b. The lack of trust in a country is positively related to the ownership concentration of the largest shareholder.

DATA AND METHODS

To empirically test our hypotheses, we have collected firm level ownership data from multiple sources (i.e., Economatica, Thomson One Banker, Osiris and Brazil SEC) to analyze the patterns of corporate ownership of publicly listed firms in seven emerging economies in Latin America (Argentina, Brazil Chile, Colombia, Mexico, Peru and Venezuela). Ownership data in emerging markets is unfortunately extremely difficult to assemble, and therefore it entailed extensive cross-checks to assure that our sample is both comprehensive and highly reliable. Our dataset includes ownership data for 4,952 firm-year observations of financial and non-financial firms, between 2004 and 2008. It represents, in average, 70.7 % of all market-capitalization of these countries (the highest representativeness is from Chile, where we cover 96.2% of the market capitalization for the 5 years, and the lowest representativeness is from Argentina, where we cover 63% of the total market capitalization). Despite the challenges with data

availability, our sample represents a significant advancement relative to previous empirical research on ownership structure in Latin America. For example, Chong and López-de-Silanes (2007) use a sample of the top 10 companies per country.

Dependent variable

Largest shareholder ownership. Our dependent variable is defined as the percentage of shares held by the largest shareholder (C1). Since share ownership, by definition, is restricted to the interval between 0 and 100, we use a logit transformation (i.e. $\ln(c1/(1 - c1))$) of this variable in our analyses (Demsetz & Lehn, 1985). As shown in Table 2, in Latin America, the average largest owner holds above 53% of the total shares. This average is much higher than the 26% of the largest shareholder in the U.S. (Holderness, 2009), the 9.96% in the U.K. and the 42% of the Continental European countries (Barca & Becht, 2001). Although stable over time, the ownership concentration of the largest shareholder varies substantially across Latin American countries. For example, in Brazil, the average largest shareholder holds more than 61% while in Colombia this value is around 42%.

Explanatory variables

Type of the largest shareholder. We distinguish between six ownership types, which include institutional investors, banks, government, industrial firms, individuals and private equity funds. Table 1 shows a breakdown of our sample by the identity of the largest shareholder along with the average shareholdings of largest owner across Latin American countries. The fraction of firms with industrial firms as the largest shareholder follows a similar pattern to the average largest owner. Concentration changes when we take the government as the largest shareholder. In Argentina and Mexico, for instance, there are no firms in our sample where the government is the largest shareholder. In contrast, in 89 Brazilian firms and in 14 Chilean firms, the government is the largest shareholder. Another notable difference across these seven countries is the high presence of banks as the largest shareholder in Brazil relative to other Latin American countries.

TABLE 2

Companies by type and shares of the largest shareholder in Latin America (average percentage of shares in parentheses)

Country	Institutional Investor	Strategic Blockholder			Private Investor		Total
		Bank	Government	Industrial Firm	Individual	Private Equity	
Argentina	93	12	-	182	18	1	306
	(19.69)	(51.25)	-	(53.31)	(62.99)	76.67	(43.66)
Brazil	194	395	89	1,102	162	22	1,964
	(58.45)	(58.88)	(73.69)	(65.64)	(40.63)	(63.72)	(61.85)
Chile	255	18	14	746	24	16	1,073
	(43.6)	(51.33)	(65.53)	(53.7)	(24.56)	(52.49)	(50.74)
Colombia	62	39	13	98	12	-	224
	(35.87)	(50.01)	(64.4)	(44.77)	(12.03)	-	(42.61)
Mexico	181	11	-	146	132	11	481
	11.89	(34.01)	-	(41.48)	(44.16)	(32.96)	(30.71)
Peru	107	46	8	538	102	4	805
	66.59	(76.93)	(99.13)	(61.54)	(32.43)	(42.150	(59.68)
Venezuela	39	21	3	34	2	-	99
	(38.39)	(53.72)	(70.82)	(48.14)	(23.88)	-	(45.68)
Total	931	542	127	2,846	452	54	4,952
	(40.05)	(58.65)	(73.37)	(58.78)	(39.02)	(52.77)	(53.75)

We group the six types of shareholders into three categorical dummy variables: *Institutional investors,* when the largest shareholder is an investment fund, a pension fund or insurance company; *Strategic block-holder* takes value 1 when the largest owner is a Bank, an Industrial Firm, or a Governmental Agency; and *Private investors* captures if the largest shareholder is an individual or family member, or private equity fund.

Country origin of the largest shareholder. We identify five world geographic regions, defined as categorical dummy variables. *Domestic* refers to when the largest owner is from the same country of the firm. Alternatively, if the largest shareholder is a foreign investor, we consider four origins: *Latin America* if the largest owner is from a non-domestic Latin American country; *Anglo Saxon* if the largest owner is from Anglo-Saxon countries such as the U.K., the U.S., and Ireland; *Continental Europe* when the largest owner is from a European country other than UK and Ireland; and *Others* if the largest owner

comes from other countries not included in previous categories. It is worth pointing that more than 80 percent of the largest shareholders are domestic while foreign investors are similarly split across the remaining four geographic regions (see Table 3).

Formal institutions. We use an index score of four combined International Country Risk Guide (ICRG) indicators: *bureaucracy quality*, the *corruption* in government, the *law and order* (i.e. rule of law) and the *contract viability* (i.e. the expropriation risk). They are calculated separately for the years 2004 to 2008. ICRG indicators are frequently used to measure the strength of formal institutions as it captures dimensions of security of property rights and efficacy of contract environment across countries (Drori, Jang & Meyer, 2006; Knack & Keefer, 1995, 1997). Drori et al. (2006) discuss that, although every indicator emphasizes a particular dimension of a country's formal institutions, altogether they refer to the general concept of "quality of formal institutions." At the empirical level, we corroborate Drori et al.'s reported high correlation between the four ICRG's indicators, varying between 0.52 and 0.74 and a confirmatory factor analysis show a high and positive average loadings for each variable on the same general factor, ranging from 0.82 to 0.92. In addition, the factor analysis shows that this general factor accounts for 73.09% of the common variability of the four variables. For our sample, this variable ranges from -2.88 and 1.80. Venezuela reports the lowest level of the quality of formal institutions with an average value of -2.45 and Chile the highest with an average index of 1.68 (e.g., the Latin American median is -0.34). To be consistent with our conceptual framework, we multiply the *formal institutional* index by -1, so that this measure increases when formal institutions in a particular country are weaker. Finally, to assess the robustness of our formal institutional measure, we use the "rule of law" (RL) as defined by Kaufman, Kraay, & Mastruzzi (2010), from the World Bank Governance indicators.

Informal institutions. To operationalize informal institutions, we borrow from Berry, Guillén, & Zhou (2010) and use public opinion data from the World Value Survey (WVS; Inglehart, 2004) on country levels of the lack of trust in the last three waves (1999-2004, 2005-2006, and 2008-2010) to replicate Hofstede's uncertainty avoidance measure. The main benefit of using this data is that it captures changes

across years in contrast with Hofstede's (1980) or Schwarz's (1999) static cultural measures. As Berry et al. (2010), we interpolate the data for years in between waves of the survey. According to the WVS, higher indexes of lack of trust mean that people "need to be careful" in dealing with others; that is, it increases with the uncertainty avoidance in a particular country. As a matter of fact, Brazil is the country where people have more uncertainty in their relationships with others. To add empirical validity to this measure, we test the robustness of our results using the alternate cultural dimension of "embeddedness" developed by Schwarz (1999), and measured by Siegel, Licht, and Schwartz (2011); and "uncertainty avoidance" developed by Hofstede (1980).

Control variables

Firm level controls. We control for the following variables: *largest shareholder diversification* accounts for the number of firms in our dataset where the largest shareholders is present. The variable is the natural logarithm of the number of firms; *firm size*, which is by the natural logarithm of the total assets of the firm; *leverage* of the firm by measuring the ratio between the total liabilities over total assets; *firm accounting performance* measured by the annual rates of return on total assets (ROA). We also classify firms by and control for industrial sectors, which include, primary, construction, manufacturing, utilities, trade, financial services, and services. To reduce the impact of outliers across all analyses, accounting variables were winsorized at the top and bottom 1% of the distribution. As firm leverage and profitability exhibit large positive skewness, they were winsorized at the bottom 1% and at the top 3% of the distribution.

Firm-specific uncertainty plays a central role in the ownership literature (Demsetz & Lehn, 1985). We therefore measure firm profitability by the ratio of annual accounting earnings before interests, taxes to total assets (ROA). For each year, we calculated the standard deviation of annual accounting rates of ROA. In order to smooth out short-term fluctuations, we measure the volatility of profitability rate in five-year moving periods (2000-2004, 2001-2005, and so on). A similar approach is used by John, Litov & Young (2008). In Latin America, the average ROA rounds 9 per cent, while the standard deviation may increase or decrease the average profitability by 12 per cent. This allows the middle value of the upper

quartile to be at 10.5 per cent, which is a moderately high profitability during a period of economy growth. A substantially lower profitability is reported by Faccio, Marchica, & Mura (2011) for European firms (7.1%). When considering the firm uncertainty, the mean (median) five-year volatility of ROA is 4.69 per cent (2.7), is comparable to the European levels of 4.8 per cent (3.7) documented by Faccio et al. (2011).

Country level controls. To rule out alternative explanations accounting for the relationship between the quality of formal institutions on ownership concentration, we introduce two controls. First, we measure the natural logarithm of the gross domestic product per capita (i.e., GDP per capita) as a proxy for country's wealth. Second, we control for the size of the capital market by taking the ratio between the market capitalizations of the outstanding shares of domestic listed firms and the total GDP. The levels of country wealth and capital market development vary substantially across countries. For example, in Mexico the average GDP per capita is around US$ 9,100 while in Peru the average is less than US$ 3,500 for our sample period. And, while in Chile the average market capitalization over GDP is about 113% between 2004 and 2008, in Argentina the capital market represents just 29.5% of the country's economy.

Descriptive statistics

In Table 3, we present the correlation matrix for firm-level variables. As Thomsen and Pedersen (2000) describe for European firms, in Latin America, firm size is negatively correlated with ownership concentration. Companies with strategic block-holders as the largest shareholders tend to have high ownership concentration, are relatively large and profitable. Institutional investors, when in the position of the largest shareholder, hold fewer shares, reflecting their portfolio diversification strategy. This is also corroborated by the high correlation with the number of firms they invest in. Indeed, institutional investors hold, on average, a stake in 6 firms, moderately diversified portfolio. Their presence is also associated with smaller and less profitable firms. In terms of the origin of the largest shareholder, European shareholders are associated with high levels of ownership concentration while Anglo-American investors hold fewer shares in a given firm, but usually, in firms with higher performance.

TABLE 3

Descriptive statistics and correlation matrix

#	Variable	Proxy	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	Ownership concentration	Logit C1	0.50	2.59	1.00						
(2)	Firm uncertainty	σ(ROA)	4.69	6.08	0.08***	1.00					
(3)	Sharehold. diversification	Ln of number of firms	0.40	0.75	-0.25***	-0.05***	1.00				
(4)	Firm size	Ln total assets	12.57	2.22	-0.08***	-0.30***	0.09***	1.00			
(5)	Firm performance	ROA	9.09	12.19	0.11***	0.44***	-0.03*	-0.33***	1.00		
(6)	Firm performance	ROE	19.39	25.38	0.08***	0.34***	-0.04**	-0.04**	0.67***	1.00	
(7)	Firm leverage	Total liab./total assets	0.51	0.26	0.04**	-0.21***	-0.01	0.47***	-0.34***	0.26***	
(8)	Strategic blockholders	Dummy Strat. block.	0.71	0.45	0.28***	0.03+	-0.25***	0.05***	0.03*	0.01	0.04***
(9)	Institutional investors	Dummy Inst. inv.	0.18	0.39	-0.24***	-0.02	0.38***	-0.00	-0.04**	-0.02	-0.05***
(10)	Private investors	Dummy Priv. inv.	0.10	0.30	-0.11***	-0.01	-0.12***	-0.07***	0.00	0.00	-0.00
(11)	Domestic	Dummy Domestic	0.82	0.38	0.04**	-0.00	0.08***	-0.09***	0.03*	-0.00	-0.03+
(12)	Latin America	Dummy Latin America	0.05	0.23	0.01	0.02	-0.08***	-0.04**	-0.02	-0.02	-0.02
(13)	Anglo-Saxon	Dummy Anglo-Saxon	0.04	0.21	-0.14***	-0.02	0.05***	0.08***	0.00	0.03*	0.02
(14)	Continental Europe	Dummy Cont. Europe	0.04	0.20	0.02+	0.01	-0.06***	0.04**	-0.01	0.01	-0.01
(15)	Others	Dummy Others	0.04	0.20	0.03*	-0.01	-0.04***	0.09***	-0.04*	-0.01	0.05***

#	Variable	Proxy	Mean	S.D.	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(8)	Strategic Blockholders	Dummy Strat. block.	0.71	0.45	1.00						
(9)	Institutional Investors	Dummy Inst. inv.	0.18	0.39	-0.75***	1.00					
(10)	Private Investors	Dummy Priv. inv.	0.10	0.30	-0.53***	-0.16***	1.00				
(11)	Domestic	Dummy Domestic	0.82	0.38	-0.01	-0.06***	0.10***	1.00			
(12)	Latin America	Dummy Latin America	0.05	0.23	0.06***	-0.05***	-0.03*	-0.51***	1.00		
(13)	Anglo-Saxon	Dummy Anglo-Saxon	0.04	0.21	-0.13***	0.18***	-0.03*	-0.46***	-0.05***	1.00	
(14)	Continental Europe	Dummy Cont. Europe	0.04	0.20	0.02	0.03+	-0.06***	-0.44***	-0.05***	-0.04***	1.00
(15)	Others	Dummy Others	0.04	0.20	0.08***	-0.04**	-0.07***	-0.44***	-0.05***	-0.04***	-0.04***

Significance at the 10%, 5%, 1%, and 0.1% levels is indicated by +, *, **, and ***, respectively.

Table 4 shows how much the largest shareholder ownership concentration, measured by C1, differs across industries, countries, and type and origin of the largest shareholders. Contrarily, it remains almost invariant along time.

TABLE 4

ANOVA across year, country, industry, origin and type of

largest shareholder (4,952 observations)

ANOVA across …	d.f.	F
Year	4	0.13
Industry	6	30.03
Country	6	107.18
Origin of the largest shareholder	4	25.09
Type of the largest shareholder	2	237.9

Analytical technique

To analyze the effects of agency and institutional uncertainties on corporate ownership concentration, we estimate a model where the dependent variable is the logit transformation of the direct ownership of the largest shareholder (C1) for every firm and year. On the explanatory side of the equation, we include proxies of uncertainty at the firm and country level and control variables. Additionally, we include industry fixed effects. We estimate feasible generalized least squares (FGLS) with asymptotic standard errors, adjusting for autocorrelation and heteroscedasticity (Bergh & Holbein 1997; Greene, 2000). This estimation is appropriate due to the presence of heteroscedasticity and auto-correlation in our panel data structure after testing for homoscedasticity (i.e., Breusch-Pagan test, Greene, 2000) and serial correlation (i.e., Wooldridge test). We did not include any year fixed-effect in our specifications because we could not reject the null hypothesis that all coefficients year dummies are jointly equal to zero. We also did not include firm-fixed effects in the main estimations because country variables do not vary within firms precluding their parameter estimates, and the ownership stake of the largest shareholder is almost invariant form year to year by firm.

RESULTS

In Table 5, we report the regression estimates of ownership concentration on uncertainty at firm and country level. The four models include our control variables, as shareholder diversification, firm and country characteristics and industry effects. Hypothesis 1 proposes that the largest shareholders have differences in their objectives, which include preferences for additional corporate control. Model 1 reports a positive and significant effect for strategic blockholders and private investors as largest owners, compared to institutional investors (the omitted category), on ownership concentration. This means, for example, that when the largest owner is a strategic blockholders, other things equal, they hold 20.14 per cent more shares than when the largest shareholder is an institutional investor. While in firms where the largest shareholder is a private investor, this stake is on average 10.44 per cent higher than when the largest shareholder is an institutional investor, other things being equal. These results support our hypothesis 1.

We further explore the contribution of each type of owner on the positive effect found of firm specific uncertainty on ownership concentration. Effectively, in model 4, the interaction effect of firm uncertainty with shareholder's type shows that institutional investors, as largest shareholder, take higher stakes when firm environment is turbulent. This behavior is different from strategic blockholders, who are almost non-affected by firm uncertainty and different form private investors that decrease their stakes under more firm uncertain environments. Figure 1 illustrates this combined effect and reveals differences in terms of risk preferences by type of owner, which supports not only our hypothesis, but also prior literature (Faccio et al., 2011).

In regard to the institutional uncertainty hypotheses, Models 2 and 3, in Table 5, present the empirical test for our hypotheses 2, which looks at the origin of the largest shareholder. Large shareholders can belong to five different regions, with the omitted category being domestic investor. Our findings show that if the largest shareholder comes from an Anglo-Saxon country (i.e., outsider model), it will have 24.1% lower ownership stake than when the largest shareholder is a domestic investor, other things equal. This is consistent with our prediction for hypothesis 2a. However, contrary to our prediction in hypothesis 2b, the

FIGURE 1

Effect of variation in firm uncertainty by type of the largest shareholder on ownership concentration (Model 4 in Table 5)
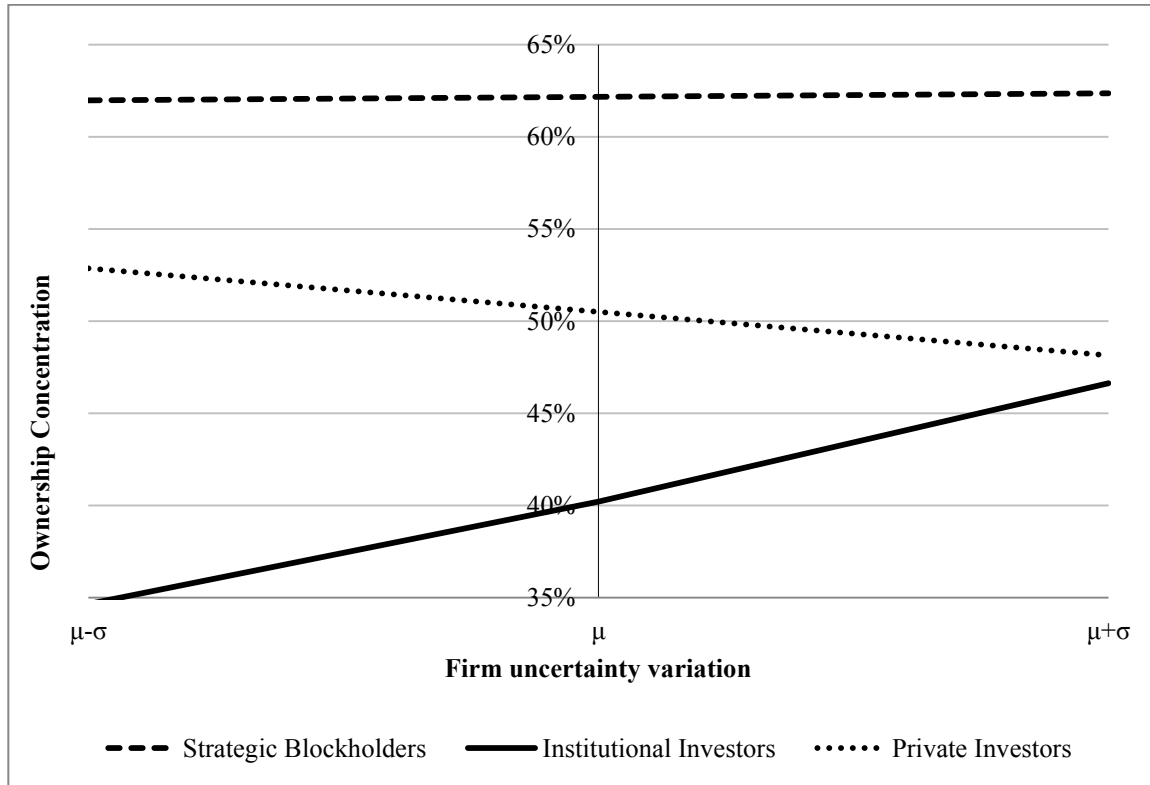
coefficient for continental European countries is positive and statistically significant, illustrating that, when the largest shareholder comes from a continental European country (i.e., insider model), her investment will be 5.4% higher than the share ownership of a domestic largest shareholder. Although, we do not however observe significant differences between domestic and largest shareholders from Latin American countries, which is consistent with the hypothesis 2b that argues that investors from the same corporate governance model should behave similarly.

In addition, we propose that formal institutions play a role in tempering the institutional uncertainty, which in turn will influence ownership concentration (H3a). We demonstrate that the weaker the quality of formal institutions, and consequently, the weaker the investor protection that causes higher institutional uncertainty for the investors, the higher the ownership concentration of the largest shareholder. Models 3 and 4, in Table 5, confirm our hypothesis 3a. Finally, our hypothesis 3b proposes a positive relationship

TABLE 5

Determinants of ownership concentration

Explanatory variables	Hypotheses	[1]	[2]	[3]	[4]
Strategic blockholders	H1	1.073***		0.886***	1.004***
		(33.921)		(23.863)	(24.609)
Private investors	H1	0.670***		0.432***	0.607***
		(12.939)		(6.956)	(8.411)
Firm uncert. # Strategic block.					-2.364***
					(-5.279)
Firm uncert. # Private inv.					-4.084***
					(-4.917)
Latin America			-0.110*	-0.075	-0.059
			(-2.080)	(-1.440)	(-1.114)
Anglo-Saxon	H2a		-1.166***	-1.017***	-0.959***
			(-19.271)	(-16.890)	(-18.264)
Continental Europe	H2b		0.156*	0.221**	0.222**
			(2.122)	-2.909	-2.886
Others			0.007	-0.106	-0.082
			(0.090)	(-1.641)	(-1.308)
Formal institutions	H3a		0.092***	0.108***	0.103***
			(6.191)	(7.271)	(7.265)
Lack of trust	H3b		4.847***	4.129***	4.040***
			21.741	18.615	18.702
Control variables					
Firm uncertainty		0.374*	0.572**	0.382+	2.496***
		(2.429)	(2.802)	(1.885)	(5.611)
Shareholder diversification		-0.473***	-0.580***	-0.427***	-0.423***
		(-25.261)	(-31.152)	(-22.506)	(-21.654)
Firm size		-0.125***	-0.081***	-0.104***	-0.107***
		(-22.075)	(-10.121)	(-12.931)	(-13.147)
Firm leverage		0.408***	0.292***	0.271***	0.269***
		(11.009)	(6.461)	(5.577)	(5.796)
Firm performance		0.116*	0.204**	0.135+	0.108
		(2.134)	(2.981)	(1.832)	(1.577)
GDP per capita		0.009	0.085***	0.092***	0.099***
		(0.482)	(3.231)	(3.358)	(3.771)
Market capitalization/ GDP		0.001***	0.001***	0.001***	0.001***
		(4.176)	(5.401)	(5.004)	(5.081)
Industry F.E.		Yes	Yes	Yes	Yes
Constant		1.440***	-3.066***	-3.028***	-3.089***
		-8.17	(-8.808)	(-8.511)	(-8.988)
Chi-squared		3832.417	3200.148	4030.444	4900.409
Observations		4306	4306	4306	4306

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001. z-statistics are shown in parentheses. [a] Coefficient estimates of firm uncertainty shall be multiplied by 10^{-2}.

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between the uncertainty of informal institutions - that is the lack of trust in a given society - and the ownership concentration of the largest shareholder. Model 4 shows a positive and significant coefficient, supporting our hypothesis 3b. This means that the lower the level of trust in a given society (i.e., the higher the uncertainty avoidance) the higher will be the level of ownership concentration. In economic terms, one standard deviation increase in the lack of trust, the ownership concentration increases, on average, a 6.76 per cent.

Our control variables behave as previous literature on ownership structure (Demsetz & Lehn, 1985, La Porta et al., 1999). That is to say, for instance, that we find a positive relationship between firm idiosyncratic uncertainty and ownership concentration of the largest shareholder. The significant effect of firm uncertainty on ownership concentration can be interpreted as the noisier the firm's environment the greater will be the payoff to large shareholders in maintaining strict control of firm. Firm diversification and size has a negative effect on the ownership concentration of the largest shareholder. On the first, largest shareholders when diversifying across firms tend to hold fewer stakes on a focal firm in order to maximize the diversification strategy. On the latter, the higher the firm the higher the costs for the largest shareholder to hold more shares decreasing the levels of ownership concentration.

We conducted a series of additional analyses and robustness tests to strengthen our findings. These are shown in Table 6. First, we have estimated our models using FGLS, which allows the presence of first-order autocorrelation within panels and heteroskedasticity across panels. We also take into account the hierarchical data structure (firms within countries) of our sample by using the hierarchical linear model (HLM) (Raudenbush & Bryk, 2002; Snijders & Bosker, 1999) assuming that countries differ randomly in their level of ownership concentration (random intercepts). Model A in Table 6 shows similar results using HLM to our primary estimations. Using HLM, we estimate our country- and firm-level parameters without any distortion on sample size. The HLM's logic weight the parameter estimates and standard errors by firm-level sample size by consistencies at the country-level for the ownership concentration within each country (Martin, Cullen, Johnson, & Parboteeah, 2007). The estimates usually match closely to OLS estimates, except that it avoids reductions in the firm-level standard errors natural in OLS.

TABLE 6

Robustness tests

Explanatory variables	Hypotheses	(A) HLM	(B) RL/Embeddedness	(C) Utilities
Strategic blockholders	H1	0.867***	1.060***	0.893***
		(9.112)	(35.179)	(24.375)
Private investors	H1	0.870***	0.367***	0.392***
		(6.170)	(8.007)	(6.448)
Latin America		0.006	-0.457***	-0.094+
		(0.037)	(-7.292)	(-1.770)
Anglo-Saxon	H2a	-1.153***	-1.236***	-1.034***
		(-8.323)	(-19.402)	(-17.010)
Continental Europe	H2b	0.489**	0.310***	0.139+
		(2.950)	(6.836)	(1.857)
Others		-0.063	-0.321***	-0.08
		(-0.380)	(-6.144)	(-1.013)
Formal institutions	H3a	0.238**	0.215***	0.095***
		(2.693)	(13.180)	(6.363)
Lack of trust	H3b	3.857***	1.624***	4.425***
		(6.047)	(11.602)	(19.735)
Utility Sector				1.414***
				(18.497)
Latin America # Utilities				0.116
				(0.528)
Anglo-Saxon # Utilities				0.157
				(0.752)
Europe # Utilities				0.406+
				(1.861)
Others # Utilities				-0.238
				(-1.329)
Control variables				
Firm uncertainty		0.798	0.303+	0.455*
		(1.325)	(1.745)	(2.136)
Shareholder diversification		-0.638***	-0.502***	-0.424***
		(-14.792)	(-26.984)	(-22.509)
Firm size		-0.158***	-0.101***	-0.098***
		(-5.011)	(-19.386)	(-12.355)
Firm leverage		0.408**	0.356***	0.267***
		(2.585)	(10.175)	(5.304)
Firm performance		0.267	0.224***	0.192*
		(1.082)	(3.474)	(2.380)
GDP per capita		0.256***	0.009	0.084**
		(3.464)	(0.440)	(2.935)

TABLE 6

Robustness tests (continued)

Control variables	Hypotheses	(A) HLM	(B) RL/Embeddedness	(C) Utilities
Market capitalization/ GDP		0.002*	0.000**	0.001***
		(2.363)	(3.266)	(5.336)
Industry F.E.		Yes	Yes	Yes
Constant		-3.627***	-4.933***	-4.740***
		(-3.894)	(-8.316)	(-12.874)
Chi-squared		1016.936	5631.605	4273.402
Observations		4405	4132	4306

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001. z-statistics are shown in parentheses. [a]Coefficient estimates of firm uncertainty shall be multiplied by 10^{-2}.

When it comes to formal institutions, we use the "rule of law" (RL) variable (Kaufman et al., 2010) as an alternative proxy to measure the quality of formal institutions.

Model B reports a negative and statistically significant coefficient for this alternative measurement of formal institutions. This corroborates our hypothesis 3a that the largest shareholder takes into account the quality of formal institutions when investing in publicly listed firms. To test the robustness of our informal institutional uncertainty construct as a positive covariate to ownership concentration, we use Schwartz's (1999) embeddedness value dimension in Model B. Our results are consistent with our primary measure (i.e., trust) for informal institutions. In separate analyses, we estimated Hofstede's (1980) uncertainty avoidance measures, and the hypothesized results remain substantively unchanged.

As shown, we first addressed endogeneity concerns from omitted variables by controlling for multiple time-varying controls that may affect the ownership concentration. In addition, we include industry and country fixed-effects. In a separate analysis, we include largest shareholder and firm fixed effects to control for unobservable variables and our results are qualitative unchanged. Nevertheless, other concern that may arise relates to the reverse causality, which requires that there are some feedback effect from ownership concentration to the type and origin of the largest shareholder and the uncertainty of both country formal and informal institutions. It therefore implies recurring changes, within firms, on the largest shareholder typology and origin and country institutions that are not fully observed in our sample

period. Moreover, country institutional changes are not expected to vary due to a ownership concentration change on a single firm, because the effect of any single company's ownership concentration is negligible at the country level.

DISCUSSION AND CONCLUSIONS

In this paper, we are interested in understanding what determines the proportion of shares owned by the largest shareholder of listed firms across emerging countries. To do so, we have developed a multi-dimensional framework that accounts for the effect of different sources of uncertainties on the investor's decision towards the level of the ownership concentration. We propose that the ownership concentration is a mitigation mechanism, which the largest shareholder may exercise to decrease the exposure to unpredictable situations affecting organizational outcomes. We then applied our uncertainty-ownership framework to a sample of 4,952 firms across seven Latin American countries. We find that firm and country level uncertainties influence and help to explain differences in ownership concentration of the largest shareholders in Latin America.

We show that the largest shareholder chooses high concentration of ownership for different reasons. First, as agency theory predicts, firm uncertainty reduces the ability of shareholders to monitor management behavior and performance. At a certain level of uncertainty, shareholders will prefer to hold higher stakes of shares and, therefore, increase their monitoring incentive. This is an important finding as it corroborates, in the context of emerging markets, similar results of previous studies in the U.S. (Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001) and Europe (Pedersen & Thomsen, 1997).

Further, the type and country of origin of the largest shareholder's related uncertainties are relevant to explain ownership concentration. Institutional investors, on average, are associated with lower ownership concentration than strategic blockholders, which are central players in defining high levels of concentration in Latin America. Regarding the origin of the largest shareholder, our results indicate that foreign investors transplant their home country governance models as a way to conserve legitimacy and diminish uncertainty (Ahmadjian & Robbins, 2005). However, contrary to our prediction (Hypothesis 2b), our empirical results uncover that Latin American firms where the largest shareholder is a continental

European investor, on average, have higher ownership concentration than when the largest investor is domestic. This result may be explained, at least in part, by the Latin American privatization process. International business research (Doh, Teegen, & Mudambi, 2004; García-Canal & Guillén, 2008) indicates that European investors have played a central role in the privatization wave of state-owned firms in Latin America in the mid 1990's, notably, in regulated sectors, such as utilities and banking (i.e., Telefónica and Portugal Telecom, in telecommunications; Energias de Portugal and Électricité de France in the electricity sector; Banco Santander in the banking sector). In our sample, 920 out of 4,952 firms-year observations are utilities, and 43 out of 209 European investments are in utility firms. In Table 6, Model C, we include an interaction term between a utility dummy and the origin of the largest shareholder to investigate whether European investors behave differently in the utility sector. Our results are consistent with previous research by showing that, in the utility sector, when the largest shareholder is from continental Europe, the ownership concentration is 13.10% higher than in firms where the largest shareholder is a domestic or Latin American investor, other things equal. As a matter of fact, on average, a continental European investor holds 63% in a utility firm, while when they invest in other sectors the average reduces to 56%. The Latin American privatization process, in many cases, transferred the control of state-owned firms to private owners through public auctions for large investors. The goal was to reduce public debt rather than to introduce ownership dispersion in the stock market (Chong & Lopez-de-Silanes, 2005). In addition, a poor regulatory policy following the privatization process reinforced the position of new constituencies maintaining their oligopolistic market structures in industries in which the government owned most of the assets, as it is the case of the utility sector.

Finally, new institutional theory (North, 1990; Williamson, 2000) highlights the importance of formal and informal institutions in shaping economic life. We demonstrate that the better are the formal institutions to enforce contracts, to reduce corruption and to offer efficient bureaucratic support, the lower will be the largest shareholder share ownership. Similarly, when the level of uncertainty avoidance is high, the largest shareholders tend to increase their ownership position as they have low trust in the environment.

Our study also faces some limitations. First, while we propose multiple sources of uncertainties that may affect ownership concentration, and we believe our conceptual model is quite specified, these are, of course, not exhaustive. Future research could extend our multi-dimensional framework to include additional sources of uncertainties such as the political processes underlying corporate governance policies or the emergence of new types of owners like the sovereign wealth funds and different types of institutional investors. Such endeavor will require a larger sample of countries in order to extend the level of analyses. Second, like most research in emerging markets, we have data limitations which preclude us from conducting further methodological tests to enhance our analyses on the ownership puzzle such as: (a) a larger time horizon to better capture ownership variation across years, and (b) details on different classes of shares would permit to contrast the potential concerns of private benefits of control.

While we offer substantial logic to explain the origins of ownership concentration and its relationship to the largest shareholder investment behavior, further research on, for instance, pyramidal structures and ultimate shareholders, would nicely complement the direct ownership pattern in Latin America. Although our study does not directly intend to explain the casual relationship of uncertainty and ownership concentration, a better understanding of the different dimensions of uncertainty hopefully contributes to comparative corporate governance by discussing investors' sensitivity to uncertain conditions and their decisions towards ownership.

Grounding uncertainty determinants on corporate ownership research has important implications for future research and policy analysis. First, the uncertainty framework can be applied to the study of ownership concentration not only in emerging markets but also in developing and developed economies as globalization and multinational firms are located across borders. Second, it is important to unravel the consequences of financial economic crises as a particular source of uncertainty that affects economic and governance polices, and ultimately plays a role on ownership of public listed firms. And finally, our "ownership-uncertainty" relationship can be applied in diverse types of organizations such as non-governmental organizations, cooperatives, and multi-national firms and a comparative analysis will be fruitful to the international business and corporate governance research.

From a policy perspective, our findings speak to the question of whether the Latin American market-oriented reforms of the past two decades have had their intended results regarding the ownership structure of publicly listed firms. In 1990s, in part because of international coercive pressures, most Latin American countries undertook macro-economy reforms aiming to reduce many areas of state intervention in the economy and to subject firms to greater competition, including, but not limited to, privatization, pension reform, tax and trade reforms, financial liberalization (Schneider, 2008). This process had a major effect on the reconfiguration of corporate ownership. As a matter of fact, from 1988 to1996, more than 900 companies were privatized in Latin America accounting for 55 per cent of total privatization revenues in the developing world in this period (Chong & Lopéz-de-Silanes, 2005). Despite all these efforts to increase economic stability and to develop financial markets in the region, our results show that the most important firms continue to be controlled by majority owner. It is worth noting that, for instance, the pension reform has had a significant effect on the increase of institutional investors' shareholdings. In particular, pension reforms in Chile, Peru and Argentina have resulted in significant growth in institutional investment which as we have seen tends to be more dispersed. Therefore, one interesting avenue for future research would be to study in more detail the role of institutional investors in Latin America and their influence on capital markets development and liquidity.

REFERENCES

Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. 2011. Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1): 154-181.

Aguilera, R.V., & Jackson, G., 2003. The cross-national diversity of corporate governance: dimensions and determinants. *Academy of Management Review*, 28(3): 447-465.

Aguilera, R. V., & Jackson, G. 2010. Comparative and international corporate governance. *Annals of the Academy of Management*, 4: 485-556.

Aguilera, R.V., Filatotchev, I., Gospel, H., & Jackson, G. 2008. An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization Science*, 19(3): 475-492.

Ahmadjian, C. L., & Robbins, G. E. 2005. A clash of capitalisms: Foreign ownership and restructuring in 1990's Japan. *American Sociological Review*, 70(2): 451-471.

Almeida, H., & Wolfenzon, D. 2006. A theory of pyramidal ownership and family business groups. *Journal of Finance*, 61(6): 2637-2680.

Arrow, K. 1972. Gifts and exchanges. *Philosophy and Public Affairs*, 1(4): 343-362.

Barca, F., & Becht, M. 2001. *The control of corporate Europe*. Oxford: Oxford University Press.

Bergh, D. D., & G. F. Holbein. 1997. Assessment and redirection of longitudinal analysis: Demonstration with a study of the diversification and divestiture relationship. *Strategic Management Journal*. 18: 557–571.

Berrone, P., Cruz, C., Gomez-Mejia, L.R., & Larraza-Kintana, M. 2010. Socio-emotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quar*terly, 55: 82-113.

Berry, H., Guillén, M. F., & Zhou, N. 2010. An institutional approach to cross-national distance. *Journal of International Business Studies,* 41: 1460-1480

Black, B, S. 2001. The legal and institutional preconditions for strong securities markets. *UCLA Law Review*, 48: 781-855.

Bortolotti, B., & Faccio, M. 2009. Government control of privatized firms. *The Review of Financial Studies*, 22 (8): 2907-2939.

Chakrabarti, A., Singh, K., & Mahmood, I. 2007. Diversification and performance: Evidence from East Asian firms. *Strategic Management Journal,* 28: 101-120.

Charkham, J.P. 1994. *Keeping good company: A study of corporate governance in five countries*. Oxford: Clarendon Press.

Chong, A., & López-de-Silanes, F. (ed.) 2005. *Privatization in Latin America: myths and realities*. Washington, D.C.: World Bank.

Chong, A., & López-de-Silanes, F. (ed.) 2007. *Investor protection and corporate governance: firm-level evidence across Latin America.* Washington, D.C.: World Bank.

Claessens, S., Djankov, S., & Lang, L. H. P. 2000. The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58(1-2): 81-112.

Colpan, A., Hikino, T., & Lincoln, J. (ed.) 2010. *The Oxford Handbook of Business Groups*. New York: Oxford University Press.

Colpan, A., Yoshikawa, T., Hikino, T., & Del Brio, E. B. 2011. Shareholder heterogeneity and conflicting goals: Strategic investments in the Japanese electronics industry. *Journal of Management Studies*, 48(3): 591-618.

Contractor, F. J. 1990. Ownership patterns of U.S. joint ventures abroad and the liberalization of foreign government regulations in the 1980s: Evidence from the benchmark surveys. *Journal of International Business Studies*, 21(1): 55-73.

Cornelli, F. & Karakas, O. 2008. Private equity and corporate governance: Do LBOs have more effective boards?, Working Paper.

Cuypers, I.R.P., & Martin, X. 2010. What makes and what does not make a real option? A study of equity shares in international joint ventures. *Journal of International Business Studies,* 41: 47-69.

Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. 2007. The fundamental agency problem and its mitigation: independence, equity, and the market for corporate control. *Academy of Management Annals,* 1: 1-64.

De Jong, E., & Semenov, R. 2006. Cultural determinants of ownership concentration across countries. *International Journal of Business Governance and Ethics*, 2(1/2): 145-165

Demsetz, H. & Lehn, K. 1985. The structure of corporate ownership: causes and consequences. *Journal of Political Economy*, 93(6): 1155-1177.

Demsetz, H., & Villalonga, B. 2001. Ownership structure and corporate performance. *Journal of Corporate Financ*e, 7(3): 209-233.

Devers, C. E., Cannella, A. A., Reilly, G. P. & Yoder, M.E. 2007. Executive compensation: A multidisciplinary review of recent developments. *Journal of Management*, 33: 1016-1072.

Dharwadkar, R., George, G., & Brandes, P. 2000. Privatization in emerging economies: An agency theory perspective. *The Academy of Management Review,* 25(3): 650-669.

DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147-160.

Dittman, I., Maug, E., & Schneider, C. 2010. Bankers on the board of German firms: What they do, what they are worth, and why they are (still) there? *Review of Finance*, 14: 35-71.

Doh, J.P., Teegen, H., & Mudambi, R. 2004. Balancing private and state ownership in emerging markets' telecommunications infrastructure: country, industry, and firm influences. *Journal of International Business Studies*, 35: 233-250.

Drori, G.S., Jang, S.Y., & Meyer, J.W. 2006. Sources of rationalized governance: Cross- national longitudinal analyses, 1985-2002. *Administrative Science Quarterly,* 51(2): 205-229.

Duncan, R.B. 1972. Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly,* 17(3): 313-327.

Eisenhardt, K.M. 1989. Agency theory: An assessment and review. *Academy of Management Review,* 14(1): 57-74.

Faccio, M., & Lang, L. H. P. 2002. The ultimate ownership of Western European Corporations. *Journal of Financial Economics*, 65(3): 365-395.

Faccio, M., Marchica, M., & Mura, R. (forthcoming). Large shareholder diversification and corporate risk-taking. *Review of Financial Studies.*

Fiss, P.C. & Zajac, E. J. 2004. The diffusion of ideas over contested terrain: The (non) adoption of a shareholder value orientation among German firms. *Administrative Science Quarterly*, 49(4): 501-534.

Folta, T.1998. Governance and uncertainty: the trade-off between administrative control and commitment. *Strategic Management Journal,* 19(11): 1007-1028.

Franks, J., & Mayer, C. 1990. Capital markets and corporate control: A study of France, Germany and the UK. *Economic Policy*, 5(10): 191-231.

Franks, J., Mayer, C., & Rossi, S. 2009. Ownership: Evolution, and regulation. *The Review of Financial Studies*, 22(10): 4009-4056.

García-Canal, E., & Guillén, M. 2008. Risk and the strategy of foreign location choice in regulated industries. *Strategic Management Journal*, 29: 1097–1115.

Gilson, R.J. 2006. Controlling shareholders and corporate governance: Complicating the comparative taxonomy. *Harvard Law Review,* 119(6): 1641-1679.

Gourevitch, P.A., & Shinn J. 2005. *Political power and corporate control: The new global politics of corporate governance*. Princeton University Press: Princeton, NJ.

Goyer, M. 2011. *Contingent capital: Short-term investors and the evolution of corporate governance in France and Germany*. Oxford: Oxford University Press.

Greene, W.H. 2008. *Econometric Analysis*. 7th Ed. Upper Saddle River, NJ: Prentice Hall.

Grinstein, Y. & Michaely, R. 2005. Institutional holdings and payout policy. *Journal of Finance,* 60(3): 1389-1426.

Hansmann, H. 1996. *The ownership of enterprise*. Cambridge, MA: Harvard University Press.

Hart, O. 1995. Corporate governance: some theory and implications. *The Economic Journal*, 105(430): 678-689.

Helmke, G. & Levitsky, S. 2004. Informal Institutions and Comparative Politics: A Research Agenda. *Perspectives on Politics*, 2: 725-740.

Henisz, W. & Williamson, O.E. 1999. Comparative economic organization – within and between countries. *Business and Politics*, 1(3): 261-277.

Hofstede, G. 1980. *Culture's consequences: international differences in work-related values*. Beverly Hills, CA: Sage.

Hofstede, G. 1991. Cultures and organizations: software of the mind. Intercultural cooperation and its importance for survival. London: McGraw-Hill International Ltd.

Holderness, C. G. 2009 The myth of diffuse ownership in the United States. *Review of Financial Studies,* 22 (4): 1377-1408.

Holderness, C. G., & Sheehan, D. 1988. The role of majority shareholders in publicly held corporations: An exploratory analysis. *Journal of Financial Economics,* 20: 317–346.

Inglehart, R., & Baker, W. E. 2000. Modernization, cultural change and the persistence of traditional values. *American Sociological Review*, 65(1): 19-51.

Jackson, G. & Deeg, R. 2008. From comparing capitalisms to the politics of institutional change. *Review of International Political Economy*, 15(4): 680-709

Jensen, M. C., & Meckling, W. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3:305-360.

Jensen 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review,* 76(2): 323-329.

John, K., Litov, L. & Yeung, B. 2008. Corporate governance and risk-taking. *Journal of Finance* 63:1679-1728.

Kaufman, D., Kraay, A., & Mastruzzi, M. 2010. *The Worldwide governance indicators: Methodology and analytical issues*. http://www.brookings.edu/~/media/Files/rc/reports/2010/09_wgi_kaufmann/09_wgi_kaufmann.pdf. Accessed on October 2010.

Khanna, T., & Palepu, K. 2000a. Emerging market business groups, foreign investors, and corporate governance. In R. K. Morck (Ed.), *Concentrated corporate ownership*: 265-294. Chicago, IL: The University of Chicago Press.

Khanna, T., & Palepu, K. 2000b. The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43(3): 268–285.

Khanna, T., & Rivkin, J. W. 2001. Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22: 45-74.

Knack, S., & Keefer, P. 1995. Institutions and economic performance: Cross-country tests using alternative institutional measures. *Economics and Politics*, 7: 207–227.

Knack, S., & Keefer, P. 1997. Does social capital have an economic payoff? A cross-country investigation. *The Quarterly Journal of Economics*, 112(4): 1251-1288.

Kristensen, P. H. & Zeitlin, J. 2005. *Local players in global games: The strategic constitution of a multinational corporation*. New York: Oxford University Press.

Kwok, C., & Tadesse, S. 2006. National culture and financial systems. *Journal of International Business Studies,* 37: 227-247.

La Porta, R., López-de-Silanes, F., & Shleifer, A. 1999. Corporate ownership around the world. *Journal of Finance*, 54(2): 471-517.

Lee, S.H., & Makhija, M. 2009. The effect of domestic uncertainty on the real options value of international investments. *Journal of International Business Studies*, 40(3): 405–420.

Lubatkin, M. H., Lane, P. J., Collin, S. O., & Very, P. 2005. Origins of corporate governance in the USA, Sweden and France. *Organization Studies*, 26(6): 867-888.

Martin, K. D., Cullen, J. B., Johnson, J. L., & Parboteeah, K. P. 2007. *Academy of Management Journal*, 50: 1401-1422.

Masulis, R., & Thomas, R. 2009. Does private equity create wealth? The effects of private equity and derivatives on Corporate Governance. *The University of Chicago Law Review,* 76(1): 219-160.

Meyer, J., & Rowan, B. 1977. Institutionalized organizations: Formal structures as myth and ceremony. *American Journal of Sociology*, 83:340-363.

Meyer, K., Estrin, S., Bhaumik, S. & Peng, M. 2009. Institutions, resources, and entry strategies in Emerging economies. *Strategic Management Journal*, 30: 61-80.

Miller, K.D. 1992. A framework for integrated risk management in international management. *Journal of International Business Studies*, Second Quarter: 311- 331.

Milliken, F. J. 1987. Three types of perceived uncertainty about the environment: State, effect and response uncertainty. *Academy of Management Review*, 12(1): 133-143.

North, D. 1990. *Institutions, institutional changes and economic performance*. Cambridge: Cambridge University Press.

Pedersen, T., & Thomsen, S. 1997. European patterns of corporate ownership: A twelve-country study. *Journal of International Business Studies,* 28(4): 759-778.

Peng, M. W. & Heath, P. 1996. The growth of the firm in planned economies in transition: institutions, organizations, and strategic choice. *Academy of Management Review*, 21: 492–528.

Peng, M.W., Wang, D., & Jiang, Y. 2008. An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies,* 39: 920-936.

Raudenbush, S.W. & Bryk, A.S. 2002. *Hierarchical linear models.* Thousand Oaks: Sage Publications.

Roe, M.J. 1994. *Strong managers, weak owners: The political roots of American corporate finance.* Princeton, NJ: Princeton University Press.

Schneider, B. R. 2008. Economic Liberalization and Corporate Governance: The Resilience of Business Groups in Latin America. *Comparative Politics*, 40(4):379-397.

Schwartz, S.H. 1999. Cultural Value Differences: Some Implications for Work. *Applied Psychology International Review,* 48:23-47.

Scott, W.R. 2008. *Institutions and organizations: Ideas and interests.* 3rd ed. Thousand Oaks, CA: Sage Publications Inc.

Shao, L., Kwok, C., & Guedhami, O. 2010. National culture and dividend policy. *Journal of International Business Studies* 41: 1391–1414

Shleifer, A., & Vishny, R. W. 1997. A survey of corporate governance. *Journal of Finance*, 52(2): 737-783.

Shleifer, A. 1998. State versus private ownership. *Journal of Economic Perspectives,* 12(4): 133-150.

Siegel, J. I., Licht, A.N., & Schwartz, S.H. (forthcoming). Egalitarism and international investment. *Journal of Financial Economics.*

Skaperdas, S. 1992. Cooperation, conflict, and power in the absence of property rights. *American Economic Review*, 82: 720–39

Snijders, T., & Bosker, R. 1999. *Multilevel analysis*. Sage: Thousand Oaks, CA.

Thomsen, S., & Pedersen, T. 2000. Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6): 689-705.

WDI, *World Development Indicators*, the World Bank, 2010.

Westney, E. 2005. Institutionalization theory and the multinational corporation. In S. Ghoshal & E. Westney (Eds.), *Organization theory and the multinational corporation*: 47-67. New York: Palgrave-Macmillan.

White, C., & Fan, M. 2006. *Risk and foreign direct investment.* New York: Palgrave-Macmillan.

Williamson, O.E. 1985. *The economic institutions of capitalism*. New York: Free Press.

Williamson, O.E. 1988 The logic of economic organization. *Journal of Law, Economics, & Organization*, 4 (1): 65-93.

Williamson, O. E. 2000. The new institutional economics: taking stock and looking ahead. *Journal of Economic Literature*, 38(3): 596-613.

Yamagishi, T., Cook, K. S. & Watabe, M. 1998. Uncertainty, trust, and commitment formation in the United States and Japan. *American Journal of Sociology*, 104(1): 165-194.

Young, M.N., Peng, M.W., Ahlstrom, D., Bruton, G.D., & Jiang, Y. 2008. Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies*, 45(1): 196-220.

Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal,* 38(2): 341–363.

Zysman, J. 1983. *Governments, markets, and growth: Financial systems and the politics of industrial change*. Ithaca, NY: Cornell University Press.

Chapter 3

Strong or Weak Owners? Understanding Ownership Structure Effects

on Corporate Governance Non-Compliance

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INTRODUCTION

In response to a worldwide wave of corporate scandals and in an attempt to increase corporate governance effectiveness, policy makers have reacted to managers' misconduct by addressing the conflicts of interest in publicly listed firms (Coffee, 2005). As a consequence, country officials and institutions have initiated regulatory efforts to address deficiencies in the corporate governance system. Some monitoring mechanisms of corporate governance are found in the domain of corporate law and emphasize the role of mandatory rules (Coffee, 1989; Gordon, 1989). For example, the 2002 Sarbanes-Oxley Act, in the U.S., represented an almost unparalleled piece of regulation, only preceded by the Securities Act of 1933, aiming to restore the confidence in the capital market system. However, soft law increasingly characterizes corporate governance regulation where actors self-regulate without possessing full legislative authority (Aguilera et al., 2008). These self-regulatory corporate governance mechanisms are known as "corporate governance codes": a voluntary set of principles, recommendations, standards, or "best practices", issued by a collective body, which relates to the internal governance of corporations, including the behavior and structure of the board of directors (Aguilera, & Cuervo-Cazurra, 2004).

Drawing on agency and institutional perspectives, our primary purpose is to answer whether and how corporate ownership structure affect non-compliance with corporate governance codes. Inside the boardroom the lack of compliance with most regulation plays out in a quiet and complex process. As such, understanding the sources of non-compliance is imperative to regulation from both policy and theoretical perspectives. From a practical perspective, a rule that is ignored does little or nothing to advance policy objectives (Tyler, 1990). By understanding the drivers of non-compliance, regulators can learn from regulated entities' behavior to adapt and amend future regulatory mechanisms. For example, in Germany, instead of giving the corporate governance code commission time to revise its recommendations on directors' remuneration, in 2009, the German Parliament reacted with a mandatory reform law on this issue (Aguilera, Desender & Kabbach-Castro, 2011; Hopt, 2011). From a theoretical perspective, on one hand, studying non-compliance with corporate governance codes adds considerable depth to the compliance theory. This is because the voluntary and non-enforceable nature of corporate

governance codes precludes the prevalent 'deterrence theory,' - which assumes a precise and narrow set of rules that threaten penalties for non-compliance, and punishment for violators – from explaining the non-compliance behavior. To understand the lack of compliance one may examine not only the enforcement but also other *costs of non-compliance* subject to diverse internal and external organizational contexts (Aguilera, Filatotchev, Gospel, & Jackson, 2008; Malloy, 2003).

While a substantial body of literature has emerged attempting to understand the direct relationship between the codes' compliance and firm valuation, as well as accounting performance (Alves & Mendez, 2004; De Jong, De Jong, Merters, & Wasley, 2005; Fernández-Rodríguez, Gómez-Ansón, & Cuervo-García, 2004; Goncharov, Werner, & Zimmermann, 2006) little has been done to examine the *determinants of corporate non-compliance* behavior to corporate governance codes. It is in part because this literature, based on the principal-agency problem between shareholders and managers (Jensen & Meckling, 1976), assumes that, in order to constrain managerial opportunism, shareholders may use a diverse range of corporate governance practices that, by reducing the agency costs, will have a positive impact on firm's economic outcomes. That is, as far as the governance practice pays-off (e.g., reduce the agency costs), the motivation to comply is straightforward.

Despite of this substantial research, the empirical findings on the relationship between governance practices' choices and firm outcomes continue to be mixed and inconclusive. It is perhaps because boards of directors, those who are in charge of such *compliance decisions*, have little responsibility for operating decisions and the effect of their actions on financial performance are, at best, indirect (Mallette & Fowler, 1992). Thus, many insights emerge from these studies, in particular, that additional insights into the antecedents of non-compliance behavior might be gained examining situations in which boards face critical governance issues. When there is a conflict of interests between insiders (i.e., managers or large shareholder) and outsiders (i.e., investors or minority shareholders), boards' decisions and their effectiveness in drawing governance practices representing the interests of corporate shareholders can be assessed (Desender, Aguilera, Crespí, & García-Cestona, 2012; Mallette & Fowler, 1992). For instance, Desender et al. (2012) examine the relationship between firm's ownership structure and audit fees.

Results indicate that audit fees are contingent not only on the ownership concentration but also on the identity of controlling shareholders.

Non-compliance with corporate governance codes, which determines what governance practices a focal firm chooses not to implement, represents another critical governance issue. We propose an organizational approach to non-compliance behavior that account for the interdependencies of principal-agent relationships (ownership concentration) under different organizational contexts (dominant shareholders) and institutional environments (country corporate governance system). We build our conceptual framework on recent research of comparative corporate governance that suggests that within and across countries, there exist multiple configurations of firm-level characteristics and governance practices leading to effective corporate governance (Aguilera et al., 2008, 2011). Therefore, an important step to advance from the 'under-contextualized' agency theory is to consider a configurational approach that show how corporate governance characteristics can be jointly conceptualized while bearing in mind that each of them is contingent on the strength and prevalence of the other.

Our major contribution is to propose a framework that helps to explain why no "one best way" exists to achieve effective corporate governance. Our theoretical framework and findings suggest that even a bundle of governance practice (i.e., code's recommendations) may not be taken in isolation; on the contrary, there is potential substitute mechanism that makes then more functional. This is because corporate ownership structure not only defines what sort of agency problem the firms will face, but also what the shareholders' motivations, incentives, and means to solve this problem are. On one hand, the separation between ownership and control naturally suppress any powerful intermediaries that may have an effective control over management, therefore corporate evolution found alternative substitutes such as outside directors, takeover, and *shareholders' activism* (Roe, 1994). On the other hand, *dominant shareholders* seem to have different preferences for corporate strategies, particularly with regard to control management monitoring (Almazan, Hartzell, & Starks, 2005; Brickley, Lease, & Smith, 1988; Chen, Hartford, & Li, 2008; Cornett, Marcus, Saunders, & Tehranian, 2004).

Taken as a whole, this study proposes that, first, greater ownership concentration at a focal firm creates a potential agency problem between majority and minority shareholders that does not fit into the traditional regulatory enactments. Therefore, regulatory provision may generate negative byproducts such as exacerbated compliance costs, or under monitoring of management behavior. Then, we advocate that differences in the amount of equity from families, corporate owners, and *active* and *passive* institutional investors, will determine their influence on the board of directors when deciding on management monitoring strategies.

This paper also contributes to the compliance theory (Mitchell, 2007). While compliance theory gives more attention to statutory rules (i.e., *hard law*) drawing on deterrence as well as behavioral theories to explain compliance, this study examine why firms do not comply with self-regulatory mechanisms interacting agency and institutional perspectives. A central implication is that self-regulation not only offers flexibility and discretion to regulated entities, allowing valid exception to the sound rule, but also adjusts to firms and institutional idiosyncrasies favoring alternative governance modes. Therefore, policymakers should be aware of this configurational approach when amending future regulatory provisions.

BACKGROUND

Corporate Governance Codes as a Bundle of Governance Practices

Corporate governance issues arise in a public firm when there is an agency problem (i.e., a conflict of interest between stakeholders) that cannot be solved through a contract (Hart, 1995). It follows that, regardless of who the principal or the agent is, an agency problem gives rise to costs such as monitoring expenditures and residual loss of control (Jensen, & Meckling, 1976). Thus, corporate governance mechanisms are developed to minimize these agency costs and are classified in two groups. First, there are internal mechanisms such as the board of directors, *large shareholders*, incentives, financial structure, and dividends payments. Second, there are external mechanisms like product market competition, managerial labor market, media pressure, hostile takeovers, proxy fights, or government *soft-* and *hard-*regulations.

The primary concern of corporate governance regulation is to protect minority shareholders. It assumes that shareholder's welfare is enhanced by governance mechanisms that have the ability to strengthen management monitoring. To prevent managerial misbehavior, lawmakers can establish legal constraints as *statutory rules* (*i.e., hard law),* which relates to prohibiting (or demanding) some kind of behavior, *ex ante* (Kraakman et al., 2004). Other things equal, firms that implement corporate governance mechanisms toward the regulatory prescriptions should perform better for their shareholders.

From a theoretical perspective, this hypothesis is conceptually falsifiable because of the possibility of a more complex relationship existing between governance mechanisms and corporate performance. This is because the importance of regulation as a governance mechanism is not homogeneous across firms (Aguilera et al., 2011). Other governance mechanisms exist which can substitute strong regulation. Indeed, previous research shows that a "one size fits all" approach does not lead to better governance. Optimal governance practices, if any, not only differ across countries (Bebchuk & Hamdani, 2009; Durnev & Fauver, 2011) but also across firms (Arcot & Bruno, 2007; Bruno & Claessens, 2010). As an alternative to *hard* regulation, policymakers institute *standards or best practices* (*i.e., soft law),* which leaves the determination of what governance mechanisms to practice to the firms, *ex post*, and are not legally binding by nature (Aguilera et al., 2011; Kraakman et al., 2004).

From a practical perspective, we observe that, despite its deficiencies, *hard* regulation in corporate governance continues to be developed in the United States, which enacted the 2002 Sarbanes–Oxley Act and the 2010 Dodd−Frank Act to improve governance accountability and transparency, whereas other advanced industrialized countries rely mostly on voluntary corporate governance codes (Aguilera et al., 2011; Aguilera & Cuervo-Cazurra, 2004). This dichotomy between *hard* and *soft* law might be explained as a byproduct of scandals, when policymakers can see where regulation has lacunae or is not effective (Hopt, 2011). Yet, the literature reports that scandal- or crisis-driven regulation often becomes too strict (McLeod, 1999; Larcker, Ormazabal, & Taylor, 2011). In particular, Larcker et al. (2011) posit that, because the cost and benefits of governance mechanisms varies significantly across firms, companies are better served by *voluntary compliance* in which firms themselves (instead of the government) determine

what practices better fits to their context. Otherwise, market participants will, again, change their behavior that will call for further regulatory intervention.

Considering the variety of corporate governance mechanisms, a growing literature focuses on how they interact, complement or substitute one another (Aguilera et al. 2008; Aguilera, & Jackson, 2010; Rediker & Seth, 1995). This literature suggests that corporate governance mechanisms do not exist in isolation; rather they are effective when considering the firms' contingencies such as size, industry, structure, strategic goals or their institutional environment.

In our study we focus on the interaction between the corporate governance codes as a specific bundle of corporate governance practices and the large shareholder's mechanism. Following Aguilera & Cuervo-Cazurra (2004), we define corporate governance codes as a bundle of 'best practices,' primarily, on the structure, functions, and behavior of the board of directors. Therefore, firms may fully comply with these practices, or choose to flout the recommendation they believe do not fit to their context. An instructive example of codes' provisions is the recommendation on the specific proportion of independent board members[1]. These directors carry out supervisory tasks to monitor management while protecting minority shareholder's interests. Thus, the presence of block-holders, and their ability and incentives to monitor managers does not necessarily require the same specific amount of independent members that the code recommends. On the contrary, it might be in the best interest of minority shareholders of a dispersed ownership firms. Consequently, the firms' willingness to not comply with the recommendation that calls for a specific proportion of independent directors depends upon the ownership structure. This example also holds for a large number of provisions of corporate governance codes that are based on the "one size fits all" monitoring role of the board. Next, we specify these relationships.

HYPOTHESES

The following hypotheses compare how ownership structure differences affect the lack of compliance of corporate governance codes. As illustrated in Figure 1, we first examine the direct effect of firm's

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[1] Usually, corporate governance literature defines an independent board member as those people who are not also top managers at a given firm. However, each corporate governance code defines precisely what is considered an independent.

ownership concentration on non-compliance behavior. A second variable that compose our conceptual

model is the typology of owners. Hence, we explore the impact of varying preferences for management

monitoring practices among family, corporate, and institutional investors towards non-compliance with

corporate governance codes. We also consider the national corporate governance systems (i.e., their

market orientation) as an underlying variable of the non-compliance decision. Finally, firm-specific

variables play a controlling role and, implicitly, we assume that any factors unspecified in the framework

remain constant, or do not have a significant effect on non-compliance.

FIGURE 1

Ownership and Organizational Context Effect on Non-Compliance[a]
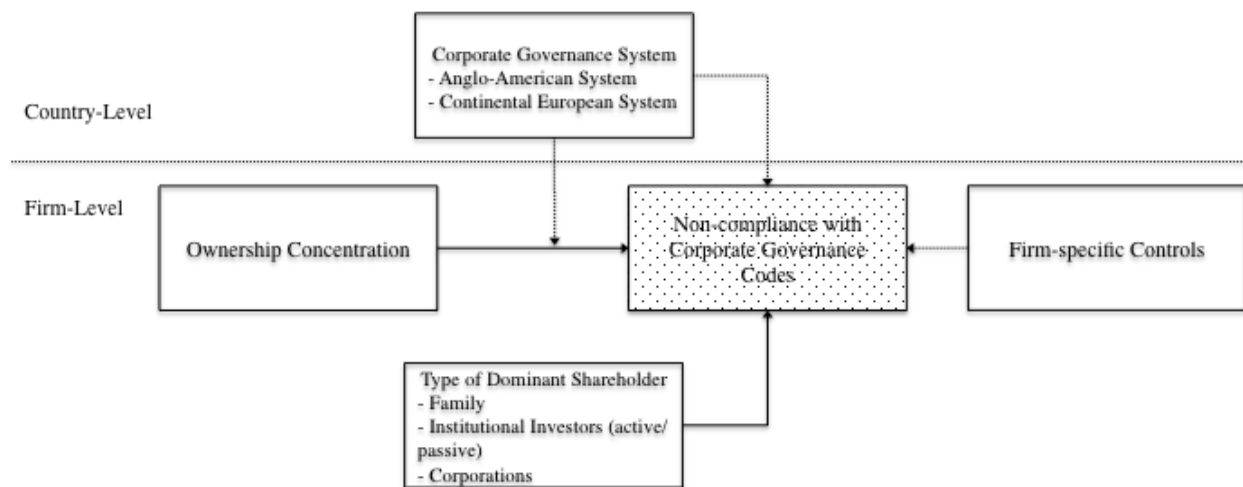
[a] Dotted lines indicate non-hypothesized relationships. With respect to the organizational context relationship our contribution lies in testing the moderating effect on the relationship between ownership concentration and non-compliance.

The Effect of Ownership Concentration

The bundle of corporate governance practices that any standard code recommends does not include any

specific proposal about the "best" level of ownership concentration. Ownership structure is therefore an

additional mechanism of corporate governance. On one hand, the ownership may be dispersed amongst a

large number of shareholders (weak owners) and control is concentrated in the hands of (strong) managers

(Roe, 1994; Villalonga & Amit, 2006). In this context the minority shareholders have little incentive to

monitor management giving rise to a possible conflict of interest between owners and managers. On the

other hand, companies may have one or more large shareholders with significant participation on firms'

returns, which predisposes them toward monitoring management behavior (Bolton, & Von Thadden, 1998; Hart, 1995). This is not without consequences, when ownership is not widely dispersed, and shares are concentrated on one or more shareholders (strong owners), conflicts of interests between majority and minority shareholders (weak owners) arise, thus a different agency problem.

Under a dual agency problem context, a regulatory concern is how do policymakers develop governance mechanisms that keep the benefits of large shareholders monitoring while encouraging minority investors to flow financial resources to corporations. To do so, regulators issue *public regulation (i.e., hard law)* to supplement self-regulation when needed, in particular, when self-regulatory provisions are proven to be unsatisfactory to preserve trust and confidence of investors. Coffee (2001) asserts "the European evidence is entirely consistent with this asserted pattern, because each of the major European economies, as their market matured, created an administrative agency." Most of the European corporate governance system is based on corporate governance codes under the "comply-or-explain" principle *(i.e., soft law)*, while simply prohibiting some sort of self-dealing of majority shareholders by relying on stronger sanctions, such as criminal punishment (Enriques, 2000).

These two types of agency problem and a high or low level of non-compliance with corporate governance codes produce primarily two hypothetical combinations. First, in firms where weak owners prevail and control is vested in the hands of professional managers, low levels of non-compliance works as a signal of good governance practices. In this case, board of directors, directly influenced by senior management, signalize to minority investors that the firm is committed to good governance practices as a way to maintain the flow of external funds from the markets. Otherwise, absent of a regulatory body that enforces good governance (i.e., *soft-law*), and absent the *bona fide* of firms to voluntary control management behavior, ownership dispersion will not last; or, regulators would impose stronger regulatory mechanisms as a way to enforce, *ex ante*, the desired behavior. On the former, it happens because minority shareholders will drive out by their fear to be expropriated, while on the latter, regulator may enact mandatory regulation to enforce a particular practice as it occurred in Germany in 2009 where the German Parliament reacted with a mandatory reform on directors' remuneration.

Second, there is the case where a strong shareholder is present, and there is a high level of non-compliance. In this context, there is a limited information asymmetry between strong owners and management, and compliance with codes' recommendation could be redundant to alternative monitoring mechanisms as large shareholders (i.e., substitute mechanism). Otherwise, if they practice all recommended provisions, firms will incur excessive monitoring that could harm managerial initiatives and hinder efficient company operations (Bruno & Claessens, 2010). In this case, monitoring of large shareholders self-dealing behavior is carry out by market-wide monitors (Europe Commission, 2009) and legal systems that rely on stronger sanctions to prevent unfair self-dealing or by simply prohibiting it or by subjecting it to some procedural mechanism of *ex ante* control (Enriques, 2000: 301).

Under the presence of these two agency problems, we propose that firms will adapt their governance mechanisms to solve their particular agency problem and, accordingly, will decide which provision of corporate governance codes not to comply. Hence, we hypothesize:

Hypothesis 1. Firms with high ownership concentration are more likely to have higher degree of non-compliance with codes' recommendations than firms with dispersed ownership.

The Role of the Shareholders' Typology

The discussion thus far has outlined arguments about the agency mechanism to explain the *non-compliance* with codes' recommendations. Nevertheless, firms operate under institutional arrangements where external pressures pull corporate governance practices (Aguilera, & Jackson, 2010; Chung, & Luo, 2008; Delmestri, 2009; Philippe, & Durand, 2011; Thortnon, & Ocasio, 2008). In particular, large shareholders' identities can affect (a) their commitment and endorsement of certain goals of the firms they invest in, (b) their internalization of social norms, and (c) their motivations and abilities to discipline managers. As illustrated in Table 1, shareholders have primarily three actions to monitor low quality management: *exit* (sell their shares), *voice* (hold their shares and voice their dissatisfaction through proxy fights, voting on general meeting or using the media, etc.) and *loyalty* (hold their shares and do nothing, or voice their dissatisfaction through internal negotiations) (Hirschman, 1970). In Hirschman's (1970) framework shareholders dissatisfied with firms' corporate governance practices, may try to improve their

lot by either *exiting* from the organization or by remaining on it but attempting to improve its governance practices by *voicing* their discontent. It assumes that both forms of response can motivate organizational insiders to be more responsive.

On one hand, investors may sell their shares on a "bad" governed firm: this is the exit option. As a result, firm's liquidity drop, the pool of investors and external finance decline and directors are encouraged to search for ways and means to install better governance practices that led to exit. On the other hand, voice option is defined as "any attempt at all to change, rather than to escape from, an objectionable state of affairs, whether through individual or collective petition to the management directly in charge, through appeal to higher authority with the intention of forcing a change in management, or through various types of actions and protests, including those that are meant to mobilize public opinion" (Hirschman, 1970: 30). As a result, directors once again engage in possible remedies and establish practices that reduce investors' dissatisfaction.

A third alternative, that favors the coexistence of exit and voice, is the concept of loyalty which tries to explain why exit is virtually ruled out in certain circumstances such as families or business groups where voice gain more scope. Hirschman suggests that loyalty makes exit strategies less likely. In his words a investor "with a considerable attachment to […] an organization will often search for ways to make himself influential, especially when the organization moves in what he believes is the wrong direction" (Hirschman, 1970: 77-78). This is because to exit from such a group just because one disagrees with its governance practices is an extremely costly and painful process (Dowding, John, Mergoupis, & Van Vugt, 2000).

Therefore, the trade-off between *exit* and *voice* (*loyalty*) and its influence on corporate *non-compliance* decisions is influenced by their relative costs that are, of course, crucial to shareholders.

We extend the agency perspective and include an institutional background to explain how family, institutional investors and corporate shareholdings influence the *non-compliance* behavior of firms through the lens of the above-mentioned possible actions.

TABLE1

Voice, Exit and Loyalty under different Types of Shareholders[b]

Monitoring Actions	Family	Active Institutional Investor	Passive Institutional Investor	Corporate
Exit	Very low	Very High	Low	Very Low
Voice	High	Medium	High	High
Loyalty	Very High	Very Low	High	Very High

[b] Our qualitative scale varies from very low to very high, while medium, low and high are intermediary levels of action.

Family ownership. A vast literature in the corporate governance field tries to understand the puzzle of family ownership as a mechanism to solve agency problem between owners and managers (Anderson, & Reeb, 2003; Claessens, Djankov, Fan, & Lang, 2002; Dalton et al., 2007; Villalonga, & Amit, 2006), even tough with mixed results. From one perspective, the family block-holder could diminish agency costs, since family members are more likely to monitor managers. Yet, it could be the case that a high equity positions by family members increase the potential incentives to expropriate rents from other shareholders driving to a new agency issue. In this case, decisions concerning the independence of board of directors, or the separation between CEO and chairman can harm family control, particularly, when the CEO or top-executive are family members. For instance, Gomez-Mejia, Nunez-Nickel, and Gutierrez (2001) report that family ownership and control is associated with greater managerial entrenchment, which is the result of a stronger relational contract between manager (sometimes, family members) and owners. Hence, the agency mechanism would predict that family dominated firms are more likely to not comply with corporate governance codes.

Alternatively, the family model of corporate governance carries an institutional logic of family control (Chung & Luo, 2008; Young et al., 2008). It means that family members expect to control the decision-making processes in such a way that they can maintain the family assets for future generations. This includes decisions associated with the governance system of the firm like the election of the board of directors, whether to disclose the executive (e.g. family members) compensation, and the level of independence of the directors. It is because that the 'kin' involvement in family firms distinguishes them

from other types of business organization and, it is the family commitment that gives the family firm its potential competitive advantage.

Moreover, there could be the case where family members disagree over firm goals. In such a case where *exit* is "ordinarily unthinkable" (Hirschman, 1970), the primary way for solving the quarrel is negotiating with family members. This solution of internal family disputes, usually referred as *loyalty,* serve the social and institutional purpose of preventing the deterioration of the family group. It also serves the family's interest in the firm's long-term survival (e.g., a minority shareholders' best interest), and the family's concern for its reputation. The increasing levels of managerial constraints through the adoption of governance practices can thus become cumbersome, as family members have to spend time and effort balancing family and outsider interests, as well as managing the firm.

It seems reasonable that family-dominated firms may also face contextual costs related to the inputs of corporate governance that also may affect their behavior towards the implementation of more stringent governance practices. For example, in terms of the costs associated with information disclosure, the relational nature of family firms may lead them to resist disclosing strategic information to outsiders because they fear to disclose proprietary information that may harm their strategies (Verrecchia, 1983) or, simply, because they want to preserve family-based relationships (Aguilera et al., 2008; Khanna & Rivkin, 2001). In sum, based on agency and institutional theories we would predict that family-dominated firms are more likely to not-comply with corporate governance codes. The former focus on the potential gains from family managerial entrenchment, while the latter underlines the internal mechanism of family norms of control. Consequently, we propose:

> *Hypothesis 2a. Firms with higher family shareholdings are more likely to have higher degree of non-compliance with codes' recommendations than firms with lower family shareholdings.*

Institutional shareholders. Academic interest in the influence of institutional investors on corporate governance reflects the importance of this category of external shareholders in shaping governance practices of firms. Some (Gompers, & Metrick, 2001; Pound, 1988) view this category of block holders as a solution to the owner-manager agency problem. Other studies however, do not support the efficacy of

institutional investors as a monitoring mechanism for managers (Coffee, 2001; Strine, 2006). Dalton et al. (2007) show in an extensive literature review that, despite their importance and magnitude in corporate equity, there is no conclusive evidence that institutional shareholders solve the agency problem.

In part, these results are mixed because, with respect to monitoring management behavior, institutional investors are heterogeneous in (a) their monitoring preferences and technologies (agency paradigm) (Brickley et al., 1988; Cornett et al., 2007), and (b) their relationship with management (institutional paradigm) (Hirschman, 1970). On one hand, institutions such as mutual funds, pension funds, and investment advisors are expected to have more skilled employees, have the ability to deal with information and have fewer natural business relations with the invested firms (Almazan et al., 2005). As such, they are less subject to management influence and, as consequence, are more likely to oppose managers' decisions, especially in the case of underperformance. On the other hand, if banks and insurance companies hold large stakes in a firm, they tend to provide financial services rather than seek to maximize short-term shareholder returns, and face high costs of monitoring because they could damage their relationship with firm management and lose existing or potential business (Brickley et al., 1988; Chen et al., 2007; Dittman, Maug, & Schneider, 2010). They are therefore more sensitive to pressures from management to favor their projects. Following this literature, we differentiate institutional investors into *active* and *passive* to investigate the impact of institutional investors ownership on non-compliance with governance codes[1].

On one hand, *active* institutional investors tend to be at an arm's-length relation with the firms they invest in and follow two main strategies. They either choose to exercise their voice in the boardroom to safeguard their interests (voice), or sell their shares of under-performing firms (exit). Choosing either of these strategies strongly depend on the available alternatives, and the cost-benefit analysis vis-à-vis one

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[1] Our sub-division of institutional investors into active and passive institutional investors is consistent with the Brickley et al. (1988) divisions into pressure-insensitive and pressure-sensitive institutional investors. With regard the transient and dedicated institutional investors from Bushee (1998) and Porter (1992), while transient is closely related to active (pressure-insensitive) institutional investors, dedicated is comparable not only to the passive (pressure-sensitive) investors, but also to corporate investors and families where the internal capital markets prevails. In this regard, we believe that our classification of different type of shareholders captures a broader perspective of owners' behavior than Bushee's or Porter's do.

another. Yet, both lead to the same prediction with regard to corporate non-compliance with governance codes. First, through voice, institutional shareholders will ask for (1) more independent directors, (2) separate functions of CEO and chairman, (3) independent audit, and compensation committees, etc. as a way to decrease managerial entrenchment and reduce agency cost. Considering that most of these claims are practices recommended by corporate governance codes, firms would be compelled to abide by the code or face some sort of intervention. Second, under the threat of exit, and its associated impact on shares liquidity and price, board of directors will increase compliance with governance practices that address institutional investors concerns as a signal of good governance. Therefore, although high compliance is costly to firms it reduces outside shareholders agency costs and, consequently, their risk to invest in a particular firm.

On the other hand, a closer institutional and economic relationship between firms and investors may give rise to a third alternative, that is, to keep their position and engage in a relationship with management looking to achieve the desired outcomes from the firm (*loyalty*). As a result of loyalty, *passive* shareholders will stay longer than *active* usually do, in the hope that improvement and reforms can be achieved from "within" (Hirschman, 1970). For example, in the case of Germany, where the banking system is an important mechanism for access to external finance (Coffee, 2001), banks exercise management supervision through clientele relationships. As such, in cases where *passive* institutional investor shareholdings are dominant we do not expect a direct consequence on level of non-compliance with governance codes. This is because enforcing firms' directors to comply with requirements of the codes not may raise firms' opportunity and implementation costs, but also may damage their relationships and reduce prospective business. This prediction is also consistent with the monitoring cost (agency) argument where *active* (investment advisors and funds) face lower costs of monitoring than the *passive* (banks and insurance companies).

Hence, both agency and institutional framework would predict that non-compliance is less likely to occur when *active* institutional investors are dominant, compared to *passive* institutional investors. We hypothesize that:

Hypothesis 2b. Firms with higher active institutional investors' shareholdings are less likely to have lower degree of non-compliance with codes' recommendations than firms with higher passive institutional investors' shareholdings.

Corporate shareholder. Ubiquitous in continental European countries, companies hold shares in other companies as part of cross-ownership or company group structures as means to obtain gains of scope, reduce resource uncertainty, and strengthen internal labor and capital markets (Colpan, Hikino & Lincoln, 2010; Pedersen & Thomsen, 2003). This entails controlling several independent firms that frequently operate in different industries but are bound together under the control of a business group. This source of "dedicated" capital seeks for firms' long-term performance and survivorship (Porter, 1992).

To achieve these goals, corporate shareholders frequently hold their shares for long time periods, sit on the board, have access to great inside information, keep stringent monitoring and control over management and provide firms with an internal capital market. Therefore, they have not only the incentives but also the abilities and means to monitor management behavior, which rule out *exit* as an alternative of action.

Moreover, European business groups are strongly connected both horizontally and vertically (Yiu et al., 2007). With respect to governance practices, their structure is distinct for having a strong dominant-owner that oversees managerial decisions through strategic firms. In this way, the affiliate firms' are similar to those divisions in an "M-form" firm (Chandler, 1962), where not only common resources (e.g., financial capital) but also industry-specific assets (e.g., technology and human resources) are exchanged across firms. At the horizontal level, cross-shareholdings and interlocking directorates are used as defense against hostile takeovers or acquisitions. Therefore, any additional governance practices may weaken the discretionary power of corporate insiders at the costs of minority shareholders who have weak mechanisms to exercise voice and little capacity to exercise influence on the firm given that the control is on the hands of insiders (Aguilera et al., 2008).

From the above mentioned, though, we expect that ownership connected firms, those with corporate shareholders, will impose managerial monitoring through other mechanisms than compliance with

governance codes. Corporate shareholdings serve as a substitute mechanism for the code's bundle of corporate governance practices which means a lesser need to signal good governance since firm's resort to finance is not so dependent on the external capital market. Thus, we hypothesize:

Hypothesis 2c. Firms with higher corporate shareholdings are less likely to have higher degree of non-compliance with codes' recommendations than firms with lower corporate shareholdings.

THE EMPIRICAL CONTEXT

Before moving to a discussion of the methods used to examine our hypotheses, we first review the context in which our study was conducted. The U.K.is an example of an Anglo-American corporate governance system, characterized by dispersed corporate ownership where markets for corporate control, legal regulation, and contractual incentives are key governance mechanisms and the legal regime is the common law (Aguilera, & Jackson, 2003; Doidge et al., 2007; La Porta et al., 1998). In 1992, aiming to restore the confidence in the financial reporting of UK companies, a joint initiative of the Financial Reporting Council (FRC), the London Stock Exchange and the British accountancy profession issued the "Cadbury Report." This was a milestone in corporate governance practice since it introduced the "comply or explain" principle that offers flexibility and discretion while avoiding the rigidity of legislation. In effect it has being increasingly emulated in the Western European countries, Asia, Latin America, and elsewhere.

Germany is a counter-example, where block-holders such as banks and families exercise direct control of firms and operate in a context with fewer market-oriented rules for information and disclosure of practices, lower takeover activity, weaker managerial incentives than Anglo-American firms, and a greater supply of debt through banks under a German-origin civil law legal regime (Tuschke, & Sanders, 2003). In Germany, firms typically engage in more strategic interactions with trade unions, suppliers of finance, and other actors (Hall, & Gingerich, 2009). Finally, Spain falls between the German and British cases. As in Germany, Spanish firms have families and banks as block holders that exercise control of firms. On the other hand, the one-tier board of directors (with nominees as specific type of non-

TABLE 2

Code Characteristics across Selected Countries

Code Characteristics	UK	Germany	Spain
Code name	The Combined Code on Corporate Governance	German Corporate Governance Code	Unified Code on Good Corporate Governance
Date of introduction	1998, reviewed 2003, 2006, 2008, 2009, 2010*	2002, amended 2003, 2005, 2006 2007, 2008, 2009, 2010*	2006
Antecedents	Cadbury Report, 1992; Greenbury Report, 1995; Hampel Report, 1998; Turnbull Report, 1999; Higgs Report, 2003; Smith Report, 2003.	Baums Commission Report (Bericht der Regierungskommission Corporate Governance), 2001; Berlin Initiative Group - German Code of Corporate Governance (GCCG), 2000; Corporate Governance Rules for German Quoted Companies, 2000; DSW Guidelines, 1998; Gesetz zur Kontrolle und Transparenz im Unternehmensbereich (KonTraG), 1998	Código de Buen Gobierno ("The Olivencia Code"), 1998; The Aldama Report, 2003
Issuing body	Committee related to stock exchange, and business, industry and/or academic association	Committee organized by the government	Committee organized by the government
Objectives	Improve quality of the board of directors and firms' corporate governance practices	Improve quality of the board of directors and firms' corporate governance practices	Improve quality of the board of directors and firms' corporate governance practices
Compliance mechanism	Comply or Explain: creates mandatory disclosure framework (in connection with listing rules) to encourage improved practices	Comply or Explain: creates mandatory disclosure framework (in connection with companies act) to encourage improved practices	Comply or Explain: creates mandatory disclosure framework (in connection with listing rules) to encourage improved practices
Scope of companies considered	All companies incorporated in the UK and listed on the main market of the LSE	German publicly-listed companies	Spanish publicly-listed companies
Legal origins	Common law	Civil law, German Origin	Civil law, French Origin

Source: Author's analysis. This table presents the main characteristics of each code in order to understand some differences regarding its evolution and the institutional setting where it is placed. (*) Although the German Corporate Governance Code and The Combined Code were amended in 2008, 2009, 2010, we have considered, respectively the 2006 and 2007' amendment in order to align the information set and data to the same period.

executives) resembles the Anglo-American model. Yet, Spain does have a corporate governance regime

that differentiates itself from Germany and the U.K.

From the corporate governance codes perspective, the seminal report of the Cadbury Committee in 1992,

set up by the London Stock Exchange, influenced the subsequent codes in the U.K. and other European

Countries. And according to the European Corporate Governance Institute, the U.K., Germany and Spain are countries with a high number of amendments to corporate governance codes (e.g. due date 2010, see Table 2). Next we examine the empirical findings.

DATA AND METHODS

Sample

Our sample initially consists of 130 largest market capitalization firms listed in the each country - U.K., Germany and Spain - totalizing 390 firms. Therefore, it includes but is not limited to firms in their respective leading indexes as FTSE 100 (U.K.), DAX (Germany) and IBEX 35 (Spain). Financial companies (e.g. banks and insurance firms) are excluded due to the significant differences with respect to other corporations, particularly in the regulatory environment (Arcot, & Bruno, 2007; Crespí et al., 2004). The external controls coming from takeovers and product-market competition are weaker in banks than in other firms. In addition, Levine (2004) affirms that the specific regulation for financial firms, although not part of the corporate governance codes, may interact with its provisions and have implications for corporate governance. After these adjustments, the actual sample consisted of 277 firms drawn from industrial and service sectors, where 86 are from the U.K., 94 are from Germany and 97 are from Spain.

Our data collection process involved three steps. First, we built a database at the individual firm level to convey *non-compliance* behavior of firms. Codes provisions were used as primary data where firms have the discretion to not comply. In the second stage, we aggregated the ownership structure of firms. Our primary source of corporate ownership data was the Thomson Financial database. In order to assure the integrity and reliability of the data we crosschecked it with the Amadeus database and where we found discrepancies we checked firms' annual reports to fix the data. Lastly we collected financial information from five years before the compliance study (2002-2007). To do so, we relied on data from Compustat Global and Amadeus.

Dependent Variable

Non-compliance. Corporate governance codes are composed of multiple recommendations. Empirically, non-compliance with self-regulation is not necessarily the contrary of compliance. Firms can claim that

they stay within code's recommendations; yet act in a particular way, which is not in the spirit of the recommendation. This is a so-called "box-ticking" kind of behavior. In this case, we cannot, *ex ante*, say that firms are really complying. On the contrary, when a focal firm announces that they are not complying with a particular provision, we believe that, for sure, it represents the actual behavior, since firms have no incentives to do so. Thus, we want to capture firm-level choices of *non-compliance* with these recommendations. For this purpose, we first normalized codes' recommendations through a content analysis technique (Neuendorf, 2002) in the following way. First, we analyzed all three codes recommendations in order to match common recommendations across codes. We define common recommendations by those that provide the same (or almost the same) governance practice. For example, the UK's Combined Code provision A.3.2. says "… at least half of the board, excluding the chairman, should comprise non-executive directors determined by the board to be independent." The Spanish counterpart would be the recommendation 13, that say, "… the number of independent directors should represent at least one third of all board members. And in Germany the recommendation is "… the Supervisory Board shall include what it considers an adequate number of independent members […] not more than two former members of the Management Board shall be members of the Supervisory Board." Second, one trained judge (i.e., "big-four" professional auditor) independently analyzed all three codes to provide reliability and accuracy checks of authors codification. Following Kolbe and Burnett (1991), disagreements in coding were resolved by discussing key terms and jointly reviewing the codes until a consensus was reached[1]. The final codification comprises 22 recommendations (i.e., *exposure variable*) that represent the maximum common denominator across these countries (see Table A1).

We then collected data on "comply-or-explain" behavior by analyzing the annual reports of each firm for the year 2007, which disclose what the firms did not comply with. If a firm does not comply with a particular recommendation, we coded 1. Otherwise we coded zero. For example, the Imperial Tobbaco's statement on the recommendation A.3.2. above says "... This non- compliance […] resulted from the board's decision to retain Mr. AG Alexander on the board to ensure continuity at senior board level

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[1] The disagreement rate was 10%.

during the chairman's early tenure and the resignation of Mr. CR Day as a consequence of his overall business commitments," then we coded 1 for this non-compliance.

We then summed all recommendations which the firm did not comply to and derived the "*non-compliance*" variable count data. This variable includes a possible heterogeneity among firms (e.g. *one size does not fit all*) incorporated in the codes through the "comply-or-explain" principle, since the presence of zero counts constitutes *full-compliant* firms.

For robustness, and following Chhaochharia & Laeven (2009), we constructed an *adjusted exposure* measure that considers only code's provisions that are non-complied by, at least, one firm. For example, if a particular provision is complied by all firms in one country this provision is not included as an exposure measure. This approach allows us to differentiate between corporate governance at the firm- and country-level, while keeping the comparability. We used this variable in a separate analysis and or results are consistent with our hypotheses.

Corporate governance codes state that firms must disclose to which particular recommendation they are not complying and what are their reasons to it. However, it could be the case that firms engage into an organizational decoupling where "formal structures are adopted in response to the demands of external stakeholders, but actual practices are tailored to the needs or demands of internal organization members" (Westphal & Zajac, 1998: 129). In order to avoid this possibility, first we rely on the fact that external auditors review annual reports as well as the declaration of compliance. Secondly, although we cannot determine exactly whether firms are rigorously respecting each recommendation[2], we reckon on Crespí and Fuster's (2009) study. They propose a more rigorous definition of director's independence and find that more than 52% of the independent directors of Spanish listed firms in 2007 according to the code's recommendation are not *really* independent. They also posit that this behavior is not concentrated in one particular type of firm, rather it is evenly distributed on their sample, and there are no significant differences across firms. Therefore, although this "new" definition will increase the level of non-

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[2] For example, in terms of director independence, we have no information if the director has been an employee of the company or group within the last five years, or if the director has, or has had within the last three years, a material business relationship with the company either directly, or as a partner, among other requirements.

compliance and, consequently, its variance, we do not expect significant changes in our results. Finally, with the information available in the annual reports and for a small control sample, we cross-check some of recommendations to which firms disclose as been compliant, and did not found material changes.

Independent Variables

Ownership concentration. To test the hypotheses of the effect equity ownership has on non-compliance behavior of firms, we measured the concentration of ownership by the *top 5* variable. It measures the percentage of shares controlled by top five shareholders, a continuous variable that takes values from 0 to 100%.

Ownership typology. According to our theoretical framework, four different types of owners are considered. First, according to Anderson and Reeb's (2003) classification, *family firms* are those where any individual of the family (e.g., the founder or any other member) is considered a block-holder, either individually or as a group. The *family shareholding* variable measures the amount of shares owned by families. It represents the sum of all individual and families that hold shares in a particular firm.[3] Second, we considered institutional investor entities that professionally invest substantial assets in international capital markets, such as investment companies, mutual funds, brokerages, insurance companies, pension funds, investment banks, and endowment funds. Following Almazan et al. (2005), Brickley et al. (1988), Chen et al. (2008), and Cornett et al. (2004), we divided the institutions into the *active* and *passive* categories according to the institution's potential business with the invested firm. *Active* institutional shareholders include investment advisors, mutual, hedge and pension funds, while *passive* institutional shareholders group banks and insurance companies. Then, we calculated the concentration of each respective group's ownership in the firm as the percentages of shares owned by each group. Finally, we define *corporate shareholdings* as the holdings of other corporations. Considering that corporate ownership is a compositional vector where components (type of owners) are subject to a constant-sum

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[3] In separate analyses, a *family-dominated* dummy variable was defined. We followed Villalonga and Amit (2006) and Berrone et al. (2010) and gave the family-control variable a value of 1 when family owners achieved a minimum threshold of voting shares, and 0 otherwise, and the hypothesized results were unchanged. Considering that in Europe the ownership structure is quite concentrated we used a threshold of 20% of voting shares.

constraint (no firm can have more than 100% of shares), we use the additive log-ratio transformation of ownership variables (see Aitchison, 1982 for a detailed discussion), where the base category were the *free-float* component.

Control Variables

Following previous literature in corporate governance and voluntary disclosure (e.g. Arcot, & Bruno, 2007; Crespí et al., 2004; Doidge et al., 2007), we considered firm-level data for total assets, cash holdings, performance, leverage, analyst coverage, and cross listing in the U.S. We used data from Amadeus, Compustat Global, and Nelson's Directories of Investment Research and, when required, we examined firms' annual reports. Information about membership of stock exchange indexes was obtained from FTSE, BME, and Deutsch Börse, for the U.K., Spain and Germany, respectively. We also controlled for industry in all models of non-compliance. Finally, we distinguished between the Anglo-American and continental European corporate governance model by using a dummy variable (*U.K.*). The United Kingdom is considered to be the Anglo-American system representative and the continental European system includes Germany and Spain which may have different approaches to the *non-compliance* with the codes' recommendations. Without panel data information, our ability to deal with a potential endogeneity between financial variables and governance practices of firms were limited. One approach we used was to lag firms' characteristics by one year. Alternative specifications with the average values of the last five years for control variables were used and the hypothesized results were very similar to those reported below.

Empirical Estimation

Our dependent variable (count of *non-compliances* with code's recommendations) can only take non-negative and integer values, and its distribution is highly skewed to the right and has a large proportion of zero observations. Poisson and negative binomial models are often used to estimate count variables. Given the over-dispersion in our dependent variable (the variance, 15.9, is much greater than the mean, 3.7), negative binomial models are preferred (Cameron, & Trivedi, 2009). Although our objective is not to explain full compliance behavior, zero non-compliance tests were done to test whether the large

proportion of zeros (31.01 % of our sample) was driving the over-dispersion, using Vuong test. A benefit of the zero-inflated negative binomial model is that it deals better with the zero counts using both binary (i.e. logit) and count (i.e. negative binomial) process. In our case it will determine if the estimates of our count predictors are the ones that drive to full compliance (Hilbe, 2007).

The zero-inflated model has the density of

$$f(y) = \begin{cases} f_1(0) + \{1 - f_1(0) * f_2(0)\} & \text{if } y = 0 \\ \{1 - f_1(0) * f_2(0)\} & \text{if } y^3 0 \end{cases}$$

and the conditional mean, $E(y \mid x) = \{1 - f_1(0 \mid x)\} \acute{} \exp(\acute{x}_2 b_2)$, where $\{1 - f_1(0)\}$ {1-f_1(0)} is the probability that the binary process variable equals to 1. The parameters β_2 can be directly interpreted as semi-elasticities (log-linear model), that is, a unit change in x changes the expected count, y, by a factor of exp (β_2).

Descriptive Statistics

Table 3, Panels A, B, and C, provides summary statistics of variables used in the empirical analyses. The mean values of the normalized *non-compliance* variable are much lower in the U.K. (0.6 in average) when compared with continental European countries, as Germany and Spain (2.82 and 6.73 respectively). With respect to the explanatory and control variables, we notice that British firms present a higher dispersion of ownership compared to German and Spanish peers. We report almost 86% of *free float* in the U.K. followed by 71% in Germany and only 45% in Spain. This result is in line with previous studies on ownership concentration in Europe (Faccio & Lang, 2002). Similar results arise from the concentration of ownership captured by the sum of shares of the five largest shareholders. Spain presents the highest average of ownership concentration (56%), followed by Germany with an average of 42% and the U.K., 33%.

Table 3 shows high average rates of ownership concentration, yet when considering the quartile distribution of ownership, Germany and Spain show a quasi-uniform distribution of concentration levels

TABLE 3

Descriptive Statistics[a]

Panel A: Germany	N	Mean	S.D.	Min	Max
Non-Compliance	94	2.82	2.81	0	11
Exposure	94	22	0	22	22
Adjusted Exposure	94	17	0	17	17
Top 1 (%)	94	26.19	22.65	1.38	83.2
Top 5 (%)	94	42.27	23.4	5.18	100
Free-float	94	70.61	26.19	14.07	100
Family Ownership	94	12.04	20.63	0	71.67
Active Institutional Investor Ownership	94	31.62	17.63	0	80.4
Passive Institutional Investor Ownership	94	0.84	0.91	0	6.61
Corporate Ownership	94	16.81	24.71	0	100
Cash-holdings	94	0.11	0.13	0	0.75
Size	94	8.28	1.79	4.99	12.57
Leverage	94	0.16	0.12	0	0.52
Performance	94	0.05	0.06	-0.12	0.35
Analyst coverage	94	11.17	9.74	0	32
Cross Listing in the U.S.	94	0.05	0.23	0	1
Panel B: Spain	N	Mean	S.D.	Min	Max
Non-Compliance	97	6.73	4.02	0	15
Exposure	97	22	0	22	22
Adjusted Exposure	97	22	0	22	22
Top 1 (%)	97	32.85	23.4	0.82	97.29
Top 5 (%)	97	56.16	21.14	1.89	99.98
Free-float	97	45.4	22.27	2.61	99.33
Family Ownership	97	19.53	22.8	0	80.66
Active Institutional Investor Ownership	97	12.83	10.16	0	42.55
Passive Institutional Investor Ownership	97	1.71	4.86	0	37.07
Corporate Ownership	97	34.68	28.57	0	97.29
Cash-holdings	97	0.11	0.14	0	0.8
Size	97	7.19	1.89	3.79	11.87
Leverage	97	0.21	0.17	0	0.67
Performance	97	0.04	0.08	-0.31	0.34
Analyst coverage	97	7.19	8.19	0	35
Cross Listing in the U.S.	97	0.02	0.14	0	1
Panel C: United Kingdom	N	Mean	S.D.	Min	Max
Non-Compliance	86	0.6	0.87	0	3
Exposure	86	22	0	22	22
Adjusted Exposure	86	9	0	9	9
Top 1 (%)	86	13.61	11.86	1.35	60.65
Top 5 (%)	86	32.81	13.3	4.77	77
Free-float	86	85.96	17.47	30.25	99.09
Family Ownership	86	3.57	9.48	0	53.76
Active Institutional Investor Ownership	86	64.99	20.32	9.65	95.9
Passive Institutional Investor Ownership	86	6.41	13.79	0.6	88.54
Corporate Ownership	86	6.04	11.43	0.1	56.1
Cash-holdings	86	0.11	0.1	0.01	0.45
Size	86	9.21	1.15	6.53	12.37
Leverage	86	0.22	0.15	0	0.67
Performance	86	0.08	0.06	-0.05	0.27
Analyst coverage	86	14.53	6.96	0	40
Cross Listing in the U.S.	86	0.16	0.37	0	1

[a] Ownership variables are calculate including firms where a particular type of owner is not present. Thus, the sum of types of shareholders is not expected to sum 100%.

for the five largest shareholders. On the other hand, in the U.K. firms' ownership is a clearly dispersed across the sample.

In relation to the type of shareholders, family ownership is relevant among Spanish and German firms, averaging 20% and 12% of respectively; in the U.K. this value drops to a 3.6%. When we consider the institutional investors, in the U.K. active institutional investor are dominant and hold in average 65% of shares while in Spain and Germany their representativeness decreases to 13% and 31% respectively. Although they are present in all three countries, passive institutional investors such as banks and insurance companies are much less representative than active ones. Taken together the ownership of different type of shareholders and the degree of concentration, For instance, in the U.K, in firms where the five largest shareholders hold less than 50%, institutional shareholders hold on average more than 70% of shares while in Spain this number drops to no more than 19%. Yet, in the U.K. even in high concentrated firms (those where the five largest shareholders hold more than 50%), the institutional investor are dominant, holding more than 54% of shares. In this case, German and Spanish corporations are more prevalent and hold 31% and 42% of shares, respectively. In sum, there is a significant variation in both the level of non-compliance and the ownership concentration across countries.

Our control variables are the natural logarithm of the total assets at time *t-1* (size), cash and short-term investments to total assets at time *t-1* (cash-holdings), the annual accounting return on assets (performance), the ratio of total liabilities to total assets (leverage), analyst coverage, cross-listing in the U.S. and industry sectors. They vary among firms and across countries but to a lesser extent than ownership data. One particular variable to underline and that might explain firm's strategic behavior toward *non-compliance* is the analyst coverage. In the U.K., the average number of financial analysts (14) that make forecast on firms' earnings are substantially larger than in Spain (7) or Germany (11). Table 4 presents the pair-wise correlation coefficients among the variables.

TABLE 4

Pairwise Correlation Coefficients

	Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1)	Non-Compliance	1												
(2)	Top 1 (%)	0.296***	1											
(3)	Top 5 (%)	0.368***	0.891***	1										
(4)	Free-float	-0.480***	-0.790***	-0.893***	1									
(5)	Family Ownership	0.206***	0.095	0.233***	-0.276***	1								
(6)	Active Institutional Investor Ownership	-0.246***	-0.209***	-0.200***	0.309***	0.055	1							
(7)	Passive Institutional Investor Ownership	-0.310***	-0.285***	-0.284***	0.283***	-0.076	0.301***	1						
(8)	Corporate Ownership	0.139*	0.275***	0.405***	-0.449***	-0.010	-0.071	-0.026	1					
(9)	Cash-holdings	-0.034	0.138*	0.137*	-0.109+	0.089	-0.018	-0.035	-0.008	1				
(10)	Size	-0.429***	-0.159***	-0.253***	0.254***	-0.308***	0.223***	0.413***	0.042	-0.153**	1			
(11)	Leverage	-0.054	-0.026	-0.021	0.057	0.044	-0.001	0.117(0.052)	0.032	-0.304***	0.210***	1		
(12)	Performance	-0.074	0.051	0.035	0.027	-0.023	0.183***	0.137*	-0.012	0.111*	0.032	-0.255***	1	
(13)	Analyst coverage	-0.369***	-0.235***	-0.277***	0.272***	-0.237***	0.203***	0.320***	-0.014	-0.012	0.751***	0.096	0.120**	1
(14)	Cross Listing in the U.S.	-0.164***	-0.174***	-0.239***	0.188***	-0.093	0.085	0.110*	0.001	-0.031	0.429***	0.043	0.189***	0.4020

Significance at the 10%, 5%, 1%, and 0.1% levels is indicated by +, *, **, and ***, respectively.

Table 5 presents the results of zero-inflated negative binomial models predicting the number of *non-compliances* with corporate governance codes' recommendations. Model 1 is the baseline with only control variables. Comparing the fitted models in Table 5, all models present better fit (smaller AIC and BIC) than the baseline. Next, we present the results for each hypothesis.

Non-compliance and the Ownership Concentration

Hypothesis 1 predicts a positive effect of high ownership concentration on the degree of *non-compliances* with the corporate governance codes' recommendations. In Table 5, Model 2 presents a consistent and highly significant effect of high ownership concentration as a predictor for the number of *non-complied* provisions. That is, other things equal, one standard deviation change in ownership concentration increases the level of non-compliance in 0.44 units (that represent a 16% increase in the level of non-compliance).[1] This result is consistent under alternative specifications. In particular, Model 4 considers all hypotheses together and the ownership concentration coefficient is significantly and positive related with the non-compliance levels.

Implicit in Hypothesis 1 is the view that firms where ownership is dispersed are less likely to *not-comply* with corporate governance codes provisions. In separate analysis we used free-float as an alternative measure of ownership dispersion, and found hypothesized results unchanged. In addition to this, we used the ownership concentration of the largest shareholder for firm's ownership concentration, and we found similar results.

We run a separate regression model to estimate the effect of non-compliance on the level of ownership concentration, controlling for possible alternative explanations for ownership concentration and the coefficient of non-compliance turns out to be not significant (*t=1.62*). This result, at some extent, rules out the possibility of reverse causality in our results.

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[1] We argue that ordinary least squares (OLS) estimators are biased, inefficient, and inconsistent when the dependent variable is highly skewed. However, we also perform an OLS and Tobit estimations and the results are qualitatively different from our findings, reinforcing the assumptions to use count data.

TABLE 5

Zero-Inflated Negative Binomial Models of Non-Compliance

Independent Variables	(1) Controls	(2) H1	(3) H2	(4) H1+H2	(5) H1+H2
Top 5 (%)		0.767***		0.349***	0.265***
		(0.152)		(0.085)	(0.067)
Family Ownership			0.030***	0.028***	0.028***
			(0.004)	(0.005)	(0.004)
Active Institutional Investor Ownership			-0.036***	-0.036**	-0.039**
			(0.010)	(0.011)	(0.015)
Passive Institutional Investor Ownership			-0.015+	-0.012	-0.012
			(0.009)	(0.010)	(0.010)
Corporate Ownership			0.028***	0.022***	0.023***
			(0.007)	(0.006)	(0.006)
Top 5 * Anglo-American CG System					1.796***
					(0.120)
Controls					
Anglo-American Corporate Governance System	-1.985***	-1.815***	-1.907***	-1.842***	-2.525***
	(0.361)	(0.363)	(0.238)	(0.252)	(0.197)
Cash-holdings	-0.209	-0.303	-0.25	-0.295	-0.392
	(0.264)	(0.235)	(0.308)	(0.287)	(0.291)
Size	-0.074	-0.099	-0.065	-0.076	-0.081
	(0.149)	(0.146)	(0.112)	(0.114)	(0.118)
Leverage	0.278	0.302	0.255	0.264	0.227
	(0.747)	(0.703)	(0.654)	(0.658)	(0.660)
Performance	0.781	0.42	0.884	0.711	0.614
	(0.770)	(0.639)	(0.749)	(0.709)	(0.686)
Analyst coverage	-0.021+	-0.016	-0.017	-0.015	-0.013
	(0.012)	(0.013)	(0.014)	(0.013)	(0.014)
Cross Listing in the U.S.	0.012	0.177	0.093	0.151	0.215
	(0.224)	(0.231)	(0.202)	(0.192)	(0.136)
Industry Dummies	Yes	Yes	Yes	Yes	Yes
Constant	-0.772	-0.959	-0.832*	-0.941*	-0.900*
	(0.658)	(0.605)	(0.365)	(0.401)	(0.383)
Over-Dispersion: lnalpha					
Constant	-1.332***	-1.386***	-1.474***	-1.486***	-1.506***
	(0.214)	(0.223)	(0.077)	(0.125)	(0.107)
AIC	1145.271	1135.134	1124.932	1123.293	1120.268
BIC	1156.143	1146.006	1135.804	1134.165	1131.14
Number of Observations	277	277	277	277	277

+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$. Standard errors (clustered by country) are in parenthesis, two-tailed tests.

FIGURE 2

Interaction between Corporate Governance System and

Ownership Concentration
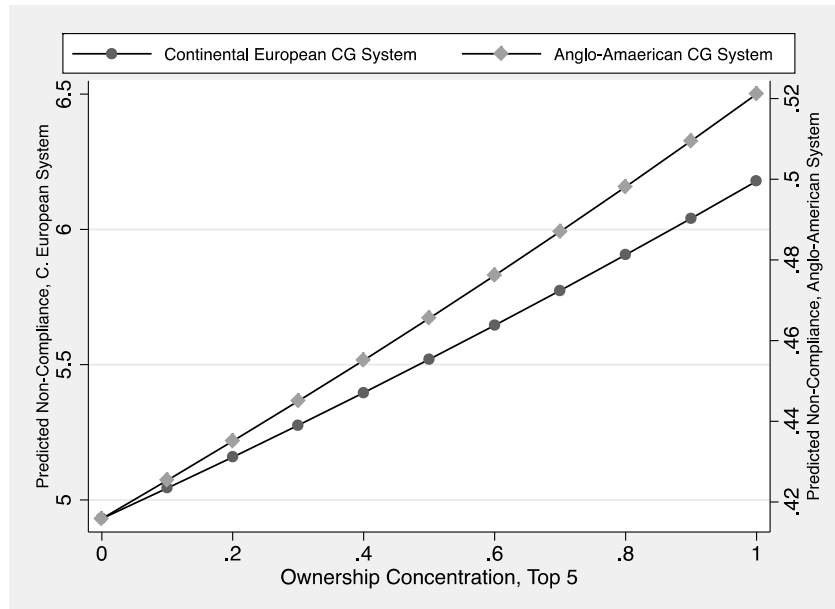
Endogeneity Concern of Ownership Concentration

An important concern with the results presented is that a firm's ownership concentration reflects an endogenous choice of investors. Our model explicitly controls for the firm and industry characteristics that affect both the ownership structure and non-compliance behavior. Yet, if any variable not considered in the model affects both ownership and non-compliance, the results will be inconsistent. We address this potential endogeneity problem using a matching estimator that allows capturing *observable* firm and industry characteristics that affect the ownership decision and that may correlate with non-compliance. In a separate analysis, we used the nearest-neighbor method to match concentrated (i.e., treated) firms to non-concentrated (i.e., untreated) on industry, size, and country. We define concentrated firms as those where the largest shareholder holds more than 20% of voting shares, and non-concentrated otherwise. Our hypothesized results using the matched sample were similar to those reported here.

Non-compliance and Shareholders Typology

In keeping with Hypothesis 2, the type of dominant shareholders matters to non-compliance with corporate governance codes. First, we hypothesize (Hypothesis 2a) that family dominated firms are more

likely not to comply with some sort of provisions that reduce their ability to control the firm. In Table 5, Models 3 to 5 support our hypothesis. The family ownership variable is positive and statistically significant ($p<0.001$) as a predictor for *non-compliance*. In other words, one standard deviation increase in family ownership (20.72% of total shares) is associated with a 16.8% increase in the number of *non-compliances* with codes' recommendations ($b = 0.03$, [exp (0.003* 5.17)-1]*100=16.8%).

From the hypothesis 2b, we expect that firms with higher *active* institutional shareholdings are more likely to have lower levels of non-compliance than those with higher *passive* institutional investors. On one hand, Models 3 to 5 show that the *active* institutional investors' shareholding is negatively and statistically significantly ($p<0.05$) associated with the number of non-complied provisions. One standard deviation increase in institutional investor ownership (26.7%) is related to a 0.14 decrease in the rate for non-compliance with codes' recommendations. Yet, the coefficient estimates for passive institutional investor shareholders are not significant in two out of three models, and where it turns out to be significant it reduces the rate for non-compliance in 0.10 points. Thus, less *active* institutional investors, when present, are more likely to use the codes' practices as mechanism for management monitoring. On the other hand, *passive* investors seem not to rely on code's recommendation.

Our Hypothesis 2c states that firms with higher corporate shareholdings are less likely to have higher degree of non-compliance with codes' recommendations than firms with lower corporate shareholdings, and Models 3 to 5 capture this with the corporate ownership variable. Its coefficient estimates are positive and significant in all models. Thus, corporate shareholders are more likely to count on their abilities and motivations for monitoring management that does not necessarily include codes' provisions. In particular, our theory proposes that they will rely on closer relationship with management both through horizontal and vertical ties.

As robustness checks, we conducted separate analysis with an alternative measure to distinguish type of dominant owners, that is, dummy variables that represent the type of the largest shareholder. The hypothesized results were unchanged.

The Role of Corporate Governance System

In Table 5, Models 1 to 4 report a negative and statistically significant coefficient ($p<0.001$) for Anglo-American Corporate Governance System. Basically, this measure distinguish U.K., from Spain and Germany, since their corporate governance systems diverge not only in the level of ownership structure but also in terms of legal regimes, financial market development, and so on (La Porta et al., 1998). This result means that a public-listed firm established in the U.K., on average, have 4 less *non-compliance* counts than Spanish or German firms. Thus, it leads us to conduct a post hoc analysis to check if the institutional setting is a dominant variable that may drive the non-compliance behavior instead of our corporate ownership theory. To do so, in Model 5 we specify an interaction relationship between corporate governance system and ownership concentration. The interaction term turns out positive and significantly associated with non-compliance. Therefore, even in the case of an Anglo-American corporate governance system, firms where the ownership concentration is dominant have other monitoring mechanisms and rely less on governance codes (see Figure 2).

Firm-Specific Controls and Full-Compliance Behavior

In Table 5, Model 1 presents the baseline model that contains only the control variables. Overall, the result suggests that the only relevant firm-specific control variables that affect the *non-compliance* behavior is analyst coverage ($p<0.10$). It means that, other things being equal, one standard deviation increase in the number of financial analysts following a firm (8.87) would have a 0.48 decrease in the rate of *non-complied* recommendations.

Previous literature state that the intermediary-role played by securities analysts can influence firms in a number of ways (Mehran & Peristiani, 2010). In particular, close monitoring by equity analysts may diminish agency conflicts between owners and managers of the firm (Jensen & Meckling 1976). Empirical evidence generally confirms that increased analyst coverage increases the informational efficiency of markets (Frankel, Kothari, and Weber, 2006). Hence, the negative effect of analyst coverage on *non-compliance* corroborates the argument that financial intermediaries do play a role in the corporate governance agenda.

The structural zeros for *non-compliance* represent 31% of our sample, which stand for *full-compliant* firms. In Table 5, the dispersion parameter alpha is significantly different from zero, which may be explained due to the excess of zero counts. This suggests that our data is over dispersed and that a negative binomial model is more appropriate than a Poisson model. Also, the Vuong test suggests that our zero-inflated model is a significant improvement over a standard negative binomial model.[1]

DISCUSSION AND CONCLUSIONS

Despite the large scope of empirical literature in corporate governance, little has been done to explain the non-compliance levels of firms with corporate governance codes. On the contrary, previous research is focused on the relationship between compliance levels with code's corporate governance practices and firm performance. Indeed, the results are mixed and inclusive. In this study, our theory and findings suggest that this is, in part, because governance mechanisms do not work in isolation. Instead, a bundle of practices enacted in corporate governance codes interact with an additional governance mechanism such as the corporate ownership to produce effective and efficient outcomes.

To do so we examine the *non-compliance* levels of firms in Germany, Spain and UK. We carefully compare countries' institutional settings regarding the corporate governance codes and then, we examine the determinants of the *"comply-or-explain"* behavior of firms (which includes the *non-compliance* and *full-compliance* models). First, drawing on agency perspectives, we ask if ownership matters and propose that ownership concentration is important to explain the *non-compliance* behavior of firms. Second, our theory combines not only the agency but also the institutional perspective of ownership, which argues that the typology of the controlling shareholders has an institutional logic that legitimizes particular behavior and strategies to achieve different goals in the firm (Aguilera, & Jackson, 2010; Chung, & Luo, 2008). We distinguish four types of dominant owners: (a) families, (b) active and (c) passive institutional investors, and (d) corporate ownership. Finally, calling again on institutional theory we ask whether national corporate governance system is relevant in *non-compliance* behavior with corporate governance codes.

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[1] The results of the zero-inflated estimates, as well as all other separated analyses are available from authors upon request.

Our comparative study of three European economies explores their corporate governance self-regulation environment and how listed-firms accept and implement the recommendations of these provisions. We contribute to the literature by studying the compliance level under two-types of agency problems and extend the "under-contextualized" agency perspective to incorporate institutional logic to the effect ownership and country has. This implied an integration between the agency framework and institutional analysis which generated robust predictions to explain non-compliance behavior. Doing so, our framework examined more explicitly the agency theory and its implications when different institutional settings are involved (Aguilera et al., 2008).

Our findings demonstrate that the recommendations have a high degree of acceptance across countries, where the average *non-compliance* rounds three recommendations. Up to 31% (86 over 277) of firms from our sample are *fully compliant* with their country's corporate governance code and 50% of firms do *not comply* with two or less explanations. Yet, there is variance among firms and across countries. With different institutional environments where the size of the capital markets, the corporate governance systems and the experience with self-regulation on corporate governance vary, U.K. firms present the lowest number of *non-compliance* followed respectively by German and Spanish firms. It implies that country's institutional settings are relevant for corporate governance codes. We undertook a methodological precaution to ensure comparability across countries and alleviate potential concerns about the validity of our findings. In particular, in defining our measure of non-compliance we carried out a qualitative content analysis that normalized country's codes recommendations to a maximum common denominator.

Using count data methodology, we examined the equity ownership as a determinant of the *non-compliance* behavior in the case where there are *fully-compliant* firms in the sample. As proposed, the ownership concentration presents a positive and significant effect on the degree of *non-compliance*. This result is consistent with the two-types of agency problems. The corporate governance codes were originally introduced in a dispersed ownership framework (e.g., U.S. and U.K.) to mitigate agency problems between weak owners and strong managers, the classical owner-manager misalignment. Thus,

firms with high ownership concentration, where strong owners are present, are expected to use other corporate governance mechanisms to align such interests, and also those related to the minority shareholders.

Indeed, the flexibility introduced by the corporate governance codes through the "comply-or-explain" principle fits well to the family and industrial firms, as their ownership structure may substitute code's provisions. In this regard, we show that corporate governance is much more than ticking boxes. We illustrate that family (and corporate) dominated firms do *not-comply* more than non-family (corporate) dominated firms do. This is mostly because some recommendations, for example, the number of independent directors, separation of chairman and CEO positions, and disclosure of directors' compensation, among others, would be oriented to a dispersed ownership firm, and may not fit family owners' interests.

Moreover, we examine why institutional investors, segmented in two groups: *active* and *passive*, differ in their willingness to monitor. We theorize that it is due to their differences in costs of monitoring, their potential business opportunities with firms they invest in, and their different regulatory and competitive environments. Our results are consistent with the implications of our theory that more *active* institutional investors prefer *exit* and *voice* as major mechanisms to management monitoring, while passive institutional investors will prefer to be *loyal* to managers.

The bottom-line implication for corporate governance policies is that public policy needs to recognize that different agency problems (i.e., dispersed versus concentrated ownership, and different types of shareholders) call for different corporate governance mechanisms. Dispersed ownership, as we see in British firms, sets the ground for managerial misbehavior, while concentrated ownership, an example of German and Spanish firms, creates the possibility for private benefits. This suggests that a specific bundle of corporate governance recommendations that work in one country may not succeed in the other, which gives rise to different degree of *non-compliance* behavior. Therefore, our theory and results dispute the central premise of corporate governance reforms that strict management monitoring and control are suited to all firms in all countries. This is particularly compelling to mandatory rules of corporate governance

such as the Sarbanes-Oxley Act 2002, and Dodd-Franks Act 2010 in the U.S., where the lack of flexibility to comply with regulatory provisions force listed firms to abide by the rules or de-list from the stock exchange.

The failure of policy makers to foresee the effect of the diversity of firms' internal governance structures on corporate governance practices may reflect prevailing assumptions about the corporate ownership. Regulators have not considered how reforms on corporate governance practices may have dissimilar effects on different types of shareholders. In the absence of such consideration, future research might address, both theoretically and empirically, how the variety of ownership patterns may relate to different bundles of corporate governance practices to achieve an effective governance outcome.

Our study is not without limitations. First, we have cross-sectional data on the compliance level, which precludes us from making strong assertions about causal relationship between our constructs[2]. In this regard, we do show a significant relationship even controlling for possible alternative explanations and different specifications and independent variables, and alternative robustness tests. Second, while our study highlights the influence of the ownership structure and country corporate governance system on *non-compliance* behavior of corporate governance codes' provisions as whole, future research could explore in detail the relationships between particular provisions and how they complement or substitute one another. Finally, our theoretical and empirical analyses preclude behavioral (Van der Laan, 2009) or socio-emotional motivations for non-compliance (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010). As future research, one can use experimental or field research approach to deeply understand the decision making structure inside the boardroom.

In summary our study contributes to the literature in different ways. First and foremost, we propose a framework that helps to explain why no "one best way" exists to achieve effective corporate governance. Our theory and findings indicate that ownership concentration is the underlying mechanism that drives non-compliance behavior of firms. We demonstrate that higher levels of ownership concentration have

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[2] We propose that, while endogenous in the long-run, ownership structure is exogenous in the short-term. This is because investors can neither buy nor sell their shares at no cost, in particular, when it's a controlling stake that is the case of dominant shareholders.

especially positive effects on non-compliance with corporate governance codes. This is because the bundle of governance practices enacted by the codes' interacts with ownership structure in a way that one may substitute another as a management monitoring mechanism. Second, understanding non-compliance allows contributing to the *compliance theory* where the *deterrence theory* has been the predominant academic perspective. Our theory and results highlight that non-compliance is contingent to regulated entities context, and specifically, to their decision-makers identities. Therefore, second order amendment that transform voluntary provisions in mandatory regulations such as the 2009's German mandatory reform law on directors' remuneration (Aguilera et al., 2011; Hopt, 2011) has a downside effect to forcefully homogenize heterogeneous firms.

Third, we construct a unique dataset of publicly listed firms in three European economies which allow us to engage with the comparative corporate governance debate and discuss implications for corporate governance policies outside the U.S. borders.

APPENDIX 1: CORPORATE GOVERNANCE CODES' RECOMMENDATIONS

TABLE A.1

Matching Codes' Recommendations Across Countries (continues)

Number of provisions	UK	Main Principle	Description	Spain	Germany
1	A.1.1	The board	The board should meet sufficiently regularly to discharge its duties effectively. There should be a formal schedule of matters specifically reserved for its decision. The annual report should include a statement of how the board operates, including a high level statement of which types of decisions are to be taken by the board and which are to be delegated to management.	19	4.2.1, 5.1.3
2	A.1.2	The board	The annual report should identify the chairman, the deputy chairman (where there is one), the chief executive, the senior independent director and the chairmen and members of the nomination, audit and remuneration committees. It should also set out the number of meetings of the board and those committees and individual attendance by directors.	20	5.4.8
3	A.2.2	Chairman and CEO	The chairman should on appointment meet the independence criteria set out in A.3.1 below. A chief executive should not go on to be chairman of the same company. If exceptionally a board decides that a chief executive should become chairman, the board should consult major shareholders in advance and should set out its reasons to shareholders at the time of the appointment and in the next annual report.	17	5.4.4
4	A.3.1	Board balance and independence	The board should identify in the annual report each non-executive director it considers to be independent. The board should determine whether the director is independent in character and judgment and whether there are relationships or circumstances which are likely to affect, or could appear to affect, the director's judgment.	10	5.4.2
5	A.3.2	Board balance and independence	Except for smaller companies (A smaller company is one that is below the FTSE 350 throughout the year immediately prior to the reporting year) at least half the board, excluding the chairman, should comprise non-executive directors determined by the board to be independent. A smaller company should have at least two independent non-executive directors.	13	5.4.2

Number of provisions	UK	Main Principle	Description	Spain	Germany
6	A.4.1	Appointments to the Board	There should be a nomination committee, which should lead the process for board appointments and make recommendations to the board. A majority of members of the nomination committee should be independent non-executive directors. The chairman or an independent non-executive director should chair the committee, but the chairman should not chair the nomination committee when it is dealing with the appointment of a successor to the chairmanship. The nomination committee should make available its terms of reference, explaining its role and the authority delegated to it by the board.	44,54	5.3.3
7	A.4.2	Appointments to the Board	The nomination committee should evaluate the balance of skills, knowledge and experience on the board and, in the light of this evaluation, prepare a description of the role and capabilities required for a particular appointment.	55	5.4.1
8	A.4.4	Appointments to the Board	The terms and conditions of appointment of non-executive directors should be made available for inspection (The terms and conditions of appointment of non-executive directors should be made available for inspection by any person at the company's registered office during normal business hours and at the AGM (for 15 minutes prior to the meeting and during the meeting)). The letter of appointment should set out the expected time commitment. Non-executive directors should undertake that they will have sufficient time to meet what is expected of them. Their other significant commitments should be disclosed to the board before appointment, with a broad indication of the time involved and the board should be informed of subsequent changes.	27	5.3.3
9	A.6.1	Performance evaluation of the Board	The board should state in the annual report how performance evaluation of the board, its committees and its individual directors has been conducted. The non-executive directors, led by the senior independent director, should be responsible for performance evaluation of the chairman, taking into account the views of executive directors.	22	5.6

Number of provisions	UK	Main Principle	Description	Spain	Germany
10	A.7.1	Re-election of the directors	All directors should be subject to election by shareholders at the first annual general meeting after their appointment, and to re-election thereafter at intervals of no more than three years. The names of directors submitted for election or re-election should be accompanied by sufficient biographical details and any other relevant information to enable shareholders to take an informed decision on their election.	14	5.4.3
11	B.1.1	The level and make-up of board and executives remuneration	The performance-related elements of remuneration should form a significant proportion of the total remuneration package of executive directors and should be designed to align their interests with those of shareholders and to give these directors keen incentives to perform at the highest levels. In designing schemes of performance-related remuneration, the remuneration committee should follow the provisions in	36	4.2.3
12	B.1.3	The level and make-up of board and executives remuneration	Levels of remuneration for non-executive directors should reflect the time commitment and responsibilities of the role. Remuneration for non-executive directors should not include share options. If, exceptionally, options are granted, shareholder approval should be sought in advance and any shares acquired by exercise of the options should be held until at least one year after the non-executive director leaves the board. Holding of share options could be relevant to the determination of a non-executive director's independence (as set out in provision A.3.1).	37	5.4.7
13	B.2.3	Remuneration procedures	The board itself or, where required by the Articles of Association, the shareholders should determine the remuneration of the non-executive directors within the limits set in the Articles of Association. Where permitted by the Articles, the board may however delegate this responsibility to a committee, which might include the chief executive.	40	5.4.7
14	C.1.1	Financial reporting	The directors should explain in the annual report their responsibility for preparing the accounts and there should be a statement by the auditors about their reporting responsibilities.	53	7.2.1

Number of provisions	UK	Main Principle	Description	Spain	Germany
15	C.3.1	Audit committee and auditors	The board should establish an audit committee of at least three, or in the case of smaller companies, two members, who should all be independent non-executive directors. The board should satisfy itself that at least one member of the audit committee has recent and relevant financial experience.	44,46	5.3.2
16	C.3.2	Audit committee and auditors	The main role and responsibilities of the audit committee should be set out in written terms of reference and should include:	50	5.3.2, 7.2.1
17	C.3.3	Audit committee and auditors	The terms of reference of the audit committee, including its role and the authority delegated to it by the board, should be made available. A separate section of the annual report should describe the work of the committee in discharging those responsibilities.	44	7.2.3
18	C.3.5	Audit committee and auditors	The audit committee should monitor and review the effectiveness of the internal audit activities. Where there is no internal audit function, the audit committee should consider annually whether there is a need for an internal audit function and make a recommendation to the board, and the reasons for the absence of such a function should be explained in the relevant section of the annual report.	47,50	5.3.2
19	C.3.6	Audit committee and auditors	The audit committee should have primary responsibility for making a recommendation on the appointment, reappointment and removal of the external auditors. If the board does not accept the audit committee's recommendation, it should include in the annual report, and in any papers recommending appointment or re-appointment, a statement from the audit committee explaining the recommendation and should set out reasons why the board has taken a different position.	50	5.3.2
20	C.3.7	Audit committee and auditors	The annual report should explain to shareholders how, if the auditor provides non-audit services, auditor objectivity and independence is safeguarded.	50	7.2.1

Number of provisions	UK	Main Principle	Description	Spain	Germany
21	D.2.1	Constructive use of the AGM	At any general meeting, the company should propose a separate resolution on each substantially separate issue, and should in particular propose a resolution at the AGM relating to the report and accounts. For each resolution, proxy appointment forms should provide shareholders with the option to direct their proxy to vote either for or against the resolution or to withhold their vote. The proxy form and any announcement of the results of a vote should make it clear that a "vote withheld" is not a vote in law and will not be counted in the calculation of the proportion of the votes for and against the resolution.	5,6	2.3.3
22	D.2.4	Constructive use of the AGM	The company should arrange for the Notice of the AGM and related papers to be sent to shareholders at least 20 working days before the meeting.	4	2.3.2

Codes' recommendations were compared taking the UK's Combined Code as reference code. Therefore, we first compared Spanish code against the British one, and then, the German against the British. We finally achieve 22 common recommendations that can be compared across countries.

REFERENCES

Aguilera, R. V., & Cuervo-Cazurra, A. 2004. Codes of good governance worldwide: what is the trigger? *Organization Studies*, 25(3): 415–39.

Aguilera, R.V., Desender, K., and Kabbach-Castro, L. R. 2011. A bundle perspective to comparative corporate governance. In T. Clarke, D. Branson (Eds.). *SAGE Handbook of Corporate Governance*. New York: Sage Publication

Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. 2008. An organizational approach to comparative corporate governance: costs, contingencies, and complementarities. *Organization Science*, 19(3): 475-492.

Aguilera, R. V., & Jackson, G. 2003. The cross-national diversity of corporate governance: dimensions and determinants. *Academy of Management Review*, 28(3): 447-465.

Aguilera, R. V., & Jackson, G. 2010. Comparative and international corporate governance. *Annals of the Academy of Management*, 4: 485-556.

Aitchison, J, 1982. The statistical analysis of compositional. *Journal of the Royal Statistical Society*. 44(2):139-177.

Almazan, A., Hartzell, J.C., & Starks, L.T. 2005. Active institutional shareholders and costs of monitoring: Evidence from executive compensation. *Financial Management*, 34: 5-34.

Anderson, R.C., & Reeb, D.M. 2003. Founding-family ownership and firm performance: evidence from the S&P 500. *The Journal of Finance*, **58**: 1301-1328.

Arcot, S. R., & Bruno, V. G. 2007. One size does not fit all: evidence from corporate governance. *Journal of Empirical Legal Studies*, 4(4): 1041-1057.

Bebchuk, L. & Hamdani, A. 2009. The elusive quest for global governance standards. *University of Pennsylvania Law Review*, 157: 1263-131.

Becht, M., Franks, J., Mayer, C., & Rossi, S. 2010. Returns to shareholder activism: Evidence from a clinical study of the Hermes UK focus fund. *The Review of Financial Studies*, 23(3): 3093-3129.

Berrone, P., Cruz, C., Gomez-Mejia, L.R., & Larraza-Kintana, M. 2010. Socio-emotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55: 82-113.

Bolton, P., &Von Thadden, E. L. 1998. Blocks, liquidity and corporate control. *The Journal of Finance,* 53(1): 1-25.

Brickley, J., Lease, R., & Smith, C. Jr. 1988. Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics*, 20: 267-291.

Bruno, V. & Claessens, J. 2010. Corporate governance and regulation: Can there be too much of a good thing? *Journal of Financial Intermediation,* 19: 461–482.

Bushee, B.J. 1998. The influence of institutional investors in myopic R&D investment behavior. *The Accounting Review*, 73(3): 305-333.

Cameron, A. C., & Trivedi, P. K., 2009. *Microeconometrics using Stata*. Lakeway Drive: Stata Press.

Chandler, A. 1962. *Strategy and Structure: chapters in the history of the industrial enterprise*. Cambridge: M.I.T. Press.

Chen, X., Harford, J., & Li, K. 2007. Monitoring: Which institutions matter? *Journal of Financial Economics*, 86: 279-305.

Chhaochharia, V., & Laeven, L. 2009. Corporate governance norms and practices. *Journal of Financial Intermediation*, 18:405-431.

Chung, C., & Luo, X., 2008. Institutional logics and agency costs: The influence of corporate governance models in business groups restructuring in Emerging Markets, *Organization Science*, 19(5): 766-784.

Claessens, S., Djankov, S., Fan, J. P.H., & Lang L. 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57: 2741-2771.

Coffee, J. 1989. The mandatory/enabling balance in corporate law: An essay on the judicial role. *Columbia Law Review*, 89: 1618.

Coffee, J. 2001. The rise of dispersed ownership: The roles of law and the state in the separation of ownership and control. *Yale Law Journal*, 1(9-11): 1-82.

Coffee, J. 2005. A theory of corporate scandals: Why the USA and Europe differ. *Oxford Review of Economic Policy*, 21: 198-211.

Colpan, A., Hikino, T., & Lincoln J (Eds). 2010. *The Oxford Handbook of Business Groups*. New York: Oxford University Press.

Cornett, M.M., Marcus, A.J., Saunders, A., & Tehranian, H. 2007. The impact of institutional ownership on corporate operating performance. *Journal of Banking & Finance*, 31: 1771-1794.

Crespí, R. C., García-Cestona, M.A., & Salas, V. 2004. Governance mechanisms in Spanish banks. Does ownership matter? *Journal of Banking and Finance,* 28(10): 2311-2330.

Crespí, R. C., & Fuster. 2009 Las prácticas de gobierno corporativo de las entidades bancarias cotizadas en España 2004-2007: Análisis comparado con el mercado continuo. *Estabilidad Financiera*, 16:81-109.

Daily, C.M., Dalton, D. R., & Cannella, A. A. 2003. Introduction to special topic forum corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3): 371-382.

Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M., 2007. The fundamental agency problem and its mitigation: Independence, equity and market for corporate control. *The Academy of Management Annals*, 1(1): 1-64.

De Jong, A., De Jong, D. V., Merters, G., & Wasley, C.E. 2005. The role of self-regulation in corporation governance: evidence and implications from The Netherlands. *Journal of Corporate Finance*, 11: 473-503.

Delmestri, G. 2009. Institutional streams, logics, and fields. In R. E. Meyer, K. Sahlin, M. J. Ventresca, & P. Walgenbach (Eds.) *Research in the sociology of organizations, vol. 27*: 115-144. Howard House: Emerald Group Publishing.

Desender, K., Aguilera, R.V., Crespí, R.C., & García-Cestona, M.A. 2012. When does ownership matter? Board characteristics and behavior. *Strategic Journal of Management* (forthcoming).

DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147-160.

Dittman, I., Maug, E., & Schneider, C. 2010. Bankers on the board of German firms: What they do, what they are worth, and why they are (still) there? *Review of Finance*, 14: 35-71.

Doidge, C., Karolyi, G. A., & Stulz, R. M. 2007. Why do countries matter so much for corporate governance? *Journal of Financial Economics*, 86(1): 1-39.

Dowding, K., John, P., Mergoupis, T., & Van Vugt, M. 2000. Exit, voice and loyalty: Analytic and empirical developments. *European Journal of Political Research*, 37: 469-495.

Durnev, A., & Fauver, L. 2011. Stealing from thieves: Firm governance and performance when states are predatory. 2nd Annual Conference on Empirical Legal Studies Paper. Available at SSRN: http://ssrn.com/abstract=970969.

Enriques, L. 2000. The law on company directors' self-dealing: A comparative analysis. *International and Comparative Corporate Law Journal,* 2(3): 297-333.

Europe Commission. 2009. Study on monitoring and enforcement practices in corporate governance in the Member States.

Faccio, M., & Lang, H. P. 2002. The ultimate ownership of western European corporations, *Journal of Financial Economics*. 65(3): 365-395.

Fernández-Rodríguez, E., Gómez-Ansón, S., & Cuervo-García, A. 2004. The stock market reaction to the introduction of best practices codes by Spanish firms. *Corporate Governance: An International Review*, 12: 29-46.

Frankel, R., Kothari, S. P., & Weber, J. 2006. Determinants of the informativeness of analyst research. *Journal of Accounting and Economics*, 41: 29-54.

Gomez-Mejia, L. R., Nu.e z-Nickel, M., & Gutierrez, I. 2001. The role of family ties in agency contracts. *Academy of Management Journal*, 44(1): 81-95.

Gompers, P., & Metrick, A. 2001. Institutional investors and equity prices. *Quarterly Journal of Economics*, 116: 229-59.

Goncharov, I., Werner, J.R., & Zimmermann, J. 2006. Does compliance with the German Corporate Governance Code have an impact on stock valuation? An empirical analysis. *Corporate Governance: An International Review*, 14(5) : 432-445.

Gordon, J. N.1989. The mandatory structure of corporate law. *Columbia Law Review*, 89: 1549.

Hall, P. A, & Gingerich, D. W. 2009.Varieties of capitalism and institutional complementarities in the political economy: An empirical analysis. *British Journal of Political Science*, 39: 449-482.

Hart, O. 1995. Corporate governance: some theory and implications. *The Economic Journal*, 105(430): 678-689.

Hilbe, J.M. 2007. *Negative binomial regression*. Cambridge: Cambridge University Press.

Hirschman, A.O. 1970. *Exit, voice and loyalty: Responses to decline in firms, organizations and states,* Cambridge, MA: Harvard University Press.

Holderness, C. 2009. The myth of diffuse ownership in the United States. *The Review of Financial Studies*, 22(4): 1377-1408.

Hopt, K. 2011. Comparative corporate governance: The state of the art and international regulation. *The American Journal of Comparative Law*, 59(1): 1-73.

Jensen, M. C., & Meckling, W. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3: 305-360.

Khanna, T., & Rivkin, J. W. 2001. Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22(1): 45-74.

Kolbe, R. & Burnett, M. 1991.Content-analysis research: An examination of applications with directives for improving research reliability and objectivity. *Journal of Consumer Research*, 18(2): 243-250.

Kraakman, R., Davies, P., Hansmann, H., et al. 2004 (Eds.) *The anatomy of corporate law: A comparative and functional approach*. Oxford: Oxford University Press.

La Porta, R., López-de-Silanes, F., & Shleifer, A. 1998. Law and finance. *Journal of Political Economy*, 106(6): 1113-1155.

Larcker, D. F., Ormazabal, G., & Taylor, D. 2011. The market reaction to corporate governance regulation. *Journal of Financial Economics*, 101:431-448.

Levine, R. 2004. The corporate governance of banks: a concise discussion of concepts and evidence. *Policy Research Paper Series 3404*, The World Bank.

Mallette, P., & Fowler, K.L. 1992. Effects of board composition and stock ownership on the adoption of poison pills. *Academy of Management Journal*, 35: 1010-1035.

Malloy, T.F. 2003. Regulation, compliance, and the firm. *Temple Law Review*, 76(3): 451-531.

McLeod, R.S. 1999. Crisis-driven changes to the banking laws and regulations. *Bulletin of Indonesian Economic Studies*, 35(2): 147-154.

Mehran, H., & Peristiani, S. 2010. Financial visibility and the decision to go private. *The Review of Financial Studies*, 23(2): 519-547.

Mitchell, R.B. 2007. Compliance theory: Compliance, effectiveness, and behavior change in international environmental law. In J. Brunee, D. Bodansky, & E. Hey (Eds.) *Oxford Handbook of International Environmental Law*: 893-921. Oxford: Oxford University Press.

Neuendorf, K.A. 2002. *The content analysis guidebook*. London: Sage Publications Ltd.

Pedersen, T., & Thomsen, S. 2003. Ownership structure and value of the largest European firms: The importance of owner identity. *Journal of Management and Governance*, 7: 27-55.

Philippe, D., & Durand, R. 2011. The impact of norm-conforming behaviors on firm reputation. *Strategic Management Journal,* 32(9): 969-993.

Porter, M. 1992. Capital disadvantages: America's failing capital investment system. *Harvard Business Review*, September-October, 65-82.

Pound, J. 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics*, 20: 237-266.

Rediker, K.J., & Seth, A. 1995. Boards of directors and substitution effects of alternative governance mechanisms. *Strategic Management Journal*, 16: 85-99.

Roe, M. J. 1994. *Strong managers, weak owners: The political roots of American corporate finance*. Princeton, NJ: Princeton University Press.

Strine, L. E. 2006. Toward a true corporate republic: A traditionalist response to Bebchuk's solution for improving corporate America. *Harvard Law Review*, 119: 1759-1783.

Thornton, P. H., & Ocasio, W. 2008. Institutional logics. In R. Greenwood, C. Oliver, S. Andersen, & R. Suddaby (Eds.) *The Sage Handbook of Organizational Institutionalism*: 99-129. Thousands Oaks, CA: Sage Publications.

Tuschke, A., & Sanders, G. 2003. Antecedents and consequences of corporate governance reform: The case of Germany. *Strategic Management Journal*, 24: 631-649Villalonga, B., & Amit, R. 2006. How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2): 385-417.

Tyler, T.R. 1990. *Why people obey the law*. New Haven, CT: Yale University Press.

Verrecchia, R. E. 1983. Discretionary disclosure. *Journal of Accounting and Economics*, 12: 179-194.

Villalonga, B., & Amit, R. 2006. How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2): 385-417.

Yiu, D.W., Lu, Y., Bruton, G.D. & Hoskisson, R.E. 2007. Business groups: An integrated model to focus future research. *Journal of Management Studies*, 44(8): 1551-1579.

Young, M.N., Peng, M.W, Ahlstrom, D., Bruton, G. D, & Jiang, Y. 2008. Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies*, 45(1): 196-220.