

# Corporate governance and Ownership Concentration in Brazil

## Abstract

Shareholders look for a qualified Corporate Governance system able to protect them from malicious top managers and align interests of both. In this vein, ownership concentration is seen as able to strengthen shareholders and mitigate the principal-agent conflict. This is the picture in markets with diffuse firm ownership. Nonetheless, in markets characterized by highly concentrated ownership and a few large controlling blockholders, the principal-principal conflict seems to be the main agency problem. This is the situation in developing and emerging economies, where large controlling blockholders may be powerful enough, not only to easily align managers' and their interests, but also impose their interests over minority shareholders. In this scenario, large controlling blockholders might not be interested in very good corporate governance practices. For a balanced panel data of Brazilian firms in the period 2010-2013 the results suggest that ownership concentration is detrimental to corporate governance quality in Brazil. Indeed, the inverse effect of ownership concentration on corporate governance quality proposes that large controlling shareholders may be interested in the use of private benefits of control. Another important finding is the adverse effect of ownership concentration on the quality of the board composition which signals that large controlling shareholders are possibly taking over the monitoring function of the board.

**Keywords:** Corporate Governance, Ownership Concentration, Principal-Principal agency model.

## 1 INTRODUCTION

The importance of corporate governance to investors has spawned a number of efforts, both by regulatory institutions and by firms themselves, with the purpose to shape corporate governance systems that, effectively, are able to guarantee investors rights. The institutional and legal environment has specific corporate governance nuances according to the local rules (Chhaochharia & Laeven, 2009).

Although the role played by institutional environment on corporate governance, there is also an important heterogeneity of firm practices within national boundaries. This reality highlights the

relevance of studies about the voluntary adoption of best governance practices in specific markets (Aguilera & Jackson, 2003).

Advances in corporate governance rules in the Anglo-Saxon economies, characterized by lower ownership concentration, have pointed out the importance of the board of directors, highlighting its composition, independence, attributes and committees. In such contexts, the board is a central element in management monitoring and minimizing the principal-agent conflicts. On the other hand, the presence of a dominant shareholder, or a coalition of a few controlling ones, is very common worldwide. In this other environment, minority shareholders are the most interested in effective corporate governance systems. However, their interests may conflict with controlling shareholders. This is the core of the principal-principal problem that has been highlighted as an important theme to be studied (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008).

The role played by ownership structure on the quality of the corporate governance system has been analyzed in the literature. There is a trend to consider ownership structure as a factor that may influence the quality of the corporate governance system since shareholders are the most interested stakeholders in having their rights protected by such system, be them large or minority shareholders (Chen, Kao, Tsao, & Wu, 2007; Larcker, Richardson, & Tuna, 2007; Shleifer & Vishny, 1986, 1997). Under the principal-principal agency model theoretical perspective, concentrated ownership may become a relevant determinant of corporate governance system structure, mainly in developing economies (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008).

This work has the objective to assess whether ownership concentration affects the quality of the corporate governance system in the Brazilian market, an important emerging economy. In order to reach such purpose, an index for corporate governance quality is proposed and tested for a relevant sample of 85 listed Brazilian firms in the period 2010-2013. The index takes into account a set of good corporate governance practices that are beyond the ones required by the legal system.

Results show that voting ownership concentration has a negative impact on the quality of the corporate governance system in Brazil. Very high concentrated voting ownership actually leads to

weaken the corporate governance system. Such findings are in accordance with the expropriation and substitution effects that are present in the principal-principal agency model. The negative impact of ownership concentration on the board composition points out the reality that large shareholders of Brazilian firm tend to directly monitor management, substituting the board function.

## **2 THEORETICAL BACKGROUND AND HYPOTHESES**

The diversity of ownership structure among countries and related agency conflicts suggest that there is no unique agency model (principal-agent or principal-principal) that perfectly fits in all national contexts (Lubatkin, Lane, Collin, & Very, 2007; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008).

Literature has documented that large shareholders are, indeed, active in corporate governance (Kang & Shivdasani, 1995; Yafeh & Yosha, 2003). In this vein, two insightful proposals have received attention of research under the theoretical framework of the principal-principal agency conflict. First, dominant shareholders have incentives to maintain weak internal control system as a way to facilitate the use private benefits of control (expropriation argument) (Bozec & Bozec, 2007; Johnson, La Porta, Lopez-de-Silanes, & Shleifer, 2000; Shleifer & Vishny, 1997). Second, controlling shareholders, not relying completely on board monitoring function, have both the abilities and incentives to directly exert such duty, substituting the board function (Bozec & Bozec, 2007; Desai, Kroll, & Wright, 2005; Desender, Aguilera, Crespí-Cladera, & García-Cestona, 2013; Rediker & Seth, 1995).

### **2.1 Hypotheses rationale**

The expropriation hypothesis proposes that controlling shareholders could be prone to use their power to obtain private benefits of control, even against the interest of minority shareholders (La Porta, López-de-Silanes, Shleifer, & Vishny, 1999). The more concentrated voting ownership is, the easier it will be for controlling shareholders to use private benefits of control. In this vein, taking into account the reality of Brazil, characterized by high ownership concentration and the existence of private benefits of control that highlight the principal-principal agency problem (Dyck & Zingales, 2004), we propose the following hypothesis:

*Hypothesis 1: Ownership concentration has a negative impact on the quality of the corporate governance system of the Brazilian firm.*

Under the agency theory framework, corporate governance has the main purpose to align the interests of shareholders and managers. In this regard, shareholders assess the cost-benefit tradeoff of the corporate governance system in effectively monitoring management. The substitution hypothesis refers to the possibility that controlling shareholders assume this monitoring activity considering they prefer to exert control directly over management, rather than installing costly corporate governance systems to do it (Alchian & Demsetz, 1972; Rediker & Seth, 1995; Roe, 2006).

The previous evidence, along with the abovementioned situation of Brazilian market of high ownership concentration with a great number of firms with only one controlling shareholder (Leal, Carvalhal-da-Silva, & Valadares, 2002) motivates the following hypothesis.

*Hypothesis 2: High ownership concentration has a negative impact on the quality of the board composition.*

The separation between voting rights and cash flow rights is a reality in dual class stock structures. With the gap, or divergence, between cash flow rights and voting rights, controlling shareholders may widen their prevalent influence over the firm's decision-making process allowing the use of private benefits of control which may be detrimental to minority shareholders' rights (Claessens, Djankov, Fan, & Lang, 2002; Dyck & Zingales, 2004). As above mentioned, the presence of large shareholders is very common in Brazil, contributing to the presence of pyramidal ownership structures (Aldrighi & Mazzer Neto, 2005, 2007; Dyck & Zingales, 2004; Leal, Carvalhal-da-Silva, & Valadares, 2002), which leads to the proposition of the following hypothesis:

*Hypothesis 3: Excess control over cash flow rights has a negative impact on the quality of the corporate governance system.*

Literature has also explored the possible positive role played by the second and other large reference blockholders in challenging the control power of the dominant largest shareholder. In firms with no major blockholder, such challenging power may be beneficial to reduce the possibility of expropriation since the largest shareholder will need to cooperate with others to compose a coalition to control the firm. In this situation, the main blockholder faces a reduction in his/her private benefits of control. By cooperating for control, other controlling shareholders also exercise management

monitoring without having the private benefits of control. In this context, in a certain way, the main shareholder has his/her actions also monitored (Jiang & Peng, 2011; López-de-Foronda, López-Iturriaga, & Santamaría-Mariscal, 2007). This rationale leads to the proposition that the presence of large non major blockholders will benefit the corporate governance system as a way to guarantee their rights, in the following terms:

*Hypothesis 4: The proportion of ownership voting rights held by large blockholders, others than the main one, has a positive effect on the quality of the corporate governance system.*

### 3 SAMPLE AND METHOD

#### 3.1 Sample

Two sources of data have been used to compose our sample. The firm Reference Form available at CVM (*Comissão de Valores Mobiliários*) Web site, which contains data relative to firm corporate governance practices. Financial and ownership data have been collected from Economática. The sample is a balanced panel data relative to 85 firms, with 340 firm-year observations in the period 2010-2013. The sample is distributed among several sectors of the economy (Table 1).

**Table 1: Firms sample by industry**

Industry	N	%
Mining, metals and metal goods	16	4,71
Motor vehicles and parts, and other transport equipment	8	2,35
Wood, Paper and paper products	12	3,53
Communication and mídia	16	4,71
Textile, clothing, leather and footwear	12	3,53
Petroleum and fuel products	12	3,53
Food, drink and tobacco	24	7,06
Miscellaneous manufacturing industries	20	5,88
Electrical	72	21,18
Building and transportation	32	9,41
Bank and Financial services	44	12,94
Business sector services	20	5,88
Trade and retailing	20	5,88
Miscellaneous services	32	9,41
Total	340	100

#### 3.2 Method and models

##### 3.2.1 Corporate governance measurement

In spite of the growing research on corporate governance, measuring corporate governance quality is still a challenge (Aguilera & Desender, 2012; Ahrens, Filatotchev, & Thomsen, 2011; Black, Love, & Rachinsky, 2006; Larcker, Richardson, & Tuna, 2007).

A set of studies dealing with corporate governance system quality at the firm level have taken into account specific practices. Another group of works has proposed governance metrics, or indices, that comprise several corporate governance practices, trying to allow a more comprehensive view of the quality in different markets, including Brazil (Correia, Amaral, & Louvet, 2011; Dey, 2008; Gompers, Ishii, & Metrick, 2003; Klein, Shapiro, & Young, 2005; La Porta, López-de-Silanes, Shleifer, & Vishny, 1999; Ntim, 2013; Silva & Leal, 2005; Silveira & Barros, 2008).

The metric used in this work integrates a set of good corporate governance practices, pointed out as relevant in the literature. These corporate governance practices are grouped into distinct dimensions, highlighted as relevant in Brazil by important market institutions following international trend (CVM, 2002; IBGC, 2009; PREVI, 2012): Stockholder; Shares; Board structure; Board composition; Board practices; Executive management; Firm disclosure; Auditing; Conflict management.

The annual firm Index of Corporate Governance Quality (ICGQ) has been calculated from the 28 corporate governance items considered. A score from zero to one has been set to each of the 28 firm items analyzed annually. The ICGQ is the average of all 28 items, varying from 0 to 1. A specific index for the quality of the board composition has also been measured comprising four items related specifically to the board composition: segregation of CEO and Chairman, proportion of external board members, proportion of independent board members, and minority shareholders representative.

### 3.2.2 Models and variables

We estimate econometric models that take into account the proposals of the expropriation and substitution hypotheses under the perspective of the principal-principal agency model. Model of equation (1) is used to assess the effect of ownership concentration on the quality of corporate governance system (ICGQ).

$$ICGQ_{i,t} = \beta_0 + \beta_1 OC_{i,t} + \beta_2 ROA_{i,t} + \beta_3 GOPP_{i,t} + \beta_4 SIZE_{i,t} + \delta_t + \alpha_i + \mu_{i,t} \quad (1)$$

Model of equation (2) has been estimated to measure the impact of ownership concentration over the quality of the board composition.

$$BOARDC_{i,t} = \beta_0 + \beta_1 OC_{i,t} + \beta_2 ROA_{i,t} + \beta_3 GOPP_{i,t} + \beta_4 SIZE_{i,t} + \delta_t + \alpha_i + \mu_{i,t} \quad (2)$$

BOARDC is the index for the quality of the board composition. BOARDC is calculated taking into account CEO duality, external board members, independent board members, and minority shareholders representation.

In both equation models (1) and (2),  $t$  refers to time period;  $i$  refers to firm;  $\delta_t$  is the error term related to time-specific effects;  $\alpha_i$  is the error term associated with firm-specific effects;  $\mu_{i,t}$  is the random error term.

Independent variable OC refers to the proxies used for ownership concentration characteristics: direct proportion of ownership concentration, the difference between control and cash flow rights, and voting ownership of contesting shareholders. Models have been estimated using OC measured by voting ownership concentration in hands of the main shareholder (VOC1), the three main (VOC3), and the five main voting shareholders (VOC5). Another group of models have been estimated for the difference between control and cash flow rights, also taking into account the difference of rights for the first, the three, and the five main shareholders (DIFFR1, DIFFR3, and DIFFR5). Finally, the role played by large blockholders in contesting the excess power of the main shareholder has also been assessed using other models with the voting ownership of contesters (sum of shares held by the second until the fifth largest blockholder). In this regard, we have also estimated models to evaluate such possible contesting power. To do so, such models have explanatory variables aimed at introducing ownership concentration in hands of such shareholders. Four variables have been defined for such purpose: OC2 standing for voting ownership held by the second largest shareholder, OC23 referring to ownership held by the second and third main shareholders, OC234 referring to ownership held by the second until the fourth largest shareholders together, and OC2345 standing for ownership held by the second until the fifth main shareholder together.

Relevant control variables pointed out in the literature have been introduced in the models: profitability, growth opportunities, firm size, and industry.

### 3.3.3 Econometric Method

Models have been estimated using panel data methodology, which allows the treatment of unobservable heterogeneity associated with fixed firm effects. Unobservable specific firm errors can be

eliminated from the equation through variable transformation by first differences (Arellano & Bover, 1995). Coefficients have been estimated using Generalized Method of Moments (GMM) system estimator (GMM-sys) that provides better estimators when the period of study is relatively short (Arellano & Bond, 1998; Blundell & Bond, 1998).

#### 4 RESULTS

Table 2 exhibits descriptive statistics of model variables. Sample firms has reached about 61% of corporate governance quality (ICGQ) and only 55% of board composition quality (BOARDC). It is worth mentioning the high ownership concentration documented which is in accordance with previous information from Brazil (Leal, Carvalhal-da-Silva, & Valadares, 2002; López-Iturriaga & Crisóstomo, 2010). Such voting ownership is 49.4% in hands of the main voting shareholder (VOC1) and reaches 70.7% in hands of the five main shareholders (VOC5). The low coefficient of variation highlights the homogeneity of firms in terms of high concentration. As can be seen, there is low voting ownership among the second up to the fifth largest shareholder, varying from 13.5% to 21.3% (OC2, OC23, OC234, OC2345).

**Table 2: Descriptive statistics**

Variable	Average	Median	Min	Max	Std Dev	Coefficient of Variation
ICGQ	0.611	0.611	0.273	0.882	0.099	0.161
BOARDC	0.555	0.551	0.036	0.904	0.148	0.267
VOC1	0.494	0.505	0.020	1.000	0.256	0.518
VOC3	0.674	0.708	0.020	1.000	0.246	0.364
VOC5	0.707	0.752	0.020	1.000	0.232	0.328
DIFFR1	0.097	0.000	-0.206	0.581	0.157	1.623
DIFFR3	0.104	0.000	-0.062	0.568	0.161	1.552
DIFFR5	0.096	0.000	-0.070	0.549	0.150	1.559
OC2	0.135	0.106	0.000	0.480	0.116	0.861
OC23	0.181	0.167	0.000	0,545	0.140	0.775
OC234	0.204	0.200	0.000	0,566	0.155	0.760
OC2345	0.213	0.216	0.000	0.579	0.161	0.756
ROA	0.110	0.094	-0.029	0.302	0.088	0.806
GOPP	1.789	1.391	0.053	8.718	1.479	0.827
SIZE	15.389	15.086	12.315	20.057	14.268	0.093

As can be observed in Table 4 (Panel A), as proposed in Hypothesis 1, the findings indicate that there is a negative effect of ownership concentration (VOC1, VOC3, VOC5) over corporate governance quality (ICGQ). This adverse influence signals that large shareholders, indeed, have a preference for weaker corporate governance.



**Table 4: The effect of ownership concentration on the quality of corporate governance practices and on the board composition**

	Panel A: Dependent variable: ICGQ			Panel B: Dependent variable: BOARDC		
	(i)	(ii)	(iii)	(i)	(ii)	(iii)
VOC1	-0.2470*** (0.079)			-0,2907** (0,126)		
VOC3		-0.2256* (0.124)			-0,5149** (0,219)	
VOC5			-0.2080*** (0.069)			-0,5770*** (0,215)
ROA	0.0823 (0.153)	0.0492 (0.176)	-0.0465 (0.068)	0,4888 (0,665)	0,0786 (0,339)	0,0545 (0,278)
GOPP	-0.0117 (0.010)	-0.0113 (0.007)	-0.0071 (0.007)	0,0284 (0,040)	0,0236 (0,027)	0,0185 (0,021)
SIZE	0.0132 (0.026)	0.0213 (0.029)	0.0139 (0.016)	0,0811 (0,071)	0,0166 (0,041)	0,0213 (0,043)
Intercept	0.5128 (0.425)	0.3913 (0.429)	0.4873* (0.282)	-0,7277 (1,211)	0,6163 (0,647)	0,6037 (0,637)
N. Obs.	340	340	340	340	340	340
N. Firms	85	85	85	85	85	85
F	6.69	7.89	7.6	2,66	2,89	3,82
p-value	0	0	0	0,001	0	0
AR2	0.481	0.344	0.551	0,111	0,104	0,152
Hansen	16.28	12.13	32.76	3,53	7,75	6,71
p-value	0.699	0.735	0.429	0,74	0,859	0,917

\*\*\*, \*\*, and \* denote statistical significance of the coefficients at 1, 5, and 10% levels.

Table 4 (Panel B) exhibits important findings that reveal an effective negative influence of ownership concentration over the quality of the board composition (BOARDC). Such detrimental effect has been detected for the negative relation between ownership concentration (VOC1, VOC3, VOC5) and the index relative to the quality of the board composition (BOARDC). This result is in accordance with the proposition that large controlling shareholders, indeed, weaken the board composition and exert management monitoring directly.

The examination of the relation between the divergence of control over cash flow rights (DIFFR1, DIFFR3, DIFFR5) and the quality of the corporate governance practices (ICGQ) is worth mentioning. As can be observed in Table 5 (Panel A), the difference between control and cash flow rights of the main shareholder (DIFFR1) has shown to affect negatively the quality of the corporate governance system while the difference of the three (DIFFR3) and five main shareholders (DIFFR5) do not affect corporate governance practices. This finding shows that, indeed, the high degree of control rights in hands of the main shareholder is negative to corporate governance at the same time that such control, diluted among multiple large shareholders, seems to be not so detrimental to corporate governance.

The scrutiny of the relation between the divergence of control over cash flow rights (DIFFR1, DIFFR3, DIFFR5) and the quality of the board composition (BOARDC) has shown a similar effect to that obtained over the quality of corporate governance as can be seen in (Table 5, Panel B). The divergence of control rights over cash flow rights has shown that the higher the control rights exerted by the main shareholder, the weaker the board composition (BOARDC) is. The negative effect has not been found for difference in rights documented for the three main shareholders (DIFFR3), and the five main shareholders (DIFFR5). That is an indication that high degree of control rights in hands of the main voting shareholder is, effectively, negative to the board composition. Large controlling blockholders, mostly the dominant one, are not interested in the presence of external and independent board members.

**Table 5: Effect of the difference between control and cash flow rights on Corporate Governance**

	Panel A: Dependent variable: ICGQ			Panel B: Dependent variable: BOARDC		
DIFFR1	-0.3408 ** (0.157)			-0,5285 * (0,278)		
DIFFR3		-0.1935 (0.153)			-0,2944 (1,866)	
DIFFR5			-0.0103 (0.134)			1,0544 (1,021)
ROA	-0.0483 (0.129)	-0.0934 (0.167)	-0.0824 (0.055)	-0,1375 (0,198)	-1,6299 (2,800)	-2,1717 (1,414)
GOPP	-0.0197 *** (0.006)	-0.0187 *** (0.007)	-0.0095 (0.007)	0,0025 (0,021)	0,0668 (0,093)	0,0635 (0,055)
SIZE	0.0100 (0.029)	0.0018 (0.028)	-0.0183 (0.026)	0,0141 (0,046)	-0,0831 (0,175)	-0,1968 (0,142)
Intercept	0.4773 (0.466)	0.5822 (0.450)	0.8469 * (0.397)	0,3904 (0,729)	1,8761 (2,890)	3,7066 (2,351)
N. Obs.	340	340	340	340	340	340
N. Firms	85	85	85	85	85	85
F	8.95	5.2	5.27	2,07	0,83	1,74
p-value	0	0	0	0,011	0,668	0,043
AR2	0.645	0.748	0.94	0,196	0,579	0,782
Hansen	14.83	13.05	27.06	14,26	0,78	3,22
p-value	0.786	0.875	0.253	0,817	0,941	0,864

\*\*\*, \*\*, and \* denote statistical significance of the coefficients at 1, 5, and 10% levels.

The hypothesis about the contesting power of reference shareholders, others than the main one, has also been tested through additional variations of equation model (1). Results on Table 6 show that ownership concentration in hands of large shareholders other than the main blockholder (OC2, OC23, OC234, OC2345), has a positive effect on the quality of the corporate governance practices (Table 6,

models 1, 3, 5, 7). This is an indication that the presence of other large shareholders is able to contest the power of main shareholder, forcing him/her to cooperate with other shareholders to maintain firm control. However, the negative effect of ownership held by the largest shareholder, previously documented (Table 4, Panel A), seems to be stronger enough to get over that positive influence of contesting shareholders. This is the result that can be seen in the models that introduce both the voting ownership held by the main shareholder (VOC1) and the ownership in hands of the second until the fifth shareholder (OC2, OC23, OC234, OC2345) (Table 6, models 2, 4, 6, 8). In such model estimations the negative influence of ownership in hands of the main voting shareholders (VOC1) highlights as negative the contesting power loses its significance.

The findings on Table 7 show that the contesting power from shareholders over the main blockholder is not beneficial to the quality of the board composition since no significant effect has been detected for ownership in hands of large shareholders other than the main blockholder (OC2, OC23, OC234, OC2345) over the quality of the board composition (Table 7, models 1, 3, 5, 7). Nonetheless, the negative influence of voting power held by the main blockholder over the quality of the board composition has been once again confirmed in these additional models (Table 7, models 2, 4, 6, 8).

These additional findings provide more robustness to results on the negative effect of high ownership voting concentration over the quality of corporate governance and board composition.

**Table 6**  
**Effect on corporate governance quality (ICGQ) by the contest for control exercised by second until the fifth main voting shareholders**

	(i) Contest: OC2		(ii) Contest: OC23		(iii) Contest: OC234		(iv) Contest: OC2345	
Model estimation:	1	2	3	4	5	6	7	8
Contest	0,1932 ** (0,094)	-0,0131 (0,134)	0,1645 ** (0,065)	-0,0251 (0,137)	0,1577 ** (0,073)	-0,0046 (0,118)	0,1663 * (0,084)	-0,0030 (0,120)
VOC1		-0,3090 *** (0,097)		-0,3267 *** (0,101)		-0,2893 *** (0,090)		-0,2868 *** (0,092)
ROA	0,5896 * (0,307)	0,2736 (0,277)	0,6286 ** (0,279)	0,2849 (0,260)	0,5613 ** (0,270)	0,1961 (0,220)	0,5347 * (0,285)	0,1660 (0,230)
GOPP	-0,0162 (0,011)	0,0040 (0,012)	-0,0160 (0,011)	0,0066 (0,011)	-0,0149 (0,014)	0,004 (0,010)	-0,0145 (0,014)	0,0037 (0,010)
SIZE	-0,0229 (0,043)	0,0338 (0,033)	-0,0134 (0,032)	0,0220 (0,021)	-0,0066 (0,031)	0,0278 (0,024)	-0,0063 (0,030)	0,0289 (0,027)
N. obs.	340	340	340	340	340	340	340	340
N. firms	85	85	85	85	85	85	85	85
F	207,25	210,73	271,35	146,61	237,35	110,17	212,62	95,09
p-value	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
AR(2)	0,157	0,515	0,255	0,492	0,321	0,546	0,331	0,556
Hansen	6,67	12,62	4,36	13,24	2,33	11,99	2,25	11,49
p-value	0,353	0,319	0,628	0,278	0,887	0,365	0,895	0,403

Dependent variable: ICGQ (index for Corporate Governance Quality). Contest is cumulated ownership held from the second up to the fifth main shareholder (OC2, OC23, OC234, OC2345). VOC1 = ownership concentration held by the main shareholder. ROA = Return on Assets. GOPP = firm growth opportunities (Tobin's Q). SIZE = firm size (Ln of total assets). Models are estimated by two step system generalized method of moments (GMM). Estimated coefficients and standard errors (in parentheses) are robust to heteroskedasticity. \*\*\*, \*\*, and \* denote statistical significance of the coefficients at 1, 5, and 10% levels.

**Table 7**  
**Effect on board composition (BOARDC) by the contest for control exercised by second until the fifth main voting shareholders**

	(i) Contest: OC2		(ii) Contest: OC23		(iii) Contest: OC234		(iv) Contest: OC2345	
Model estimation:	1	2	3	4	5	6	7	8
Contest	0,0935 (0,259)	-0,2017 (0,208)	-0,0287 (0,290)	-0,2227 (0,190)	-0,0319 (0,218)	-0,2769 (0,214)	-0,0642 (0,239)	-0,3242 (0,251)
VOC1		-0,2332 ** (0,106)		-0,3076 * (0,159)		-0,3768 ** (0,156)		-0,4211 *** (0,158)
ROA	0,0727 (0,843)	0,0442 (0,099)	-0,0710 (0,904)	-0,0783 (0,751)	0,2884 (0,366)	0,1867 (0,496)	0,3108 (0,368)	0,2655 (0,447)
GOPP	-0,0168 (0,050)	-0,0034 (0,009)	0,0027 (0,051)	0,0194 (0,039)	0,0248 (0,035)	0,0097 (0,035)	0,0235 (0,036)	0,0134 (0,038)
SIZE	-0,0068 (0,072)	-0,0062 (0,032)	-0,0191 (0,070)	0,035 (0,058)	0,0061 (0,065)	0,0339 (0,058)	-0,0043 (0,068)	0,0333 (0,058)
N. obs.	340	340	340	340	340	340	340	340
N. firms	85	85	85	85	85	85	85	85
F	44,32	47,20	49,47	49,48	38,14	28,35	46,25	20,26
p-value	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
AR(2)	0,170	0,108	0,122	0,110	0,113	0,148	0,125	0,149
Hansen	17,73	30,31	14,97	12,03	3,82	14,47	3,92	13,95
p-value	0,124	0,502	0,243	0,361	0,923	0,633	0,917	0,671

Dependent variable: BOARDC (index for the quality of the board composition).

Contest is cumulated ownership held from the second up to the fifth main shareholder (OC2, OC23, OC234, OC2345). VOC1 = ownership concentration held by the main shareholder. ROA = Return on Assets. GOPP = firm growth opportunities (Tobin's Q). SIZE = firm size (Ln of total assets). Models are estimated by two step system generalized method of moments (GMM). Estimated coefficients and standard errors (in parentheses) are robust to heteroskedasticity. \*\*\*, \*\*, and \* denote statistical significance of the coefficients at 1, 5, and 10% levels.

## **5 CONCLUSIONS**

This work has advanced research on the role played by ownership concentration over corporate governance by studying the Brazilian market, an important emerging market where the protection for minority shareholders are not yet adequate and the principal-principal conflict tend to be more prominent.

The findings reveal that ownership concentration is relevant for the worse quality of the corporate governance system. The documented adverse effect of ownership concentration on corporate governance is an important signal that large controlling blockholders of Brazilian firm may be interested in the use private benefits of control at the expense of minority shareholders in line with the expropriation hypothesis. Another crucial finding is the negative effect of ownership concentration on the quality of the board composition. That is a meaningful signal that ownership concentration acts as an internal control mechanism in the Brazilian firm. Large controlling blockholders are not interested in independent and qualified board and. Another attractive result is the positive effect of ownership held by large shareholders, other than the main one, on the quality of the corporate governance. That signals a bit of power sharing and the need for the composition of coalition for control which helps to contest the power of the largest blockholder. However, this contestability power seems to disappear in firms with high concentrated ownership held by the main blockholder, usually a major one that in Brazil.

We believe that this study contributes to the studies on corporate governance by discussing how the different interests of shareholders can be reflected in the quality of corporate governance of the Brazilian company. Besides, the risk of expropriation indicated by ownership concentration, although already addressed in the international literature, is still little explored in Brazil. It is also noteworthy the proposal of an index that measures the quality of corporate governance (IQGC).

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