PRIVATE EQUITY AND CORPORATE GOVERNANCE IN BRAZIL

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Abstract

This work studies how the activism of institutional investors, specifically private equity funds, influences the development of corporate governance in Brazil. We analyze the control and ownership structure of Brazilian publicly listed companies in order to identify the presence of private equity funds as shareholders. Corporate governance is evaluated through three alternative proxies: a broad governance index, listing on Novo Mercado and presence of American Depositary Receipts (ADRs). Our results indicate a positive influence of private equity funds on the quality of corporate governance practices in Brazil. Firms with private equity tend to have better governance index, and list more on Novo Mercado. There is a moderate relation between the stake of private equity in a company and ADR listing.

Keywords: Corporate Governance, Private Equity, Brazil

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1 Introduction

Corporate governance has been vastly studied in different countries. In Brazil, there has been a big evolution in governance practices, in part because of globalization, privatization, and the entrance of new market participants, specially foreign and institutional investors, which resulted in a corporate environment more competitive.

The role of institutional investors as active shareholders is crucial to better corporate governance, because these investors have greater motivation to improve governance because the costs of active monitoring are supplanted by the larger scale of benefits. When there is activism by these institutions, they use their power of influence to participate in the decision-making of companies.

Studies on the role of institutional investors have been important in explaining the development of corporate governance (Black (1992, 1998), Coffee (1993), Chidambaran and John (1998), Gillan and Starks (1998, 2003), Carleton, Nelson and Weisbach (1998), Giannetti and Laeven (2009), and Aggarwal et al. (2011)).

Aggarwal et al. (2011) show that institutional investors promote good governance practices in 23 countries, especially those with poor legal protection. Mallin (2008) highlights the importance of institutional equity investors to improve corporate governance in the US and UK. Smith (1996) finds evidence that shareholder activism changes governance structures and increases shareholder value. Brav et al. (2008) find that the activism of hedge funds can reduce agency cost in investee companies and create value. Rubach and Sebora (2009) show that

institutional shareholders actively monitor companies to improve portfolio returns.

An important class of institutional investors is the private equity (PE). In order create value in investee companies, PEs usually encourage the adoption of best governance practices. As a result, PEs can expect higher prices in the sale of investee companies. Some studies have been conducted in order to verify the relationship between PE and corporate governance. Masulis and Thomas (2008) analyze five theories on governance improvements by PE: a) reduction of misuse of cash flows by focusing on more efficient operations; b) realignment of incentives to improve performance; c) increasing the performance incentive of managers; d) improving monitoring of management; and e) replacement of inefficient management.

There have been many studies on the relationship between institutional investors and corporate governance in different countries, but there are only a few studies in Brazil. Moreover, studies on activism of institutional investors in Brazil have found some inconclusive results. Oliveira (2005) and Crisostomo and Gonzalez (2006) does not find significant relation between the activism of pension funds the quality of governance of investee companies, whereas Punsuvo, Kayo and Barros (2007) find a negative relation between pension funds and corporate governance.

This work analyzes the activism of PE and its relation with corporate governance in Brazil. We analyze the control and ownership structure of Brazilian publicly listed companies in order to identify the presence of private equity funds as shareholders. Corporate governance is evaluated through three alternative proxies: a broad governance index, listing

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on Novo Mercado and presence of American Depositary Receipts (ADRs).

Our results indicate a positive influence of private equity funds on the quality of corporate governance practices in Brazil. Firms with PE tend to have better governance index, and list more on Novo Mercado. The larger the capital held by PE the higher the governance index and the probability of NM listing. There is no significant relation between ADR and PE, however there is some evidence that the voting and total stake of PE has positive effect on ADR listing.

This paper is structured as follows. The next section presents the data and methodology. Section 3 shows the results of the empirical analysis, whereas Section 4 discusses the main findings and concludes the research.

2 Data and methodology

Our sample includes 649 companies (54 of which have PE as shareholders) listed on Sao Paulo stock exchange from 2002 to 2009. The information of the ownership structure and on the percentage of voting

and total shares held by PE comes from the Brazilian Securites Commission (CVM).

Corporate governance is evaluated through three alternative variables: CGI (governance index of Leal and Carvalhal (2007)), NM (listing on Novo Mercado, a special governance segment created by the Sao Paulo stock exchange) and ADR (presence of American Depositary Receipts). This information come from CVM and Sao Paulo stock exchange. We also collect financial and accounting data from Economatica database.

The first analysis we perform is a test of differences in mean and median to check if there are differences between firm with and without PE. We split the companies into two groups - companies with and without PE – and check if the governance, financial and accounting variables are significantly different between them.

Then, we run fixed-effects panel regression models to analyze the relation between CGI and the presence of PE, and probit models to analyze the relation between NM and ADR and PE. The equations used in the models are as follows:

$$CGI_{i,t} = \beta_0 + \beta_1 P E_{i,t} + \beta_2 P E V_{i,t} + \beta_3 P E T_{i,t} + \beta_4 V_{i,t} + \beta_5 V / T_{i,t} + \beta_6 P / B_{i,t} + \beta_7 R O A_{i,t} + \beta_8 L E V_{i,t} + \beta_9 S I Z E_{i,t} + \varepsilon_{i,t}$$
(1)

$$NM_{i,j} = \beta_0 + \beta_1 P E_{i,t} + \beta_2 P E V_{i,t} + \beta_3 P E T_{i,t} + \beta_4 V_{i,t} + \beta_5 V / T_{i,t} + \beta_6 P / B_{i,t} + \beta_7 R O A_{i,t} + \beta_8 L E V_{i,t} + \beta_9 S I Z E_{i,t} + \varepsilon_{i,t}$$
(2)

$$ADR_{i,t} = \beta_0 + \beta_1 P E_{i,t} + \beta_2 P E V_{i,t} + \beta_3 P E T_{i,t} + \beta_4 V_{i,t} + \beta_5 V / T_{i,t} + \beta_6 P / B_{i,t} + \beta_7 R O A_{i,t} + \beta_8 L E V_{i,t} + \beta_9 S I Z E_{i,t} + \varepsilon_{i,t}$$
(3)

CGI is the index of Leal and Carvalhal (2007), NM is a dummy variable that equals 1 if the firm is listed on Sao Paulo stock exchange's Novo Mercado, ADR is a dummy variable that equals 1 if the firms has American Depositary Receipts, PE is a dummy variable that equals 1 if the firm has private equity as shareholders, PEV is the percentage of voting shares owned by PEs, PET is the percentage of total shares owned by PEs, V is the percentage of voting shares owned by the largest shareholder, V/T is the ratio of voting to total shares owned by the largest shareholder, P/B is the price-to-book ratio, ROA is the return on assets (ratio of operating income to total assets), Lev is firm leverage (ratio of total non-equity liabilities to total assets), and Size is the natural logarithm of total assets.

3 Empirical results

Table 1 shows the descriptive statistics of the variables used in the study. In our sample, 2% of the companies have PE as shareholders, which have on average 21% of the voting and total capital of the company. On average, there is a great concentration of capital (62% of the votes with the majority

shareholder) and strong separation between voting and cash flow (1.4 votes per share).

Brazilian firms have moderate governance practices, since the average CGI is 4.5 (out of 10), 40% of companies are listed on Novo Mercado and only 10% list ADRs in the US. It is noteworthy that there is a large dispersion of the quality of governance among companies (CGI ranging from 0.75 to 8.75). Regarding the other variables, companies have moderate leverage (66%), P/B (1.07) and ROA (10%).

Table 2 compares the characteristics of firms according to the presence of PE. The results indicate that firms with PE have better governance. The mean and median CGI is higher for companies with PE (6.22 and 6.38 respectively) when compared with companies without PE (4.45 and 4.25 respectively), and the differences are statistically significant at 1%. Moreover, firms with PE tend to list more on Novo Mercado than firms without PE (81% versus 39%, respectively). Regarding ADR listing, we find no significant difference between both groups. We also can note that firms with PE are larger and have higher value, less leverage, lower control concentration and less separation between voting and total capital.

Table 1. Descriptive statistics of variables

Descriptive statistics of variables used in the study. The description of the variables can be seen in Section 2.

Variable	Average	Median	Std Dev	Min	Max
CGI	4.51	4.25	1.66	0.75	8.75
NM	0.41	0.00	0.49	0.00	1.00
ADR	0.10	0.00	0.30	0.00	1.00
LEV	0.66	0.64	0.30	0.00	2.05
P/B	1.07	0.82	1.17	-3.65	5.67
ROA	0.10	0.11	0.11	-0.36	0.56
SIZE	8.87	8.95	1.00	4.25	11.85
V	62.3	60.8	27.25	2.03	100.00
V/T	1.42	1.12	0.59	0.40	4.30
PE	0.02	0.00	0.15	0.00	1.00
PEV	21.43	11.86	26.72	0.00	100.00
PET	21.88	13.37	23.07	0.00	100.00

Table 2. Comparison of companies with and without private equity

Average and median of firm characteristics according to the presence of PE as shareholders. The description of the variables can be seen in Section 2.

	Average			Median		
	Without PE	With PE	P-value	Without PE	With PE	P-value
CGI	4.45	6.22	0.00	4.25	6.38	0.00
NM	0.39	0.81	0.00	0.00	1.00	0.00
ADR	0.10	0.10	0.91	0.00	0.00	0.93
LEV	0.66	0.53	0.00	0.64	0.54	0.00
P/B	1.05	1.60	0.00	0.81	1.30	0.00
ROA	0.10	0.08	0.09	0.11	0.08	0.01
SIZE	8.86	9.04	0.05	8.94	9.24	0.00
V	62.84	51.28	0.00	61.65	50.03	0.00
V/T	1.42	1.30	0.02	1.14	1.00	0.01
PE	0.00	1.00	NA	0.00	1.00	0.00
PEV	0.00	21.43	0.00	0.00	11.86	0.00
PET	0.00	21.88	0.00	0.00	13.37	0.00

Table 3 shows the correlation between the variables. Similar to the results of Table 2, firms with PE are positively correlated with governance practices (CGI and NM), firm value, and negative correlated

with leverage and ownership concentration. There is no correlation between PE investment, ADR, ROA, firm size and control/ownership separation.

Table 3. Correlation matrix

Correlation matrix for the variables used in the study. The description of the variables can be seen in Section 2.

Variable	CGI	NM	ADR	LEV	P/B	ROA	SIZE	V	V/T	PE	PEV	PET
CGI	1.0											
NM	0.7	1.0										
ADR	0.2	0.0	1.0									
LEV	-0.2	-0.1	0.1	1.0								
P/B	0.4	0.3	0.0	-0.2	1.0							
ROA	0.2	-0.1	0.1	-0.1	0.3	1.0						
SIZE	0.4	0.0	0.4	0.0	0.3	0.3	1.0					
V	-0.3	-0.3	0.0	0.0	-0.1	0.0	0.0	1.0				
V/T	-0.2	-0.3	0.1	0.1	-0.1	0.0	0.0	0.1	1.0			
PE	0.2	0.2	0.0	-0.1	0.1	0.0	0.0	-0.1	0.0	1.0		
PEV	0.1	0.1	0.0	-0.1	0.1	0.0	0.0	0.0	-0.1	0.6	1.0	
PET	0.1	0.1	0.0	-0.1	0.1	0.0	0.0	0.0	-0.1	0.7	1.0	1.0

Table 4 presents the regression of the fixedeffects panel regressions for CGI. The presence of PE is positively related to good governance practices. The larger the capital held by PE the better corporate governance. All results are positive and statistically significant at 1%. There is a positive relation between governance, firm size and value, and a negative relation with leverage, control concentration, and separation between voting and cash flow.

Table 4. Corporate Governance Index and private equity

Fixed-effects panel regressions using CGI as dependent variable. The description of the variables can be seen in Section 2. The p-value for each variable is reported in parentheses. ***, ** and * indicate statistical significance at 1%, 5% and 10%, respectively.

Variables	I	II	III	IV	V	VI
PE	1.77***	1.08***				
	(0.00)	(0.00)				
PEV			0.03***	0.03***		
			(0.00)	(0.00)		
PET					0.04***	0.04***
					(0.00)	(0.00)
V		-0.02***		-0.02***		-0.02***
		(0.00)		(0.00)		(0.00)
V/T		-0.36***		-0.35***		-0.35***
		(0.00)		(0.00)		(0.00)
P/B		0.30***		0.30***		0.30***
		(0.00)		(0.00)		(0.00)
ROA		-0.30		-0.36		-0.34
		(0.41)		(0.32)		(0.35)
LEV		-0.71***		-0.72***		-0.72***
		(0.00)		(0.00)		(0.00)
SIZE		0.74***		0.74***		0.74***
		(0.00)		(0.00)		(0.00)
\mathbb{R}^2 adj	0.04	0.36	0.02	0.37	0.02	0.37

Table 5. Novo Mercado Listing and private equity

Probit regressions using NM as dependent variable. The description of the variables can be seen in Section 2.The p-value for each variable is reported in parentheses. ***, ** and * indicate statistical significance at 1%, 5% and 10%, respectively.

Variables	I	II	III	IV	V	VI
Constant	-0.27***	-0.08	-0.24***	-0.10	-0.25***	-0.09
	(0.00)	(0.89)	(0.00)	(0.87)	(0.00)	(0.88)
PE	1.13***	1.16***				
	(0.00)	(0.00)				
PEV			0.02***	0.02***		
			(0.00)	(0.00)		
PET					0.03***	0.03***
					(0.00)	(0.00)
V		-0.01***		-0.01***		-0.01***
		(0.00)		(0.00)		(0.00)
V/T		-0.38***		-0.36***		-0.36***
		(0.00)		(0.00)		(0.00)
P/B		0.25***		0.26***		0.25***
		(0.00)		(0.00)		(0.00)
ROA		-1.86***		-2.07***		-2.05***
		(0.00)		(0.00)		(0.00)
LEV		-0.96***		-0.95***		-0.96***
		(0.00)		(0.00)		(0.00)
SIZE		0.13**		0.14**		0.14**
_		(0.05)		(0.04)		(0.04)
R ² McFadden	0.02	0.20	0.01	0.19	0.01	0.19

Table 5 shows the results of the probit regression models using NM as the dependent variable. The presence of PE is positively related to NM listing. The larger the capital held by PE the higher probability of NM listing. Moreover, all other variables are statistically significant at 1% or 5%. Firms that list on NM tend to be larger, more valued, riskier, less profitable, and have lower capital concentration and ownership/control separation.

Table 6 shows the results of the probit regression models using ADR as the dependent variable. There is no significant relation between ADR and PE, however there is some evidence that the voting and total stake of PE has positive effect on ADR listing. The larger the capital held by PE the higher probability of ADR listing. Firms that list ADRs tend to be larger, more profitable, and have higher ownership/control separation.

Table 6. American Depositary Receipt Listing and private equity

Probit regressions using ADR as dependent variable. The description of the variables can be seen in Section 2. The p-value for each variable is reported in parentheses. ***, ** and * indicate statistical significance at 1%, 5% and 10%, respectively.

Variables	I	II	III	IV	V	VI
Constant	-1.27***	-13.21***	-1.28***	-13.27***	-1.29***	-13.33***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
PE	-0.02	0.15				
	(0.91)	(0.59)				
PEV			0.01	0.01**		
			(0.18)	(0.03)		
PET					0.01*	0.02**
					(0.10)	(0.02)
V		0.00		0.00		0.00
		(0.46)		(0.64)		(0.66)
V/T		0.27***		0.29***		0.29***
		(0.00)		(0.00)		(0.00)
P/B		-0.07		-0.07		-0.08
		(0.28)		(0.26)		(0.23)
ROA		3.17***		3.41***		3.45***
		(0.00)		(0.00)		(0.00)
LEV		-0.14		-0.11		-0.13
		(0.70)		(0.77)		(0.73)
SIZE		1.17***		1.18***		1.18***
		(0.00)		(0.00)		(0.00)
R ² McFadden	0.00	0.31	0.00	0.32	0.00	0.32

4 Conclusions

There are many studies on the activism by institutional investors to enhance governance practices in different countries, but the research of this topic in Brazil is scarce. This paper analyses the activism of private equity (PE) in 649 Brazilian companies (54 of which have PE as shareholders) from 2002 to 2009.

Our goal is to evaluate if the presence of PE in a company improves its governance. We measure corporate governance in three ways: CGI (governance index of Leal and Carvalhal (2007)), NM (listing on Novo Mercado, a special governance segment created by the Sao Paulo stock exchange) and ADR (presence of American Depositary Receipts).

Our results indicate a positive effect of PE on governance practices. Firms with PE tend to have better governance index, and list more on Novo Mercado. The larger the capital held by PE the higher CGI and the probability of NM listing. There is no significant relation between ADR and PE, however there is some evidence that the voting and total stake of PE has positive effect on ADR listing.

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