Determinants of Differential Pricing of Equity Classes in the Brazilian Equity Market [1]

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Abstract

We examine the differential pricing of equity classes between voting and non-voting shares in Brazilian listed companies with particular emphasis on privatized companies, and we discuss the role of majority control, liquidity, and governance issues that may influence these differentials over time. We include a brief discussion on the Brazilian corporate law system, its impact on controlling and minority shareholders, and the characteristics of the Brazilian privatization process, before proceeding to the econometric analysis. We find empirical evidence to support that liquidity is a major component for determining this differential pricing over time. Other variables, such as the ratio of non-voting equity to total equity, type of majority control, and changes in regulation signal the high level of agency costs between majority controllers and minority shareholders in explaining the differential pricing of equity classes.

I.   Introduction

Two different equity classes with the same cash-flow rights but different voting rights should, in principle, convey to equal pricing; however, a series of empirical studies has confirmed that a premium exists for voting shares over non-voting shares. This premium averages from 5% up to 20% with countries with relatively good shareholder's protection (Kunz and Angel [1996]), while for countries with relatively poor shareholder's protection, the voting premium can vary from 46% in Israel (Levy (1982)) up to 82% in Italy (Zingales (1994)). In Brazil, contrary to most equity markets, voting shares were actually trading at a discount relative to non-voting shares adjusted to cash-flow rights. The voting discount has a median of 26% for the period of 1994 to 1998 for the 70 most liquid shares on the São Paulo exchange.

The voting premium serves as a proxy to indicate the level of (1) market for corporate control and (2) agency costs between controlling and minority shareholders. In the case of dispersed ownership (e.g. Anglo-Saxon companies), competition for control is intense, and marginal shareholders are crucial in transferring control. Further, the new shareholders are able to obtain the private benefits of control to justify the premium. On the other hand, if ownership is concentrated, marginal voting shareholders do not play any pivotal role in transferring control. In this case, the voting premium may turn out to be a discount.

The data available for Brazilian companies offers a research opportunity to investigate the reason for a voting discount. Minority shareholders in Brazil play a low-key role in the transfer of control, since shareholder concentration is high leading to a voting discount rather than a voting premium. We also discuss other possible determinants including liquidity preferences, ownership structure, and market segmentation. Amihud and Mendelson (1986) argue that investors take into consideration the liquidity premium in addition to the risk premium. In addition, the paper also investigates how change in the ownership structure of recently privatized companies may influence the voting discount. For instance, if a block of shareholders holds the majority of voting shares, we might have a more active market for corporate control, since marginal voting shareholders play a crucial role in determining control in case the group of controlling shareholders breaks up. The empirical results confirm the existence of a liquidity premium, but the increase of a market for corporate control is not significant.

Another key aspect in investigating the differential pricing between ordinary (voting) and preferred (non-voting) shares is the local regulation regarding share capital structure. Prior to May 1997, the candidate for controlling shareholder was required to make an offer to the remaining voting shareholders at a price not lower than its book value. After Law #9457 was enacted on May 5, 1997, the minimum tender offer was no longer required. The main rationale for this change was to allow the Government to sell off its controlling stakes in power and telecom companies without any likely lawsuits sponsored by minority shareholders. The empirical results in this paper support the hypothesis that the voting premium is significantly smaller for companies who have statutory amendments requiring a clear dividend payment to preferred shareholders.

This paper contributes to the existing literature in three ways. First, we review the legal institutions in Brazil and its impact on voting premium and corporate governance rules in the equity markets. Second, we analyze how privatization has impacted the value of control rights in Brazil. Third, we evaluate how corporate

governance rules may negatively effect minority shareholders as in the case of change in corporate law legislation that occurred in May 1997.

This paper is structured as follows. Section 2 provides some background on the legal structure of corporations in Brazil, the legal determinants of the composition of the shares with voting and non-voting powers, and the degree of protection it offers to shareholders against expropriation risks. This section also highlights some characteristics of the Brazilian privatization process. Section 3 presents the empirical results of our analysis. Section 4 presents our conclusions.

II.   Recent Changes in Brazilian Corporate Law

As pointed out by Shleifer and Vishny (1997), an essential element of corporate governance is the legal protection of investors' rights. In Brazil, publicly traded companies are required to be incorporated in the form of "Sociedade Anônima" (*SA*). This section provides some evidence on how the changes in the corporate law of May 1997 may have negatively affected the minority shareholders, and thus hurt the principle of "good" corporate governance. This section also provides a review of the privatization program.

II.1   Prior to May 1997

Law #6404 of December 15, 1976, the Corporate Law, governs the "Sociedade Anônima" (the corporation), as amended by Law #9457 of May 5, 1997. According to the Corporate Law, shares represent the capital stock and the shareholders' liability is limited to the amount of the issued share capital to which they have subscribed. Publicly traded "Sociedade Anônima" can sell its securities on the primary market which are subsequently traded on either the over-the-counter market or the local stock exchange, following registration at the Brazilian Securities and Exchange Commission ("Comissão de Valores Mobiliários").

The share capital of an *SA* may consist of ordinary (voting) shares and preferred (non-voting) shares. The maximum allowable preferred share participation in the company's share capital depends on (1) whether the controlling shareholder is a foreigner[1] and (2) whether the company is a financial institution as follows:

- Foreign Capital Law #4131/1962 prescribes that companies whose controlling shareholder is foreigner can only issue voting shares, where one share is one vote (Article 40); and
- Financial institutions can issue up to 50% of share capital in preference non-voting shares (Law 4595/64, article 25);

Corporations not subject to the above rules can have up to two-thirds of its shares as preferred non-voting shares.

Under this capital structure, Brazilian non-financial firms need to own 16.7% of the total share capital to control the corporation. The Corporate Law establishes a minimum dividend payment of 25% of net income[2]. If the company fails to distribute dividends for three years in a row (e.g. due to losses), preferred non-voting shareholders acquire full voting rights until the Company starts repaying dividends[3], although no minimum amount is specified.

II.2   May 1997 Amendments to the Corporate Law

To avoid likely lawsuits from minority shareholders, the Congress approved amendments to the Brazilian Corporate Law – known as Law #9457/1997 – in May 1997. Under this new legal framework, it was no longer required that the new controlling shareholder publicly offer a tender with the same terms to minority shareholders as those offered to the Government. This change has led to some opportunistic behaviors from large shareholders who could jeopardize minority shareholders.

To mitigate the impact on minority shareholders, the new regulation entitles preferred non-voting shareholders an additional 10% in dividends ("dividend premium") compared to those paid to ordinary voting shareholders. This requirement could not be applied to cases where the corporate charters specify the size and features of the dividend rights of preference shares.

However, the current main criticism against the Corporate Law is based on the expropriation against minority shareholders in the case of transfer of corporate control. Since the current legislation does not include a minimum payment to minority shareholders, nor can minority shareholders interfere in major decision at the shareholders' meeting, any decision related to a merger or to a share repurchase may lead to serious losses against minority shareholders.

In fact, the Brazilian capital markets have witnessed recent moves by controlling shareholders that could negatively affect minority shareholders. One example is the merger between DOC4 Participações S. A. (DOC4, the holding company) and Companhia Paulista de Força e Luz (CPFL), a power distribution company. DOC4 was at the time of merger the controlling shareholder of CPFL. By merging, DOC4 shareholders would benefit by the retained losses to apply against future profits as a tax shield scheme. However, minority shareholders would not get dividend payments, since expenses would offset operating income for the coming years as DOC4 was highly leveraged as a way to make a leverage buyout for CPFL. Table 1 provides the shareholding structure for CPFL.

Table 1
Shareholding Structure of Companhia Paulista de Força e Luz (CPFL)
(As of October 22, 1999)

	Ordinary (voting)		Peferred (non-voting)		Total	
	Shares	%	Shares	%	Shares	%
DOC4 Participações	4.147.395	30,1%	28.759	0,5%	4.176.154	21,5%
Previ pension fund	3.503.407	25,5%	24.247	0,4%	3.527.654	18,2%
Bonaire (pension funds)	1.567.314	11,4%	10.714	0,2%	1.578.028	8,1%
Market float	3.114.017	22,6%	1.654.474	29,3%	4.768.491	24,6%
CESP	171.420	1,2%	3.672.291	65,1%	3.843.711	19,8%
Eletrobrás	828.158	6,0%	22.564	0,4%	850.722	4,4%
Employees	81.371	0,6%	-	0,0%	81.371	0,4%
Other	347.707	2,5%	226.074	4,0%	573.781	3,0%
Total	13.760.435	100,0%	5.638.940	100,0%	19.399.375	100,0%

Source: CPFL (October 1999)

Recently the Brazilian capital markets have seen actions by controlling shareholders to lower liquidity in secondary markets as a way to eventually repurchase shares at lower than "fair" share price. Examples include Lojas Renner S. A., Ericsson S. A., Solorrico Fertilizantes S. A., where the strategic investor launches a public tender offer to repurchase shares in a first moment to lower liquidity. After the shares are repurchased, the controlling shareholders may either buy shares in the secondary markets to further lower liquidity or even decide to take the company private by offering lower price terms, since the remaining minority shareholders would have no benchmark to exit their investments.

Therefore liquidity plays an important role in determining the voting premium. Since preferred shares are more liquid, the voting premium would be lower the higher the liquidity of preferred shares compared to that of ordinary shares.

II.3   The Brazilian Privatization Program

Since the beginning of the "Programa Nacional de Desestatização" in 1991, sixty-four federally-owned companies and minority shareholding stakes have been sold to the private sector. The privatization program has included companies in steel, chemicals and petrochemicals, fertilizers, telecom and power sectors, in addition to concession rights to railroads, operations of container terminals, and power companies from the states. The Brazilian privatization program has raised about US$88 billion in exchange for public debt and cash to year-end 1998. Table 2 details year-by-year the number of privatized companies, the cash raised, as well as the amount of debt transferred to the private sector.

Table 2
Privatization Program 1991-1998

	# of privatized companies	Cash (US$ billion)	Transferred debt (US$ billion)	Total (US$ billion)
1991	4	1.6	0.4	2.0
1992	14	2.4	1.0	3.4
1993	6	2.6	1.6	4.2
1994	9	2.0	0.3	2.3
1995	8	1.0	0.6	1.6
1996	11	4.1	0.7	4.8
1997	4	4.3	3.5	7.8
July 1998	2	0.4	-	0.4
Total	58	18.4	8.1	26.5

Source: Banco Nacional de Desenvolvimento Econômico e Social (BNDES)

An important feature of the Brazilian privatization process has been the strong role of the state, both in putting the investors together to form consortia (groups of large shareholders) where pension funds play a key role, and in financing these groups via BNDES, the local development bank.

According to recent studies by Pinheiro (1996), privatized companies have shown improved operating performance by increasing profitability, operating efficiency,

higher capital expenditures, and output. In addition, as pointed out by Pinheiro (1996), the listed companies have their better performance reflected in their respective share prices. For an illustrative purpose, Table 3 below depicts the increased profitability after privatization, shown in the shaded area.[4]

Table 3
Selected Privatized Companies' Net Income (US$ million)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Acesita	(58)	6	(17)	(86)	(97)	31	79	32	3	2	(165)
Copene	116	137	73	(56)	10	(101)	137	149	6	59	83
Copesul	n/a	n/a	n/a	n/a	(3)	0	21	66	86	112	58
Cosipa	n/a	n/a	n/a	(30)	(297)	(579)	45	74	(240)	(109)	(13)
Embraer	(35)	64	(278)	(235)	(263)	(114)	(310)	(300)	(118)	(30)	124
Escelsa	n/a	n/a	n/a	n/a	n/a	(56)	38	(103)	77	77	(140)
Fosfertil	n/a	n/a	n/a	(16)	(12)	9	114	43	93	82	58
Light	132	119	(82)	(146)	(317)	(244)	144	(113)	167	291	(167)
LightPar	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	191	299	(58)
Petroflex	n/a	n/a	n/a	n/a	2	(1)	14	3	(35)	(21)	(29)
Petroq.Uniao	n/a	n/a	n/a	n/a	n/a	4	(2)	(5)	(31)	13	42
CSN	(482)	(37)	(751)	31	125	22	154	110	245	409	402
Sid Tubarao	40	148	(215)	(13)	(149)	33	241	190	110	113	50
Usiminas	55	337	(9)	60	123	246	345	336	228	315	293
Vale Rio Doce	208	735	106	252	300	262	645	338	497	677	890

Source: Economatica

We have a particular interest in analyzing the voting premium of recently privatized companies for two reasons. First, privatized companies have been the most liquid on the local stock exchange, responsible for at least 75% of the daily trading volume. Second, privatized companies have experienced changes in corporate governance through their new ownership structure, professional senior management, and an active board of directors. This sample of privatized companies is far more interesting to analyze than other companies with basically no major changes related to corporate governance issues, except for the market of corporate control.

III. Empirical Model

Our empirical model relates the voting premium determinants to four factors: (1) the financial leverage; (2) the ownership structure; (3) the liquidity differences between voting and non-voting shares; and (4) changes in corporate law.

As pointed out by Grossman and Hart (1988) and Harris and Raviv (1988), control benefits have been positively correlated with the amount of controlled assets by clearly separating control from cash-flow rights. Debt, non-voting stocks, and pyramiding are three instruments to increase the amount of assets under control with a fixed equity investment.

First, we should expect that the higher the financial leverage, the higher the value of the voting share. To take into account financial leverage, we test whether capital gearing (CG), defined as the ratio of debt to total assets, is positively correlated to the voting premium.

On the ownership structure, we investigate how the voting premium is related to the ratio of preferred equity to total equity (*NV*). We should also expect a positive correlation with the voting premium in the event of a market for corporate control. On the other hand, if a market for corporate control is non-existent, the number of non-voting shares held by the controlling shareholder might play a role in determining the voting premium (or discount). For instance, the greater the ratio of non-voting shares to total shares, the higher the likelihood that controlling shareholders might signal a favorable treatment of minority shareholders by paying higher dividends.

The liquidity premium in addition to the risk premium plays a key role in determining share prices, especially in secondary markets concentrated on a few companies; therefore, the higher the liquidity for non-voting shares relative to voting shares, the lower the voting premium. Indeed, this might explain in part the voting discount we observe in the Brazilian secondary market.

In the course of analyzing the local legislation in corporate law in emerging countries like Brazil, we address the issue to what extent changes in bid rules can negatively affect minority shareholders of preferred and ordinary shares. Specifically, we analyze how May 1997 amendments to the Brazilian Corporate Law are correlated with majority-control and its actions against minority shareholders, particularly for privatized listed companies in Brazil. There have been a lot of lawsuits from minority shareholders against the transfer of control by taking a public company private or by a merger. Both moves have negatively affected minority shareholders recently. We analyze to what extent changes in bid rules have affected minority shareholders by analyzing the voting premium, and to what extent ownership structure is related to these changes.

III.1 Description of Data and Variables

The sample consists of all Brazilian companies with both ordinary and non-voting preferred shares traded on the São Paulo stock exchange, which meet the following criteria:

- Companies must have dual classes of shares, i.e., non-voting preferred shares and voting ordinary shares.
- The non-voting and voting shares must have an average monthly trading volume of at least US$100,000 equivalent reported by the São Paulo stock exchange to avoid problems with missing prices.

Our sample period extends from January 1994 through December 1998. The voting premium is calculated on the average of the closing share prices on the first 10 trading days for each year. The sample consists of 174 observations and 75 companies during 1994 to 1998. The share prices are taken from "Economatica", a major source for financial information on publicly traded companies. Share prices and dividend payments are adjusted for stock splits. The voting premium is computed as follows:

$$VP_{it} = \frac{P_{it}^{v} - P_{it}^{nv}}{P_{it}^{nv}} \tag{1}$$

where P_{it}^{v} (P_{it}^{nv}) is the price of voting (non-voting) share of company i in period t. Table 4 presents a summary of statistics for some key variables to be used in the regressions.

Table 4
Summary Statistics of Key Variables

	Voting Premium	Non-Voting Shares (% of total shares)	Non Voting Stock held by the Largest Shareholder (% of total shares)	Capital Gearing
Mean	-0,016293	48,41977	23,12069	40,78448
Median	-0,265356	50,00000	8,000000	34,10000
Maximum	6,713096	66,66667	100,0000	99,40000
Minimum	-0,924239	1,694228	0,000000	1,500000
Standard Deviation	0,991948	16,00830	29,37169	26,77439
Skewness	3,680695	-0,930468	1,080442	0,577317
Kurtosis	21,21838	3,210879	2,733081	2,360179
Observations	174	174	174	174
Cross sections	70	70	70	70

III.2 Regression Results

Given the dual class equity nature in Brazil, non-voting stocks play a key role in leveraging as well as separating control from cash-flow rights. However, marginal ordinary shareholders may not benefit from such leverage (both financial and voting to total equity leverage), unless they are crucial in determining the control transfer in the market for corporate control. Within this context, we test the following hypotheses:

Hypothesis 1: The ratio of non-voting equity to total equity should be positively correlated with the voting premium.

Hypothesis 2: For low levels of leverage in the form of capital gearing and non-voting shares, the price differential between voting and non-voting stock should rise. For higher levels of leverage the relation should reverse because of an increasing risk of control change to debt claimants.

The econometric specification follows Hoffmann-Burchardi (1999). We investigate how voting premium is related to the ratio of preferred equity to total equity, NV_{it}, and the ratio of debt to total assets, CG_{it}. To capture the reversion of voting premium at higher leverage levels, we include the square of capital gearing, CG_{it}^{2}. NL_{it} represents the number of preferred non-voting shares owned by the largest shareholder. To capture the dividend policy, we include the dividend dummy variable for the preferred shares, DV_{it}. Finally, preference for liquidity is included as a dummy variable LQ equals one if the preferred shares trade an equivalent of at least US\$500,000 in the first two weeks for each year, and zero otherwise. We therefore obtain the following empirical functional form as follows:

$$VP_{it} = b_0 + b_1 CG_{it} + b_2 (CG_{it})^2 + b_3 NV_{it} + b_4 NL_{it} + b_5 DV_{it} + b_6 LQ_{it} + b_7 PV_{it} + b_8 SM_{it} + b_9 PV_{it} + m_i + e_{it}$$

(2)

where i denotes the company and t denotes time (the year). *SM* stands for "simple majority", a dummy variable equals 1 if the controlling shareholder has at least 50% plus one of the ordinary voting shares. Alternatively, we substitute *QM* standing for "qualified majority", as a dummy variable equals 1 if there is at least one controlling shareholder (or group of shareholders tied together under a shareholders' agreement) holding at least 75%. This variable, *QM*, is chosen because most privatized companies were acquired by a group of large shareholders. We argue that although a 50% plus one share of votes are required for any major changes (e.g. changes in corporate charter, increases or decreases of share capital or a merger), large shareholders are likely to jointly agree upon major decisions. Given the Brazilian legal structure, the ownership structure can affect the relative price of voting versus nonvoting shares through the incentives for both the controlling blockholder and the minority shareholders to engage in opportunistic behaviors. Classens et al. (1999) analyze this phenomenon in an East Asian case. The structure of the privatization process, on the other hand, also has an effect on the relative prices, reflecting an improved ownership structure, as La Porta and Lopez-de-Silanez (1997) stress in an Mexican case.

Table 5 presents the results of estimation under alternative specifications to Equation (2). They only differ in the assumption that a 75% shareholding is the critical level to confer control, while specification II requires majority control. The two regressions show that the ratio of controlled equity to invested equity increases the value of the voting rights and thus the voting premium (NV). This provides evidence for Hypothesis 1. Both the economic and statistical significance are superior for specification II. This suggests that majority control implies a higher control value than a qualified minority holding of 75%, implying that a supermajority control may not increase the control value of the company. The impact of capital gearing is not clear, since related variables are not statistical significant. Contrary to the above conjectures, the ratio of non-voting stock to total equity is negatively correlated with the voting premium. A more interesting finding is the positive relationship between the non-voting shares by the controlling shareholder to the voting premium, although its impact is small. Finally, note that the higher the liquidity, the higher the value of non-voting stocks, which implies a lower voting premium.

The Brazilian market for corporate control has not experienced the same degree of hostile takeover activities as those in the Anglo-Saxon market. However, after privatization in addition to openness for foreign capital investments and globalization, public companies have been targets of giant strategic investors. Therefore, we analyze the wealth implications of a corporate control transaction for minority shareholders derived from the enactment of May 1997 amendments to the Brazilian Corporate Law, and we test the following hypothesis:

Hypothesis 3: The May 1997 amendments to the Corporate Law have a negative impact on both ordinary and preferred marginal shareholders. However, the negative impact will be stronger for ordinary shareholders, implying lower voting premium.

The econometric specification tries to capture the privatization effect on changes in the voting premium as well as the change in regulation. We include a dummy variable equals 1 for data after May 1997, and zero for data prior to that date, AM_{it} to capture the impact of May 1997 amendments to Corporate Law. We therefore obtain the empirical functional form as follows:

$$VP_{it} = b_0 + b_1 CG_{it} + b_2 (CG_{it})^2 + b_3 NV_{it} + b_4 NL_{it} + b_5 DV_{it} + b_6 LQ_{it} + b_7 PV_{it} + b_8 SM_{it} + b_9 PV_{it} + b_{10} AM_{it} + m_i + e_{it}$$

(3)

Table 5

Regression Results – Determinants of Voting Premium

The table below presents the coefficient estimates for a fixed effects panel data model for the voting premium of ordinary voting relative to preferred nonvoting shares for Brazilian listed companies from the first quarter of 1994 to the fourth quarter of 1998. The standard errors are robust to heteroscedasticity and autocorrelation of arbitrary forms. The p-values are reported below the coefficient estimates in parentheses. Specification I is designed to analyze the effect of a simple majority, while specification II includes a dummy for qualified majority control of 75% of voting shares. Specifications III and IV include a dummy variable to capture the effect of change in regulation for the May 1997 amendments to the corporate law.

Variable		I	II	III	IV
Constant		0.771	0.989	1,143	0,937
		(0.001)	(0.000)	(0,000)	(0,000)
Capital Gearing	CG	-0.005	-0.007	-0,009	-0,006
		(0.636)	(0.415)	(0,321)	(0,545)
Square of Capital Gearing	$(CG)^2$	6.22E-05	7.95E-05	9,82E-05	7,95E-05
		(0.554)	(0.407)	(0,309)	(0,449)
Privatization	PV	-0.005	-0.048	0,034	0,090
		(0.975)	(0.797)	(0,869)	(0,618)
Fraction Nonvoting	NV	-0.018	-0.018	-0,018	-0,018
		(0.000)	(0.000)	(0,000)	(0,000)
Fraction Nonvoting of Largest Shareholder	NL	0.009	0.008	0,008	0,009
		(0.039)	(0.014)	(0,018)	(0,038)
Liquidity	LQ	-0.314	-0.338	-0,324	-0,294
		(0.007)	(0.004)	(0,004)	(0,008)
Qualified Majority	QM	-0.321			-0,360
		(0.154)			(0,107)
Simple Majority	SM		-0.276	-0,279	
			(0.031)	(0,026)	
Dividends	DV	0.149	0.136	0,143	0,157
		(0.287)	(0.336)	(0,301)	(0,249)
Amendments	AM			-0,287	-0,311
				(0,069)	(0,043)
R-squared		0.169	0.168	0,188	0,192
Number of Observations		174	174	174	174
F-statistic		4.213	4.168	4,209	4,340
Prob(F-statistic)		0.000	0.000	0,000	0,000

Table 5 under specifications III and IV presents the results of estimation for simple majority control and qualified majority control, respectively. The two regressions show that the ratio of controlled equity to invested equity increases the value of the voting

right and thus the voting premium. Both the economic and statistical significance are superior for specification II. The impact of capital gearing is not clear, since related variables are not statistically significant. The same applies to the ratio of non-voting stock to total equity. However, as for the functional form (3), there is a positive relationship between the non-voting shares by the controlling shareholder to the voting premium, although its impact is small. The empirical evidence provides support for Hypothesis 3, where the 1997 amendments show a negative effect on the voting premium. Finally, note that the higher the liquidity, the lower the value of non-voting stocks, implying a higher voting premium, although it is not significant.

IV.   Conclusions

In this paper, we relate the voting premium determinants to two governance issues of interest. First, in analyzing the private benefits under the private sector ownership after privatization, we evaluate how the ratio of non-voting to overall equity as well as financial leverage should be correlated with the voting premium. Second, in the course of analyzing the local legislation in corporate law in emerging countries like Brazil, we address the issue to what extent changes in bid rules can negatively affect minority shareholders of preferred and ordinary shares.

With respect to the first issue, we have found empirical evidence supporting that the ratio of non-voting shares to total equity is negatively correlated to the voting premium. No support has been confirmed though for the financial leverage. This provides support to confirm separation of control rights from cash-flow rights in Brazilian listed companies. As expected, liquidity plays a key role in determining the voting discount.

Regarding the impact of May 1997 amendments to the Corporate Law, we have found empirical evidence of a negative impact on both ordinary and preferred marginal shareholders. We conjecture that although minority shareholders have lost their tag-along rights, minority shareholders might be better off with a 10% dividend premium benefit. This may have implied a lower voting premium.

Future directions for this research include the study on how the recent proposed changes in Brazilian corporate law may lead to better corporate governance for minority shareholders. Changes include tag-along rights as well as minimum dividend payments to minority shareholders.

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Endnotes

1. Wald and Moraes (1999) discuss the legal aspects of issuing only ordinary voting shares by foreigner controlled companies. They argue that according to the Constitution of Brazil as of October 5, 1988, local and foreign investors have the same rights, since there has been no distinction between Brazilian controlled companies and foreigner controlled companies as previously stated in Article 117 of the previous Constitution

2. Article 25 of Corporate Law establishes minimum dividend payments on 25% of adjusted net income. Adjusted net income might be lower than economic net income, since the Company may include extraordinary non-operating items (e.g. contingencies from losses in litigation).

3. For additional information, the reader is referred to Article 111, Paragraph 1 of the Corporate Law.

4. Table 3 shows the evolution of net income after privatization. This is for illustrative purposes rather than showing that net income alone plays a key role in determining the rise in stock prices.