# SESSION 3: CORPORATE OWNERSHIP AND CONTROL

# ANALYSIS OF THE LONG-TERM EFFECTS OF THE VOLUNTARY BID RULE ON BRAZILIAN STOCK

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#### Abstract

The mandatory bid rule (also known as tag-along rights) is an important corporate governance mechanism that emerges in a company takeover and consists of acquirers granting non-controlling investors a price similar to the one made to the controlling shareholders. The goal of this research is to analyze if Brazilian companies that grant tag-along rights voluntarily have higher valuation and liquidity. We show evidence that the voluntary bid rule significantly affects common shares' liquidity. In contrast, we find no significant relation between firm valuation and tag-along rights.

## 1. INTRODUCTION

Corporate governance is made of numerous factors. It dictates the board of directors' election and composition, executive hiring, monitoring and compensation, takeover defenses and ownership structure. Although it has always been an important subject, in the last decades it has been increasingly discussed, especially due to major corporate scandals in different countries.

One of the most important forms of protecting minority shareholders is the mandatory bid rule. This rule states that, in a takeover, the acquirer of the controlling block must offer minority shareholders a fair price for their shares, usually a price greater than or equal to 80% of the price offered to controllers. Therefore, any control premium paid to the controllers will also be shared with minority shareholders.

There are many relevant studies related to the mandatory bid rule such as Bebchuk (1994), Bergström et al. (1997) and Bebchuk and Hart (2001). The literature points to both positive and negative effects. On the positive side, Carvalhal da Silva and Subrahmanyam (2007) show that the mandatory bid rule strengthens the protection of minority shareholders in the event of a takeover. By favoring equal treatment of all shareholders, the mandatory bid rule ensures that all shareholders share the control premium and may exit their investment. Schuster (2013) and Wang and Lahr (2017) find that the mandatory bid rule increases the efficiency of acquisitions. However, on the negative effects side, Burkart and Panunzi (2003) and Sepe (2010) argue that the mandatory bid rule raises the cost of acquisitions, prevents valueincreasing transactions, and reduces the value of the companies.

The objective of this research is to analyze if companies that offer better tag-along rights have higher valuation, liquidity and lower volatility. We study Brazilian listed companies and find that the voluntary bid rule significantly affects common shares' liquidity, but has no impact on firm valuation.

## 2. DATA AND METHODOLOGY

Our sample is composed of 343 different types of shares of Brazilian companies (208 common and 135 preferred). Most common shares (141 out 208) grant better tag-along rights. In contrast, only a small proportion of preferred shares (29 out of 135) has tag-along rights.

We estimate fixed-effects panel regressions to analyze whether tagalong rights affect valuation and liquidity. We estimate separate models for common and preferred shares, according to the equation below:

$$\begin{aligned} Q &= \beta_1 + \beta_2 TAG + \beta_3 TAGC + \beta_4 TAGP + \beta_5 SIZE + \beta_6 LEV + \beta_7 ROA + \\ & \beta_8 NM + \varepsilon \end{aligned} \tag{1}$$

$$LIQ = \beta_1 + \beta_2 TAG + \beta_3 TAGC + \beta_4 TAGP + \beta_5 SIZE + \beta_6 LEV + \beta_7 ROA + \beta_8 NM + \varepsilon$$
(2)

where, Q is Tobin's Q, LIQ is shares' liquidity, TAG is a dummy variable that takes the value of 1 when the firm grants tag-along rights for at least one type of share, TAGC is a dummy variable that takes the value of 1 when the firm grants tag-along rights only for common shares, TAGP is a dummy variable that takes the value of 1 when the firm

grants tag-along rights only for preferred shares, SIZE is the logarithm of total assets, LEV is firm's leverage, ROA is the return on assets, and NM is a dummy variable that takes the value of 1 when the firm is listed on new market governance segment.

#### **3. RESULTS**

Table 1 shows the results of the panel regression using Tobin's Q as a dependent variable, for both common and preferred shares. No coefficient on tag-along rights is statistically significant, so we can conclude that there is no significant relation between market valuation and the voluntary bid rule. With regard to the control variables, financial leverage is positively related to the valuation of common and preferred shares. In the case of preferred shares, we also can see that Tobin's Q is positively related to ROA and negatively associated with firm size.

Table 2 shows the results of the panel regression using share liquidity as a dependent variable. The coefficient on *TAG* and *TAGC* are positive and statistically significant at 5% and 1%, respectively, so there is evidence of a positive relation between common share's liquidity and the voluntary bid rule. In contrast, we find no significant results for preferred shares. Therefore, there is evidence that the tag-along rights significantly increase the liquidity of common shares but not that of preferred shares.

Variable	Common shares			Preferred shares		
TAG	0.06 (0.90)			-0.09 (0.44)		
TAGC		0.00 (1.00)			0.07 (0.49)	
TAGP			-0.12 (0.87)			-0.08 (0.53)
SIZE	0.06 (0.90)	0.06 (0.90)	0.06 (0.90)	-0.22*** (0.01)	-0.22*** (0.01)	-0.22*** (0.01)
LEV	4.20*** (0.00)	4.20*** (0.00)	4.20*** (0.00)	1.05*** (0.00)	1.05*** (0.00)	1.05*** (0.00)
ROA	-3.22 (0.65)	-3.22 (0.65)	-3.22 (0.65)	0.54*** (0.01)	0.54*** (0.01)	0.54*** (0.01)
NM	0.06 (0.89)	0.10 (0.81)	0.09 (0.75)	0.27 (0.14)	0.13 (0.45)	0.20 (0.23)

Table 1. Firm	n valuation	and tag-a	long rights
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Note: The p-values are reported in parentheses. \*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively.

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Variable	Common shares Preferred shares			es		
TAG	0.33** (0.02)			-0.06 (0.88)		
TAGC		0.35*** (0.01)			-0.36 (0.55)	
TAGP			0.04 (0.65)			0.26 (0.37)
SIZE	-0.04	-0.04	-0.04	-0.26	-0.24	-0.26
	(0.55)	(0.55)	(0.55)	(0.20)	(0.23)	(0.20)
LEV	0.00	0.00	0.00	0.00	0.00	0.00
	(0.41)	(0.41)	(0.44)	(0.53)	(0.54)	(0.58)
ROA	-0.11	-0.11	-0.10	0.11	0.11	0.11
	(0.55)	(0.55)	(0.58)	(0.63)	(0.63)	(0.61)
NM	0.32	0.30	0.58***	0.02	0.31	-0.13
	(0.18)	(0.21)	(0.00)	(0.97)	(0.64)	(0.72)

Table 2. S	hare liquidity	and tag-along	rights
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Note: The p-values are reported in parentheses. \*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively.

#### 4. CONCLUSION

There is a consensus in the literature that the expropriation of minority shareholders is more likely in firms with poor corporate governance provisions. Among the forms of protecting minority shareholders are the tag-along rights (also known as mandatory bid rule). To shed further light on the impacts the mandatory bid rule has on firms, this work analyzes if the voluntary offer of the bid rule affects the firm valuation and liquidity of Brazilian firms. We find that there is no significant relation between firm valuation and the voluntary offer of the bid rule. When it comes to shares' liquidity, our findings indicate that the voluntary bid rule increases the liquidity of common shares.

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