

# Factors associated with the non-migration to the New Market of companies of the one share, one vote type<sup>\*,\*\*</sup>

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## ABSTRACT

This study aimed to understand which characteristics and listing rules relate with non-migration to the New Market (*Novo Mercado*) segment in companies that already obey the “one share, one vote” principle. The study sought to understand which governance characteristics, as well as the one share, one vote principle, represent challenges to listing in the New Market. Given the benefits of adherence to the New Market shown in the literature and the existence of companies in the traditional segment that already meet one of the challenges to migration, namely the use of shares with only voting rights, the relevance of the study lies in showing which other governance characteristics may represent challenges to migration. The study indicates to regulators and markets which governance characteristics may represent challenges to adherence to higher segments. This understanding may influence strategies for promoting better practices aimed at overcoming resistances to these governance rules. For the literature, the results show characteristics that warrant additional studies as they represent adoption challenges for companies. We chose the companies from the traditional segment that already have only common shares and with propensity score matching we chose comparable companies from the New Market. We observed variables related to the other New Market rules, ownership structure, pyramid structures, shareholder agreements, and the score in a comprehensive corporate governance index. The analyses involved descriptive statistics, differences of means and proportions tests, and logit models. The results show that the free float and minimum tag along rules have a strong relationship with the non-listing in the New Market of companies that already fulfill the one share, one vote rule. In addition, ownership concentration and corporate governance quality are also related to non-listing in the New Market.

**Keywords:** tag along, free float, corporate governance, one share - one vote, PSM.

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## 1. INTRODUCTION

Since 2001, in Brazil, the special listing segments have separated companies on the B3 S.A. - *Brasil, Bolsa, Balcão* (B3) into different corporate governance levels. Adhesion to these segments is voluntary and, to take part in one of them, the company has to fulfill a series of pre-requisites. The restrictions imposed for listing in these segments aim to give shareholders protection and signal to investors that these companies pursue better corporate governance practices (Esqueda & O'Connor, 2020; Gonzalo & Silva, 2009). The literature shows that adhesion also brings benefits to the company. Gonzalo and Silva (2009) find evidence that listing in these segments generates increased value and greater share liquidity.

The increased share value of these companies is consistent with what Silveira et al. (2004) call the virtuous cycle of corporate governance. Since adopting better practices increases shareholder protection, it tends to reduce the risk premium of these companies, also reducing their cost of capital, which ultimately generates more attractive opportunities for fundraising for investment and growth. Other studies also find positive financial impacts on companies that adhere to the New Market (*Novo Mercado*) (Aldrighi et al., 2018; Procianoy & Verdi, 2009; Silva & Leal, 2005; Silveira et al., 2004), which reinforces the benefits.

Among the listing segments, the New Market is the one that has the most strict requirements, thus being the place where the companies with the best corporate governance are expected to be listed. One of its main requirements is that the companies have only common shares, that is, shares with voting rights. In the other listing segments, companies may also have preferred shares that only grant the shareholder rights over cash flow, but not voting rights (Aldrighi et al., 2018; Gonzalo & Silva, 2009; Gorga, 2009).

The existence or not of two classes of shares directly influences the ownership structure and control of the

company. This is a determining characteristic in decision making, such as for investment, financing, cash flow distribution, and many others (Burkart & Lee, 2008). The literature shows that companies with two classes of shares can suffer from conflicts of interests among shareholders, since the controlling ones may act in their own self-interest, expropriating the minority shareholders (Burkart & Lee, 2008). In Brazil, the studies on the impacts of two classes of shares also find results that converge with the idea of expropriation of minority shareholders through voting rights (Aldrighi & Mazzer, 2007; Aldrighi & Postali, 2011; Andrade et al., 2015; Bortolon, 2013).

It is under arguments like these that the self-regulation of the New Market requires companies to obey the “one share, one vote” principle in their ownership structure. The rationale behind that principle is to offer greater protection to minority shareholders, ensuring the same voting rights per share for all.

Despite the debate around two classes of shares, this study observed that there are currently companies from the traditional segment that already meet the pre-requisite of having only common shares, but that for some reason have not yet adhered to the New Market; that is, that requirement is not a barrier for such firms to migrate to the segment. Up to the end of 2018, excluding companies from the financial sector and those with negative net equity, there were 18 companies that already fulfilled that requirement, but had not adhered to the New Market. Considering the benefits of adhering to the special segments, both for the company and for the shareholders, non-adhesion remains an unexplained question.

Therefore, this study will aim to answer the following problem: what are the factors associated with the decision not to migrate to the New Market listing segment in companies that already have only shares with voting rights?

## 2. THEORETICAL FRAMEWORK

### 2.1 Ownership Structures

The literature shows that around the world there is a prevalence of ownership structures with a high shareholder concentration in the hands of a few controlling shareholders (Claessens et al., 2000; La Porta et al., 2000; Shleifer & Vishny, 1997). If, on one hand, this reduces agency conflicts between managers and shareholders, as it increases the monitoring power of the principal, on the

other hand it can cause conflicts between controlling and minority shareholders. La Porta et al. (1999) show that controlling shareholders commonly use mechanisms that generate deviations of rights, obtaining more voting rights in relation to cash flow rights, enabling control over the company with less investment.

The consequences of rights deviations are widely studied, and many studies defend the one share, one vote principal. The principal argues that shareholders' votes

should be proportional to the shares held, aligning voting rights with those over cash flow. In Brazil, the legislation allows up to 50% of shares to be without voting rights. Only the New Market listing segment requires only ordinary shares.

Besides shares without voting rights, rights deviations can occur through pyramid control structures, cross shareholding, and shareholder agreements (Aldrighi & Mazzer, 2007; Silva & Leal, 2005).

A pyramid structure occurs when there is one or more companies in a chain of ownership relationships to assume control over a particular other company (Aldrighi & Mazzer, 2007; Almeida & Wolfenzon, 2006; Andrade et al., 2015). In these structures, control can be obtained with less capital investment.

In the New Market, there are no restrictions on indirect ownership structures and, therefore, the deviation of rights that is not allowed through the use of shares without voting rights can be achieved in this way. In Brazil, Andrade et al. (2015) find the presence of two classes of shares in 69.5% of the companies and of indirect structures in 78.8% of the companies in their sample.

The motivations behind the adoption of this type of structure are investigated in the literature. The first studies indicated as the main motivation the expropriation of minority shareholders (La Porta et al., 1999). However, the results found by Almeida and Wolfezon (2006) show that in environments with low legal protection there are financing advantages derived from adopting pyramid structures, since they enable access to internal resources that would not be obtained through external financing. In fact, studies find pyramid structures that are not associated with major rights deviations. Aldrighi and Postali (2011), for example, find that in Brazil the percentage held by the largest ultimate shareholder is on average much greater than necessary to assume control through pyramids.

Bortolon (2013) finds evidence that indicates greater rights deviations in pyramid structures with more levels until the ultimate shareholder. However, not all the evidence indicates the expropriation motive. For example, pyramids are more common in bigger, capital-intensive companies, suggesting the financing motivation. Andrade et al. (2015) show that in the presence of pyramid structures financial performance is greater, especially when there are fewer levels until the ultimate shareholder. The authors also argue that these structures can be alternatives for those companies to access resources, which is relevant in a market that is still developing.

Despite the extensive literature on the motivations, there is no consensus. In the studies reviewed here for the Brazilian market the findings are more coherent with

Almeida and Wolfezon (2006). However, in a more recent study, Aldrighi et al. (2018) found a lower probability of pyramid structures in the New Market. As this segment is the one with the highest governance standards, the result is more adherent to the logic of expropriation of minority shareholders.

## 2.2 Shareholder Agreements

Shareholder agreements can be defined as voluntary contracts that govern the relationships between shareholders in a company. With the agreements, a new ownership structure may come to exist, with there being various shareholders that can enjoy control over the company. The literature shows that the effects of these agreements over the firm's value can be negative or positive; positive when the signatory shareholders carry out mutual monitoring and monitoring of other large shareholders, and negative if it provides the opportunity for agreements to expropriate the minority shareholders.

In a study on shareholder agreements in Brazil, Silva (2012) finds that the most commonly found clauses are on (i) preference rights, which obligate shareholders who wish to sell their shares to third parties to first offer them to the shareholders of the agreement, who will have purchasing preference; (ii) restrictions on selling shares, which prohibit shareholders who wish to sell their shares from doing so without the prior consent of all the shareholders of the agreement; (iii) provision of control, requiring unanimous consent from all shareholders for important decision making; and (iv) non-competition – requirements related to prohibiting shareholders from acting as competitors of the company.

Gorga (2009) analyzes shareholder agreements in 84 companies from the special corporate governance segments without majority shareholders. According to the author, in the absence of shareholders with more than 50% of the shares with voting rights, it is more likely for there to be agreements with clauses that guarantee control. The results showed that 50% of the sample had some type of shareholder agreement. More specifically, in the New Market, 66.67% of the companies without a majority shareholder had agreements, while in Level 2 only 9.52 and in Level 1 only 23.81% had them. The author states that the result is expected, as agreements are predicted to occur in more disperse ownership structures, such as in the New Market.

Silva (2012) also reveals that companies with shareholder agreements have greater value, contradicting the logic that these may be used to expropriate minority shareholders. By means of an index created with 24 questions on the mechanisms of the agreements, the

result found by the author indicates greater shareholder protection and greater company value. However, by analyzing only companies listed in special segments and clauses entailing votes, Gelman et al. (2015) found a negative relationship with firm value. In contrast, generic clauses on other relevant matters presented a positive effect, converging with the result of Silva (2012). The authors affirm that the effects depend on the characteristics of the agreements and believe in the prevalence of the negative effects, due to the weak legal protection and high private benefits of control in Brazil.

López-Iturriaga and Santana-Martín (2015) test the impact of agreements on the dividend policies of companies and find negative effects on payout, indicating that controlling shareholders seek to increase available cash flow for their discretionary decisions. The authors conclude that this increases rights deviations between cash flow and voting and the possibility of expropriation.

### 2.3 Regulation in Brazil and around the World

In Brazil and around the world, capital market regulation generally occurs through two routes: regulation carried out by the State, via legislation or regulatory bodies, such as the Brazilian Securities and Exchange Commission (CVM); and private regulation, carried out by various entities.

According to the report from the Organisation for Economic Co-operation & Development (OECD, 2019), in almost all markets observed there is permission to issue shares with limitations on voting rights or without voting rights. Of 49 jurisdictions surveyed by the report, only in Indonesia, in Israel, and in Singapore the issuance of such shares is not allowed. In addition, in a little more than half of the countries (26 of 49), these shares have the characteristic, as in Brazil, of preference in the distribution of company earnings. However, when emerging economies besides Brazil are observed, only South Africa and Indonesia allow shares without voting rights, which are prohibited in countries such as Russia, China, Mexico, and India.

In France, there are three classes of shares, one being exclusively for oil companies. In Scandinavian markets, in which there has long been protectionism, foreign investors can only acquire shares without voting rights (Muus, 1998). In Italy, the legislation resembles that of Brazil, in which shares without voting rights have the right to a greater share of dividends and preference in relation to shares with voting rights on liquidation (Linciano, 2003).

The Brazilian market is primarily regulated by the State; however, since the start of the 21<sup>st</sup> century, the share of private regulation has grown (Donaggio, 2017). In 2001, the B3 created three special listing segments, Level 1, Level 2, and New Market, which present increasing requirements for corporate governance practices. Adhesion is voluntary through meeting the requirements via a contract with the B3. Other private regulation initiatives include, for example, the code of best practices of the Brazilian Association of Financial and Capital Market Entities (Anbima) and the governance standards published by the National Electrical Energy Agency (Aneel).

La Porta et al. (2000) state that the legal environment is important for avoiding the expropriation of minority shareholders. According to the authors, as the legal protection of minority shareholders increases, the costs for obtaining control of the company through rights deviations become higher. In a way, this is what the self-regulation of the B3 tried to do in 2001, by creating the special listing segments.

The Brazilian model has been largely based on the German one (Donaggio, 2017). Launched in 1997, it was called the *Neuer Market* and focused on medium and small-sized companies, requiring better disclosure standards than for other companies. Comparing the German listing segment with those of other European countries, Donaggio (2017) affirms that its rules were considered more rigid and, at the same time, the most successful. In a consultation carried out of the German stock exchange (Deutsche Börse) in October of 2020, the German market had a total of 495 listed companies, 303 (61%) of which formed part of the highest governance segment. In Brazil, in a consultation carried out on the same date, there were 395 listed companies and, of these, 157 (40%) were in the New Market. That is, the proportion of the higher segment in Germany is greater than the proportion found in the New Market. Gorga (2009) shows that the objective of incentivizing migration to the better governance segments does not appear to have been very successful. By analyzing the migration patterns, the author finds that, in the New Market, only 16.3% of the companies migrated from the traditional segment, with the rest being companies that went public directly in the higher segment.

Despite various studies indicating positive consequences of listing in the differentiated segments (Silva & Leal, 2005; Gonzalo & Silva, 2009; Procianny & Verdi, 2009; Silveira et al., 2004), there are criticisms of some rules and the need for greater enforcement. By analyzing the notifications and fines applied by the B3 when carrying out the role of regulator, however, Donaggio (2017)

identifies that the self-regulation model in Brazil can be considered successful. The author also shows that, over time, alterations have been made in the rules of the listing segments in order to improve their efficiency. The most recent changes occurred in 2018, primarily featuring the flexibilization of free floats and the obligation to have an audit committee for companies listed in the New Market.

With relation to state regulation, Law n. 10,303, of October 31<sup>st</sup> of 2001, changed the percentage of preference shares allowed in the ownership structure of companies, reducing it from two thirds to 50%. The change, however, was only valid for the companies that went public after the new regulation, limiting its effectiveness (Aldrighi & Mazer, 2007; Gelman et al. 2015).

### 3. METHODOLOGY

#### 3.1 Data Collection and Sample Selection

We identified the companies from the traditional segment that already fulfill the one share, one vote principle and, based on these, we carried out the analyses, comparing them with similar companies from the New Market. In 2019, excluding companies from the financial sector and those with negative net equity during the last five years, we observed 18 companies in that situation.

The analysis period ran from 2014 to 2018. We used the Comdinheiro databases, Thomson Reuters Eikon, the references forms of the companies themselves, and the shareholder agreements. In addition, to complete the corporate governance index, the present study sought information in the bylaws and on the websites of the companies in the sample. The data collection, in the multiple sources mentioned, occurred throughout 2019.

Based on the 18 companies from the group of interest, we chose 18 companies from the New Market to compose the group of comparable ones. The selection was carried out through propensity score matching (PSM), a multivariate method for choosing individuals comparable to those of a group of interest. Using a propensity score obtained based on a set of variables, the closest pair is chosen. This approach reduces potential selection bias. To do the matching, we chose the near neighbor criterion, which looks for the closest scores. The variables chosen for the propensity score calculation were those relating to the financial strategy of the companies (investment, financing, dividends) and the performance and size variables, as proposed in the empirical example from the study of Shipman et al. (2017). The operationalization of the variables is shown in Table 3.

The PSM model used to find the comparable companies from the New Market was the following:

$$\log\left(\frac{p(Trad = 1)}{1 - p(Trad = 1)}\right) = \beta_0 + \beta_1 Investment_i + \beta_2 Financing_i + \beta_3 Dividends_i + \beta_4 Performance_i + \beta_5 Size_i + e_i \quad \boxed{1}$$

Besides the sample chosen through PSM, we chose companies manually, with the aim of carrying out a robustness analysis of the results. The manual selection occurred through choosing companies with similar characteristics to those of the group of interest in terms of asset size, net equity, and operating sector.

#### 3.2 Variables

Table 1 contains variables for the New Market requirements, defined as dummies, which take the value of 1 if the company fulfills the pre-requisite and 0 otherwise.

**Table 1**  
Variables related to the New Market requirements

New Market requirements		
Variable	Requirement	Description
MIN_FF	Minimum free float	25 or 15%, if the ADTV is greater than R\$ 25 million
COMP	Composition of the board of directors	Minimum of three members, of which at least two or 20% (whichever is higher) are independent, with a combined mandate of up to two years
PRO_AC	Prohibition on accumulating roles	The chairman of the board and CEO cannot be the same person.
TAG_D	Tag along concession	100% for ordinary shares
AUD	Audit committee	Obligatory to establish an audit committee

ADTV = average daily trading volume.

Source: Elaborated by the authors.

Table 2 represents the ownership structure variables, their description, and the expected sign for each one with the probability of the company being listed in the traditional segment. In that construct, we analyzed variables for ownership concentration, shareholder characteristics, shareholder agreements, and indirect ownership structures.

**Table 2**  
Ownership structure variables

Variable	Description/calculation	Expected sign	References
<b>Ownership concentration</b>			
FF	% of shares in circulation	-	Ding et al. (2016)
BIGGOR	% held by the largest ultimate shareholder	+	Stulz (1988)
SHARE3	% held by the three largest shareholders	+	Stulz (1988)
<b>Shareholder characteristics</b>			
FOR	Dummy = 1 if there is a foreigner among the three largest shareholders	-	Inácio-Soares & Marcon (2019)
INST	Dummy = 1 if there is an institutional investor among the three largest shareholders	±	Gillan e Starks (2000)
GOV	Dummy = 1 if the government is among the three largest shareholders	+	La Porta et al. (1999)
PRIV	Dummy = 1 if there is a private individual among the three largest shareholders	+	La Porta et al. (1999)
<b>Shareholder agreement</b>			
D_SA	Dummy = 1 if there is a shareholder agreement in the company	+	Gelman et al. (2015), Silva (2012)
QT_SH	Total number of shareholders present in the agreement	+	Gorga (2009)
SHARE_SA	% of combined share of the shareholders present in the agreement	+	Gorga (2009)
SA_CONTROL	Dummy = 1 if the combined share of the shareholders in the agreement is greater than 50%	±	Gorga (2009), Silva (2012)
<b>Indirect ownership structures</b>			
D_IND	Dummy = 1 if there is an indirect ownership structure	±	Gorga (2009), Silva & Leal (2005)
D_CONTROL	Dummy = 1 if the largest ultimate shareholder has acquired more than 50% of the company's shares with voting rights	±	Aldrighi et al. (2018), Andrade et al. (2015), Gorga (2009)
D_PR	Dummy = 1 if there are preference shares in companies that compose the indirect structure	±	Gorga (2009), Silva & Leal (2005)
DEV_SH1 (SH2; SH3)	Difference between the voting rights and cash flow rights of the largest ultimate shareholder, of the second largest, and the third largest	+	Bortolon (2013), Silva & Leal (2005)
LEVEL	Number of levels in the indirect structure	+	Andrade et al. (2015), Bortolon (2013)

Source: Elaborated by the authors.

To measure the corporate governance level of the companies in the sample, we calculated the Corporate Governance Practices Index (CGPI), adapted from the index published in a document from the Brazilian Institute of Corporate Governance (IBGC, 2014). In the literature, the index was initially elaborated by Silva and Leal (2005) and subsequent studies have used it as a measure for the corporate governance level of companies in the B3. The indices found in the literature (Silva & Leal, 2005; Silveira et al., 2008; IBGC, 2014) are generally made up of questions that compose four governance dimensions: (i) transparency; (ii) composition and functioning of the board of directors; (iii) ethics and conflicts of interest;

and (iv) shareholder rights. The index used as a basis for this study (CGPI) is composed of a total of 24 questions. Due to the particularity of this study, three questions were removed from the index, as they concerned characteristics of shares without voting rights, a characteristic that is not present in the samples (interest and comparable) of this study. Thus, the index was composed of 21 questions answered for each one of the companies in the sample. Finally, we used, as a control, the financial variables represented in Table 3. As the literature usually shows that there are relationships between value, performance, and financial health and a listing in the differentiated segments, it is important to include these.

**Table 3**  
*Variables of the economic-financial characteristics*

Variable	Description/calculation	Expected sign	References
<b>Investment</b>			
FIX	Variation in fixed assets/assets	±	Silveira et al. (2008), La Porta et al. (2000)
CFI	Cash flow from investments/assets		
<b>Financing</b>			
IND	Total liabilities/assets	-	Silveira et al. (2008)
IND_CL	Current liabilities/assets		
IND_NCL	Non-current liabilities/assets		
<b>Dividends</b>			
PAYOUT	Total dividends/net earnings	-	La Porta et al. (2000), Silva (2004)
DY	Dividend per share/share price		
<b>Performance</b>			
TOBINQ	Market value/assets	±	Silva & Leal (2005)
MTB	Market value/book value		
ROA	Net equity/assets		
ROE	Net earnings/net equity		
<b>Size</b>			
LNASS	Logarithm of assets	-	Silva & Leal (2005)

**Source:** *Elaborated by the authors.*

### 3.3 Analysis Methods

To avoid possible problems with outliers, we used the winsorization method with upper and lower limits of 2.5%. Initially, we analyzed the descriptive statistics of the sample and, next, tests of differences between means and proportions were conducted to compare the variables between the group of interest and the comparable companies. Finally, logit-type multivariate models enabled

us to evaluate the variables that have a relationship with permanence in the traditional listing segment of the B3.

We ran models with different constructs to avoid collinear variable problems, namely regression models containing (i) the New Market rules together with the other constructs, except the CGPI; (ii) the CGPI together with the other constructs; and (iii) the dimensions of the CGPI together with the constructs. Thus, the models used in this stage were:

$$\log\left(\frac{p(\text{Trad} = 1)}{1 - p(\text{Trad} = 1)}\right) = \beta_0 + \beta_1(\text{New Market Rules}_i \text{ or } \text{CGPI}_i \text{ or } \text{Dimensions of the CGPI}_i) + \beta_2 \text{Ownership Structure}_i + \beta_3 \text{Structural Pyramids}_i + \beta_4 \text{Shareholder Agreements}_i + \beta_5 \text{Control}_i + e_i$$

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## 4. RESULTS ANALYSIS

### 4.1 Descriptive Statistics

Table 4 presents the descriptive statistics. Panel A contains the statistics of the variables that represent the New Market rules. Among these, the prohibition on accumulating roles (PRO\_AC) and the existence of an audit committee (AUD) had results that warrant greater attention at this point. For the former this is because it shows that the vast majority (89%) of the companies fulfill the pre-requisite of the chairman and CEO being different people, a result that is consistent with Andrade et al. (2015). The result suggests that this requirement may not be of great importance in preventing companies migrating to the New Market.

The AUD variable, in turn, presented a very low proportion of companies with that characteristic in both samples. Similar results are also found in other studies in Brazil (Bortolon et al., 2019; Luca et al., 2010). The audit committee may represent an important impediment for migration to the higher segment. In addition, it is important to highlight that this is one of the rules that only came to be required for listing in the New Market as of 2018 and, as the sample covers the period from 2014 to 2018, there was no obligation to fulfill it in almost the entire period observed.

**Table 4**  
*Descriptive statistics*

Variable	n	Mean/proportion	Standard deviation	Minimum	Maximum
<b>Panel A – New Market rules</b>					
FF_MIN	160	0.581		0	1
COMP	173	0.474		0	1
PRO_AC	172	0.89		0	1
TAG_D	173	0.566		0	1
AUD	173	0.191		0	1
<b>Panel B – Ownership structure</b>					
FF	160	28.185	20.965	0.265	81.797
OWN_UL1	169	37.201	28.465	0	99.637
SHARE3	155	64.5	25.073	15.854	99.97
FOR	155	0.316		0	1
INST	144	0.417		0	1
PRIV	155	0.477		0	1
GOV	168	0.22		0	1
<b>Panel C – Indirect structures</b>					
D_IND	170	0.629		0	1
D_CONTROL	170	0.235		0	1
D_PR	170	0.312		0	1
LEVEL	170	3.1	2.543	1	13
DEV_SH1	169	1.175	0.484	0	3.17
DEV_SH2	169	0.995	0.621	0	4.371
DEV_SH3	169	0.911	0.464	0	3

**Note:** The means refer to the quantitative variables and the proportions to the dummy variables. AUD = audit committee established; COMP = board of directors with at least three members and at least two or 20% independent ones; D\_CONTROL = presence of an indirect structure used to assume control of the firm; D\_IND = presence of an indirect structure; D\_PR = presence of PR shares in the indirect structure; DEV\_SH1 = rights deviation in the largest ultimate shareholder (BUS); DEV\_SH2 = rights deviation in the second BUS; DEV\_SH3 = rights deviation in the third BUS; FOR = presence of a foreign shareholder among the three BUSs; FF = free float; FF\_MIN = 25 or 15% minimum free float, if the daily trading volume is above 15 million; GOV = presence of the government among the three BUSs; INST = presence of an institutional shareholder among the three BUSs; LEVEL = number of levels in the indirect structure; OWN\_UL1 = ownership concentration in the largest ultimate shareholder; PRI = presence of a private individual among the three BUSs; PRO\_AC = non-accumulation of the roles of chairman and CEO; SHARE3 = ownership concentration in the three BUSs; TAG\_D = 100% tag along.

**Source:** Elaborated by the authors.

In Panel B of Table 4, the characteristics of the ownership structure show that the ownership concentration in the largest shareholder (OWN\_ULT) is above 37% and the combined share of the three largest shareholders (SHARE3) is greater than 64%. The high degree of concentration in Brazilian companies is well known and widely highlighted in the literature (Bortolon et al., 2019; Leal et al., 2002).

The types of shareholders most present in the sample are private individuals and institutional shareholders. While the large share of private individuals is consistent with the findings of Aldrighi and Mazzer (2007), the high number of institutional shareholders is something that differs considerably from the authors' finding. In their study, they observed the presence of investment and pension funds in only 7.2% of the observations. In addition, the number of foreign and government shareholders was higher than that found by the authors. The differences could be due to the different samples and period analyzed, with the sample of this study being restricted due to the objectives of the research.

Panel C shows that pyramid structures are present in 62.9% of the observations. The high value is consistent with the 78.8% found by Andrade et al. (2015). In contrast, the result differs a little from the one presented by Aldrighi et al. (2018) who, analyzing companies from the New Market, found that 18.8% of these had pyramid structures.

The D\_CONTROL variable, in turn, shows that in only 23.5% of the observations in the sample the pyramid structure was used to assume control of the company. That is, despite the high frequency of the indirect structure, its use to assume company control is not so common. On this point, the result is more aligned with that of Aldrighi

et al. (2018), who found that in only 32% of companies that have pyramid structures the largest shareholder has more than 50% of the voting rights.

It was also observed that in more than 30% of the sample there were preference shares in companies that formed part of the indirect ownership structure, which may be a second way of deviating rights in the pyramid structure. In relation to the number of levels, the total mean was close to 3. The values are consistent with those of Bortolon (2013), who found a mean from 2.9 and 3.02 in his samples.

With relation to the deviations, the largest ultimate shareholder presented a deviation greater than 1, that is, it has more voting rights than rights over company cash flow. The second and third largest ultimate shareholders, however, had values below 1 in the sample, which shows that the leverage of votes through indirect structures is used primarily by the largest shareholder.

## 4.2 Difference Tests

Table 5 refers to the comparisons of means and proportions between the companies in the traditional segment (SEG = 1) and New Market (SEG = 0). As expected, the proportion of companies from the New Market that fulfill the rules of the segment is higher, with statistically significant differences. Only the AUD variable did not present a difference with statistical significance. The obligation to have an audit committee only emerged in 2018 and, therefore, it is normal that even the companies in the New Market have low adherence to that rule. Only 24.1% of the companies in the New Market had an audit committee in the period.

**Table 5**  
Difference tests

	SEG = 0		SEG = 1			
<b>Panel A – New Market Rules</b>						
Variables	n	Proportion	n	Proportion	$\chi^2$ stat.	Sig.
FF_MIN	73	0.822	87	0.379	31.948	***
COMP	83	0.771	90	0.2	56.482	***
PRO_AC	82	1	90	0.789	19.461	***
TAG_D	86	0.942	87	0.195	98.127	***
AUD	83	0.241	90	0.144	2.6059	NS
<b>Panel B – Ownership structure</b>						
Qualitative variables	n	Proportion	n	Proportion	$\chi^2$ stat.	Sig.
FOR	69	0.435	86	0.221	8.099	***
INST	65	0.492	79	0.354	2.789	*
PRIV	69	0.58	86	0.395	5.216	**
GOV	78	0.064	90	0.356	20.669	***
Quantitative variables	n	Mean	n	Mean	t stat.	Sig.
FF	73	41.031	87	17.405	8.4437	***
OWN_UL1	79	24.052	90	48.742	-6.4207	***
SHARE3	69	48.242	86	77.544	-8.8392	***
<b>Panel C – Indirect structures</b>						
Qualitative variables	n	Proportion	n	Proportion	$\chi^2$ stat.	Sig.
D_IND	80	0.5	90	0.744	10.85	***
D_CONTROL	80	0.088	90	0.367	18.344	***
D_PR	80	0.225	90	0.389	5.302	**
Quantitative variables	n	Mean	n	Mean	t stat.	Sig.
LEVEL	80	3.038	90	3.156	-0.302	NS
DEV_SH1	79	1.019	90	1.311	-4.375	***
DEV_SH2	79	1.117	90	0.888	2.516	**
DEV_SH3	79	1.117	90	0.73	5.996	***

**Notes:** The t test was conducted assuming different variances. The normality premise is met based on the approximation of the distribution of sample means to the normal distribution given the size of the samples (central limit theorem). The Wilcoxon-Mann-Whitney non-parametric difference of means test was also run and presented the same results for all the quantitative variables, except for DEV\_SH2, which did not maintain a statistically significant difference.

AUD = audit committee established; COMP = board of directors with at least three members and at least two or 20% independent ones; D\_CONTROL = presence of an indirect structure used to assume control of the firm; D\_IND = presence of an indirect structure; D\_PR = presence of PR shares in the indirect structure; DEV\_SH1 = rights deviation in the BUS; DEV\_SH2 = rights deviation in the second BUS; DEV\_SH3 = rights deviation in the third BUS; FOR = presence of a foreign shareholder among the three BUSs; FF = free float; FF\_MIN = 25 or 15% minimum free float, if the daily trading volume is above 15 million; GOV = presence of the government among the three BUSs; INST = presence of an institutional shareholder among the three BUSs; LEVEL = number of levels in the indirect structure; OWN\_UL1 = ownership concentration in the largest ultimate shareholder; PRI = presence of a private individual among the three BUSs; PRO\_AC = non-accumulation of the roles of chairman and CEO; SHARE3 = ownership concentration in the three BUSs; TAG\_D = 100% tag along.

**Source:** Elaborated by the authors.

The TAG\_D variable had 94.2% fulfillment and PRO\_AC had 100% adhesion in the New Market. The behavior of these in the traditional market, however, was quite different. The 100% tag along requirement was very rarely obeyed in the traditional segment (19.5%), while the prohibition on accumulating roles had 78.9% fulfillment. The high number of companies from the

traditional segment that obey the PRO\_AC rule is consistent with what is revealed by the IBGC (2014). In contrast, there is little evidence regarding the fulfillment of the 100% tag along rule in the literature; however, there is a discussion regarding its effectiveness as a corporate governance mechanism (Beirão & Lima, 2017; Silveira et al., 2008). Forti et al. (2015), however, show

that in companies with 100% tag along, the dividend distribution is lower, which the authors attribute to the lower conflict between controlling and minority shareholders. The difference between the groups may indicate that 100% tag along could be relevant in the decision to list on the New Market.

With relation to ownership structure, free float presented a higher mean in the New Market. Bortolon and Silva (2015) show that a low free float is one of the factors that influence the closing of capital, which suggests that this may be a challenge for companies to remain listed and even more so for migrating to a level with greater requirements in this sense. The concentration of control of the largest shareholder (OWN\_ULT) and of the three biggest ones (SHARE3) is greater in the traditional segment, with statistically significant differences. This reinforces the conclusion of Gorga (2009) that adherence to the special segments reduced the ownership concentration in these companies.

With relation to the variables that represent the shareholders' characteristics, it was possible to observe the greater presence of foreigners (FOR), institutional shareholders (INST), and private individuals (PRIV) in the New Market segment. However, the presence of the government (GOV) among the three largest shareholders was greater in the traditional segment.

The differences of proportions for the D\_IND and D\_CONTROL variables were statistically significant at 1%, showing the presence of pyramids, and their use for assuming control was more frequent in the traditional segment. The result diverges from the idea that companies in the New Market may use that mechanism due to the impossibility of leveraging control through two classes of shares (Andrade et al. 2015; Gorga, 2009). In addition, the proportion of companies that adopt preference shares in other companies of the pyramid was higher in the traditional segment.

There was no difference between the segments in the number of levels of the indirect structure, which was a different result from expected, not converging with Andrade et al. (2015) and Bortolon (2013), who found a relationship between the number of levels in the pyramid and the company's corporate governance level. The rights deviation of the largest ultimate shareholder presented a statistically significant difference at 1%, with a higher mean deviation observed in the traditional segment. With relation to the second and third largest ultimate shareholders, they presented a higher deviation in the New Market, of greater than 1, while in the traditional segment

it was lower than 1. That is, indirect structures are used more to leverage voting rights by these shareholders in the New Market than in the traditional segment. In this aspect, the result appears to converge more with Andrade et al. (2015) and Gorga (2009) regarding the use of pyramids in the absence of two classes of shares. One explanation for this occurring more with the second and third largest shareholders could lie in the fact that a large portion of the company's ownership may already be concentrated in the largest shareholder and so this device does not need to be used as often in the companies.

### 4.3 CGPI

The results of the difference tests for the CGPI are summarized in Table 6 and show that, in the vast majority of questions, there are statistically significant differences in the proportion of positive answers to the questions between the segments. This aspect was expected, given that the requirements regarding corporate governance practices in the New Market (SEG = 0) are stricter. The means of the four dimensions also present statistically significant differences, with the companies in the New Market presenting a higher average score than that of the traditional segment (SEG = 1). The same occurred for the mean of the total and scaled scores, which were also higher in the New Market.

With relation to the questions, some warrant highlighting due to the differences observed between the groups. The sixth question, for example, on the provision of the presentations to market analysis on the companies' websites, was positive in more than 90% of the observations in the New Market, while in the traditional segment only 18.9% of the answers were positive. Throughout the data collection for elaborating the CGPI, we observed websites with clearer, more precise, and easily assessable information in the New Market, while many websites of companies present in the traditional segment do not facilitate access to the information.

Questions Q14, Q15, and Q19 warrant highlighting as they did not present any positive answer in the observations of the companies in the traditional segment.

Finally, there is no loan prohibition that favors the controller in clauses of the company bylaws or shareholder agreement; the bylaws do not enable the participation of shareholders in the assemblies, adopting the good faith principle, and the agreements do not abstain from linking or restricting the board members' votes or from indicating directors for the company.

**Table 6***Tests of differences between means and proportions of the Corporate Governance Practices Index (CGPI)*

#	Questions of the Brazilian Institute of Corporate Governance	SEG = 0		SEG = 1		$\chi^2$ stat.	Sig.	Documentation consulted
		n	Proportion	n	Proportion			
Q1	Is there public information on policies and mechanisms for dealing with conflicts of interests?	89	1.00	90	0.69	32.82	***	References forms and company bylaws
Q2	Does the company reveal detailed information on the fixed and variable remuneration of management and the board?	82	0.87	90	0.62	13.18	***	Reference forms
Q3	Does the company reveal information on the minimum and mean remuneration and/or individual remuneration of management?	82	0.95	90	0.71	17.18	***	Reference forms
Q4	Has the company received any independent audit opinion with reservations in the last 5 years?	85	1.00	90	0.86	13.26	***	Financial statements
Q5	Does the company's website have an investor relations section containing the annual report?	87	0.91	90	0.56	27.81	***	Institutional website
Q6	Does the website provide the presentations made to market analysts?	86	0.91	90	0.19	91.29	***	Institutional website
Q7	Does the Annual Report include the implementation of corporate governance principles, besides the descriptions of the composition of the board of directors and ownership structure?	86	0.21	90	0.23	0.15	NS	Annual report and institutional website
Q8	Are the roles of CEO and chairman carried out by different people?	83	1.00	90	1.68	32.13	***	References forms
Q9	Does the company have some type of board committee revealed in public documents?	82	0.50	90	0.22	14.47	***	References forms and company bylaws
Q10	Is the board only composed of external advisers, with the exception of the CEO?.	83	0.96	90	0.31	78.44	***	References forms
Q11	Does the board have an adequate number of members, according to the IBGC 15 recommendations?	83	0.93	90	0.50	38.00	***	References forms
Q12	Do the board members have mandates with an adequate duration, according to the IBGC 16 recommendations?	82	0.39	90	0.32	0.87	NS	References forms
Q13	Does the board meet from 6 to 12 times a year?	82	0.42	90	0.29	2.99	*	References forms
Q14	Are loans in favor of the controller and other related parties prohibited in the company bylaws or shareholders agreement?	85	0.18	90	0.00	17.37	***	Company bylaws and shareholder agreement
Q15	Do the bylaws enable shareholder participation in assemblies, not requiring the documentation proving the right to vote to be sent previously (shareholder document and/or the mandate instruments) and adopting the good faith principle?	82	0.21	90	0.00	20.71	***	Company bylaws
Q16	Does the company have a share trading policy?	82	1.00	90	0.68	31.78	***	References forms
Q17	Do the company's bylaws grant additional tag along rights beyond those legally required?	86	0.94	90	0.57	33.02	***	Company bylaws
Q18	Is the company control direct?	62	0.39	79	0.30	1.07	NS	Database of the companies' ownership structure
Q19	Do the shareholder agreements abstain from linking or restricting the right to vote of the board members, or from indicating any directors for the company?	88	0.05	90	0.00	4.19	**	Shareholder agreement

**Table 6**  
Cont.

#	Questions of the Brazilian Institute of Corporate Governance	SEG = 0		SEG = 1		$\chi^2$ stat.	Sig.	Documentation consulted
		n	Proportion	n	Proportion			
Q20	Is the free float greater than or equal to 25%?	71	0.79	86	0.43	20.70	***	Database of the companies' ownership structure
Q21	Are there poison pill clauses in the company's bylaws.	82	0.82	90	0.22	60.74	***	References forms
<b>Quantitative variables</b>		<b>n</b>	<b>Mean</b>	<b>n</b>	<b>Mean</b>	<b>t stat.</b>	<b>Sig.</b>	
Q1-Q7	Transparency	90	5.53	90	3.86	-6.71	***	
Q8-13	Board of directors	90	3.86	90	2.32	-7.84	***	
Q14-Q16	Ethics and conflict of interests	90	1.27	90	0.68	-7.36	***	
Q17-Q21	Shareholder rights	90	2.58	90	1.47	-6.50	***	
	Total	90	13.23	90	8.32	-9.44	***	
	Scaled	90	5.51	90	3.47	-9.44	***	

**Notes:** The *t* test was conducted assuming different variances. The normality premise is met based on the approximation of the distribution of the sample means to the normal distribution, given the size of the samples (central limit theorem). The Wilcoxon-Mann-Whitney non-parametric difference of means test was also run, which presented the same results for all the quantitative variables.

Board of directors = dimension that concerns the board of directors in the CGPI composed of questions 8 to 13; Ethics and conflicts of interests = ethics and conflicts of interest dimension of the CGPI composed of questions 14 to 16; Q1 to Q21 = questions that compose the CGPI; NS = not significant; Scaled = scaled score of the companies in the CGPI on a scale from 0 to 10 possible points; Shareholder rights = shareholder rights dimension of the CGPI composed of questions 17 to 21; Total = total score of the companies in the CGPI on a scale from 0 to 21 possible points; Transparency = transparency dimension of the CGPI composed of questions 1 to 7.

\* =  $p < 0.1$ ; \*\* =  $p < 0.05$ ; \*\*\* =  $p < 0.01$ .

**Source:** Elaborated by the authors.

#### 4.4 Logit Regressions

Regressions 1, 2, and 3 of Table 7 contain the results with the variables that represent the New Market rules. The PRO\_AC variable was not included to avoid estimation problems, since there is little variability in the samples (the characteristic is present in 100% of the companies in the New Market and almost 80% in the traditional segment). The proxies for free float (FF\_MIN and FF) presented a multicollinearity problem and, therefore, only the dummy for the minimum free float rule was used. The correlations between proxies for ownership structure (OWN\_ULI, SHARE3, and FF) and indirect structure (D\_IND, LEVEL, and D\_CONTROL) and the consequent effects on multicollinearity determined the choices of variables in models 1, 2, and 3.

Among the rules of the New Market, the statistically significant and consistent variables among the specifications were the 100% tag along requirement (1%) and the composition of the board of directors (5%), both with a negative sign. In contrast, the dummies that represent the minimum free float and the existence of an audit committee were not significant, the latter one impacted by the low observance even in the New Market

group, given the requirement being recent (2018) with companies still meeting the adaptation deadline.

With relation to the characteristics of the largest shareholders, only the presence of a foreign (FOR) and government (GOV) shareholder were statistically significant in all the regressions. The first result converges with the idea that the presence of a foreign shareholder is associated with better governance practices (Inácio-Soares & Marcon, 2019). The result for the latter, in turn, is consistent with the worse governance quality in companies where the government is present among the main shareholders (Klein et al., 2005).

OWN\_ULI and SHARE3 were used in different regressions and both presented a statistically significant result with a positive sign, showing that the companies with a smaller ownership concentration have a greater probability of a New Market listing. Since ownership concentration is associated with the expropriation of minority shareholders (La Porta et al., 1999), the result is expected, given that the controlling shareholders may not be willing to adhere to the New Market regulations.

With relation to the pyramid structures, the D\_CONTROL variable presented a positive sign with statistical significance. The result shows that companies

in which the shareholders use pyramids to assume control have more chance of being listed in the traditional segment. This result converges with Aldrighi et al. (2018). The LEVEL variable, however, presented the opposite sign to what was expected. The negative and statistically significant sign suggests that more levels in the pyramid structure reduce the chances of a listing in the traditional segment. Considering the greater concentration of control and rights deviations of the largest shareholder identified in the univariate tests (OWN\_ULT and DEV\_SH1), it is possible that the objective of leveraging control has already been achieved in that group of companies without pyramids with many levels being necessary. When compared to the number of levels, the difference between the groups was not significant.

The second set of regressions (4, 5, and 6) was run with the CGPI. These did not include variables for the New Market rules, as well as the indirect structures and agreement variables, since the questions of the index directly or indirectly address these topics.

The CGPI presented a negative and statistically significant relationship in all the regressions, that is, the higher the score in the CGPI, the lower the probability of a listing in the traditional segment. The result is coherent, since some aspects of the index coincide with requirements of the New Market and, as expected, companies from the segment have worse governance practices.

Regarding the characteristics of the largest shareholders, only the presence of a foreign shareholder was statistically

significant. The variables that represent the ownership concentration (OWN\_ULT and SHARE3), in turn, did not present results with statistical significance. One reason for this may be that the CGPI could have greater explanatory power over the dependent variable, if compared with the previously used variables, meaning that some cease to capture their relationship with the presence in the traditional segment.

In regressions 7, 8, and 9, we used the variables for the dimensions of the CGPI and removed the one that represents the ethics and conflict of interests dimension, for a similar reason to what occurred with the PRO\_AC variable in the regressions with the New Market rules. Since its score was composed of only three questions and the behavior was very similar throughout the sample, the variable generated estimation problems.

The transparency and board of director dimensions were statistically significant in all the regressions and had a negative sign, converging with what was observed in the difference tests. The shareholder rights dimension, in turn, was only statistically significant in one of the regressions, showing that it may be the one that has the least relationship with a listing in the traditional segment. This aspect is important, since many New Market requirements are related with protecting minority shareholders.

The behavior of the variables of the other constructs was generally similar to that of the regressions with the CGPI score. That was expected to some extent, given that the dimensions are no more than parts that compose the index.

**Table 7**  
*Logit regressions*

	Dependent variable: SEGMENT (Traditional = 1 and New Market = 0)								
	New Market rules			CGPI			Dimensions of the CGPI		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FF_MIN	0.739 (1.147)		-2.002 (1.464)						
COMP	-4.473** (1.945)	-4.217** (1.938)	-6.674** (2.712)						
TAG_D	-11.548*** (3.823)	-13.470*** (5.099)	-17.263** (6.847)						
AUD	-2.387 (2.357)	-0.336 (1.792)	-3.262 (2.401)						
CGPI				-1.655*** (0.379)	-1.591*** (0.394)	-1.526*** (0.387)			
TRANSPARENCY							-1.276*** (0.451)	-1.334*** (0.484)	-1.394*** (0.505)
BOARD							-2.021*** (0.542)	-1.894*** (0.564)	-1.841*** (0.558)
RIGHTS							-1.105** (0.5)	-0.91 (0.574)	-0.611 (0.661)

**Table 7**  
Cont.

	Dependent variable: SEGMENT (Traditional = 1 and New Market = 0)								
	New Market rules			CGPI			Dimensions of the CGPI		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FOR	-6.258** (2.537)	-5.981** (3.031)	-5.284* (2.884)	-4.290*** (1.526)	-4.052*** (1.572)	-4.232*** (1.491)	-3.135*** (1.052)	-3.021*** (1.062)	-3.299*** (1.117)
INST	1.67 (1.147)	1.139 (1.104)	3.575* (1.833)	0.121 (0.968)	0.113 (0.982)	0.199 (1.043)	0.32 (0.885)	0.277 (0.900)	0.213 (0.935)
PRIV	-0.488 (1.379)	1.476 (1.851)	0.324 (1.585)	2.025 (1.364)	1.984 (1.386)	2.356 (1.485)	1.457 (1.193)	0.9 (1.223)	1.381 (1.229)
GOV	8.189*** (2.971)	9.243** (4.182)	14.560** (6.590)	2.734* (1.418)	2.515* (1.432)	2.411* (1.399)	0.511 (1.271)	0.48 (1.262)	0.5 (1.257)
OWN_ULT	0.126** (0.053)			0.004 (0.023)	-0.002 (0.024)		0.006 (0.019)	0.001 (0.020)	
SHARE3		0.200** (0.093)				0.033 (0.026)			0.037 (0.027)
FF					-0.014 (0.027)			-0.02 (0.027)	
D_IND	-1.019 (1.785)	-1.980 (2.180)							
AGREE	-0.371 (1.487)	1.412 (1.783)	-0.654 (1.713)						
LEVEL			-1.778** (0.790)						
D_CONTROL			6.676** (2.958)						
LNASS	2.847** (1.251)	2.650** (1.107)	4.305** (1.907)	1.587*** (0.497)	1.484*** (0.526)	1.452*** (0.515)	1.235*** (0.416)	1.187*** (0.407)	1.227*** (0.429)
Constant	-53.501** (23.869)	-58.647** (24.171)	-72.167** (33.223)	-14.485* (7.868)	-12.493 (8.534)	-15.242* (8.029)	-10.503 (7.314)	-9.266 (7.114)	-13.512* (8.010)
Observations	130	130	130	133	133	133	133	133	133
Log likelihood	-20.53	-18.826	-17.019	-21.349	-21.218	-20.457	-26.449	-26.187	-25.39
Akaike information criterion	75.06	69.653	68.037	66.698	68.437	64.914	80.898	82.374	78.781
$\chi^2$ statistic	138.39***	141.8***	145.41***	140.41***	140.67***	142.19***	130.21***	130.73***	132.32***
McFadden's pseudo R <sup>2</sup>	0.771	0.79	0.81	0.766	0.768	0.776	0.711	0.714	0.722

**Note:** The control variables *FIX*, *IND\_NCL*, *PAYOUT*, AND *ROA* were included in all the specifications, they did not present statistical significance, and they were omitted for questions of space. Standard errors in parentheses.

*AGREE* = presence of a shareholder agreement; *AUD* = audit committee established; *COMP* = board with at least three members and at least two or 20% independent ones; *BOARD* = board of directors dimension of the Corporate Governance Practices Index (CGPI); *D\_CONTROL* = dummy for the presence of an indirect structure used to assume control of the firm; *D\_IND* = dummy for the presence of an indirect structure; *RIGHTS* = shareholders' rights dimension of the CGPI; *FOR*, *INST*, *PRIV*, *GOV* = dummies for the presence of a foreign shareholder, institutional shareholder, private individual, and government, respectively, among the three largest ultimate shareholders; *FF* = free float; *FF\_MIN* = minimum free float of 25 or 15% if the daily trading volume is above 15 million; *LNASS* = logarithm of assets, representing the size of the company; *LEVEL* = number of levels in the indirect structure; *OWN\_ULT* = ownership concentration in the largest ultimate shareholder; *SHARE3* = ownership concentration in the three largest ultimate shareholders; *TAG\_D* = 100% tag along; *TRANSPARENCY* = transparency dimension of the CGPI.

\* =  $p < 0.1$ ; \*\* =  $p < 0.05$ ; \*\*\* =  $p < 0.01$ .

**Source:** Elaborated by the authors.

With the exception of size (LNASS), the financial control variables (FIX, IND\_NCL, PAYOUT, and ROA) did not present statistically significant coefficients and are not shown in Table 7. This result may be linked to the fact that these variables were used in the PSM to find the control group in the sample, making both samples homogeneous in these characteristics. This reduces potential differences that may exist between the groups in these variables, which was translated both in the difference tests and in the linear regressions, with few statistically significant results.

#### 4.5 Robustness Analysis

The robustness analysis involved manually selecting the control sample, as described at the end of section 3.1. The data treatment followed the same procedures as the main analysis.

### 5. CONCLUSIONS

This study tried to understand which aspects can influence companies into failing to adhere to the highest corporate governance segment, the New Market. More specifically, it sought to analyze the companies that already have only ordinary shares and have still not migrated to the higher segment, given that the literature indicates different benefits for the companies listed there (Procianoy & Verdi, 2009; Silva & Leal, 2005; Silveira et al., 2004). We identified 18 companies in the traditional segment that had only ordinary shares and that became the group of interest in the study. As a control group, we chose comparable companies in the New Market using PSM, and as a robustness analysis, through manual selection, observing the operating sector, size of assets, and net equity.

We used variables to represent New Market rules, ownership structure characteristics, shareholder agreements, corporate governance quality, and financial variables. The analyses involved descriptive statistics, tests of difference between means and proportions, and, finally, logit regressions in which the dependent variable was a dummy that represented the company's listing in the traditional segment.

In general, the research found that other rules may, in fact, have a relationship with the companies' decision not to migrate from the traditional segment. Among these, the requirement to offer 100% tag along in the shares was the one that appeared to be the most important. The minimum free float requirement also showed consistent results and may be a relevant rule. The result is also directly related with the possible resistance of controlling

Most of the findings were consistent with the previous ones, especially those that form the basis for the main conclusions of this study. Thus, the significant signs were maintained for the minimum free float (FF\_MIN), tag along (TAG\_D), governance quality (CGPI and its subindices), and control concentration variables (OWN\_UL, SHARE3, and D\_CONTROL).

The differences identified in some specifications were: (i) the identity of the ultimate shareholders (FOR and GOV) was not significant; (ii) the rule for the board composition in the New Market (COMP) showed less significance; and (iii) the variables identifying shareholder agreements (AGREE) and indirect structures (D\_IND) were significant.

The tables with the logit model results are not presented because of space restrictions, but they are available from the authors and will be provided whenever requested.

shareholders to give up part of their control, since the ownership concentration variables also have a relationship with a listing in the higher segment. This behavior is also reinforced when it is observed that in the traditional segment more companies used pyramid structures to leverage control in the companies. Finally, observing the CGPI results, it is understood that there is, in fact, a challenge for the companies from the traditional segment analyzed to fulfill the best governance practices.

Nonetheless, the study presented some limitations, such as the low number of observations in the sample and the impossibility of quantitatively observing all of the New Market rules and of accessing subjective information that can influence the companies' decision not to migrate, such as possible strategic management decisions. In addition, it was not possible to carry out a more comprehensive analysis of the shareholder agreements through regressions, due to the low number of agreements there were in the sample. Also, as the study covered the period from 2014 to 2018 and there was a change in the rules in 2018, it is believed that some conclusions may change over time.

Moreover, the research sought to extend the knowledge regarding company behavior in relation to the different corporate governance segments. With that, it sought to understand important aspects for the regulators to seek greater effectiveness of self-regulation by governance levels. In an environment such as the Brazilian one, in which changes in the legislation are difficult to be implemented, self-regulation initiatives such as the different

listing segments gain greater relevance as a tool for driving better governance practices. Understanding the attitude of companies in relation to the requirements can contribute to better definitions regarding the requirements. In addition, the study is also relevant for investors and shareholders who wish to understand the motivation of such companies

in not seeking to take advantage of the potential benefits of listing in the New Market. Finally, the study contributes to the literature, expanding the knowledge concerning ownership structures, pyramid structures, shareholder agreements, and about the corporate governance level of companies in the different listing segments in Brazil.

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