

MIGRATION TO “NOVO MERCADO”: DOES IT REALLY MEAN IMPROVEMENT OF CORPORATE GOVERNANCE PRACTICES?

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Abstract

One of the most significant changes regarding the adoption of better corporate governance was the creation of special trading segments, which impose tighter disclosure rules and listing requirements. Most literature on the special trading segments focused on the European markets. Not much is known, however, about the Brazilian “Novo Mercado” (NM). While most European new markets have failed to attract IPOs and investors, NM has grown fast and reached 35% of the total number of listed companies and 57% of the market capitalization of the Sao Paulo stock exchange. Despite its success, no research has examined whether firms that list on NM really improve their corporate governance practices. Further, there is no empirical evidence whether there is a reward for companies that list on NM without improving governance practices. This paper addresses this question by investigating the stock market reaction to the listing on NM without improving governance practices. We provide evidence that firms that list on NM and improve governance practices earn positive abnormal returns, have higher liquidity and lower volatility. On the other hand, firms that list on NM without improving governance practices do not earn positive returns, but are rewarded with higher liquidity and lower volatility.

Keywords: Novo Mercado, corporate governance, valuation, liquidity, volatility, Brazil

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1. Introduction

Corporate governance has attracted considerable attention following recent corporate scandals in developed and developing countries. For the most part, the literature compares corporate governance mechanisms and standards among countries. La Porta et al. (1997, 1998) examine the content and the development of legal institutions in different countries, and conclude that the common law systems offer greater protection against managerial abuse than do civil law systems.

Although most research on corporate governance has been cross-country, more recent studies, such as Klapper and Love (2004) and Gompers et al. (2003), have shown that corporate governance choices can vary a lot across firms within a country. Further, recent research highlights the importance of corporate governance and suggests empirical relation between governance and corporate performance. Results indicate that better corporate governance is associated to better performance and higher corporate valuation. La Porta et al. (1998, 2000, 2002) provide evidence that better shareholder protection is associated with higher valuation of corporate assets and with more developed and valuable financial markets. When the shareholders' rights are better protected by the law,

outside investors are willing to pay more for financial assets such as equity and debt.

One of the most significant changes of 1990s regarding the adoption of better corporate governance was the creation of special trading segments, such as the “Neuer Markt” (Germany), “Nouveau Marché” (France), “TechMark” (UK), “Nuovo Mercato” (Italy), “Novo Mercado” (Brazil), among others. An important characteristic of these segments is that they impose tighter disclosure rules and listing requirements.

Most literature on the special trading segments focused on the European markets. Not much is known, however, about the Brazilian “Novo Mercado” (NM). The difference between the NM and the European special segments is that the latter have been designed to attract companies from fast-growing markets and high tech areas, while the Brazilian NM places no restriction on the field of activity, nor is reserved for small companies. While most European new markets have failed to attract IPOs and investors, NM has grown fast and reached 35% of the total number of listed companies and 57% of the market capitalization of the Sao Paulo stock exchange.

Despite its huge success, only a few articles have studied the Brazilian NM. Chavez and Silva (2006) analyze the market price reaction and liquidity impact

of the firm's listing on NM and find significant enhancement of stock return and liquidity. In a similar study, Carvalho and Pennacchi (2006) provide evidence that the listing on NM brings positive abnormal returns, and an increase in share trading volume.

Despite the trend on the study of the NM, no research examines whether firms that list on NM really improve their corporate governance practices. Further, there is no empirical evidence whether there is a reward for companies that list on NM without improving governance practices. This paper addresses this question by investigating the stock market reaction to the listing on NM without improving governance practices. We provide evidence that firms that list on NM and improve governance practices earn positive abnormal returns, have higher liquidity and lower volatility. On the other hand, firms that list on NM without improving governance practices do not earn positive returns, but are rewarded with higher liquidity and lower volatility.

This paper contributes to our understanding of corporate governance in the following ways. First, it adds to the scant literature on the Brazilian NM. Brazil offers a unique case study given the prevalence of a weak legal environment (La Porta et al. (1998)) and the presence of the NM, on which firms of different sectors voluntarily decide to offer high standards of transparency as well as better corporate governance practices. Second, this paper examines whether companies that do not improve governance practices benefit from the listing on NM.

The paper is structured as follows. Section 2 shows the main studies on special listing segments with enhanced corporate governance practices. Section 3 provides the main characteristics of the Brazilian market and NM. Section 4 describes the data, methodology and contains the empirical results. Section 5 discusses our findings and concludes.

2. Corporate Governance and Special Listing Segments

Recent studies suggest that the Berle and Means (1932) model of widely dispersed ownership is not common even in developed countries. In fact, La Porta et al. (1999) show that large shareholders control a significant number of firms in the wealthier countries as well. Moreover, the country legal institutions differ from one another with respect to the protections that they afford to shareholders. La Porta et al. (1997, 1998) provide evidence that shareholder protection is greater in common law systems when compared to civil law regimes.

There have been efforts by countries with weak corporate governance toward higher transparency and better shareholder rights either by enacting legislation reform or by creating new listing segments. Shleifer and Wolfenzon (2002) argue that legal reform is generally slow, because it faces political opposition from controlling shareholders. Further, when the

legislation change passes, it is mandatory for all public companies, so that the differentiation across firms is lower when compared to voluntary actions toward better corporate governance practices.

The other significant approach is the creation of special trading segments with enhanced corporate governance standards. Chavez and Silva (2006) show that the differentiation signal is clear and more visible when compared to legislation reform, because the firm voluntarily chooses to list on the special segment. Most importantly, a voluntarily set of better corporate governance practices should induce a self-selection of valuable firms and overcome the asymmetric information problems between controlling and minority shareholders.

Enhanced governance through voluntarily listing on special segments should be characterized by better performance, higher corporate valuation and lower risk. This is consistent with La Porta et al. (1998, 2000, 2002), who document that investors would be willing to pay more for financial assets when their rights are better protected and the risk of expropriation is lower. Further, Brockman and Chung (2003) argue that better corporate governance practices should enhance market liquidity.

Most literature on the special trading segments focused on the European markets created in the 1990s to attract companies from fast-growing markets and high tech areas, such as the "Neuer Markt" (Germany), "Nouveau Marché" (France), "TechMark" (UK), and "Nuovo Mercato" (Italy). While most European new markets have failed¹, the Brazilian "Novo Mercado" (NM) has developed significantly.

However, only a few studies have analyzed the Brazilian NM. Chavez and Silva (2006) and Carvalho and Pennacchi (2006) provide evidence that listing on NM enhances firm valuation and liquidity. Nevertheless, none of them examine whether firms improve their corporate governance practices when they migrate to NM. This paper fills this gap and investigates the stock market reaction to the listing on NM without improving governance practices.

3. The Brazilian Corporate Market and the "Novo Mercado"

As shown by La Porta et al. (1998), the Brazilian legal system follows the French code tradition and seems to offer less protection to investors, both with regard to the written laws and their enforcement. The main characteristics of the Brazilian market are stated by the Law 6404/76 ("Law of Corporations"), which had important amendments in 1997 and in 2001.

In Brazil, companies are allowed to issue non-voting shares in an amount up to two-thirds of the total capital², which means that the control of a company can be guaranteed with only one-sixth of its total capital. In fact, the control can be kept with much less than one-sixth of total capital through the use of pyramidal structures.

Besides the voting rights, another difference between voting and non-voting shares is the mandatory bid rule for voting shares in the case of a control transfer. This rule implies that the acquirer of the control block is also obliged to offer minority shareholders the same (or partially the same) price for their shares. The Brazilian law establishes the mandatory bid rule only for voting shares for at least 80% of the control block price.

The NM was created by the Sao Paulo stock exchange (Bovespa) in 2000 and consists of three listing segments: Level 1, Level 2 and Level 3³. These segments are designed for companies that voluntarily decide to offer high standards of disclosure and transparency, as well as better corporate governance practices. The main objective of the NM levels is to provide investors with corporate governance rights beyond what is legally required. What distinguishes the three levels is the adherence to the practices and the degree of commitment assumed by the company.

The Level 1 requires that the companies improve their methods of disclosure and increase the dispersion of their shares. The main practices required for the Level 1 are: maintenance of a free-float of at least 25% of the capital; public offerings with mechanisms to facilitate capital dispersion; disclosure of consolidated financial statements and special audit revision; monthly disclosure of trades of stocks by the controlling shareholders and management; and disclosure of an annual calendar of corporate events.

To be classified on Level 2, the company must adopt all the obligations of Level 1 and a much broader range of corporate governance practices: a two-year unified mandate for the entire board of directors, which must have at least 5 members, 20% of whom must be independent; disclosure of annual balance sheet according to the US GAAP or IFRS; mandatory bid rule for voting shares at 100% of the control block price; mandatory bid rule for non-voting shares at 80% of the control block price; voting rights granted to non-voting shares in relevant decisions such as incorporation, spin-off, merger, and approval of contracts between related parties; and admission to the arbitration for resolution of corporate disputes.

To be listed on Level 3, the company is required to adopt all the obligations of Level 1 and 2 and issue only voting shares. Therefore, what distinguishes Level 2 from Level 3 is the prohibition of non-voting shares in the company's capital structure.

In July 2007, the NM reached 35% of the total number of listed companies and 57% of the market capitalization of the Bovespa. The performance of these companies can be measured by the evolution of the IGC (Special Corporate Governance Stock Index), designed to measure the return of a portfolio composed of companies with good corporate governance practices⁴. From its creation in June 2001 to July 2007, the IGC had a total return of 537%, significantly higher than the Ibovespa⁵ return of 273%.

4. Empirical Analysis

4.1. Data

Our sample includes all firms that have migrated to NM as of June 2006. We exclude companies with incomplete or unavailable information and firms that had no trade on the Sao Paulo stock exchange during the 12 months before the migration to NM. The final sample consists of 28 firms, distributed as follow: 20 on Level 1, 4 on Level 2, and 4 on Level 3.

Most of the data come from the Economatica, a financial database that contains a wide coverage of Brazilian stock market data, and Datastream. The information on the corporate governance provisions comes from the Brazilian Securities and Exchange Commission (CVM), and the dates on which the firms listed on NM are gathered from the Bovespa and the provider of news Factiva.

4.2. Event Study for Abnormal Returns

We perform an event study to determine the return reaction when the firm decides to migrate to NM. The event study methodology requires the precise identification of the event date. The problem in performing an event study in the case of migration to NM is that the event date does not necessarily coincide with the date on which the information about the migration become publicly available, because firms may discuss over time with their shareholders and market participants about the possibility of migrating to NM.

Since the migration must be approved in a shareholders' meeting, we consider two event dates: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration.

To calculate the abnormal returns, we estimate the market model using the Sao Paulo stock exchange index and a 250-day estimation window from trading day -255 to -6 relative to the event date ($t=0$)⁶. We use an 11-day event window ($t-5$ to $t+5$) to allow for information about the migration to be leaked in advance or to have a slow effect on the stock prices.

On a particular day t , the abnormal return AR_t is defined as the stock return in excess of its expected return calculated from the market model. For a multi-day announcement window $[t_1 \text{ to } t_2]$, a cumulative abnormal return $CAR [t_1 \text{ to } t_2]$ is defined as the sum of the time-series of AR_t within the event window. Cumulative abnormal returns over days -1 to $+1$ ($CAR [-1,+1]$), -5 to $+1$ ($CAR [-5,+1]$), and -5 to $+5$ ($CAR [-5,+5]$) are calculated around the event date for each share.

There are 8 (out of 28) overlapping and thus non-independent event dates, which cause the partial clustering of event windows. Since the cross-sectional dependence in the data may cause downward bias in the standard error (see Bernard (1987)), the results assuming cross-sectional independence should be

interpreted cautiously. Therefore, due to event clustering and possible event-induced volatility, we compute a bootstrap p-value (see Boehmer, Musumeci, and Poulsen (1991), and Aktas, DeBodt, and Roll (2004)). We re-sample from non-clustered abnormal returns in order to find the distribution of the t -statistic assuming independent observations. Then, we determine the p-value by the location of the observed average abnormal return within the bootstrapped distribution⁷.

The results of the event study are shown in Table 1. There are significantly positive abnormal returns when the firms call the shareholders' meeting and when the migration is approved. Although the AR_0 is not statistically significant, the cumulative abnormal returns (ranging from 1.95% to 4.62%) are significant in both statistical and economical terms.

We can note that the market reacts to both the call for the shareholders' meeting and the shareholders' meeting itself. One possible explanation is that, although the call for a shareholder's meeting does not necessarily mean that the migration is going to be approved in the shareholders' meeting, it conveys information about the probability of the approval.

It is important to note that, since the control is highly concentrated in most Brazilian companies, the controlling shareholder must agree to migrate to NM. Since the shareholders' meeting is called by the Board of Directors, which is generally composed of corporate insiders and controlling shareholders, the inclusion of the migration to NM in the agenda of a shareholders' meeting may imply that the probability of approval by the controlling shareholder is high.

4.3. Regression Analysis of Liquidity and Volatility

We now run regressions to analyze the effect of the migration to NM on the share liquidity and volatility. In our models, the liquidity (volatility) of share i in day t depends on the liquidity (volatility) of share i in day $t-1$, and on the liquidity (volatility) of the market index in day t . The following regressions are specified:

$$\begin{aligned} Vol_{i,t} &= \alpha_0 + \alpha_1 Vol_{i,t-1} + \alpha_2 Vol_{m,t} + \alpha_3 NM_{i,t} + \alpha_4 NM_{i,t} \times \\ & Vol_{i,t-1} + \alpha_5 NM_{i,t} \times Vol_{m,t} + \varepsilon_{i,t} \\ Liq_{i,t} &= \beta_0 + \beta_1 Liq_{i,t-1} + \beta_2 Liq_{m,t} + \beta_3 NM_{i,t} + \beta_4 NM_{i,t} \times \\ & Liq_{i,t-1} + \beta_5 NM_{i,t} \times Liq_{m,t} + \nu_{i,t} \end{aligned}$$

where $Vol_{i,t}$ is the volatility (annualized standard deviation of daily returns in the last 250 trading days) of share i in day t , $Liq_{i,t}$ is the liquidity (trading volume throughout the previous 250 trading days relative to the total market value of the firm) of share i in day t , $Vol_{m,t}$ is the volatility of the market index in day t , $Liq_{m,t}$ is the liquidity of the market index in day t , and $NM_{i,t}$ is a dummy variable that takes the value 1 if the firm i migrates to NM in day t , ε and ν are error terms.

The results of the analysis of the liquidity and volatility are shown in Table 2 and 3, respectively. Table 2 indicates that the current share liquidity depends strongly on the previous share liquidity. The liquidity of the market does not seem to affect the share liquidity. Most importantly, there is a strong increase in the liquidity when the firms announces and approves the migration to NM.

Table 3 indicates that the current share volatility depends on the previous share volatility, and on the current volatility of the market. Further, there is a significant decrease in the volatility when the firms announces and approves the migration to NM. Overall, our results for the regression analysis provide evidence that the migration to NM is positively (negatively) related to the share liquidity (volatility).

4.4. Migration to NM and Improvement of Corporate Governance Practices

In Brazil, although all companies are subject to the same legislation, their corporate governance practices can differ substantially since corporate charter provisions can establish additional rights for minority shareholders. In order to measure the quality of the firm's corporate governance practices before and after the migration to NM, we use the corporate governance index (CGI) developed by Leal and Carvalhal (2007), who use an approach that has recently become very popular in the literature (Black et al. (2006), Klapper and Love (2004), and Gompers et al. (2003)).

The index is composed of 15 questions. If the answer is "yes" to any given question they interpret it as a pro-shareholder provision or action and attribute it the value of 1. The negative answers get a null value. The index is the simple sum of the values assigned to each question. The questions are grouped in four dimensions: disclosure, board composition and functioning, ethics and conflicts of interest, and shareholder's rights. The detailed description of the CGI is presented in the appendix

Firms are divided into two groups: firms that do and do not improve corporate governance practices after the migration to NM. Table 4 shows whether corporate governance practices are improved after the migration for companies in all three NM levels. Most companies (16 out of 20) that migrated to Level 1 have not changed their practices. Only two of them have improved 1 point in the CGI, while two firms have had a decrease of 1 point in the CGI. The average CGI was 7.20 before the migration and remained at 7.20 after the migration. On the other hand, the CGI has increased substantially for the companies that have migrated to Level 2 (from 6.25 to 10.00, an average increase of 3.75) and Level 3 (from 7.75 to 13.25, an average increase of 5.50). As expected, the CGI increases more for Levels 2 and 3, which require a much broader range of corporate governance practices.

Table 5 shows the event study for abnormal returns classifying the firms according to the improvement (or not) of corporate governance practices. The results indicate that the cumulative abnormal returns (ranging from 3.00% to 7.04%) are significantly positive for firms that improve the governance practices (all the results are statistically significant at 1%). In contrast, there are no abnormal returns for firms that do not improve governance practices. This result is consistent with a positive relation between better corporate governance and higher performance (La Porta et al. (1998, 2000, 2002)). Although the firms migrate to NM, their governance practices do not improve, so there should be no reward in terms of positive abnormal returns.

The results of the regression analysis for the share liquidity and volatility are shown in Table 6 and 7, respectively. The results indicate that the share liquidity (volatility) increases (decreases) for firms that do and do not improve corporate governance practices. These results are consistent with those of Tables 2 and 3. Contrary to the abnormal return analysis, there is an enhancement of liquidity and decrease of volatility even for firms that migrate to NM without improving governance practices.

There are two possible explanations. Although the firms do not improve governance practices, they must provide higher liquidity for their shares in order to list on NM, which requires a free-float of at least 25% of the capital. Moreover, the migration to NM implies that the firm's commitment to governance practices increases, because the stock exchange will act as a certifier agent. A migrating firm's commitment to improved information disclosure would tend to reduce information asymmetries between the firm (and its controlling shareholders) and minority investors. Thus, minority investors are less likely to be expropriated, thereby decreasing the volatility.

Overall, our results show that there are positive abnormal returns for firms that migrate to NM and improve the governance practices. As expected, there is no reward for firms that do not improve governance practices. Further, we provide evidence that there is an enhancement of liquidity and decrease of volatility for firms that migrate to NM, even for those that do not improve governance practices.

5. Conclusion

There have been efforts by countries with weak corporate governance regimes toward higher transparency and better shareholder rights by creating new listing segments with enhanced corporate governance standards. The voluntary migration to the special governance segments should be characterized by better performance, higher liquidity and lower risk, because investors would be willing to pay more for financial assets when their rights are more protected and the risk of expropriation is lower.

Most literature on the special trading segments focused on the European markets. Not much is known, however, about the Brazilian "Novo Mercado" (NM), which, in contrast to most European new markets, is not designed to attract companies from fast-growing markets and high tech areas. Further, there is no empirical evidence whether there is a reward for companies that list on NM without improving governance practices.

This paper addresses this question by investigating the stock market reaction to the listing on NM without improving governance practices. We provide evidence that firms that list on NM and improve governance practices earn positive abnormal returns, have higher liquidity and lower volatility. On the other hand, firms that list on NM without improving governance practices do not earn positive returns, but are rewarded with higher liquidity and lower volatility.

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Endnotes

¹ See Goergen et al. (2003) for a study about the rise and fall of the European new markets. It is interesting to note that the German "Neuer Markt" gave way to the Prime Standard segment, which requires transparency standards higher than those regulated by law, but, similar to the Brazilian NM, is not restricted to small and medium size firms in high-growth industries.

² In 2001, the law changed the maximum amount of non-voting shares to 50% of total capital, but this rule is mandatory only to non-public firms that decide to go public after the law.

³ The Level 3 is called the "Novo Mercado". In this paper, we consider that all three governance levels are part of the NM, so that we can analyze the market reaction to the listing on each NM level separately.

⁴ Such companies should be traded on Levels 1, 2 or 3. The shares are weighted according to their respective market values and by a governance factor, which is equal to 2 (Level 3), 1.5 (Level 2), and 1 (Level 1).

⁵ The Ibovespa is the main indicator of the Brazilian stock market performance.

⁶ We also use the constant-mean-return model (see Campbell, Lo, and MacKinlay (1997)) to analyze the potential biases of our results. The results (not reported, but available upon request) are essentially identical to those obtained using the market model.

⁷ Alternatively, we use the approach developed by Schipper and Thompson (1983, 1985) and analyze the abnormal returns using unaggregated security-by-security data. While not reported in this paper, the results, although weaker, yield similar conclusions.

Appendices

Table 1. Abnormal Returns and Migration to NM

Abnormal returns of firms that migrate to NM. Two event dates are considered: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration. The abnormal returns are estimated through the market model using a 250-day estimation window. Abnormal returns during the event date (AR_0) and cumulative abnormal returns over days -1 to +1 ($CAR [-1,+1]$), -5 to +1 ($CAR [-5,+1]$), and -5 to +5 ($CAR [-5,+5]$) are calculated. Bootstrap p-values (in parentheses) account for event clustering and event-induced volatility. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

Abnormal Returns	Event	
	Call for the Shareholders' Meeting	Shareholders' Meeting
AR_0	0.18 (0.70)	0.37 (0.47)
$CAR [-1,1]$	1.95% ** (0.02)	2.19% ** (0.02)
$CAR [-3,3]$	2.20% ** (0.02)	2.20% ** (0.03)
$CAR [-5,5]$	4.62% *** (0.00)	3.41% ** (0.05)

Table 2. Liquidity and Migration to NM

The dependent variable in each regression is the liquidity (*Liq*), measured as the trading volume throughout the previous 250 trading days relative to the total market value of the firm. *Liq_m* is the liquidity of the market index, and NM is a dummy variable that takes the value 1 after the firm migrates to NM. Two dates are considered: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration. The p-values are shown in parentheses. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

Variables	Event	
	Call for the Shareholders' Meeting	Shareholders' Meeting
<i>Liq_{t-1}</i>	0.54*** (0.00)	0.52*** (0.00)
<i>Liq_{m,t}</i>	0.01* (0.10)	0.00 (0.41)
NM	-0.07 (0.75)	-0.02 (0.30)
NM x <i>Liq_{t-1}</i>	0.08*** (0.00)	0.10*** (0.00)
NM x <i>Liq_{m,t}</i>	0.00 (0.52)	0.00 (0.69)
Adjusted R ²	0.33	0.32

Table 3. Volatility and Migration to NM

The dependent variable in each regression is the volatility (*Vol*), measured as the annualized standard deviation of daily returns in the last 250 trading days. *Vol_m* is the volatility of the market index, and NM is a dummy variable that takes the value 1 after the firm migrates to NM. Two dates are considered: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration. The p-values are shown in parentheses. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

Variables	Event	
	Call for the Shareholders' Meeting	Shareholders' Meeting
<i>Vol_{t-1}</i>	0.19*** (0.00)	0.19*** (0.00)
<i>Vol_{m,t}</i>	0.54*** (0.00)	0.55*** (0.00)
NM	-0.01*** (0.01)	-0.01*** (0.01)
NM x <i>Vol_{t-1}</i>	0.01 (0.57)	0.00 (0.94)
NM x <i>Vol_{m,t}</i>	0.06 (0.16)	0.06 (0.20)
Adjusted R ²	0.09	0.09

Table 4. Improvement of Corporate Governance Practices and Migration to NM

List of firms that migrate to NM, and quality of corporate governance practices before and after the migration to NM, measured by the corporate governance index (CGI) developed by Leal and Carvalho (2007). The index is composed of 15 questions, and is the simple sum of the values assigned to each question.

Firm	Migration Date	NM Level	CGI Before Migration	CGI After Migration	CGI Change
Alpargatas	15/Jul/03	1	6	7	1
Aracruz	16/Apr/02	1	7	6	-1
Bradesco	26/Jun/01	1	9	8	-1
Bradespar	26/Jun/01	1	8	8	0
Confab	19/Dec/03	1	7	7	0
Duralex	05/May/05	1	9	9	0
Fras-Le	11/Nov/04	1	4	4	0
Gerdau	26/Jun/01	1	6	6	0
Gerdau Met	25/Jun/03	1	8	8	0
Globocabo	26/Jun/01	1	6	6	0

Table 4 continued

Iochpe-Maxion	10/Nov/05	1	9	9	0
Itaubanco	26/Jun/01	1	7	7	0
Klabim	10/Dec/02	1	8	8	0
Randon Part	26/Jun/01	1	6	6	0
Sadia	26/Jun/01	1	8	8	0
Tran Paulista	18/Sep/02	1	8	8	0
Ultrapar	27/Oct/05	1	8	9	1
Unibanco	26/Jun/01	1	8	8	0
Unipar	24/Nov/04	1	6	6	0
VCP	14/Nov/01	1	6	6	0
Average Level 1			7.20	7.20	0
Celesc	26/Jun/02	2	6	10	4
Eletropaulo	13/Dec/04	2	6	7	1
Eternit	02/Mar/05	2	8	14	6
Marcopolo	03/Sep/02	2	5	9	4
Average Level 2			6.25	10.00	3.75
Perdigão	12/Apr/06	3	9	14	5
Rossi Resid	27/Jan/06	3	6	14	8
Sabesp	24/Apr/02	3	10	14	4
Tractebel	16/Nov/05	3	6	11	5
Average Level 3			7.75	13.25	5.50

Table 5. Abnormal Returns and Improvement of Governance After Migration to NM

Abnormal returns of firms that migrate to NM, divided into two groups: firms that do and do not improve corporate governance, which is measured by the corporate governance index (CGI) developed by Leal and Carvalhal (2007). Two event dates are considered: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration. The abnormal returns are estimated through the market model using a 250-day estimation window. Abnormal returns during the event date (AR_0) and cumulative abnormal returns over days -1 to +1 ($CAR [-1,+1]$), -5 to +1 ($CAR [-5,+1]$), and -5 to +5 ($CAR [-5,+5]$) are calculated. Bootstrap p-values (in parentheses) account for event clustering and event-induced volatility. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

Abnormal Returns	Event			
	Call for the Shareholders' Meeting		Shareholders' Meeting	
	Do Improve Governance	Do Not Improve Governance	Do Improve Governance	Do Not Improve Governance
AR_0	0.85 (0.32)	0.13 (0.82)	0.67 (0.25)	0.38 (0.71)
$CAR [-1,1]$	3.72%*** (0.01)	1.14% (0.24)	3.03%*** (0.00)	0.18% (0.92)
$CAR [-3,3]$	4.20%*** (0.01)	1.25% (0.24)	3.00%*** (0.01)	0.20% (0.92)
$CAR [-5,5]$	7.04%*** (0.01)	3.52% (0.11)	4.51%*** (0.01)	0.44% (0.89)

Table 6. Liquidity and Improvement of Governance After Migration to NM

The dependent variable in each regression is the liquidity (Liq), measured as the trading volume throughout the previous 250 trading days relative to the total market value of the firm. Liq_m is the liquidity of the market index, and NM is a dummy variable that takes the value 1 after the firm migrates to NM. Two dates are considered: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration. The p-values are shown in parentheses. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

Variables	Event			
	Call for the Shareholders' Meeting		Shareholders' Meeting	
	Do Improve Governance	Do Not Improve Governance	Do Improve Governance	Do Not Improve Governance
Liq_{t-1}	0.58*** (0.00)	0.53*** (0.00)	0.56*** (0.00)	0.51*** (0.00)
$Liq_{m,t}$	0.01*** (0.00)	0.00 (0.37)	0.01*** (0.00)	0.00 (0.66)

Table 6 continued

NM	0.02 (0.39)	-0.02 (0.70)	0.00 (0.85)	-0.02 (0.43)
NM x Liq _{t-1}	0.05*** (0.00)	0.09*** (0.00)	0.03*** (0.00)	0.10*** (0.00)
NM x Liq _{m,t}	0.00 (0.34)	0.00 (0.50)	0.00 (0.52)	0.00 (0.78)
Adjusted R ²	0.42	0.32	0.39	0.31

Table 7. Volatility and Improvement of Governance After Migration to NM

The dependent variable in each regression is the volatility (*Vol*), measured as the annualized standard deviation of daily returns in the last 250 trading days. *Vol_m* is the volatility of the market index, and NM is a dummy variable that takes the value 1 after the firm migrates to NM. Two dates are considered: the date on which the call for the shareholders' meeting becomes publicly available, and the date on which the shareholders approve the migration. The p-values are shown in parentheses. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

Variables	Event			
	Call for the Shareholders' Meeting		Shareholders' Meeting	
	Do Improve Governance	Do Not Improve Governance	Do Improve Governance	Do Not Improve Governance
Vol _{t-1}	0.19*** (0.00)	0.19*** (0.00)	0.17*** (0.00)	0.19*** (0.00)
Vol _{m,t}	0.68*** (0.00)	0.49*** (0.00)	0.60*** (0.00)	0.54*** (0.00)
NM	-0.01* (0.07)	-0.01** (0.02)	-0.01* (0.07)	-0.01* (0.08)
NM x Vol _{t-1}	-0.05 (0.15)	0.02 (0.18)	-0.06 (0.12)	0.00 (0.47)
NM x Vol _{m,t}	0.02 (0.30)	0.08 (0.18)	0.01 (0.33)	0.09 (0.14)
Adjusted R ²	0.08	0.09	0.07	0.09

Appendix. Description of the Corporate Governance Index (CGI)

Corporate governance index developed by Leal and Carvalhal (2007). Each question corresponds to a "yes" or "no" answer. If the answer is "yes", then the value of 1 is attributed to the question, otherwise the value is 0. The index is the sum of the points for each question. The maximum index value is 15. Index dimensions are simply for presentation purposes and there is no weighing among questions. All questions are answered from public information disclosed by listed companies and not by means of potentially subjective interviews.

Disclosure
1. Does the company produce its financial reports by the required date?
2. Does the company use an international accounting standard (IASB/U.S. GAAP)?
3. Does the company use one of the leading global auditing firms?
4. Does the company disclose the compensation of the CEO and board members?
Board Composition and Functioning
5. Are the Chairman of the Board and the CEO not the same person?
6. Is the board clearly not made up of corporate insiders and controlling shareholders?
7. Does the company have board monitoring committees (audit, compensation, etc.)?
8. Is there a permanent Fiscal Board?
Conflicts of Interest
9. Is the controlling shareholder's ratio of vote to cash-flow not higher than 1?
10. Is the company free of any inquiries or convictions by the Brazilian Securities and Exchange Commission (CVM) for governance malpractices?
11. Does the company charter establish arbitration to resolve corporate conflicts?
Shareholder's Rights
12. Does the company facilitate the voting process beyond what is legally required?
13. Does the company grant additional voting rights beyond what is legally required?
14. Does the company grant mandatory bid beyond what is legally required?
15. Does the shareholder agreements decrease the largest shareholder's control?