AN ASSESSMENT OF DUAL-CLASS SHARES IN BRAZIL

Evidence From the Novo Mercado Reform

Pedro Matos

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Pedro Matos
Academic Director of the Richard A. Mayo Center for Asset Management
Associate Professor of Business Administration (Finance)
Darden School of Business
University of Virginia

Amec
Associação de Investidores no Mercado de Capitais

CFA Society Brazil

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Contents

Executive Summary

The Brazilian stock market has faced numerous obstacles throughout its development. Despite Brazil having the eighth largest economy in terms of GDP, the BM&FBOVESPA stock exchange ranks as only the seventeenth largest market capitalization in the world. Similar to other emerging markets, the corporate governance of Brazilian listed firms has followed the concentrated ownership model, with only a minority of companies' shares floated in the market. The main conflict typically occurs between controlling versus minority shareholders and can manifest itself in a number of ways, including corrupt related-party transactions. For example, Petrobras, the flagship government-controlled Brazilian firm, paid for rights to extract the "pre-salt" oil discoveries to the government and used the proceeds to buy new shares. Subsequently, the company has been at the center of the recent "Petrolão — Operation Car Wash" scandal, where contracts with suppliers to the company were set at inflated prices due to weak internal controls.

Historically, Brazilian companies have a dual-class structure with common shares (voting) and preferred shares (nonvoting). To compensate for no voting rights, preferred shares pay (in theory) higher dividends or have "tag-along" rights (takeout rights on a sale of control). This enables holders of voting shares to control companies by owning as little as 16.67% of the company's total equity, which is a deviation from the proportionality principle (*one-share one-vote*). The high level of share-ownership concentration in the hands of the government or founding families can be detrimental to shareholder value creation.

In 2000, BM&FBOVESPA launched the Novo Mercado — a voluntary listing segment with enhanced protections for shareholders. One of the most exigent rules of the Novo Mercado listing is the requirement to issue only common shares (*one-share one-vote*). Intermediate listing levels (Nível 1 and Nível 2) offer between 80% and 100% tag-along rights to all shareholders (i.e., the same conditions provided to controlling shareholders in the transfer of the controlling block). A Novo Mercado listing entails further requirements in terms of transparency, monitoring, and share dispersion.

The core design of the Novo Mercado listing was to enact equitable treatment to all shareholders according to international best practices, which is the focus of our study. The Novo Mercado reform offers an opportunity to test the potential benefits of eliminating dual-class share structures. Key findings of this study include the following:

1. A strong macroeconomic environment and the new Bovespa listing rules led to initial public offerings (IPOs) in 2004–2007 as well as a spike of secondary offerings (follow-ons) in 2009–2011; however, that pace has slowed in the last 5 years. By mid-2016, there was a total of 154 IPOs and 123 follow-ons with a total raised capital of R$ 374 billion; there were also migrations of companies to the premium governance segments. **Novo Mercado (the *one-share one-vote* segment) now represents close to 40% of the total number of listed firms and market capitalization**. However, this **has not stopped the net drop in the number of listed companies from 2000–2016**.

2. There remains **a high level of controlled companies** in Brazil. As of 2016, dispersedly held firms represent only 10% of the total market cap (and 24% in the Novo Mercado segment). The largest blockholders are families, affiliated foundations, and top managers, which control 36% (e.g., Bradesco and JBS, which we discuss in this report). The second most frequent case is that of government-controlled companies, which represent 19% of the total market cap (such as Petrobras or Banco do Brasil). The remaining stock listings are other closely held companies controlled by joint ventures or subsidiaries of multinational companies.

3. The **stock index of Novo Mercado single-class firms (IGCNM) outperformed** the market index IBovespa over the last decade. However, the performance of the Brazilian stock market was not stellar, producing only single-digit average annual returns.

4. The Novo Mercado firms with single-class shares produced better operational results in terms of accounting profitability (ROA) and have higher valuations (M/B ratios), while paying lower dividends. Estimates from multivariate regressions (that control for "tag-along rights" and other factors) indicate that **Novo Mercado single-class firms exhibit a 6% higher return-on-assets (accounting performance) and up to 0.45 higher market-to-book ratio (market valuation)**. Additionally, the regressions show that a Novo Mercado premium governance listing is incremental to just "renting" governance from a U.S. cross-listing via an American Depositary Receipt (ADR). We conclude that a Novo Mercado listing helps ameliorate the potential conflicts between controlling versus minority shareholders. There is some evidence that a **Novo Mercado single-class share listing is rewarded by investors with a higher M/B ratio, particularly in the cases of the presence of a controlling shareholder**.

5. There is **some (albeit weak) evidence that Novo Mercado single-class firms experienced less risk** in the last decade, both in terms of lower total return volatility and less pronounced stock price drawdowns, such as the recent "Petrolão — Operation Car Wash" market episode.

Overall, this study documents that the firms that moved to the Novo Mercado single-class structure experienced higher firm performance. However, there are continuing criticisms that these reforms did not eliminate the dominance of controlled companies even in single-class firms, and that they have not reinvigorated the local equity markets. Progress has stalled — particularly in the last five years. In our concluding remarks, we offer an update on the 2016 Novo Mercado reform agenda currently being proposed by the BM&FBOVESPA.

1. Dual-Class Shares and Controlled Firms in Brazil

The Brazilian stock market has made front-page news worldwide due to the high-profile "Petrolão — Operation Car Wash" ("*Operação* Lava *Jato*"). The corruption scandal, which surfaced in 2014, centered on the state-controlled oil company Petrobras (Petróleo Brasileiro S.A.), where executives accepted bribes in return for awarding contracts to construction firms at inflated prices (for details, see *Financial Times* [2016]). Beyond the recent market drop due to these governance and political problems, Brazil has historically faced numerous challenges in the development of a healthy stock market. In fact, Brazil's equity capital market is relatively small when compared to its weight in the global economy. Despite being the eighth largest economy in terms of GDP, Brazil has about 350 listed companies, which is much fewer than other major emerging market economies, such as China or India.[1] The Brazilian stock market (BM&FBOVESPA) ranks only seventeenth in the world by market capitalization and fourteenth by trading volume (**Table 1**).[2]

At the same time, Brazil presents itself as an interesting "experiment" of market reforms designed to improve corporate governance standards and encourage companies to use equity capital markets. In December 2000, BM&FBOVESPA (at the time the São Paulo Stock Exchange or "Bovespa") launched the Novo Mercado — a voluntary premium listing segment with enhanced protections for shareholders and transparency rules. In the following year, Brazil updated its Corporate Law, increasing shareholder rights and the powers of the regulator CVM (the Comissão de Valores Mobiliários). These reforms came in response to the growing number of de-listings and the drying up of liquidity in all but the largest companies as trading volumes declined in the late 1990s (see Santana [2008] for an overview of the Novo Mercado reform). Low prices in the secondary market had driven many controlling shareholders to remove their companies from the Brazilian market by going private. Another challenge for Bovespa was a shift of trading in shares of the largest Brazilian companies to the American Depositary Receipt (ADR) market in New York. The cross-listing of shares in US markets committed firms to higher levels of

[1]There were about 350 public companies listed in BM&FBOVESPA as of mid-2016. However, fewer than 300 firms have sufficient market liquidity, and they will be examined later in the study.
[2]BM&FBOVESPA (in Portuguese, "Bolsa de Valores, Mercadorias & Futuros de São Paulo") is the result of the May 2008 merger between the Brazilian Mercantile and Futures Exchange (BM&F) and the São Paulo Stock Exchange (Bovespa Holding).

Table 1. Top Stock Markets in the World (sorted by domestic stock market capitalization)

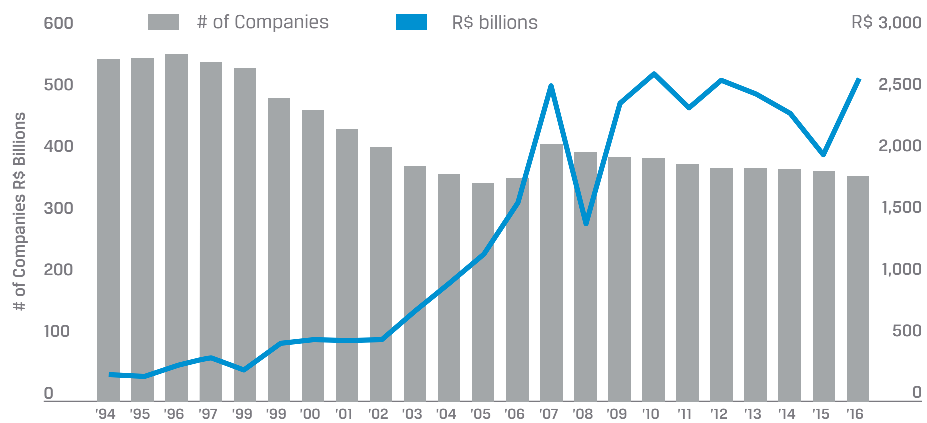
		Domestic market capitalization (USD billions)		Number of listed companies		Value of share trading		GDP (USD billions)	
Country	**Exchange(s)**	**Rank**	**Jun-16**	**Rank**	**Jun-16**	**Rank**	**Jun-16**	**Rank**	**2015**
USA	NYSE + Nasdaq	1	25,775	2	4,333	1	2,628,092	1	17,947
CHN	Shanghai + Shenzhen	2	6,967	6	2,887	2	1,719,863	2	10,866
JPN	JPX	3	4,686	4	3,524	3	499,358	4	4,123
GBR, ITA	LSE	4	3,480	7	2,139	4	241,128	3	4,664
FRA, NLD, BEL, PRT	Euronext	5	3,286	12	944	5	179,572	5	3,827
IND	BSE	6	3,015	1	7,783	20	8,528	7	2,074
HKG	HKEX	7	2,973	10	1,807	9	107,347	18	310
CAN	TMX Group	8	1,869	5	3,431	8	113,383	9	1,551
DEU	Deutsche Boerse	9	1,539	15	539	7	126,439	6	3,356
CHE	SIX Swiss	10	1,420	20	230	10	82,681	15	665
SWE, DNK, FIN, LTU, LVA, EST, ISL	Nasdaq Nordic	12	1,221	13	817	13	63,612	14	1,125
AUS	ASX	13	1,202	9	1,956	11	71,646	11	1,340
KOR	KRX	11	1,259	8	1,976	6	162,584	10	1,378
ZAF	JSE	14	997	18	306	16	34,822	17	313
TW	TWSE	15	876	11	1,516	15	41,326		
BR	**BM&FBOVESPA**	**17**	**664**	**17**	**342**	**14**	**43,332**	**8**	**1,775**
SGP	SGX	16	666	16	480	18	16,691	19	293
ESP	BME	18	651	3	3,563	12	69,531	13	1,199
RUS	Moscow Exchange	19	496	19	246	19	11,208	12	1,326
THA	Thailand SET	20	401	14	644	17	27,611	16	395

Data sources: The World Federation of Exchanges (stock market data) and World Bank (GDP).

disclosure and corporate governance practices. With ADRs, Brazilian companies were effectively "renting" the credibility and depth of the US market.

A good macroeconomic environment combined with the new Bovespa listing rules led to initial public offerings (IPO) activity after 2004, as well as a spike of secondary (follow-on) offerings before the onset of the global financial crisis (**Figure 1**). Subsequently, the Brazilian economy also benefited from the global commodity boom. Although these occurrences helped to partially reverse the downward trend in listings, progress has stalled again in the last few years. Overall, the number of listed companies has dropped from 460 in the year 2000 to about 350 currently. By mid-2016, the total capital raised was R$ 374 billion, with a total of 154 IPOs and 123 follow-ons.[3]

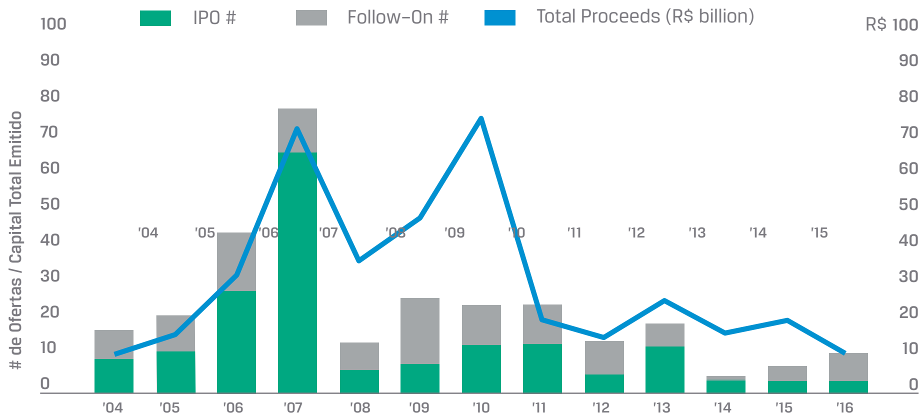
Figure 1. The Evolution of BM&FBOVESPA Stock Exchange



Data source: BM&FBOVESPA.[4]

[3]R$ 374 billion corresponds to about US$ 110 billion (at the R$1 = US$0.30 exchange rate prevailing at the time of this report).
[4]The follow-on value for 2010 excludes the portion acquired by the Brazilian government in the Petrobras offering, via the transfer of rights in barrels (R$ 74.8 billion).

Figure 1. The Evolution of BM&FBOVESPA Stock Exchange (continued)



Data source: BM&FBOVESPA.[4]

A part of the limited development of the Brazilian equity market can be attributed to weaknesses in corporate governance. Similar to other emerging markets, the governance of most Brazilian firms has followed the concentrated ownership model, with only a minority of companies' shares actually floated in the market.[5] Firms are almost universally controlled by founders/family or the state. Under this governance model, the main conflict typically occurs between controlling versus minority shareholders. Such conflict can manifest itself in suspicious related-party transactions with sales to the company at inflated prices. Other instances may involve inequitable treatment in changes of control or center around family succession events, as well as "low-balling" bids in de-listings. The result can lead to a general perception by minority investors that company success gives rise to rich controllers but poor performance for minority shareholders. In contrast, at dispersedly held companies the main potential conflict occurs between managers and shareholders, but discipline comes from the market for corporate control (M&As) and civil litigation.[6] In the Brazilian context, on the other hand, controlling shareholders select top management and boards of directors have low independence.

[5]This study adopts the OECD (2004) definition that "… corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined."

[6]The paradigm for the agency problems in the dispersedly held firm is historically attributed to Berle and Means (1932) and further developed by Jensen and Meckling (1976). Measures of investor protection appear superior in common-law countries and translate into more vibrant equity markets (La Porta, Lopez-de-Silanes, Shleifer, and Vishny [2000]). Other academics point to the political structure within the country to explain financial development (Rajan and Zingales [2003]).

The first traditional feature of share ownership in Brazil is the predominance of companies with dual-class shares. Companies typically issue voting common/ordinary shares ("ações ordinárias nominativas" in Portuguese, or simply ON) and nonvoting preferred shares ("ações preferenciais nominativas" in Portuguese, or simply PN). Brazil's Corporate Law authorized publicly held companies to issue up to two-thirds of their capital in the form of PN shares. This enabled holders of voting shares to control companies by owning as little as 16.7% of the company's total equity. A reform in 2002 reduced the required level of PN shares required to only 50% of the capital for new companies. Thus, a controlling shareholder now needs to own 25% of total shares. However, companies that had already gone public before the law were "grandfathered" to maintain the right to use PN shares to represent up to two-thirds of their total capital, and even to issue new shares of such stock, if necessary. To compensate for no voting rights, preferred shares frequently have either higher dividends or are offered "tag-along" rights (takeout rights on a sale of control). This dual-class share structure is a deviation from the proportionality principle (*one-share one-vote*) that constitutes international best practice.

Nonvoting preferred shares are one of the several control-enhancing mechanisms (CEMs) also used in European public companies. A report by the European Corporate Governance Institute and Institutional Shareholder Services (ECGI and ISS [2007]) examined the range and prevalence of legally available CEMs and the use made of them by leading European companies. Pyramid structures were the most important form of CEM (100% available in the 16 EU countries in the study and used by 75%), followed by shareholder's agreements (69%) and multiple voting-rights shares (44%). Some other kinds of CEM were found to be in decline, such as the cross-shareholdings that were once a hallmark of French and German companies. A literature review carried out by the ECGI concluded that the academic evidence was not fully conclusive on whether CEMs were contrary to the interests of ordinary shareholders (Adams and Ferreira [2008]). However, a survey of big investors found that about 80% were opposed to CEMs and typically applied a discount of between 10% and 30% to the shares of companies using them (*The Economist* [2007]).

The US equity market is probably the paradigm of the *one-share one-vote* model. An academic study by Gompers, Ishii, and Metrick (2010) concluded that dual-class share structures constituted only 6% of their sample of publicly listed firms. However, these structures are common in some recent IPOs (such as Facebook, Inc. or LinkedIn Corp.). In fact, a study by Investor Responsibility Research Center Institute and ISS (IRRC and ISS [2012]) showed that the number of controlled companies in the S&P Composite 1500 Index grew from 87 firms in 2002 to 114 in 2012. The report concluded that controlled firms underperformed and exhibited more share price volatility.

The second predominant characteristic of Brazilian companies is the high level of concentration in share ownership. There is a large number of public companies controlled by founding families, such as JBS S.A. (the largest meat-processing company in the world) as well as by affiliated foundations, such as Bradesco. There is also a significant government presence in such flagship companies as Petrobras. Moreover, there are Brazilian companies with dispersed ownership structures that have become global players, such as Embraer (the world's third-largest airplane maker).

2. The Novo Mercado Reform

The Novo Mercado reform provided a new framework for enhanced corporate governance of public firms in Brazil. In December 2000, Bovespa launched voluntary listing levels with increasingly stricter corporate governance requirements above the legal minimum. As Santana (2008) explains, the design of the Novo Mercado listing was to get equitable treatment of all shareholders, which is why we focus on it in our study. These premium listing segments were a private initiative and not the result of government regulation; rather, they stemmed from the self-regulation power of the BM&FBOVESPA stock exchange, in order to improve the quality of public companies and the Brazilian capital market. The reform operates as an "opt-in" system and requires an agreement among the company, controlling shareholders, senior managers, and the BM&FBOVESPA stock exchange. While company bylaws have to be amended to insert the shareholders' rights, the BM&FBOVESPA has the authority to oversee and enforce its regulations and even to impose penalties when necessary.

With the reform, BM&FBOVESPA listing levels include the Tradicional ("Traditional" or basic) listing as well as the new Nível 1 ("Level 1"), Nível 2 ("Level 2") and Novo Mercado. **Table 2** provides details of the four listing segments. The core rule of the Novo Mercado listing level is that it requires the firm to issue only voting common shares (i.e., to follow the *one-share one-vote* rule). Nível 2 is similar to Novo Mercado, but still allows firms to issue preferred shares. Nível 1, on the other hand, is only a small step up from a Tradicional listing and focuses on improved disclosure but does not include private arbitration of shareholder disputes and includes only 80% "tag-along rights" to all shareholders (i.e., less than 100% of the same conditions provided to controlling shareholders in the transfer of the controlling block).[7] Companies remain free to list under the Tradicional listing, which simply requires compliance with Brazil's company and securities laws. Nível 1 and Nível 2 are perceived as stepping stones that might facilitate gradual adoption by companies when direct migration to the Novo Mercado is not feasible.

The adoption of single-class share structure is the key feature that we will explore in the present study. While the reforms were focused on shareholder rights, there are other requirements for the new premium listing segments (Nível 1, Nível 2, and Novo Mercado) with respect to transparency, monitoring, and dispersion. In terms of transparency, these included the following requirements: (i) to disclose additional information (e.g.,

[7]The establishment of the Market Arbitration Chamber responds to market perception that the Brazilian justice system is slow and ineffective in dealing with shareholder disputes in a fair manner.

Table 2. BM&FBOVESPA Listing Segments

	Tradicional	Nível 1 (Level 1)	Nível 2 (Level 2)	Novo Mercado
	regulation	+ better disclosure and free float	+ shareholder rights and arbitration	+ only voting shares (*one-share-one-vote*)
Shares issued	Common and pre-ferred shares	Common and preferred shares	Common and preferred shares	Only common shares
Free float		> 25%	> 25%	> 25%
Board of directors	Minimum of 3	Minimum of 5, >20% independent	Minimum of 5, >20% independent	Minimum of 5, >20% independent
CEO-Chairman		Split	Split	Split
Annual public shareholder's meeting		Mandatory	Mandatory	Mandatory
Tag-along rights	80% for common shares	80% for common shares	100% for common shares	100% for common shares
Market Arbitration Chamber			Mandatory	Mandatory
Other		Share distribution efforts, calendar of corporate events, securities nego-tiation policy and code of conduct	Share distribution efforts, financial statements in English, calen-dar of corporate events, securities negotiation policy, and code of conduct	Share distribution efforts, prohibi-tion to statutory provisions, financial statements in English, calendar of corporate events, securities negotia-tion policy, and code of conduct

This is a simplified table based on http://www.bmfbovespa.com.br/en_us/listing/equities/listing-segments/about-listing-segments/. The *Bovespa Mais* and *Bovespa Mais* Nível 2 segments were ignored in the study as these are for small companies.

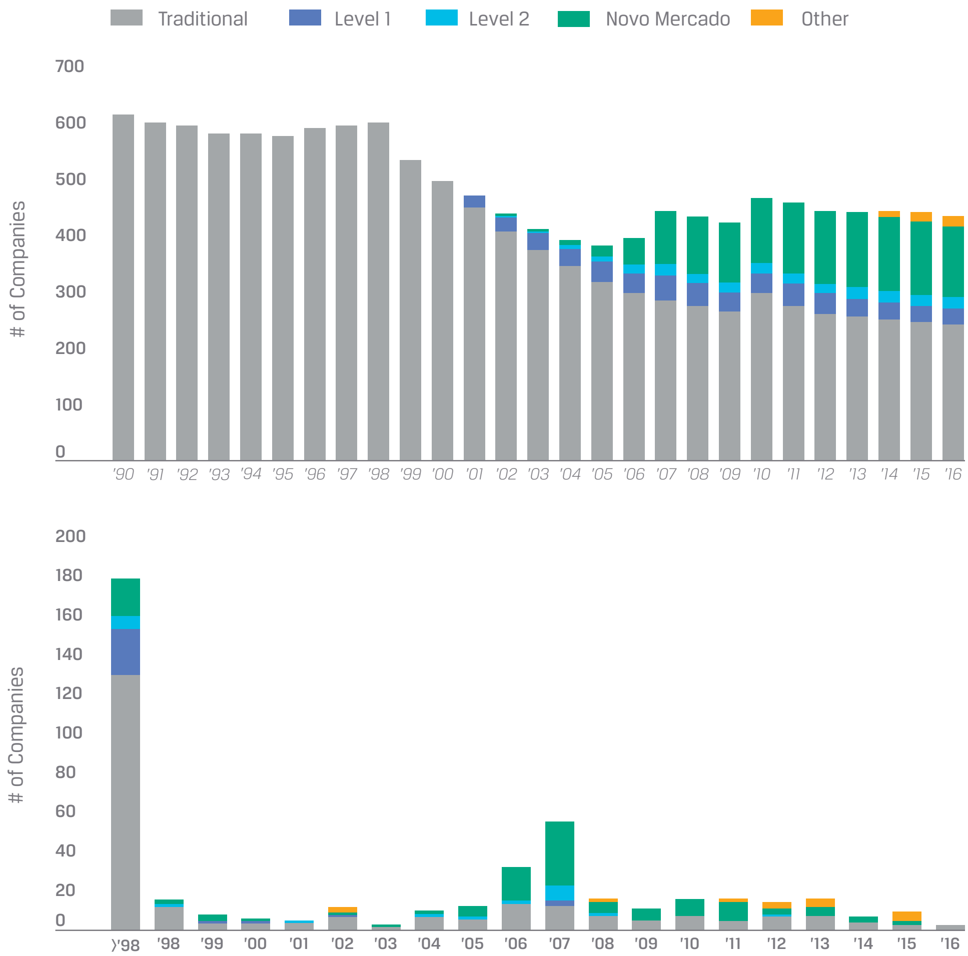
related-party and security transactions by the controlling shareholders); and (ii) to produce financial accounts available in accordance with US GAAP or IFRS and to improve quarterly reports. In terms of monitoring, companies need to maintain: (i) a board of directors with at least five members, 20% of whom are independent; (ii) a distinction between the CEO and chairman roles; and (iii) a public annual shareholder meeting. In terms of dispersion, companies need to maintain a "free float" equivalent to 25% of the outstanding stock and to hold public share offerings through mechanisms that favor capital dispersion. Subsequently, a number of these dimensions became law for all publicly listed companies with the adoption of Instrução 480 by the CVM in 2009.

Figure 2 presents the evolution of the number of listings by segments. Officially launched in December 2000, the first company to have an IPO in Novo Mercado was not until 2002 (CCR S.A., a highway concession firm). With the macroeconomic environment improving in Brazil, new listings peaked in 2007. Overall, by mid-2016 there were 178 firms in the premium segments, with 128 of the new equity listings in the Novo Mercado segment (the difference reflects firms that migrated to the higher corporate governance standards).

The "Traditional" segment includes debentures and other securities that are not part of market capitalization in Figure 1. The "Other" segment includes *Bovespa Mais* and *Bovespa Mais* Nível 2 which migrated from the OTC to the Bovespa segment exchange market in 2014. The chart excludes sponsored and nonsponsored Brazilian Depositary Receipts (BDRs) for foreign companies.

Box 1 provides a case study of Ultrapar, a firm that adopted tag-along rights in 2000 and subsequently migrated to the Novo Mercado segment in 2011. Ultrapar is one of the 14 companies in the Latin America Companies Circle, which have been at the forefront of improving corporate governance practices in Brazil and the rest of the region. The International Finance Corporation (2009) provides a detailed report on these companies' experiences. There are also some existing academic studies. De Carvalho and Pennachchi (2012) document shareholder gains from Brazilian firms' migration to premium listings (particularly when the firm chooses the Novo Mercado listing) for an early sample of firms from 2001–2006. Bennedsen, Nielsen and Nielsen (2012) show that investors react positively to the announcement of tag-along rights also with a sample from 2000–2006.

Figure 2. The Evolution of BM&FBOVESPA Listing Segments



Data source: BM&FBOVESPA Operational Figures - Bovespa Segment (update: end of May 2016).

Box 1. Ultrapar — A Case Study of a Novo Mercado Migration[8]

Ultrapar is a large Brazilian liquefied petroleum gas and petrochemicals distribution company. Founded in the 1930s, the company was successfully run by the founding family. In the 1980s, the founder's son drew up a process for his succession based on the professionalization of the group's management and shared control of the company between family heirs and key executives. A cadre of professional managers were awarded substantial amounts of shares, mostly locked up for 20 years in trusts. The ownership interests of the family and key executives in the company were consolidated into a holding entity named Ultra S.A.

1999: Simultaneous IPO in Bovespa and ADR Level III at the NYSE of nonvoting PN shares. All voting, or common ON shares, still held by the controlling shareholders (family and senior managers). The offer raised USD 130 million and provided the family and the management with access to liquidity.

2000: First company in Brazil to provide "tag-along" rights to its minority shareholders. These were awarded at 100% of the price (i.e., for free). This means that anyone acquiring the voting shares from the controlling shareholders would have to pay the same price per share to the nonvoting shareholders.

2011: Migration to Novo Mercado with the conversion of all shares of preferred stock issued by the company into shares of common stock, at a 1-to-1 conversion ratio. The conversion was approved at an extraordinary shareholders meeting. Preferred shareholders who dissented were granted withdrawal rights as required by law. This turned Ultrapar into Brazil's largest company without a defined controlling shareholder. Before the migration, the family and key executives holding company Ultra S.A. controlled the company with 66% of the voting common shares, which became only a 24% block of total common shares outstanding after the conversion. This reduced control but increased liquidity of the shares for family and management that were Ultra S.A. shareholders.

[8] This box is based on Fernandes (2016) and The World Bank (2006).

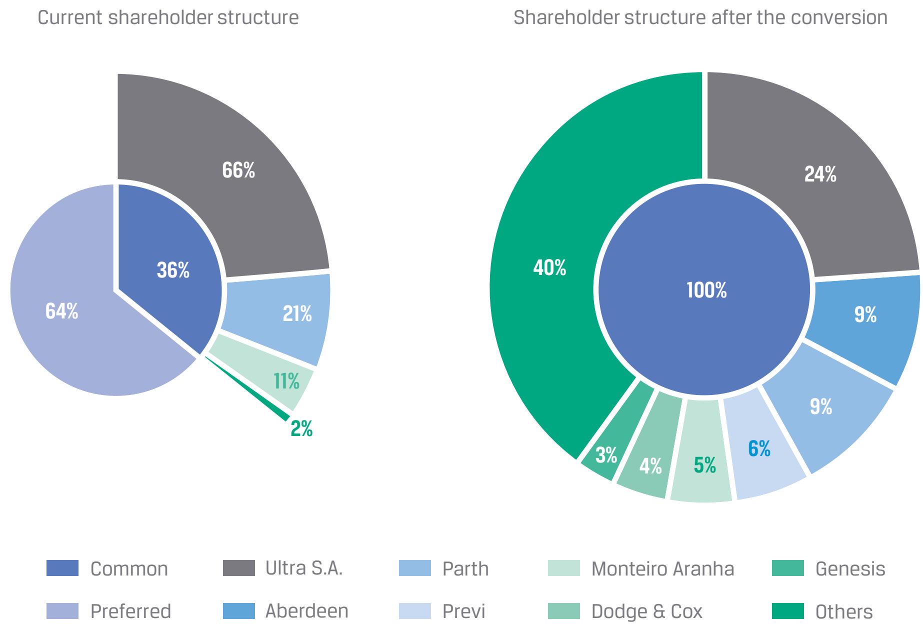
Ultrapar – Key elements of the new corporate governance structure

Conversion of every preferred share into one common share

One-share = one-vote

All shareholders with same economic and political rights

Ultrapar will no longer have a defined controlling group



Source: Ultrapar investor relations website (April 2011) (http://www.ultra.com.br/RI/Download.aspx?Arquivo=EA/wpID4mvBhRRqDZHkHTw==&IdCanal=vKYhCAB6bD3axSbxekhJ9g).

3. A Study of Single-Class Shares in Novo Mercado

For this study, we assembled data on all listed firms in BM&FBOVESPA that had sufficient market liquidity (in particular, available share price). The sample consists of 291 firms with available market capitalization data in the Economatica database at the end of June 2016.

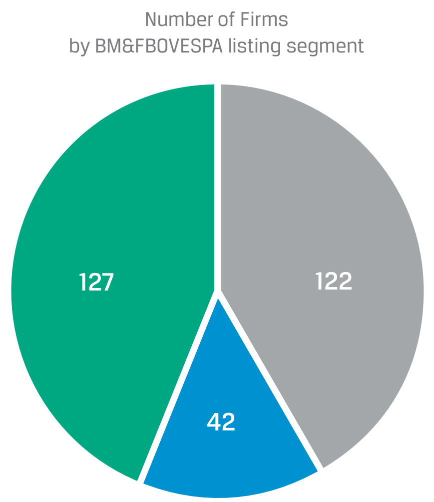
3.1. Premium Governance Listings

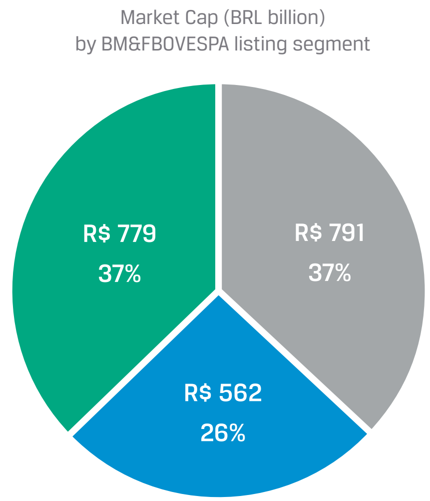
The pie charts in **Figure 3** illustrate that the single-class Novo Mercado listings now constitute a significant share of the Brazilian market, representing close to 40% of the listed firms and market capitalization. The Novo Mercado segment is the focus of our analysis since its distinguishing feature is that it offers a *one-share one-vote* standard (see Table 2).[9] In order to test if the effect comes from the single-class structure and not from the other features (transparency, monitoring, and dispersion) of premium listings, we analyze an intermediate group of dual-class firms with a Nível 1 and 2 with tag-along rights. These are firms that maintain a dual-class structure (common and preferred shares) but offer 100% tag-along rights to the preferred shares in the case of transfer of the controlling block. This intermediate group offers some protection to nonvoting shareholders and represents 26% of the market capitalization in Brazil. The remaining group of firms (Tradicional or Other) have dual-class share structures without equal rights for all investors.

[9]This study focuses on the Novo Mercado segment to assess the *one-share one-vote* standard since this is the dominant cause for the unification of share-classes in Brazil. Among IBovespa companies, the only Tradicional company with a single class structure is Ambev S.A. (the beer company), which restructured its capital structure in 2013 to have only voting common shares.

Figure 3. Sample of BM&FBOVESPA Firms

Listing Segment	Number of Firms	Market Cap (R$ bln)
Tradicional or Other	122	R$ 791
Nível 1 and 2 with tag-along rights	42	R$ 562
Novo Mercado	127	R$ 779
Total	291	R$ 2,132





Novo Mercado | Tradicional or Other | Nivel 1 and 2 with tag along rights

Source: Author's calculations based on Economatica sample.

3.2. Concentrated Share Ownership

As mentioned earlier, the second important aspect of shareholder ownership structures in Brazil is the high level of concentration. Based on data compiled by Economatica from the regulatory filings on the list of top shareholders for each listed company, we are able to identify the most common types of controlling shareholders. The pie charts in **Figure 4** illustrate that only a minority of companies are dispersedly held (i.e., no shareholder or related group of shareholders owns more than 50% of voting shares), representing only 10% of the total market cap. The phenomenon of concentrated block ownership is pervasive also in the Novo Mercado segment. Even in this most stringent segment of the BM&FBOVESPA exchange, only about 25% of companies are dispersedly held.

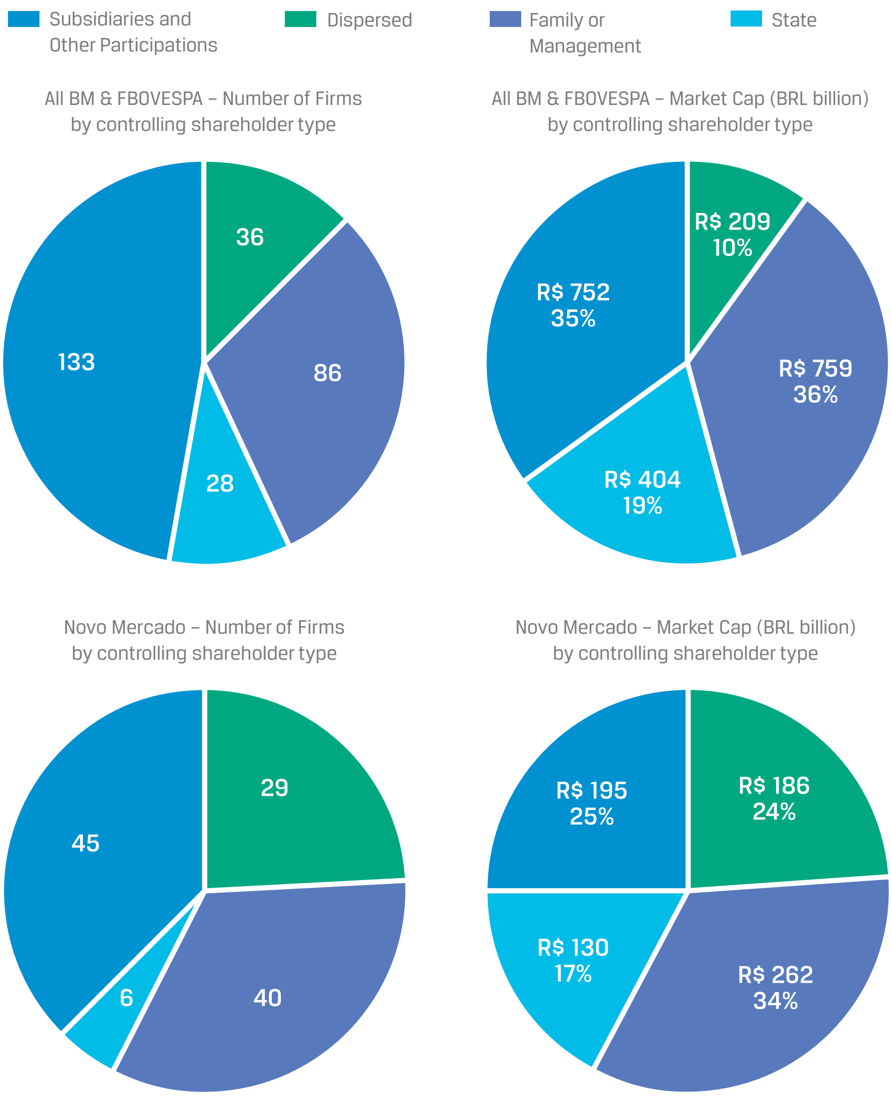
Boxes 2, 3, and 4 provide examples for each of the types of controlling shareholders:

- State-held: majority stakes by the federal or state-level governments and also minority stakes by BNDES (Banco Nacional de Desenvolvimento Econômico e Social, the state-owned development bank);
- Family or top management group control: by founders, family, or affiliated foundations as well as top professional managers;
- Other closely held: These include all other cases of controlling block holder that is not a family/founder or government entity. These include joint participations as well as subsidiaries controlled by multinational companies that have a listing for their Brazilian operations.

Brazil's oil giant Petrobras was partially privatized in the 1990s but is still a state-controlled company. As shown in Box 2, the government directly holds only 28.7% of total outstanding shares but has majority control via its 50.3% stake in the common shares that have voting rights. In addition, the state also has indirect stakes via BNDES. Lazzarini and Musacchio (2010) and Inoue, Lazzarini, and Musacchio (2013) analyze more broadly the impact of the minority equity investments by BNDES in the Brazilian economy. Musacchio and Lazzarini (2014) document economic benefits of this new form of "state capitalism" in their study for 1976–2009. However, the company has been at the epicenter of the "Petrolão — Operation Car Wash" scandal since 2014.

The influence of the state was on the rise in Brazil in the period after the 2008 global financial crisis. In this respect, Banco do Brasil in Box 2 is an interesting example. It was listed in 2006 and constitutes the only bank in Novo Mercado. In this case, there is a single class of common shares and the government holds 50.7% of these to gain majority

Figure 4. The Frequency of Controlling Shareholder Types



Source: author's calculations based on Economatica sample.

Box 2. Examples of State-Controlled Companies

PETROBRAS (Tradicional listing):

The oil company has common (ON) shares which are 50.3% held by the Brazilian Federal Government (União Federal). The state-owned Brazilian Development Bank (BNDES) also has a 23.9% block in the nonvoting preferred (PN) shares, but these are more widely held.

Name	%ON	%PN	%Total
União Federal	**50.3**	**0.0**	**28.7**
Bndes Participações	**0.2**	**23.9**	**10.4**
BNDES + Fundo de Participação Social	**10.0**	**2.9**	**6.9**
Previ - Caixa Previdência Banco Brasil	**0.2**	**6.3**	**2.8**
Dodge & Cox	0.0	7.1	3.0
Caixa Econômica Federal	**3.2**	**1.1**	**2.3**
Others	36.2	58.7	45.9
Treasury Stock	0.0	0.0	0.0
Total	100.0	100.0	100.0

BANCO DO BRASIL S.A. (Novo Mercado listing):

The largest bank in Brazil is controlled by the government via Secretaria do Tesouro Nacional, which is part of the Ministry of Finance (50.7% of common ON shares). Banco do Brasil own employees' pension fund Previ also holds a 10% stake in ON shares.

Name	%ON	%PN	%Total
Secretaria Do Tesouro Nacional	**50.7**	0.0	**50.7**
Previ - Caixa Previdência Banco Brasil	**10.0**	0.0	**10.0**
Fundo Fiscal de Inv. e Estabilização	**3.7**	0.0	**3.7**
Others	32.8	0.0	32.8
Treasury Stock	2.8	0.0	2.8
Total	100.0	0.0	100.0

Source: Economatica/BM&FBOVESPA.

control. The second largest holder is Previ, the Banco do Brasil employees' pension fund and Brazil's largest pension fund, with a 10% stake. Conti and Monteiro (2014) describe how, as the leading bank in Brazil, the company pursued a timid internationalization strategy, part of a larger governmental strategy to boost Brazil's standing in the world. However, in 2011, under pressure from the government, Banco do Brasil announced it was freezing international expansion to focus on domestic infrastructure projects. The bank is another case in which government participation might be used to further social and political goals, potentially at a cost to company profitability.

Founders and families are the most frequent controlling shareholders of Brazilian listed firms (see Figure 4). The first example in **Box 3** is Bradesco, a Nível 1 listing, the largest nongovernment-owned bank in Brazil, which was founded by Amador Aguiar and is headquartered in Cidade de Deus, São Paulo. The founder created the holding company Cidade de Deus and the Fundação Bradesco, the largest philanthropic organization in Brazil, and transferred ownership of shares in Bradesco to it. The foundation is led by professional managers, but the descendants of the Aguiar family still retain seats on the board. These entities control the company by holding a combined majority of common shares (48.2% and 17% of ON shares, which represent, respectively, 24.2% and 8.5% of total shares). The second example in Box 3 is the Novo Mercado company JBS

Box 3. Examples of Family or Management as Controlling Shareholders

BRADESCO S.A. (Nível 1 listing):

The banking group is held by the holding company Cidade de Deus, the Fundação Bradesco, and the Aguiar family.

Name	%ON	%PN	%Total
Cidade de Deus Participações	**48.4**	**0.0**	**24.2**
Fundação Bradesco	**17.0**	**0.0**	**8.5**
NCF Participações S.A.	**8.4**	**2.2**	**5.3**
Others	26.0	97.1	61.6
Treasury Stock	0.2	0.6	0.4
Total	100.0	100.0	100.0

JBS S.A. (Novo Mercado listing):

The meat processor is held by the Batista family (through its holding Fb Participações S.A.) that took it public in a joint investment with the state-owned BNDES.

Name	%ON	%PN	%Total
FB Participações S.A.	**42.2**	**0.0**	**42.2**
BNDES Participações S.A.	**20.4**	**0.0**	**20.4**
Caixa Econômica Federal	**6.9**	**0.0**	**6.9**
Others	27.3	0.0	27.3
Treasury Stock	3.3	0.0	3.3
Total	100.0	0.0	100.0

Source: Economatica/BM&FBOVESPA.

S.A., the largest meat-processing company in the world, originally established by rancher Jose Batista Sobrinho. JBS went public in 2007, and in the same year, it received a major investment from the state-owned BNDES (20.4% of shares). The Batista family retains control via Fb Participações S.A. (42.2% of shares).

Box 4 shows an example of Telefônica Brasil (known as "Vivo" at the consumer level), which is a telecommunications group that is a subsidiary of Spanish Telefónica. It was originally formed as part of Telebrás, the state-owned telecom monopoly at the time. In 1998, Telebrás was demerged and privatized, with Telefónica taking Telesp. In 2010, Telefónica acquired the shares of Vivo that belonged to Portugal Telecom and transferred control of the company to Telefônica-Vivo, its subsidiary in Brazil.

Another interesting feature of corporate ownership in Brazil is the existence of shareholder agreements.[10] One example is Vale, the global mining firm. Its controlling shareholder, Valepar, owns 33.1% of total shares but more than half (53.4%) of the voting ON shares. Valepar is incorporated for the sole purpose of holding a controlling interest in Vale and has no other business activity. Valepar acquired its controlling stake in Vale from the Brazilian government in 1997 as part of the first stage of Vale's privatization. The shareholders of Valepar (which include Litel, an investment fund

Box 4. Example of Other Closely Held Firm

TELEFÔNICA BRASIL S.A (Tradicional listing):

The phone company is the Brazilian subsidiary of Telefónica, the Spanish telecom group (via a direct stake and its Latin American holding in SP Telecomunicações Participações Ltda).

Name	%ON	%PN	%Total
Telefónica S.A.	**34.7**	**27.3**	**29.8**
SP Telecomunicações Participações Ltda	**51.5**	**3.4**	**19.7**
Telefónica Internacional S.A.	**8.2**	**32.2**	**24.1**
Telefonica Chile S.A.	**0.2**	**0.0**	**0.1**
Others	5.1	37.1	26.3
Treasury Stock	0.4	0.0	0.1
Total	100.0	100.0	100.0

Source: Economatica/BM&FBOVESPA.

[10] Carvalhal (2012) presents a comprehensive study of shareholder agreements in Brazilian listed firms.

affiliated with Banco do Brasil, as well as BNDES and others) are parties to a shareholders' agreement, ending in 2017.[11] This agreement regulates the transfer or purchase of Valepar and Vale shares, allocates seats on Valepar's board of directors, and causes their representatives on Vale's board to vote only in accordance with decisions made at Valepar meetings. In addition, the Brazilian government also owns 12 "golden shares" of Vale, which give it veto powers over certain actions (changes to the name, location of headquarters, and corporate purpose).[12] In the 2000s, the company transformed itself from selling iron ore to domestic steel mills to being one of the world's largest mining companies. However, in 2009–2011 the company's CEO and the Brazilian government were at odds with the company's decision to order large "chinamax" vessels from China and Korea, instead of being built in Brazil. Khanna, Musacchio, and Reisen de Pinho (2010) describe how the government was able to oust the CEO and how the stock price dropped following that government intervention.

Finally, there is only a minority of dispersedly owned firms in the BM&FBOVESPA, predominantly in the Novo Mercado segment (see Figure 4). These are cases where no shareholder or related group of shareholders owns more than 50% of voting shares. The top shareholders have minority stakes, and these tend to be mostly held by foreign institutional money managers, with the remainder of the shares held by retail investors. **Box 5** provides the example of Embraer, the aircraft manufacturer that is a global leader in regional jets. Previously a state-owned company, it is mostly held by foreign institutional investors with no controlling shareholder. The state-owned BNDES has a small 5.4% stake. It is a Novo Mercado company with a single class of shares. Some of the shares are held via the company's ADR listing at the NYSE.

[11]Source: Vale Form 20-F (2015).
[12]Source: Vale Form 20-F (2015).

Box 5. Example of a Dispersed (No Controlling Shareholder) Firm

EMBRAER S.A (Novo Mercado listing):

The aircraft manufacturer is mostly held by institutional investors with no controlling shareholder.

Name	%ON	%PN	%Total
Oppenheimer Funds	11.1	0.0	11.1
Brandes Investments Partners. L.P.	10.1	0.0	10.1
BNDES Participações S.A.	5.4	0.0	5.4
Others	72.6	0.0	72.6
Treasury Stock	0.8	0.0	0.8
Total	100.0	100.0	100.0

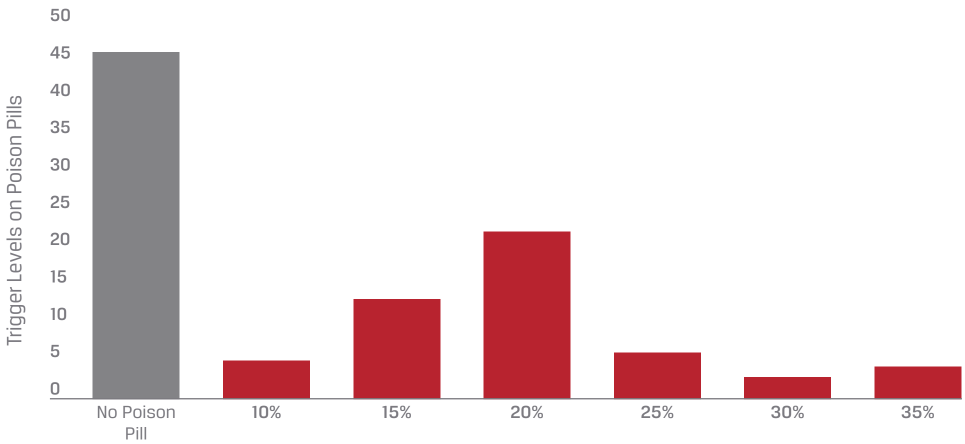
Source: Economatica/BM&FBOVESPA.

B3.3. Other Governance Mechanisms

One early concern with IPOs to Novo Mercado is that these have been accompanied by the adoption of anti-takeover measures. A 2009 study by a local investment bank was able to assemble some data on "poison pills" (BTG Pactual [2009]). These are the most common anti-takeover clauses, which consist of "capital dispersion protection" clauses in the company's bylaws to prevent minority shareholders from surpassing a specific percentage of shares. These clauses force a mandatory tender offer every time a shareholder reaches a certain stake in a company. Out of 94 Novo Mercado companies at the time, 49 had poison pills with triggers ranging from 10% to 35% of shares (**Figure 5**). The BTG Pactual (2009) study concluded that "poison pills" did not increase the value of minority shareholders since it blocks value-increasing M&As.

Black, De Carvalho, and Gorga (2010) conducted a detailed voluntary survey in 2005, which highlighted that Brazilian companies lag behind world standards in terms of board independence, financial disclosure, and the lack of audit committees. As Santana (2008) explains, when designing the Novo Mercado, improving corporate governance in Brazil had more to do with equitable treatment of all shareholders than it had to do with other dimensions, such as the board's composition and practices. This is because Brazilian companies generally have clearly defined controlling groups (Figure 5), which are involved in company management, and because the board of directors is less influential. In terms of the board of directors at Brazilian companies, some of the main features are:

Figure 5. The Frequency of "Poison Pills" in the BM&FBOVESPA Novo Mercado (as of 2009)



Data source: BTG Pactual (2009).

1. Board size: A minimum of three members for a Tradicional listing, while Novo Mercado requires a minimum of five. This is still a relatively small-sized board by international standards.

2. Board independence: There is no requirement for a Tradicional listing and only a minimum of 20% independence for a Novo Mercado listing. International best practices typically require at least 75% independence, but this is very uncommon in Brazil. In a 2014 study examining the 100 most liquid Brazilian listed companies, BTG Pactual (2014) found that 25 had less than 20%, 51 between 20% and 50%, 21 from 50% to 75%, and only three firms had a 75% or greater proportion of independent directors.

3. CEO–chairman split: This is common practice in Brazil (the BTG Pactual [2014] study found that to be true for 94 of the 100 firms); however, the chairman typically represents the controlling shareholder. The 2014 BTG study documented that only seven firms had truly independent chairmen.

4. Committees: The BTG Pactual (2014) study shows that it is not common for boards to have an audit committee (only 35% of firms have them and, of these, only half are coordinated by an independent counselor). On the other hand, a "fiscal board," which is responsible for legal compliance and providing an opinion on the company's accounts, was more common (64% of firms).

Finally, there is limited information in Economatica and other large databases on two other items. First, there seems to be some variation in manager incentive programs in Brazilian firms. The BTG Pactual (2014) study found that 38% of the companies used both bonus and stock options, 23% used only distributed stock options, and 12% used only bonuses. However, the terms of these were hard to measure. Second, another important item is the disclosure of related-party transactions. Only 23% of companies analyzed in the BTG Pactual (2014) study had a formal and detailed policy on this issue, which means that investors at over three-quarters of these companies are likely unable to review related-party transactions.

4. Results on Single-Class Shares in Brazil: Evidence from Novo Mercado

The Novo Mercado reform makes Brazil a good laboratory to test the link between single-class share structure and company performance. The adoption of a *one-share one-vote* standard can help align the interests of investors and companies. Using the comprehensive Economatica sample of 291 BM&FBOVESPA firms described previously, we analyzed whether companies with equitable treatment of shareholders enjoyed better performance, if these companies received higher market valuation (and thereby a lower cost of capital), and if risks were consequently mitigated for investors.

4.1. Stock Price Performance

Did firms with a single-class listing produce higher shareholder returns? To answer this question, we start by examining special indices that BM&FBOVESPA created to capture the performance of a portfolio of firms with more equitable shareholder treatment. These return indices are plotted in **Figure 6**.[13] The corporate governance special indices are the IGCNM (Special Corporate Governance Stock Index—Novo Mercado Segment) and ITAG (Bovespa Special Tag Along Stock Index).[14,15] These can be compared against the IBOV (Ibovespa Brasil São Paulo Stock Exchange Index) of the most representative companies in the BM&FBOVESPA market, both by market cap and traded volume.[16] Finally, we examine also the comprehensive IBRA (BM&FBOVESPA Brazil Broad-Based Index).

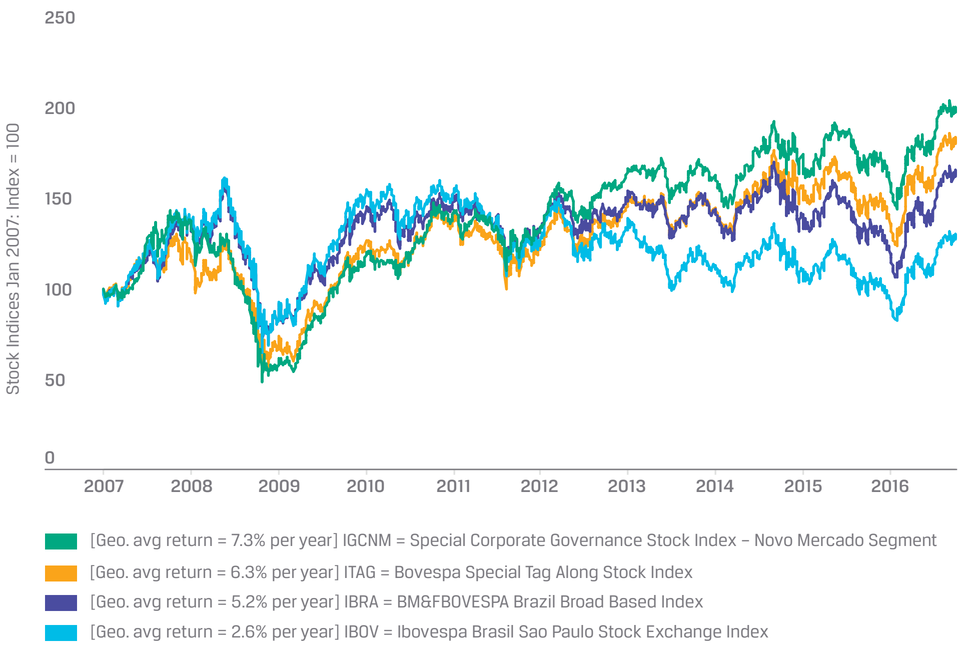
[13]All indices are total return indices (i.e., including dividends and other distributions) and expressed in Brazilian real (R$) terms. Bloomberg has data available on these index returns since 2007.

[14]IGCNM tracks the performance in the prices of stocks listed for trading on the Novo Mercado segment of the BM&FBOVESPA.

[15]ITAG is composed of companies that offer "tag-along" rights to minority shareholders. When a company is sold, minority shareholders have the right to receive for their common shares at least 80% of the amount paid to the controlling shareholders. Companies with special tag-along rights may, pursuant to their bylaws, establish higher amounts or extend to minority shareholders the same payment rights held by the holders of the preferred shares.

[16]This is the oldest and most commonly used benchmark for the Brazilian market. At the time of this report, this index comprised 56 companies that met the inclusion criteria from BM&FBOVESPA.

Figure 6. Stock Index Performance—Novo Mercado vs. Other Firms



Data Source: Bloomberg. All indices are gross total return indices (in R$) weighted by market value of the free float.

Figure 6 illustrates that the compounded returns of IGCNM (Novo Mercado firms) were better than those of ITAG (intermediate protection of minority shareholder rights), and both outperformed the IBRA (broad market) and IBOV (top companies). Overall, however, the Brazilian stock market did not have stellar performance over the last decade, producing only single-digit average annual returns. This compares poorly with inflation levels in Brazil over the same time period.

4.2. Accounting Performance and Market Valuation

To analyze weather there is a difference in performance between Novo Mercado companies with single-class share structures and other firms in Brazil, we take different approaches. The first way to identify tangible gains is by examining accounting measures of profitability: return on assets (ROA) and return on equity (ROE). We take the last 10 fiscal years to calculate the average ROA or ROE as of the end of our sample period (June

2006 to June 2016).[17] The results in **Table 3** and **Figure 7** are quite pronounced—the Novo Mercado firms produced better operational results in terms of profitability. We conducted *t*-tests, and these differences are statistically significant at high confidence levels.

The second approach is to test whether companies with better governance practices are associated with more shareholder value creation. We take a well-known stock market indicator: the market-to-book (M/B) ratio. The M/B ratio is calculated as the market value of equity plus debt over the book value of total assets (as of the end of June 2016). Academically, this is also known as Tobin's *q* ratio, and it is the most commonly used measure of firm value in studies on the impact of corporate governance (e.g., Gompers, Ishii, and Metrick [2010]). The results in **Figure 8** confirm that investors reward companies with the Novo Mercado single-class share listings with higher valuation multiples. We also look at stock payout policy. It is not clear that dividend returns are necessarily higher for investors in the Novo Mercado, since larger dividend payouts are linked to the nonvoting preferred shares in the Tradicional listings.[18] In fact, a high dividend yield could increase the cost of capital for a company. **Figure 8** shows that indeed Novo Mercado firms paid fewer dividends over the prior 10 years. These differences are statistically significant.

One potential challenge with the comparisons of averages as presented so far, however, is that there are many omitted factors that could make Novo Mercado single-class share firms different from the lower corporate governance listings. For example, the group of Novo Mercado listings could be composed of larger firms or those operating with more financial leverage. To address these issues, we run multivariate regressions. We also include industry fixed effects in order to control for the industry in which a firm operates.

In **Tables 4 and 5**, we present the regression results for both ROA (operating performance) and the M/B ratios (valuation). The estimated regression coefficients in **bold** denote those coefficients that are statistically different from zero, and the stars indicate the level of significance (or *p*-value) of the estimates. For example, a "***" mark indicates that the coefficient is statistically different from zero at the 99% confidence level (i.e., a *p*-value of 0.01). In the Appendix, we provide variable definitions for all the controls included in the regressions.

The key variable of interest is the Novo Mercado dummy variable, which flags companies that are in the Novo Mercado segment. The positive and statistically significant coefficients of the Novo Mercado dummy variable show the strong positive association between a Novo Mercado single-class structure listing and both measures of firm performance. The results in columns (1) and (2) indicate a 6.3% higher ROA (Table 4) and a 0.28–0.45

[17]When the company has less than 10 fiscal years of data, we take either 5 or 3 last years whichever is available. We also winsorized (i.e., censored) these ratios at 100% and –100% to reduce the effect of data outliers.
[18]A similar lower dividend yield is found for the 14 members of the Latin America Companies Circle by The World Bank (2009).

Table 3. Differences in Performance, Valuation, and Risk

Listing Segment:	Mean (ROA)	Mean (ROE)	Mean (M/B Ratio)	Mean (Dividend Yield)	Mean (Volatility)
Tradicional or Other	-0.73	4.14	1.33	6.98	51.74
Nível 1 and 2 with tag along rights	0.35	7.38	1.16	4.61	44.95
Novo Mercado	3.85	8.90	1.50	3.44	46.34
Is Novo Mercado statistically different?	YES	YES	YES	YES	YES
(confidence = 100% - *p*-value of *t*-test)	100%	98%	84%	99%	95%

Figure 7. Operating Performance by Type of Listing

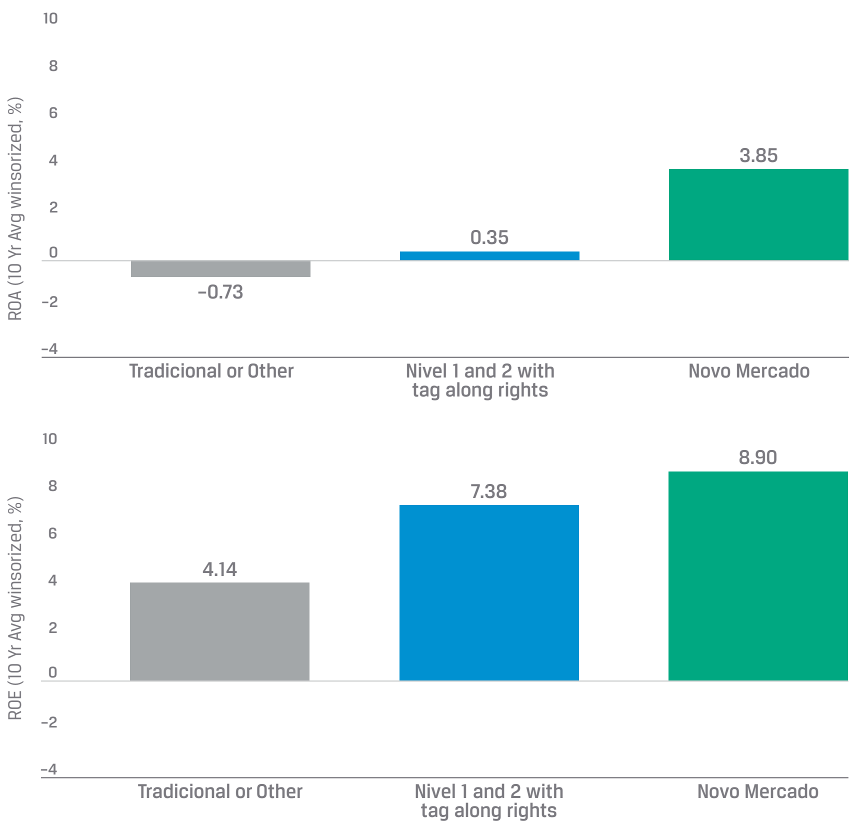
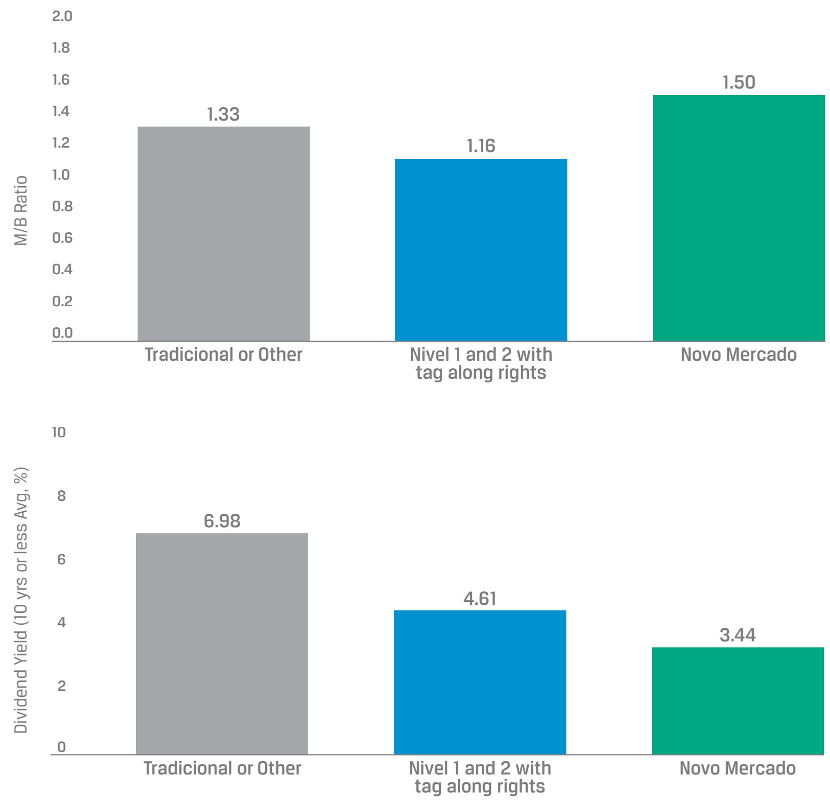


Figure 8. Stock Performance by Type of Listing



increase in the M/B ratio (Table 5), depending on whether one uses firm-level control variables or not. Both of these effects are economically large. One caveat with the regressions is that an R-squared statistic of less than one-third means that there are two-thirds of unexplained variation in accounting and market performance.

One advantage of the multivariate regressions in Tables 4 and 5 is that we can test whether the more stringent Novo Mercado single-class share listing brings any additional value compared to other voluntary listings that Brazilian firms may undertake. In particular, 28 Brazilian firms in the sample also have an ADR listing on a US stock exchange and the multivariate regressions allow us to tease out the added value of a domestic governance standard (Novo Mercado) separate from the potential benefits that might accrue from a US cross-listing (*ADR listing*). Once we control for an ADR listing, columns (3) of Tables 4 and 5 continue to show a strong positive association between a Novo Mercado listing

Table 4. Multivariate Regression Results of Accounting Performance (ROA)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	ROA	ROA	ROA	ROA	ROA	ROA
Novo Mercado	**6.260*** **	**6.319*** **	**6.304*** **	**8.041*** **	**8.029*** **	6.760
	(1.665)	(1.530)	(1.543)	(2.164)	(2.170)	(5.087)
Controlling shareholder						-0.194
						(4.448)
Novo Mercado and controlling shareholder						1.150
						(5.086)
ln (assets)		1.896***	1.913***	1.996***	1.962***	2.065***
		(0.379)	(0.434)	(0.440)	(0.502)	(0.504)
Leverage		0.000403	0.000412	0.000255	0.000371	0.00110
		(0.0158)	(0.0159)	(0.0159)	(0.0159)	(0.0162)
ROA		-0.962	-0.955	-0.972	-1.011	-0.293
		(0.737)	(0.743)	(0.743)	(0.790)	(0.831)
Dividend yield		0.522***	0.522***	0.512***	0.511***	0.464***
		(0.0870)	(0.0872)	(0.0876)	(0.0878)	(0.0893)
ADR listing			-0.231	-0.183	-0.305	-0.230
			(2.798)	(2.797)	(2.926)	(2.902)
Tag-along rights				-2.390	-2.417	-2.789
				(2.089)	(2.101)	(2.097)
iBovespa index member					0.338	-0.108
					(2.334)	(2.342)
Observations	291	286	286	286	286	278
R-squared	0.169	0.364	0.364	0.367	0.367	0.349
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 5. Multivariate Regression Results of Market Valuation (M/B ratios)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	M/B ratio	M/B ratio	M/B ratio	M/B ratio	M/B ratio	M/B ratio
Novo Mercado	**0.276****	**0.447*****	**0.469*****	**0.524*****	**0.431****	-0.229
	(0.134)	(0.129)	(0.129)	(0.182)	(0.173)	(0.390)
Controlling shareholder						-0.429
						(0.339)
Novo Mercado and controlling shareholder						**0.757***
						(0.385)
ln (assets)		-0.171***	-0.202***	-0.199***	-0.277***	-0.277***
		(0.0315)	(0.0353)	(0.0361)	(0.0367)	(0.0357)
Leverage		-0.000855	-0.000862	-0.000866	-0.000429	-0.000537
		(0.00133)	(0.00132)	(0.00132)	(0.00125)	(0.00123)
ROA		-0.00675	-0.00661	-0.00676	-0.00624	-0.00171
		(0.00517)	(0.00514)	(0.00516)	(0.00488)	(0.00485)
Dividend yield		-0.00108	-0.00139	-0.00163	-0.00222	0.00157
		(0.00778)	(0.00774)	(0.00777)	(0.00734)	(0.00718)
ADR listing			**0.436***	**0.437***	0.0319	0.0554
			(0.231)	(0.232)	(0.230)	(0.222)
Tag-along rights				-0.0750	-0.146	-0.0937
				(0.175)	(0.165)	(0.161)
iBovespa index member					**0.988*****	**0.988*****
					(0.173)	(0.167)
Observations	291	286	286	286	286	278
R-squared	0.095	0.234	0.244	0.245	0.329	0.341
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1.

and both measures of firm performance (ROA and M/B ratios). The estimated coefficients for "ADR listing" show some (weak) evidence that the market rewards ADRs with higher M/B ratios (Table 5), but there is no statistically significant difference in terms of ROA performance (Table 4). In both cases, the estimated coefficients of the Novo Mercado dummy variable is always positive and significant, suggesting that the premium listing in Brazil matters. We conclude that the domestic Novo Mercado listing standards are value-accretive. These results speak to one of the motivations of the Novo Mercado reform. The launch of the premium governance listing was designed to interrupt the liquidity migration of Brazilian companies to the US stock exchanges in the 2000s. Data from the BM&FBOVESPA on the split between the US and Brazilian trading volumes suggest this reversal has been happening in the last few years. As of May 2016, only about 36% of the traded volume of the companies with ADR programs occurred in US stock venues. This fraction had exceeded more than half in 2008; however, the majority of trading has now reverted to the BM&FBOVESPA.[19]

The regressions also allow us to measure the differential impact of the Novo Mercado listing requirements from just tag-along rights. Columns (4) of Tables 4 and 5 show that the estimated coefficients on tag-along rights are not statistically different from zero, suggesting that the tag-along rights are not significantly associated with higher firm performance. However, we still observe a positive relation between a Novo Mercado single-class listing and performance, even after controlling for tag-along rights.

In addition, we control for the broad effect of a firm being in the main stock benchmark (the iBovespa index). There is no relation between iBovespa index members and ROA [column (5) of Table 4] but a positive relation with M/B ratio [column (5) of Table 5]. Importantly, we still observe a positive relation between a Novo Mercado listing and performance, even after controlling for the iBovespa effect.

Besides the *one-share one-vote* single-class structure, one interesting aspect we highlighted above is the concentration of ownership, even among Novo Mercado firms (see Figure 4). To analyze this issue in more detail, we create a dummy variable that flags the cases when there are controlling shareholders (state, family or management, subsidiaries, or other) and expand the regressions to test for the interaction effect. The positive estimated coefficient for the interaction variable "Novo Mercado and Controlling Shareholder" in column (6) of Table 5 shows statistical evidence that a Novo Mercado listing is rewarded with a higher M/B ratio, particularly in cases of the presence of a controlling shareholder. This provides evidence that the proportionality and better treatment of minority shareholders from a Novo Mercado is valuable.

[19]Source: BM&FBOVESPA Investor Relations - Monthly Presentation (June 2016).

4.3. Risk Mitigation

Another important aspect that investors might seek with the single-class structure of a Novo Mercado listing is risk mitigation. For this purpose, we start by analyzing a traditional measure of risk: the volatility of stock returns. **Figure 9** shows that Novo Mercado firms exhibited a slightly lower variation in returns over the last decade. This difference is shown in Table 3, where Novo Mercado firms are statistically less risky than Tradicional or Other firms (but not Nível 1 and 2 with tag–along rights firms)

Besides the overall return volatility, many investors may care specifically about negative returns. Testing the value of good corporate governance during market downturns is particularly important in the Brazilian context, given that it was impacted by both a global shock (the 2008 global financial crisis) as well as a domestic market shock (triggered by the 2014–2015 Petrolão — Operation Car Wash corruption scandal). Therefore, we examine stock price "drawdowns" (i.e., peak-to-trough declines) during these "crisis" episodes in the last decade. In **Figure 10**, we find differences in the 2014–2015 period, suggesting that the Novo Mercado was relatively less affected than the broad market by the corruption scandal episode. While overall the stock market had a 30% drop in value, the Novo Mercado segment experienced a 25% drop. The difference, however, is not economically large and is, at most, only indicative that minority investors fared relatively better when investing with Novo Mercado companies.

Figure 9. Stock Return Volatility by Type of Listing

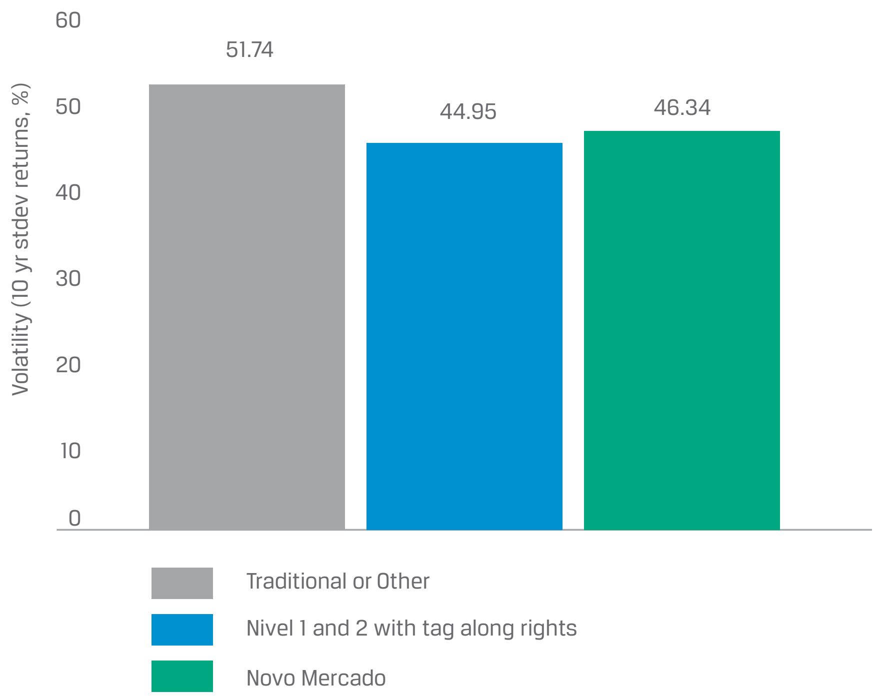
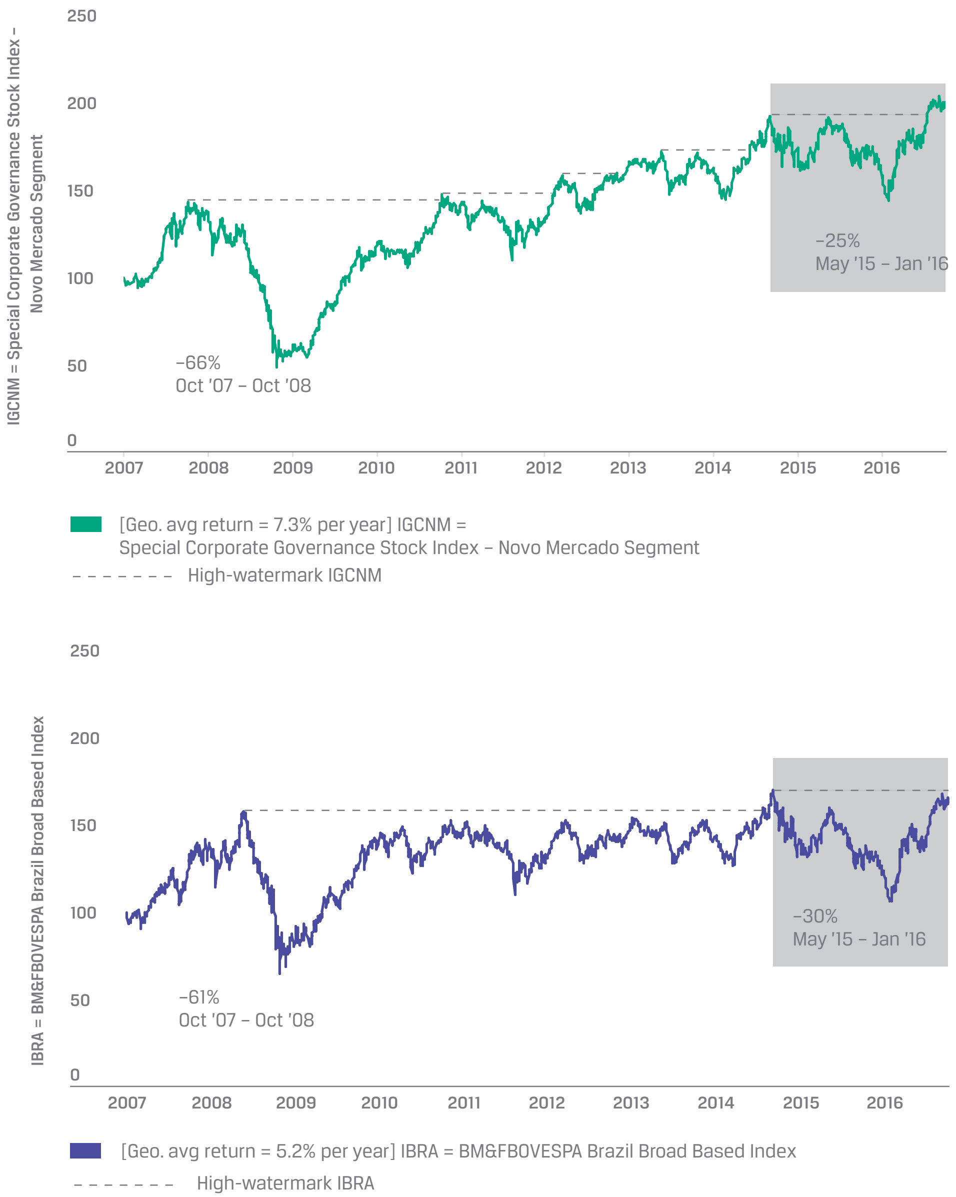


Figure 10. Top Drawdowns – Novo Mercado vs. Other Firms



5. The Next Stage in the Reform of the Novo Mercado

With the objective of preserving the effectiveness of the Novo Mercado, the BM&FBOVESPA conducted hearings first in 2005–2006 and again for a longer period from 2008–2011; however, there were not many significant changes actually made to listing standards. As a consequence, the Novo Mercado rules are roughly the same today as they were at launch. This fact, together with an increased perception that the Novo Mercado was losing effectiveness in providing a better environment for investors to participate in Brazilian companies, led some parties to demand an *evolution* of the rules, based on the lessons of the past two decades.

In response, in 2015, BM&FBOVESPA announced a new reform phase of Novo Mercado and Nível 2 listing segments.[20] The stock exchange held private consultations from March to May 2016, followed by public hearings in June to September 2016 (first phase) and collected comments from November 2016 to January 2017 (second phase) with the goal of drafting final rules in the spring to be voted upon by member companies by the end of June 2017. The CVM would then still need to approve the eventual changes, and these would not take effect until 2018.

The BM&FBOVESPA proposals as of the second-phase hearings in November 2016 can be summarized as follows:[21]

1. New Tender Offers

    - Exit Tender Offer: It is relatively easy today for a company to leave the Novo Mercado and walk away from its investor-protecting provisions. BM&FBOVESPA now proposes that such a decision be conditional upon the realization of a tender offer to minority shareholders at a fair (appraised) price. Under the current version of proposals, a minimum acceptance level of 40% would be required to leave the Novo Mercado.

[20]Source: BM&FBOVESPA Evolution Process of the Special Segments - http://www.bmfbovespa.com.br/en_us/listing/equities/listing-segments/about-listing-segments/evolution-process-of-the-special-segments/.
[21]This list summarizes the most relevant items from BM&FBOVESPA's presentation "Public Hearing – Development of the Listing Segments" (June 27, 2016), taking into account the adjustments announced in "Evolution of the Special Segments – Second Stage of the Public Hearing" (November 7, 2016).

- Thirty Percent Tender Offer: Market players criticize legal loopholes that allow companies to be bought/sold disregarding tag–along rights. BM&FBOVESPA proposes a mandatory tender offer should a buyer acquire 30% (or possibly 20%) of the company.

2. Corporate Governance Improvements

- Members of the board and independent directors: at least 20% or two independent directors, whichever is greater (in practice, increasing the level of independence at the board);

- Compensation: disclosure of minimum, medium, and maximum compensation of managers, with the important exception for companies supported by judicial decisions that do not disclose such information;

- Evaluation process of the board of directors but with flexibility in the implementation process by the companies;

- Statutory audit committee;

- Disclosure of information and documents: obligation to disclose a report with environmental, social, and corporate governance based on internationally accepted standards.

The list above suggests two things. First, BM&FBOVESPA is not caving in to pressures to bend the *one-share one-vote* rule. Such pressures exist not only in Brazil but also in other countries, as shown in the debate regarding Alibaba's listing in the United States (after its rejection from the Hong Kong exchange listing).[22] This is particularly encouraging, since the study suggests that the *one-share one-vote* structure is perhaps the most important item increasing the attractiveness of a Novo Mercado listing.

Second, the list does not include measures to close loopholes that allow for a *de facto* increase in multiple classes of shares. One such case is Gol Airlines, a low-cost airline which is a Nível 2 company. In 2015, Gol created "super preferred shares" (Super PNs) to get around foreign-ownership limitations and to facilitate M&A deal-making by increasing the number of common shares (ON) by a factor of 35 in order to make room for additional equity at the preferred (PN) level. Company management claimed that it had

[22]The Council of Institutional Investors opposed it in its letters to the London Stock Exchange, NYSE and NASDAQ: http://www.cii.org/files/issues_and_advocacy/correspondence/2014/03_27_14_CII_letter_to_NYSE_one_share_one_vote.pdf.

the following restrictions limiting equity capitalization options: (1) Gol was near the legal limit of the preferred shares it could issue, which is set at 50% of total shares; and (2) an inability to list ON shares given limits on foreign ownership as an airline company (BTG Pactual [2015]). Gol's minority investors approved this capital structure change. Minority investors pointed out that Gol could issue nonvoting shares in the future, allowing controlling shareholders to control the company with only 1.4% of the total capital.

Other features of Brazilian governance not addressed by the current reforms are issues concerning shareholder agreements. One such case is Usiminas where in 2014, Ternium (27.7% of voting ON shares) and Nippon (29.5%) had entered into a conflict, despite their shareholder agreement, which was in force until 2032. If the agreement was dissolved and one of the blockholders sought majority control of ON shares, it was not clear what would be the application of tag-along rights for minority investors (Valor Econômica [2014]).

BM&FBOVESPA might be sensing some resistance, since many of the reforms proposed in the 2008–2011 review ended up not being approved by member companies.[23] For example, the mandatory establishment of an audit committee and the tender offer requirement triggered at 30% accumulation of material ownership interest originally proposed in 2008–2011 were not approved at the time. These proposals were reintroduced in the 2016 review proposals. A proposal to increase to 30% (from 20%) the percentage of independent directors had also been rejected in 2008–2011 and was not brought back in the 2016 proposals.

Market participants diverge in their opinions about the current proposals. The corporate sector expressed some resistance with the Brazilian Association of Public Companies (ABRASCA), complaining in its January 2017 comment letter that the reforms would bring extra compliance costs at a difficult market environment for Brazilian companies, which were engaged in cost-cutting (ABRASCA 2007). For example, it mentioned that rules such as the requirement of an audit committee would be too onerous. It argued that these compliance costs were real, referring to the experience of Brazilian cross-listed companies and the Sarbanes–Oxley act in the United States. It requested for the 40% shareholder approval for voluntary delisting from Novo Mercado and Nível 2 segment to be relaxed for the percentage to be measured among those shareholders in attendance at the general meeting. The Association of Capital Markets Investors (Amec), which represents minority investors, argued that the 40% was a relaxation of the 50% threshold of majority approval by shareholders, which had been originally proposed by BM&FBOVESPA in the first phase of hearings (Amec 2017). Amec also criticized the more flexible language on the disclosure of executive compensation.

[23]BM&FBOVESPA Armínio Fraga's presentation "How Have Stock Exchanges in the Region Impacted Corporate Governance" at the Latin American Roundtable of Corporate Governance (October 2010).

At the same time, however, ABRASCA had made previous concessions on other points. After originally rejecting some of the changes in its September 2016 comment letter, in January 2017 it expressed approval in terms of the minimum of two independent directors, among other rules (ABRASCA 2017). The decision-making process is complex, and the hearing process is still ongoing.

Given the benefits documented in this study for the *one-share one-vote* rule of a Novo Mercado listing, it is reassuring that the current reforms being proposed do not touch this principle. However, the set of reforms still leaves Brazil's corporate governance standards well below international best standards in terms of board of directors' structure (namely, 20% is a low bar in terms of board independence) and limited disclosure of managerial compensation (given the many legal exemptions). Furthermore, the difficulty in enacting significant improvements in corporate governance structure in BM&FBOVESPA's reform proposals suggests an environment very different than the one that gave rise to the Novo Mercado in 2000.

6. Conclusions

This study provides evidence of the success of the single-class structure Novo Mercado launched in 2000, which has been associated with higher performance (and somewhat mitigated risk) of firms in this premium governance listing over the last decade. The Novo Mercado segment now represents close to 40% of the Brazilian market capitalization as of mid-2016, but this has not stopped the net drop in the number of listed companies from 2000 to 2016. The large majority of listed firms still have controlling shareholders — in particular, founding families and the Brazilian government. This study provides evidence that the *one-share one-vote* rule of a Novo Mercado listing helps ameliorate the potential conflicts between controlling versus minority shareholders. We find that a Novo Mercado single-class listing is rewarded with a higher M/B ratio, particularly when a controlling shareholder is present.

These findings show that a private initiative, such as Novo Mercado, based on the self-regulatory power of the BM&FBOVESPA stock exchange, can produce some benefits for listed companies. However, the Brazilian equity market is still in need of further governance reforms, and the next stage of the evolution of the Novo Mercado initiated in 2016–2017 should pursue a more ambitious agenda. The Brazilian stock market is relatively small when compared to its economic weight in the world. Enhanced governance standards protecting the rights of minority shareholders will help boost the local stock market as a major source of capital for economic activity in Brazil.

References

Adams, Renee, and Daniel Ferreira. 2008. "One Share, One Vote: The Empirical Evidence." *Review of Finance*, vol. 12: 51–91.

Associação Brasileira das Companhias Abertas (ABRASCA). "Manifestação da Abrasca na Segunda Fase da Audiência Pública sobre a Evolução dos Segmentos Especiais de Listagem." (January 6, 2017). Available at http://www.bmfbovespa.com.br/lumis/portal/file/fileDownload.jsp?fileId=8AA8D09758C221250159841960DB0F78.

Associação de Investidores no Mercado de Capitais (Amec). "Carta/AMEC/Presi nº 01/2017 Evolução Dos Segmentos Especiais—Nova Audiência Pública." (January 4, 2017). Downloadable at http://www.bmfbovespa.com.br/lumis/portal/file/fileDownload.jsp?fileId=8AA8D09758C22125015984195FED0EE8.

Bennedsen, Morton, Kasper Miesner Nielsen, and Thomas Vester Nielsen. 2012. "Private Contracting and Corporate Governance: Evidence from the Provision of Tag-Along Rights in Brazil." *Journal of Corporate Finance*, vol. 18, no. 4: 904–918.

Berle, Adolf, and Gardiner Means. *The Modern Corporation and Private Property*. Transaction Publishers, 1932.

Black, Bernard S., Antonio Gledson de Carvalho, and Erica Gorga. 2010. "Corporate Governance in Brazil." *Emerging Markets Review*, vol. 11, no. 1: 21–38.

Pactual, BTG. 2009. "Getting to know Brazil #1: The Poison Pill Myth."

———. 2014. "Getting to know Brazil #9: Corporate Governance: It Pays to be on Top." Available at https://www.btgpactual.com/Research/OpenPdf.aspx?file=20570.pdf.

———. 2015. "Super PNs: Bringing Flexibility to Capital Structure." Available at https://www.btgpactual.com/Research/OpenPdf.aspx?file=26294.pdf.

Carvalhal, Andre. 2012. "Do Shareholder Agreements Affect Market Valuation? Evidence from Brazilian Listed Firms." *Journal of Corporate Finance*, vol. 18, no. 4: 919–933.

Conti, Claudio Ramos, and L. Felipe Monteiro. 2014 *Banco do Brasil: From Brazil to the World?* Fontainebleau INSEAD Case Publishing, 2014.

De Carvalho, Antonio Gledson, and George G. Pennacchi. 2012. "Can a Stock Exchange Improve Corporate Behavior? Evidence from Firms' Migration to Premium Listings in Brazil." *Journal of Corporate Finance*, vol. 18, no. 4: 883–903.

European Corporate Governance Institute (ECGI) and Institutional Shareholder Services. (ISS). 2007. "Report on the Proportionality Principle in the European Union."

An External Study Commissioned by the European Commission. Available at http://www.ecgi.org/osov/documents/final_report_en.pdf.

Fernandes, Nuño. 2016. "Ultra Novo Mercado A and B." IMD case studies. Available at http://www.imd.org/research/publications/case-studies/case/2921/.

Financial Times. "What Is the Petrobras Scandal That Is Engulfing Brazil?" (March 31, 2016).

Gompers, Paul A., Joy Ishii, and Andrew Metrick. 2010. "Extreme Governance: An Analysis of Dual-Class Firms in the United States." *Review of Financial Studies*, vol. 23, no. 3: 1051–1088.

Inoue, Carlos F.K.V., Sergio G. Lazzarini, and Aldo Musacchio. 2013. "Leviathan as a Minority Shareholder: Firm-Level Implications of State Equity Purchases." *Academy of Management Journal*, vol. 56, no. 6: 1775–1801.

Investor Responsibility Research Center Institute (IRRC) and Institutional Shareholder Services. (ISS). 2012. "Controlled Companies in the Standard & Poor's 1500: A Ten Year Performance and Risk Review."

Jensen, Michael C., and William H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics*, vol. 3, no. 4: 305–360.

Khanna, Tarun, Aldo Musacchio, and Ricardo Reisen de Pinho. 2010. "Vale: Global Expansion in the Challenging World of Mining." *Harvard Business Review* Case Study.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 2000. "Investor Protection and Corporate Governance." *Journal of Financial Economics*, vol. 58, no. 1–2: 3–27.

Lazzarini, Sergio G., and Aldo Musacchio. 2010. "Leviathan as a Minority Shareholder: A Study of Equity Purchases by the Brazilian National Development Bank BNDES), 1995–2003." Working paper. Available at http://www.hbs.edu/faculty/Publication%20Files/11-073.pdf.

Musacchio, Aldo, and Sergio G. Lazzarini. 2014. *Reinventing State Capitalism: Leviathan in Business, Brazil and Beyond.* Cambridge, MA: Harvard University Press.

Organisation for Economic Co-Operation and Development (OECD). 2004. "OECD Corporate Governance Principles." Available at http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf.

Rajan, Raghuram G., and Luigi Zingales. 2003. "The Great Reversals: The Politics of Financial Development in the Twentieth Century." *Journal of Financial Economics*, vol. 69: 5–50.

Santana, Maria Helena. 2008. "The Novo Mercado." Chapter 1 in *Novo Mercado and Its Followers: Case Studies in Corporate Governance Reform*. Ed. the International Finance Corporation (IFC). Global Corporate Governance Forum Focus 5.

The Economist. (June 7, 2007). "European Corporate Governance: Tricks of the Trade."

The World Bank. 2006. "Case Studies of Good Corporate Governance Practices: Companies Circle of the Latin American Corporate Governance Roundtable (English)." Available at http://documents.worldbank.org/curated/en/461761468266076850/Case-studies-of-good-corporate-governance-practices-companies-circle-of-the-Latin-American-corporate-governance-roundtable.

———. 2009. "Practical Guide to Corporate Governance: Experiences from the Latin American Companies Circle (English)." Available at http://documents.worldbank.org/curated/en/726671468047053207/Practical-guide-to-corporate-governance-experiences-from-the-Latin-American-companies-circle.

Econômico, Valor. "The Still Unsolved Controversy Over Tag-Along Rights in Brazil." (October 13, 2014).

Appendix

Variable Definitions for Regressions in Tables 4 and 5

Novo Mercado = Dummy variable that equals 1 if a firm's stock is listed for trading on the Novo Mercado segment of the BM&FBOVESPA, where issuers adopt single-class shares and higher-level corporate governance standards.

Controlling Shareholder = Dummy variable that equals 1 if a firm has a shareholder or group of shareholder(s) that holds more than 50% of voting shares. Controlling shareholders include: 1) family or management; 2) state; 3) subsidiaries; and 4) other participants.

Novo Mercado & Controlling Shareholder= Dummy variable that equals 1 if both Novo Mercado = 1 and Controlling Shareholder = 1 (i.e., a firm is listed on the Novo Mercado and there is also a controlling shareholder).

ln (Assets) = The log of assets measured in thousands of Brazilian reals.

Leverage = The ratio of the book value of debt to the market capitalization of equity.

ROA = Return on assets.

Dividend Yield = Yearly Dividends/Stock Price.

ADR listing = Dummy variable that equals 1 if a firm has an American Depositary Receipt trading in a US stock exchange.

Tag-along rights = Dummy variable that equals 1 if a firm is an index member of the Special Tag Along Stock Index (ITAG).

iBovespa index member = Dummy variable that equals 1 if a firm is an index member of the Ibovespa Brasil São Paulo Stock Exchange Index (IBOV).

CFA Institute

AUTHOR

Pedro Matos
Academic Director of the Richard A. Mayo Center for Asset Management
Associate Professor of Business Administration (Finance)
Darden School of Business
University of Virginia

CONTRIBUTORS

Mauro Rodrigues da Cunha
CEO
Associação de Investidores no Mercado de Capitais
AMEC

Luis Fernando Affonso, CFA
Institutional Relations and Advocacy
CFA Society Brazil

Matthew Orsagh, CFA, CIPM
Director
Capital Markets Policy
CFA Institute

James C. Allen, CFA
Head
Capital Markets Policy
Americas
CFA Institute

Kurt N. Schacht, JD, CFA
Managing Director
Standards and Advocacy
CFA Institute

THE AMERICAS
(800) 247 8132 PHONE (USA and Canada)
+1 (434) 951 5499 PHONE
+1 (434) 951 5262 FAX

915 East High Street
Charlottesville, VA 22902
USA

477 Madison Avenue
21st Floor
New York, NY 10022
USA

ASIA PACIFIC
+852 2868 2700 PHONE
+852 2868 9912 FAX

23/F, Man Yee Building
68 Des Voeux Road
Central, Hong Kong SAR

Si Wei Beijing Enterprise Management Consulting Company Limited
Unit 7, Level 12, Office Tower C1, The Towers, Oriental Plaza
No 1 East Chang An Avenue, Dong Cheng District
Beijing, 100738, China

CFA Institute India Private Limited
Naman Centre, Unit No. 103
1st Floor, Bandra-Kurla Complex, G Block, Bandra (East)
Mumbai 400 051, India

EUROPE, MIDDLE EAST, AND AFRICA
+44 (0) 20 7330 9500 PHONE
+44 (0) 20 7330 9501 FAX

67 Lombard Street
7th Floor
London EC3V 9LJ
United Kingdom

Rue du Champ de Mars, 23
1050 Brussels, Belgium

9 781942 713388
90000

CFA Institute

www.cfainstitute.org
info@cfainstitute.org