PUBLIC DEBT ISSUANCE AND CORPORATE GOVERNANCE IN THE UNITED STATES AND BRAZIL

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Abstract

Debentures are important financing resources for U.S. and Brazilian companies. The manner of securing a debenture can improve a company's capital structure and maintain its ownership structure while diversify risk. Most credible companies have better opportunities because they implement good corporate governance practices that tend to provide instruments to ensure greater protection for their creditors. Motivated by this, our research makes a multi-case analysis of Brazilian and American companies with respect to the characteristics of their corporate governance mechanisms during security emission processes. The methodology is based on the Economic Commission for Latin America and the Caribbean index, a quantitative tool that was developed to measure governance and the internal control of risk levels. The results show differences in governance between these countries. Two possible causes of this difference are the market's most selective characteristics and internationalization, which require Brazilian companies to adapt to global rules.

Keywords: Debenture, Corporate Governance, ECLAC index, United States, Brazil
JEL Codes: G30, G32, G34, L25, M49

1. INTRODUCTION

Companies with the best corporate governance (CG) practices tend to add more credibility as they provide mechanisms that ensure greater protection for their creditors and minimize the risk of default, especially in the case of debentures. Consequently, companies with greater credibility tend to have better funding opportunities for external resources (Hasan & Butt, 2009; Croci, Doukas, & Gonenc, 2011; De Paula, Ribeiro, & Almeida, 2012).

In the North American environment, debentures have substantial importance in the capital market. For example, the debentures trade represented $1.4 trillion, accounting for 25% of the total $6.67 trillion transacted in the issuance of long-term securities in 2013 (Securities Industry and Financial Markets Association – SIFMA, 2014). In the case of Brazil, the Annual Report 2012 of the Brazilian Securities Commission (*Comissão de Valores Mobiliários* – CVM, 2012) stated that debentures constituted the main source of fundraising for companies in that year. In addition, debentures are an alternative source of portfolio diversification that offers higher returns than short-term indexed bonds.

The American bond market is significantly different from that of Brazil. First, the resource volumes raise the issue that these securities are substantially higher in all aspects than those on the Brazilian market. Second, the maturity of the capital markets in the countries differs. In this sense, comparing the different CG practices used in these countries' bond-issuing processes may indicate opportunities for improvement in Brazilian companies and contribute to governance indicator analysis. Additionally, American firms are used to meeting governance rules, as the laws and codes of practice highlight the importance of hat issue in the country's organizational environment (Kostyuk, 2006; Meier & Meier, 2014).

Considering CG in Latin American companies and its relevance in the financial market, the Economic Commission for Latin America and the Caribbean (ECLAC), in partnership with the Development Bank of Latin America (CAF) and the Inter-American Development Bank (IDB), worked to create an evaluation methodology for CG and internal control of risk levels through an index that specifically focused on the government bond emission process. The main purposes of this index are to identify the deficiencies of the analyzed firms and to standardize good CG practices in Latin America and the Caribbean. Hence, this promotes the development of the capital market in that it reduces the perceived risk of emission debts. Brazilian, Colombian, Peruvian, Chilean, and Mexican companies practices were analyzed using this methodology (Galindo, 2012).

Thus, this paper presents a discussion of the importance of the capital market to the economic development of Brazil and the United States; it reports CG's role in minimizing the effects of conflicts of interest between agents, describes the growth of securities issues in both countries, and examines the ECLAC index. Therefore, the research question is: According to the ECLAC index, what is the standard for CG mechanisms in the process of issuing debt securities for the selected companies in the United States and Brazil?

The answer is that the two countries have a slight difference, based on two aspects. The first is that the Brazilian bond market seems to be more selective in relation to the capital markets. Second, the scope of the U.S. market requires more appropriate governance criteria to attend to the needs of investors from all over the world, which is not seen in the Brazilian companies in this study. Therefore, we thoroughly discuss the numerical results provided by the index and examine these results' implications in detail. We also conduct a critical review of each company, allowing for an overview of the concepts.

After this section, the paper is structured such that the second section provides a theoretical review of the literature on CG in the United States and Brazil and on the relationship between debt security issuance and CG quality. The third section presents the study's research methodology. The fourth section describes the analysis of the selected companies and presents the results. Finally, the last section presents the final considerations of the research and makes suggestions for future works.

2. LITERATURE REVIEW

Although the definitions of CG come from different points of view, the literature indicates commonalities among all of them: an attempt to mitigate the effects of agency costs and a main purpose of defending the interests of investors either shareholders or creditors (Cadbury, 1992; Shleifer; Vishny, 1997; Brugni et al., 2012; Meier & Meier, 2012).

Fisher (1959) recognized that investors take greater risks as expected returns increase. He also proposed a new way of measuring the risk premium: as the difference between the yield on a government bond and the yield on a corporate bond. From the least-squares regression method for U.S. industrial companies, Fisher discussed the influence of debentures' credit risk spreads and introduced the volume of securities issued as a proxy for liquidity.

In line with Saito, Sheng, and Bandeira (2007), shareholders can expropriate wealth from bondholders in several ways: through the improper payment of dividends, through the repurchase of shares, or by investing in high-risk projects financed by additional emissions debt. Saito et al. said that, due to contractual limitations on the issuance of debentures and the risk of expropriation inherent to that business, debenture holders require a higher rate to offset these risks.

Other scholars have dedicated themselves to justifying the variability in bond spreads, including Fama and French (1993), who identified maturity and risk of default as the principal determinants of spreads.

Elton, Gruber, Agrawal, and Mann (2001) compared the spreads of private companies to those of the debentures of U.S. government bonds to quantify and explain the disparities. As a result, Elton et al. identified a small variation in premium corporate rates on public treasures and –considering taxes as a substantial part of that difference – followed by the influence of the risk-return ratio (which was measured by corporate bond ratings).

Another interesting paper was written by John, Lynch, and Puri (2003). Searching for the link between debt returns and agency problems, John et al. analyzed a set of secured and unsecured loans from 1993 to 1995, showing, contrary to expectations, that the spreads are higher for cases with guarantees than for those without. The researchers attributed this to the effect of agency problems between managers and debt holders and to imperfections in the risk-rating process. The conclusion, in essence, was that agency problems affect assets' values.

Corroborating this statement, Ashbaugh-Skaife, Collins, and LaFond (2006) investigated the relationship between CG mechanisms and higher ratings. Using data from 2,000 U.S. companies from the year 2002, Ashbaugh-Skaife et al. concluded that credit ratings are negatively related to the number of blockholders but positively related to the minority shareholder rights, financial transparency, and board independence. Ashbaugh-Skaife et al. indicated that good governance can translate to significant savings in debt costs, but they argue that there is a cost to maintaining good governance. On the other hand, Ashbaugh-Skaife et al. identified the reasons for poor governance, such as CEO compensation that is above the cost of the company's debt.

These results partly differ from those obtained by Silva et al. (2009), who also aimed to check the influence of CG in the ratings of Brazilian debentures. Using an ordered logistic model, Silva et al. concluded that the quality of the CG is associated with the ratings of the debentures – but only in conjunction with other variables (such as accounting and market measures). The results showed when governance has a higher value, the dependent variable also has a higher value, and, hence, the debenture has a lower rating. This was contrary to expectations, as Silva et al. expected that increasing CG quality would be better for the trust market, thus leading to a better security rating.

In an effort to improve CG and, consequently, the development of the capital market, the Organization for Economic Cooperation and Development (OECD) lists the following practices as priorities in governance reform: (a) appropriate treatment of voting rights; (b) fair treatment of shareholders during changes in corporate control; (c) assurance of the integrity of financial reporting and improved disclosure; (d) development of efficient advice; (e) improvement in the quality, effectiveness, and safety of the legal and regulatory structure; and (f) continuous cooperation at the regional level (OECD, 2014).

With the same purpose, but considering the importance of debt securities in the financial market scenario, ECLAC, CAF, and the IDB worked together to improve CG mechanisms specifically for the debt-security issuance process. One consequence of this project was the work of Galindo (2012), who proposed developing an index to measure the standards of Latin American governance mechanisms to encourage standardization and improved management by minimizing risks and enhancing the effectiveness of internal controls.

The ECLAC index considers the guidelines and best practices recognized by regulatory institutions and organizations, with the main goal of identifying the shortcomings of the analyzed companies and standardizing governance practices in ECLAC member countries. This standardization is intended to promote the development of capital markets and reduce the perceived risk of debt issuances. Thus, we adopted the ECLAC index variables that have been identified in the literature as affecting the risk of public debt emissions. When this procedure is not possible, the selection was based on experiences described by Galindo (2012), who served as a member of boards of directors and on corporate committees.

Moreover, Galindo (2012) considered four standard categories: (a) the roles and responsibilities that the administration members assume, (b) the board's structure, (c) the corporate committees' methods to minimize business risk, and (d) the evolution of performance advice. Galindo warned that there is no degree in the compliance to the established standards; that is, the score is binary for all questions: agree or disagree.

According to Galindo (2012), the compliance, when all aspects were combined, promoted good CG, timely and accurate disclosure of relevant information, effective functioning of the internal control system, and responsible behavior with regard to the issuance of debt securities. A direct link could be noted in some standards, as in a case concerning the functioning of a risk committee. In others, the relationship was not necessarily direct, but it was relevant, as selecting a board of directors after the improper appointment of its members increases the likelihood of a negative performance on debt issuance.

This paper adopted the methodology used for the development and application of the ECLAC index; it considered the mechanisms described below.

2.1. Role of the Board of Directors

Andrade et al. (2009) defined a board of directors as an intermediary body between shareholders and managers. This board has to protect the interests of shareholders and help to resolve agency conflicts, as Hermalin and Weisbach (2003) explained.

The board's role is broad. It includes actions related to business management, such as hiring and firing managers, overseeing their performance, and ensuring that their remuneration is compatible with the company's strategic management; the definition of operational targets and social responsibility; and the fulfillment of this planning (Peij, Bezemer, & Maassen, 2015).

The ECLAC index takes into account information about the role of the board of directors, including (a) its duties; (b) its use of effective mechanisms to ensure the availability of relevant information on assets and liabilities; (c) its authority to decide on the company's strategic planning, executive management, compensation, and indebtedness; and, (d) its responsibility in managing, directing, and monitoring the corporation.

2.2. Structure of the Management Board

In this regard, the ECLAC index considers three aspects: (a) the board's size; (b) its percentage of independent directors; and (c) its chairman's independence (such as if the chairman is an external advisor with no ties to or interests in the company).

For example, Andrade et al. (2009) aimed to identify the relationship between the structure of a management board and the company's market value and performance with a sample of Brazilian public companies. The authors' findings reveal that the number of directors is positively related to both operating performance and market value. Moreover, the directors' independence was identified as an efficient mechanism for improving companies' performance – but only for those that did not have high levels of debt.

2.3. Corporate Committees

According to Galindo (2012), the importance of corporate committees derives from the tasks and responsibilities they assume. Thereby, the ECLAC index seeks to measure the autonomy and independence of the committees'' work through explicit rules in the board's regulations. The committees considered in the index are: (a) audit committees, (b) investment committees in financial assets, (c) corporate finance committees, and (d) risk committees.

For all such committees, Galindo (2012) suggested that the leadership was held by an independent director and that the participating members were competent to act on the committee on which they served. In the case of the audit committee, the concerns were related to audit process and the control of information.

2.4. Performance Development of Boards

Monitoring a board's performance is critical to ensuring alignment with the proposed objectives and to correcting deficiencies. The process of monitoring the development of the board should be systematized in documents and executed with a formally defined periodicity (Galindo, 2012).

An alert is crucial. An efficient CG system imposes costs on businesses, and the assessment of board performance allows: (a) a view of the cost-benefit ratio regarding board maintenance and the performance generated resulting from its installation, and (b) the structural standardization, integration, and operation of the board and of corporate committees.

Thus, a board is appropriate only when its actions generate tangible income greater than the total cost of maintenance—in other words, when decreasing the perceived risks promotes better funding of financial resources, eliminates expropriation opportunities, and maximizes shareholder return (Hermalin & Weisbach, 2003; Andrade et al., 2009).

3. METHODOLOGY

The work approach is mixed (i.e., quantitative and qualitative). Initially, the data were collected from a variety of documents, requiring a comprehensive interpretation and analysis of the contents disclosed by the companies. We used secondary data extracted from the databases of the Security Exchange Commission (SEC, by EdgarOnline), CVM (annual information and reference forms), and *Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais* (also known as ANBIMA); from corporate websites of the selected companies; and from reports issued by the companies. These data refer to evidence of the presence of CG practices, according to the ECLAC index methodology. As a complement, we performed descriptive statistics.

From a qualitative point of view, we discussed the positive and negative points of CG and also the evidence that companies have similar cultures. We chose four companies in each country, following the same criteria used in the previous work that ECLAC conducted in partnership with CAF and IDB in Chile, Mexico, Colombia, Peru, and Brazil. This refers to an initiative to assess CG practices in the bond issuance process (and to therefore reduce investment risks) in an attempt to improve the financial market performance of these countries.

The methodology of Galindo (2012) – which is part of this research for the standardization of the CG index in the ECLAC, CAF, and IDB project – used three steps. First, based on Galindo's experience as a researcher and on other contributors' market experiences, the stages in the corporate debt issuance process were determined in the following order: (a) the determination of funding requirements; (b) the selection, approval, and use of financial intermediaries; (c) the determination of the risks of bond issues; (d) the authorization of emissions and the dissemination of information on both the use of resources and the implications of leverage; and (e) the structuring of effective internal control systems to provide timely information on the managers' effectiveness regarding risk controls and performance.

After arranging this set, the researcher selected four main categories of CG mechanisms to make up the ECLAC index: the role of the board of directors, the structure of the management board, the specific corporate committees, and the development of the board's performance.

Finally, based on the experiences of project members, we assigned weights based on the importance of each governance standard in the bond issuance process. In the first column of Table 1, we show the weights for each question. If the company implemented the practice, the assessed mechanism is assigned that weight (or score). If the experience is not diagnosed from the information available, the value is null. Thus, the final score is the sum of all the weights given in each category.

Choosing the companies also met the criteria of previous work, which preferentially selected organizations with the possibility of default or downgrade ratings, cases of renegotiation, case studies, and financial institutions.

From the U.S. side, the reasons for the selected companies amounted to:

1. ExxonMobil was chosen to present similar characteristics to Petrobras, favoring the comparison between the two oil companies. In addition, Robert Monks, one of the founders of the theory of CG and shareholder rights activist, worked for the separation of the positions of president and CEO (Silveira, 2008).
2. NUCOR was one of the U.S. companies strongly shaken by the crisis of 2008. In the early years of the crisis, the company had very low ratings and was issued an alert by the rating agencies.
3. The choice of General Motors follows the same criteria of NUCOR. The crisis of 2008 led the company to a major financial difficulty, which seriously erred in strategic and financial planning. In the year following the crisis, at one of the hearings in the U.S. bankruptcy court in New York, the company requested authorization to sell its best assets to a "New GM" funded by the U.S. government, representing the largest bankruptcy of a manufacturing company in the USA (General Motors, 2014).
4. As a U.S. financial institution, a statement of The Bank of New York Mellon (BNY Mellon) was considered the largest global bank custody, with leading positions in investment services, a position as one of the largest financial managers of world, and the status as a major player in the north American and global capital market (Fitch, 2014; BNY Mellon – Proxy Statement, 2013).

On the Brazilian side, the selected companies are justified by:

1. The choice of Petrobras is justified for two main reasons. The first reason is the interest in evaluating the trajectory of the CG of the organization within two years of the first analysis according to ECLAC methodology, held by De Paula, Riberio and Almeida (2012). The second reason is, due to recurring disclosures indicating governance problems, such as lack of transparency, the council failed to fulfill its role, which was permitted by decisions made by the board.
2. The Gerdau analysis is the result of the downgrading of its rating for long-term bonds d, with a level that received only a speculative grade with the possibility of default. Another motivating factor is the dependence characteristic of directors, since most belong to the controlling family. In this case, there is an interest in evaluating the impact of this dependence on other decisions relating to issues of securities and other governance.
3. The selection of Braskem stems from the interest in evaluating the CG process, in particular its problems, since Braskem is subject to expropriation of shareholders, corruption, and money laundering; lack of transparency of the information disclosed; and suspicious accounting maneuvers. Moreover, there are no national automaker cars in Brazil: all of them are multinationals with manufacturing plants, and a company that was comparable to GM is required.
4. The choice of the Itaú Unibanco Holding financial institution is justified by the interest in knowing the board and the governance practices of one of the largest Brazilian banks. Initially, the interest would be the evaluation of emission processes of Itaú BBA titles, but because there are no CG practices for the subsidiaries of Itaú Unibanco, the selection criteria was expanded to the holding company, as the board and the statutes are centered on it.

In short, the selected companies are shown in Table 1, as well as their characteristics.

Table 1. Selection of Brazilian and U.S. Companies for Research

Country	Company	Industry	Features
USA	ExxonMobil	Oil & Gas	High ratings
	Nucor	Steel & Iron	Default alert after subprime crisis
	GeneralMotors	Auto Manufacturers	Defaulted after crisis
	BNY Mellon	Banking, Financial services	High ratings
Brazil	Petrobras	Oil & Gas	High ratings
	Gerdau	Steel & Iron	Downgraded to medium low degree (one level above speculative grade)
	Braskem	Chemical	Downgraded to medium low degree (one level above speculative grade)
	Itau Holding S.A.	Banking, Financial services	Medium ratings

4. ANALYSIS OF RESULTS

This section presents the analysis of results of the eight companies selected – four American and four Brazilian for evaluation – following the methodology of ECLAC index as a methodological purpose. Before that, we summarize the main contextual features of each company.

ExxonMobil

ExxonMobil is the largest publicly worldwide company in the oil and petrochemical sector. The corporate ownership structure is dispersed, formed mainly by institutional investors and mutual funds, which together accounted for 51% of total shares held (ExxonMobil, 2014).

In relation to firm's raising funds, the public offering of securities in 2014 totaled $5.5 billion, the largest issue in the company's history. The last bond issue was in 1993, amounting to $250 million and restricted to the American capital market. In the meantime, the company opted for offering. The funds raised in the last round of securities were intended for application in new investments and acquisitions to refinance commercial papers (Bloomberg, 2014).

Concerning CG, ExxonMobil has a clear systematic role and functioning of the board and committees. The committees are: (a) audit; (b) remuneration; (c) governance; (d) finance; (e) public affairs; and (f) executive. The statute of these committees is structured necessarily in seven topics: the proposal of the committee, members, structure and operation, activities, performance measures, reports, and committee's authority.

The chairman is the CEO of the company. In May 2008, only 39.5% of shareholders voted in favor of separation of board chairman and CEO and a subsequent election for president of the independent board, a resolution that had been proposed for six consecutive years by Robert Monks (Silveira, 2008).

CG deficiencies in ExxonMobil, according to the methodology of ECLAC index, are related to the non-separation of chairman and CEO, the absence of an investment committee, and the non-formalization of the risk committee.

NUCOR

The company NUCOR (NUCOR Corporation) belongs to the Fortune 300 list. Regarding the ownership structure, NUCOR has dispersed structure with 79% of the shareholding structure retained in institutions and mutual funds and a number of 631 institutions with shares (Yahoo Finance, 2014b).

The long-term ratings of the corporation are Baa1 and A respectively by Moody's and Standard & Poor's. The prospect, according to these agencies, is negative. The ECLAC index for NUCOR is being negatively affected for three main reasons: (a) the price of the final product is not consistent with the high costs, mainly due to the production of high-value-added products; (b) the increase in the debt level, caused by rising capital expenditures; and (c) the reduction in steel demand in the U.S. market, mainly motivated by steel imports from China, and the reduction in global demand induced by the credit crunch and downturns in some economies (Moody's, 2013; Standard & Poor's, 2014a).

The guidelines for CG at NUCOR are well systematized in the statute, which contains clear rules about the role of the management and director's boards, selection and election of board members, remuneration, performance evaluation, qualification, agendas and meetings, independence ratio, president's role, succession planning, and selection of independent auditors.

The analysis indicates CG problems in NUCOR regarding the lack of use of information resources taken; absence of systematization of risk management, for any risk involved; non-separation of the chairman and CEO, lack of investment and financial risks committees.

General Motors

The automobile company General Motors is considered a North American industrial development icon. After an exponential growth since its foundation, GM became the world's largest automaker, but the crisis of 2008 has significantly affected its business.

In July 2014, the company issued new government bonds, whose purpose was only to exchange senior notes with the same yield and maturity. The total amount of the prospectus was $ 4.5 billion (SEC-FORM S-3 General Motors, 2014).

This issue has been rated by Fitch Ratings in August 2014 as BB+, justified by low leverage, high liquidity, positive capacity of available cash-flow generation, reduction of liabilities, and better product portfolio. In the long term, continuous restructuring of the work of the entire chain should significantly improve efficiency and profitability, but in the short term this is likely to increase the incremental cost and complexity for the business. Economic challenges include global pressure for reduction of pollutant emissions, fuel economy, and safety regulations deficit (Fitch, 2014a).

As for the ownership structure, 71% of the shares are held by institutions and owners of mutual funds, featuring a dispersed structure (Yahoo Finance, 2014c).

With respect to CG, there is a strong concern with the management of macro-economic risks, although a risk committee does not exist in this company. The committees are divided into: audit, compensation, governance, finance, and public policy.

There is a significant difference in comparison to other companies. The CEO is responsible for the strategic planning. GM is seeking to overcome the default arising from the 2008 financial crisis, given the improvement of its ratings, although it is still at low levels.

Bank of New York Mellon

The Bank of New York Mellon (BNY Mellon) is considered the largest global custodian bank. It has leading positions in investment services and is one of the largest managers of financial resources in the world (Fitch, 2014b; BNY Mellon - Annual Report, 2013).

In December 2013, a subsidiary of BNY Mellon (BNY Capital III) issued $330 million in subordinated debentures. The guarantee of this issue affects preferred securities of the holding. Then, the obligation of the holding in the case of a subsidiary default consists of a full and unconditional guarantee obligation under the preferred securities. Also, in the same period, another subsidiary (BNY Capital IV), whose only asset was originally subordinated debentures and a purchase agreement of preferred shares, re-marketed subordinated debentures issued by BNY Mellon in May 2012, held by the subsidiary. These debentures were sold to third-party investors and then exchanged for senior notes of the bank, which were sold in a public offering. The proceeds were used to finance the purchase by BNY Capital IV of $500 million in preferred shares of BNY Mellon, issued in June 2012 (BNY Mellon - FORM 10-K; 2013).

Regarding the ownership structure, the bank is characterized by dispersion, with 82% of shares held by institutions and mutual funds (Yahoo Finance, 2014d).

BNY Mellon's Board is divided into six committees: audit; CG and nominating; corporate social responsibility; executive; human resources and compensation; and risks and technology.

The assessment of CG structure by ECLAC methodology at BNY Mellon shows the accumulation of the functions of the chairman of the board, who is also the CEO of the company. The risk and audit committees are well defined and meet, in general, the standards of the ECLAC index. The formalization of these committees can be justified by the fact that this firm is a financial institution, which requires the company's major concern on the aspects of control and risk analysis.

Petrobras

Petrobras has undergone significant changes since its founding in 1953. The federal government and the majority shareholder respond immediately, sometimes contrary to the financial market, with the devaluation of the shares.

The board of directors, in turn, presents problems as to fulfill its role. Two major incidents, widely reported in the media, occurred in 2006 and 2014. The first refers to the purchase of the Pasadena refinery, whose operation is investigated for corruption and money laundering, at an overestimated value. The second occurrence of this is a transfer of barrels of oil and the pre-salt gas to Petrobras, at a cost close to $5 billion. The two cases have in common inefficiency as the fulfillment of the board of director's role, which should have a decisive role in the process and not just a "countersigning" (Fitch, 2014c).

Regarding the issue of debentures, the company made four emissions throughout its history. The first occurred in 1998, the second and third issues occurred in 2002, and the fourth occurred in May 2014. This last proposal to issue matures in six years at the amount of $250 million. The classifications of risks of the securities issued, despite the problems presented, correspond to the best indicators.

The report issued by Fitch warns of pressure on cash flow, caused by the allocation of surplus production. In summary, the Brazilian government demanded a bonus payment of almost $700 million for the year 2014 and a foretaste of $4.5 billion profit for the years 2015 and 2018 for anticipating exploration in Petrobras areas. These payments, together with the accumulated losses due to the pricing problems, tend to increase the company's financing need to settle debts and consequently affect the rating assessments (Fitch, 2014d).

The evolution of CG – according to the methodology of the ECLAC index, based on the research conducted by De Paula Ribeiro and Almeida (2012) – indicates improvements especially for the additional responsibilities to the board, in particular the responsibility for analysis and bonds emissions and developments for the role of the audit committee, which was structured to meet international standards.

The CG standards of Petrobras, according to the ECLAC index, lack development in some fundamental standards, particularly the formalization of specific committees of risk, investment, and financing and guarantee of independence of directors, external and internal, compared with interests of the controlling shareholder. The biggest challenge of the company (in terms of governance) is to ensure compliance management according to the situation and regain full credibility of the firm in the capital market.

Gerdau

Gerdau was founded in 1901 by German immigrant Johann Heinrich Kaspar Gerdau. Since then, the company has expanded its manufacturing operations in 14 countries, including those in the United States and India (Gerdau, 2014a).

In 2002, Gerdau held the 13th public issue of subordinated debentures, non-convertible, in a single series of $75 million. Only in August 2014 did the company appeal again to this type of financing and release the 14th issue, unsecured, non-convertible, at an amount of $400 million – but this time as a private issue. The funds of this issue were not mentioned in the drafts of deliberation meeting (Gerdau, 2014b).

The company's current risk rating is BBB–, Baa3, and BBB–, by Fitch (2014e), Moody's (2014a), and Standard & Poor's (2014b), respectively. The company is experiencing potential default risks, the appreciation of the dollar against the real (BRL), as a result of a significant portion of the debt being denominated in U.S. currency, as well as the increase of electricity, the downturn in steel-consuming countries, the reduction in the price of commodities, and the policy interventions in the Brazilian economy and other countries.

With respect to CG, the company has a risk committee that advises the board of directors and meets quarterly. The financial risks are assessed and managed by the financial department and periodically reported to the risk committee.

According to ECLAC methodology, the Gerdau's score of CG was penalized by the high level of dependence of advisors. It should be noted that Brazilian recommendations of best practices indicate that advisors are people without employment status in the company, i.e., non-executives. Its own CVM Reference Form asks for information about whether it is an external advisor when the most complete case would be to evaluate the independence of the company's advisor. It is important to note that the audit, finance, and investment committees are not formalized by the firm.

These governance problems, coupled with the high degree of financial leverage and macroeconomic uncertainties, contribute to the Gerdau rating reaching medium levels, even being a leader in the industry with geographically diverse operations and high technological capacity.

Braskem

Braskem is a Brazilian petrochemical company, producer of polymers, biopolymers, and other oil derivatives. The current Braskem was formed in 2002 from the acquisition of petrochemical COPENE by Odebrecht and Mariani groups. As the target of questions about the acquisition of another company (Triunfo), Braskem also undergoes a process of investigation for corruption and money laundering along with Petrobras (Medeiros, 2009).

Braskem is questioned by CVM regarding the transparency of the information disclosed. In an unprecedented decision of the regulatory body at the request of minority shareholders, the CVM has made an assessment of the Braskem reports, which describe the merger of Trikem, that were released in 2004. The CVM pointed out serious flaws, such as lack of evaluation of accounting items, incomplete reviews of affiliates, and deficiencies in the goodwill measure. However, the stain of Braskem in the capital market is due to the fact that the directors and fiscal boards are exempt from supervisory responsibilities and critical problems related to the work of the external audit agency.

In 2013, again the CVM questioned Braskem about the manipulation of accounting information disclosed to the agency. The company used the hedge accounting method to mitigate the impact of foreign currency. Although the method is legal in Brazil, established in 2009 from rule 38 (issued by the Accounting Pronouncements Committee), the practice allows smooth current losses generated by high American currency in the future result only when there are revenues in dollars. This maneuver allowed the recording of losses of more than $50 million in 2012, when in fact, the loss would be about $400 million.

With respect to CG, there are 10 members of the Board of Directors, and 12 directors in the committees. Thus, the entire board is composed of 22 members. This is because the advisors do not share committees in the company, e.g., an advisor belonging to the investment committee does not participate in another committee. Braskem corresponds, among the companies analyzed, with the one that has the behavior of form committees with advisors outside the board of directors.

Recommendations for Braskem, according to the ECLAC methodology, are seeking independence of the committee members: almost all members are linked to the controlling shareholders (Odebretch and Petrobras). This independence promotes fairness in decisions and improves the image of the company in the capital market. Even with the enormous potential of profitability given Braskem's business, its image is tarnished with the CVM, in the press, and among legal bodies due to recent governance problems.

The confusion over the interpretation of the audit committee supersedes the role of the audit committee, which needs to be revised. It is recommended that Braskem invest in an audit committee. An excessive number of advisors can generate unnecessary delays and complexity in decision-making, as well as the high cost of maintenance.

Itaú Unibanco Holding

Itaú Unibanco holding is the director of Itaú Unibanco Bank, the largest bank in Latin America since the merger of Itaú and Unibanco in 2008. In the industry of financial institutions, financial letters comprise the issuance of common bonds. In this type of issue, Itaú Unibanco, with Bradesco, account for more than half of the emissions of financial bills in Brazil (Pentagono S.A. DTVM, 2014).

The board of directors presents a concentration of members in relation to the parent company dependency. As a result, there is a concern on the part of the holding company to formalize the policy of impartiality and avoid conflicts of interest relating to the controller versus minority shareholders. In the case where an advisor conducts transactions with other groups' companies, the statute suggests the operation should be done according to normal market conditions, or, if necessary, request financial advisors opinions to solve the conflict and enlist the involvement of related parties, superintendence of ethics committees, and ombudsmen (Itau, 2014)

The board is divided into seven committees: audit, people, related parties, nominating and CG, risk management and capital, strategy, and compensation and international advisory. The chairman is a member of IUPAR, which owns 51% of the voting capital of Itaú Unibanco Holding, highlighting the chairman's dependence (CVM - Reference Form Itaú Unibanco Holding, 2014).

In general, the holding presents adhesion to most standards suggested by ECLA. The company is penalized by the concentration profile of dependent members on the board. Being a bank, the efficiency of the risk committee is essential to consolidate the competence of the management in exercising its role with clients. The risk committee, at least in the disclosed information, is solid and well structured.

Multi-case Analysis

Table 2 shows the consolidated and summarized results of the assessment of the CG of companies selected according to ECLAC methodology. The index of the four U.S. companies presented 4,740 points on average, while Brazilian companies' average is 3,625 points (a range that could varies from 0 to 10). The expectation that U.S. companies have a high volume of trading capital, more mature financial market, and more consolidated legal and regulatory systems should lead to significant differences (not statistically) in standards of CG mechanisms in relation to Brazil. However, this has not occurred. Thus, the difference between the U.S. standards and Brazil, given the existing counterpoints between the two countries, was lower than expected.

Table 2. ECLAC's Analysis of Selected Companies

Categories	Bench mark	USA					Brazil					Final Score
		EXXON	NUCOR	GM	BNY	Average Score	Petrobras	Gerdau	Braskem	ITAU	Average Score	
Role of the Board of Directors on transparency	1,508	1,508	1,131	1,131	0,754	1,131	1,508	1,131	1,131	1,131	1,225	1,178
Role of the Board of Directors regarding the delegation of responsibilities	0,567	0,378	0,000	0,378	0,000	0,189	0,189	0,378	0,189	0,378	0,284	0,236
Structure of the Board	0,094	0,094	0,094	0,094	0,093	0,094	0,062	0,062	0,031	0,000	0,039	0,066
The role of Chairman of the Board of Directors	0,566	0,189	0,000	0,377	0,189	0,189	0,189	0,000	0,000	0,189	0,095	0,142
The role and selection of internal and external directors	0,757	0,568	0,189	0,378	0,379	0,379	0,190	0,189	0,190	0,379	0,237	0,308
External advisors	0,567	0,189	0,567	0,378	0,567	0,425	0,378	0,378	0,378	0,189	0,331	0,378
Internal advisors	0,755	0,378	0,755	0,378	0,378	0,472	0,378	0,000	0,000	0,378	0,189	0,331
Audit Committee	1,885	1,131	0,754	1,131	1,508	1,131	0,754	0,000	0,000	1,508	0,566	0,848
Investment Committee in financial assets	0,285	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,095	0,190	0,071	0,036
Corporate Financing Committee	1,508	0,754	0,000	1,131	0,000	0,471	0,000	0,000	0,095	0,000	0,024	0,248
Risk Committee	1,508	0,000	0,000	0,000	1,131	0,283	0,000	1,131	0,000	1,131	0,566	0,424
Total	**10,00**	**5,189**	**3,490**	**5,376**	**4,999**	**4,764**	**3,648**	**3,269**	**2,109**	**5,473**	**3,625**	**4,194**

A detailed analysis reveals that among the selected companies, the formalization of the role of the board of directors regarding the transparency is better specified in the Brazilian case. This fact implies that at least in terms of status, the responsibility of the board of directors regarding the transparency of information is best defined and documented in Brazilian firms. The item with the highest negative impact on the assessment of U.S. companies refers to the question of the formalization of the board of knowledge on the implications of existing emissions and actions by leverage levels, which were not explicit in the statute and documents of two from American companies.

The same occurred in respect to the category of the role of the board of directors, regarding the delegation of responsibilities. The set of questions in this category evaluates the interaction of the responsibilities of the risk, financial, and audit committees. The fact that U.S. companies present lower results than the Brazilian companies lies in the absence of the risk committee.

5. CONCLUDING REMARKS

The objective of this work was one multi-case analysis of Brazilian and U.S. companies, evaluating the standards of CG mechanisms in the issuance of debt securities. The chosen methodology was the ECLAC index, a quantitative tool developed to measure the level of risk governance and internal controls.

As a result, the average index was 4.194 points (in a range of 0 to 10) on average for all firms. U.S. companies had an index average of 4,764 points, while Brazilian companies had an index of 3,625. This small difference found in the standards of CG mechanisms of the two countries is contrary to the literature on the subject because it is expected that countries with strong legal protection and a mature financial market will present significant differences in governance practices.

Two possible explanations for the low difference in the results found in the U.S. and Brazilian companies, according to ECLAC methodology, are the most selective characteristics of the bond market and the internationalization of the capital market. Since the Brazilian director has patrimonialist behavior, the debt, even at higher costs, does not dilute firm capital (Li et al., 2013) and debt securities are offered in large emissions and have lower liquidity to the stock market. Thus, the market of debt becomes more selective than the stock market. Also, the magnitude of capital volumes makes the issuing companies adopt CG mechanisms to ensure adequate returns to investors. On the other hand, the uptake of these funds in overseas financial markets, in turn, requires companies to conform to the regulatory requirements of the countries of their creditors.

The major contribution of this study focuses on the analysis of U.S. CG standards and Brazil, which tend to have a better convergence when it comes to the issue of corporate bonds than in relation to the stock market.

The main differences between the U.S. and Brazilian governance practices refer to the issues of independence of directors and the separation of the management and supervisory boards.

In Brazil, regulators propose as good governance practice the untying of advisors who monitor the executive board's activity, i.e., the hiring of external advisors. In the United States and according to the ECLAC methodology, it is recommended that the advisor, in addition to being external to the organization, should also be independent. The concept of independence is broad and involves everything from the shareholding advisor in the company to the existence of conflicting personal interests in company decisions with the interests of shareholders. In this regard, selected Brazilian companies did not obtain any score because both questions referred to the majority of the board as composed of independent directors, as the question of the chairman of the board as an independent member was averted in the four companies evaluated.

Independent directors or presidents undoubtedly are more reliable and complete only the rating of "external." This criterion could be reviewed by the regulatory bodies, and the search for a benchmark changes this concept.

Another aspect is the conceptual difference in the boards of the United States and Brazil. In the United States, all directors are part of the board of directors, and its work is divided into committees, such as, in general, an audit committee, remuneration, and CG. In Brazil, there are two main boards: a management board and a supervisory board, with different members in each one, according to the Brazilian Corporate Law.

Some board members are from other organizations or have activities such as consulting, business, teaching, and activities of NGOs. It would be interesting to see whether the ECLAC index and other indices take into account the fact that the workload and thus the partial fulfillment of the advisor's role and also begin to question the involvement of the directors in other activities.

The financing process, by providing corporate bonds, is costly for the issuer, making it unfeasible for small corporations, which implies a concentration of issuances of securities held in companies with large equity assets. As this research needs information about emissions (prospectuses, ratings, or default), companies in the sample have in common the characteristic of having high equity asset values.

Another limitation refers to the data source. In general, the information was collected from sources disclosed by the companies. In this case, distortion may occur between what is practiced in fact and what is statutory in the organization. Because the survey is also qualitative, there is a limitation to the interpretation. Despite the strong attempt to systematize the research, this limitation cannot be ruled out.

Future studies may also use the ECLAC index to assess other companies, considering organizations of different sizes, other business industries, or more quantitative approaches, such as in econometric models that consider the relationship between the score given by the ECLAC index, and, for example, the spreading of corporate bonds.

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