

CHARACTERISTICS OF AUDIT COMMITTEE: A STUDY IN LISTED COMPANIES AT BM&FBOVESPA

VANDERLEI DOS SANTOS

Doctoral Student of the Graduate Program in Accounting at the Federal University of Santa Catarina (UFSC). Professor at the Universidade do Estado de Santa Catarina (UDESC). Address: Universidade Federal de Santa Catarina, Campus Reitor João David Ferreira Lima, s/n, Trindade | 88040-900 | Florianópolis/SC | Brazil.

E-mail: vanderleidossantos09@gmail.com

CAMILA FRANCIELI SCHMEIDER

Specialist in Accounting and Finance from Universidade do Estado de Santa Catarina (UDESC). Address: Rua Dr. Getúlio Vargas, 2822, Bela Vista | 89140-000 | Ibirama/SC | Brazil.

E-mail: camila.schmeider@yahoo.com.br

PAULO ROBERTO DA CUNHA

PhD in Accounting and Business Administration from Universidade Regional de Blumenau (FURB). Professor in the Postgraduate Program in Accounting of the Universidade Regional de Blumenau (PPGCC/FURB) and the Universidade do Estado de Santa Catarina (UDESC). Address: Rua Antônio da Veiga, 140, Sala D 202, Bairro Victor Konder | 89012-900 | Blumenau/SC | Brazil.

E-mail: pauloccsa@furb.br

ABSTRACT

The study aimed to verify the characteristics of size, independence and expertise of the audit committees of companies listed on the BM&FBovespa in 2010 to 2013. Among the 407 companies listed on the stock exchange, only 68 of them have audit committee trained in some period analyzed. The year 2013 had 59 companies with the audit committee, which is the largest number found, representing only 14.50% of the population. The main results showed that compared to most size complies with the precepts of best practices, have three participating members of the audit committee. However, companies have heterogeneous practices in this feature, existing both those with only one or two members as others that have more than six members. In 2013 there were 192 members of 59 committee's companies, and of these, 48 are engineers, 45 economists, 41 managers, 26 accountants and one auditor. Overall, it is concluded that the creation of the audit committee is not yet an established practice by Brazilian companies and that this manifests itself in different ways across organizations.

Keywords: Audit Committee. Size. Independence. Expertise.

1 INTRODUCTION

The corporate governance is a monitoring, direction and incentive system that relates all interests from the organization's agents. It separates property and control (Instituto Brasileiro de

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Governança Corporativa [IBGC], 2009a). It has the goal to create a group of efficient mechanisms to ensure the alignment of the executives' behavior with the interests from the shareholders (Viana, 2010). The action of the Administration Board on the management of organizations is one of these mechanisms, and one of its main goals is to ensure the transparency of generated information and to design other support committees (Silveira, Barros, & Famá, 2003).

According to IBGC (2009b), the Administration Board can establish the creation of committees to support it on the execution of activities. One of these subsidized committees is the Audit Committee, which is responsible to supervise and administer issues referring to the accounting demonstrations, finances, internal controls and to follow the works of internal and independent audits. The institutionalization of the Audit Committee aims to provide a higher transparency to the information and to ensure a legit provision of accountability to the interested persons and investors (Oliveira & Costa, 2005).

Baioco and Almeida (2017) evaluated the effects of the Audit committee and the fiscal board with their different characteristics on the quality of the Brazilian accounting information. The results evinced that the different arrangements of the fiscal board and the existence of an audit committee had different impacts on the accounting information properties. Felo, Krishnamurthy and Solieri (2003) examined the relation between the audit committee's characteristics (composition – expertise and independence; and size), with the quality of the financial reports. The authors suggest that the companies could improve their presentation quality of the financial reports and to properly structure the audit committees, reducing their capital cost.

This way, the audit committee is constituted by a descending department of the administration board, instituted to ensure the quality and fidelity of the reports and that has characteristics that collaborate for the good practices of corporate governance, such as the size, independence and expertise. This, the question that guides this research is: *Which are the prevailing characteristics on the audit committees from the companies listed at BM&FBovespa?* In this sense this study has the goal to verify the size, independence and expertise characteristics of the audit committees from the companies listed at BM&FBovespa.

The size is related to the number of members that compose the committee; the independence is determined by the quantity of members that do not have a bound or subordination to other levels on the same organization. On the other hand, the expertise is a characteristic that aims to identify the members that have a formation of professional experiences that enable the analysis and approval of accounting and financial reports from the organization in an effective way (Teixeira, Camargo, & Vicente, 2016; Felo *et al.*, 2003).

Studies about the audit committee had been performed in national and international scope. Such studies have, as the investigation focus, the relation between the characteristics of the audit committee with the management of results (Cunha, Hillesheim, Faveri, & Rodrigues Junior, 2014; Habbash, Sindezingue & Salama, 2013; Klein, 2002) and with the quality of independent audit (Teixeira *et al.*, 2016; Lary & Taylor, 2012); the comparison of the characteristics proposed for the audit committee on the corporate governance code of Brazil and other countries (Beuren, Nass, Theiss, & Cunha, 2013); The analysis of the audit committee's characteristics on the corporate governance of the Brazilian companies with open capital (Oliveira & Costa, 2005); the relation between the audit committee's characteristics (independence, expertise and frequency of meetings) with the audit honoraries (Adelopo, Jallow, & Scott, 2012); the relation between the company's characteristics, of the audit committee and the independent auditor with the deadline to publish the financial reports (Cunha, Pletsch, & Silva, 2015) and the relation between the audit committee's characteristics and the audit delay (Cunha, Lunelli, Santos Faveri & Rodrigues Júnior, 2015).

This research focus on the diagnosis of characteristics from the audit committees. This diagnosis is useful because it can help the companies in what concerns the structure of their audit committees, since it presents the main existing and needed characteristics to ensure the efficacy of this mechanism, which contributes to improve the good practices of corporate governance. Another point that justify the work is the contribution for the investors' decision taking, who might have a deep knowledge about the audit committees and to comprehend their main characteristics. The existence and employability of these characteristics influence the

quality and transparency of the reports and statements generated by the audit committee. According with Cunha, Sant'Ana, Theiss and Krespi (2013) when presenting the guidelines assigned to the audit committee, associated to the characteristics of their components, it contributed for the organizations when reflecting a higher quality of the accounting reports and a higher safety to the shareholders and investors.

2 AUDIT COMMITTEE

The Corporate Governance has the goal to settle the agency's conflict, which appears when there's a separation between the property and control (Viana, 2010). It is the system by which the organizations are conducted, monitored and stimulated. It involves the owners, the administration board, the board and the control departments (IBGC, 2009a). For Viana (2010) and Silveira, Barros and Famá (2003), the corporate governance is oriented to create an efficient group of mechanisms, as much as of incentives as of monitoring, to ensure that the executives' behavior is always aligned with the shareholders' interests. Among the mechanisms, there's an emphasis on the action of the Administration Boards and the transparency on the information through the obligation to publish information about the company (Silveira et al., 2003).

According with IBGC (2009b), the Administration Board can establish several committees to support it on the execution of its activities, decision taking and deconcentrating of some points from the management. Among the committees that can be formed, there's the audit committee, responsible to supervise the accounting reports, internal controls, financial area, internal audit and independent audit. The Guide of Corporate Governance Guidelines of BM&FBovespa (2015), states that the audit committee is a mechanism of Corporate Governance that has the responsibility to manage the internal procedures, as well as to ensure that such procedures are worthy and effective to produce quality financial reports, aiming the protection of the shareholders and of other users of the accounting information.

The Law *Sarbanes-Oxley*, in its section 301, establishes that the audit committee must be composed by at least three members of the administration board. Equally, the Resolution n. 3.198/04 of the National Monetary Board [CMN] (2004) states that the audit committee must be composed by at least three members with non-delegable activities that must be described on the organization's social statute. The Commission of Furnishing Values [CVM] (2002) recommends that the audit committee must include at least one adviser that represent the minority among the company's members. According to Yang and Krishnan (2005), higher the Audit Committee, higher the variety of existing knowledge for an effective performance of the committee's activities.

The Resolution n. 3.198/04, on art. 12, CMN (2004) establishes that the term of the audit committee's members must have a maximum duration of five years. It is excluded the companies of closed capital that do not need a fixed term for the board's members; and that the member of the audit committee can only integrate again such department on the same institution after at least three years, counting from the term's ending. Yang and Krishnan (2005) verified that the committee members that have more than one term obtain experience and contribute on the reduction of the management of results.

The audit committee will have to keep its dependence to not suffer an internal influence and to not have a negative reflection on the effectiveness of the accounting report analysis (Beuren *et al.*, 2013). According with IBGC (2009b), the members of the audit committee will have to be independent, or at least the majority of them. Klein (2002) determined that higher the number of independent members in a committee, better the quality of the information available to the user.

The Code of the Best Corporate Governance Practices (IBGC, 2009b), in its item 2.16, disposes that the number of independent advisors will depend on the degree of maturity from the organization, from its life cycle and from its characteristics; The same code recommends that the majority be composed by independent advisors, hired through formal processes and with a well-defined scope of acting and qualification.

The *Sarbanes-Oxley* law defines the section 301 that the independent member is the one that does not receive, except by the provision of services on the board, any honorary referring to consulting or other kind of compensation by the company, and that is not an affiliated person and neither of its subsidiaries. This fact is ratified by IBGC (2009a) on item 3.3 of the Guide for the Orientation of Better Practices on the Audit Committee, which mention that, to keep their independence, the committee's members must not receive any kind of remuneration from the organization or from its related parties that is not the one relative to the function of advisor and member of the committee. The independence involves the capacity to exercise judgments and show itself on the way it performs the role (IBGC, 2009a).

The independence on the analysis and issuances from the audit committee opinion is not enough to ensure that there's a transparency on the generated information. The committee must support the administration board and the executive board in what concerns the transparency, reliability and effectiveness of the performance of its roles and responsibilities (Beuren *et al.* 2013).

In order to keep the independence of the audit committee, the administration board must fix attributions and responsibilities for this committee, besides looking after these designations to ensure They are duly fulfilled. These attributions must be expressed on the statute or on the company's social contract (CMN, 2004).

Figure 1 presents the basic attributions from the audit committee contained on the international text of the *Sarbanes-Oxley* law and in the national scope on the Resolution 3.198/04 do CMN (2004):

Sarbanes-Oxley Law	<ul style="list-style-type: none"> • hiring, replacement and supervision of the independent or external audit, including the resolution of any conflicts between the administration and independent auditors; • creation of procedures to receive, process and deal with complaints and/or complaints against the administration, including mechanisms to receive anonymous and confidential reports by part of the employees. • interaction and communication with the external and internal auditors, administration board, executive board, controllers, lawyers, among other agents of the elaboration process of the accounting reports; • identification of critical accounting aspects and the analysis of a proper application from the accounting principles generally accept; • evaluation of the internal control and corporate risks.
Resolution No. 3.198/04	<ul style="list-style-type: none"> • establish the operational rules for its own functioning, which must be approved by the administration board or, if there is none, by the board of the institution formalized in written and put at the disposal of the respective shareholders; • recommend, along with the institution's administration, the entity to be hired for the provision of the independent audit services, as well as the replacement of the provider of these services, if it is considered necessary; • to review, prior the publication, the biannual accounting reports, including explaining notes, administration reports and opinions from the independent auditor; • evaluate the effectiveness of the independent and internal audit, including in what concerns the verification of the compliance of legal and normative devices applicable to the institution, besides internal and independent auditors; • evaluate the compliance, by the institution's administration, of the recommendations made by the independent or internal auditors; • to establish and disclose procedures for the receipt and treatment of information about the non-compliance of legal and normative devices to the institution, besides the internal regulations and codes, including with the provision of specific provisions for the protection of the provider and from the information confidentiality; • recommend, to the institution's board, the correction or improvement of policies, practices and procedures identified on the scope of their attributions; • gather, at least quarterly, with the institution's board, with the independent audit and with the internal audit to verify the compliance of their recommendations or inquiries, inclusive in that refers to the planning of the respective audit works, formalizing the content of such meetings in minutes; • verify, by the occasion of meetings, the fulfilling of its recommendations by the institution's board; • reunite with the fiscal council and with the administration board, through their request, to discuss about policies, practices and procedures identified on the scope of their respective competences; • other attributions determined by the Central Bank of Brazil.

Figure 1. Responsibilities of the Audit Committee

Source: Own elaboration through the precepts of the *Sarbanes-Oxley* law and from the resolution 3.198/04, CMN (2004).

For Oliveira and Costa (2005), the attributions presented by both legislations are similar, but the Brazilian resolution contain more details, such as the participation in meetings of the fiscal counsel and the obligation to elaborate a bi-annual report. Sorrentino, Teixeira and Vicente (2016) investigated the adequacy level of the audit committees from the companies of the differentiated levels at BM&FBovespa in relation to SOX, Bace, Susep and IBGC rules. For such, the elaborated an index through the application of a checklist based on the rules that affect the Brazilian companies. The authors observed that the companies subject to the rules from BACEM and SUSEP formed the group with a higher adequacy while the companies that were submitted to the SOX and the ones that are not-obligated to built the audit committee presented the lower indexes of the sample.

In relation to the expertise of the audit committee's members, the Sarbanes-Oxley law, in its section 407, demands that the audit committee be formed by at least one financial expert – *Audit Committee Financial Expert (ACFE)*. For *Securities and Exchange Commission – SEC* (2003), an ACFE is defined as a person that have an academic or professional knowledge in accounting, audit, controllership, such, for instance, the CEO (*Chief Executive Officer*), the CFO (*Chief Financial Officer*) or other similar that have qualification and comprehension about elaborations, audit, evaluation and analysis of the accounting demonstrations, computation of provisions and reserves, comprehension about the internal control and about the functions that involve the audit committee (Oliveira & Costa, 2005).

According to the *New York Stock Exchange – NYSE* (2003), each member of the audit committee must have knowledges about finances as interpreted by the administration as necessary for the comprehension about the business. Other point considered by the institution is that at least one of the committee's members must be an expert in accounting or financial administration.

The Guide for the Orientation of Better Practices on the Audit Committee IBGC (2009a) presents that at least one of the committee's member must have knowledge about accounting, audit and financial management, besides gathering experience in management of risks about financial and accounting business. The item 2.30 of the Guide for the Orientation of Better Practices on the Audit Committee IBGC (2009b) also deals with the expertise of the committee's members presenting that at least one of the members must have proven experience on the accounting or audit area. This way, an efficient audit committee starts on the choice of its members, that must be prepared to support these qualifications (Oliveira & Costa, 2005).

In a study made by Ika and Ghazali (2012), it was observed that the formation and experience on the accounting, audit and finances area has an influence over the audit committee. In another research performed by Dezoort, Hermanson and Houston (2003), it was emphasized that the audit committees with a higher experience offer better results on the moment to supervise the process, to ensure an integrity of the values generated. They evince, thus, the importance of the committee's members to have a finance experience (Cunha, Pletsch, & Silva, 2015). Therefore, it is noted that the expertise does not refer just to the academic formation, but also to the professional experience.

Felo *et al.*, (2003) evinced that after the control of the company's size, composition of the board, commitment of the administration with transparency (the existence of an ethic program) and the institutional appropriation, the percentage of members from the audit committee experienced with accounting or financial management is positively related to the quality of the financial report. It is even observed a positive relation between the committee's size and the quality of the financial reports. However, they noticed that the independence of the audit committee is not related to the quality of the financial report. The results from the research of Felo *et al.*, (2003) suggests that to demand a higher expertise in audit committees instead to simply demand an expert on the audit committee can be beneficial for the investors.

From what is exposed, it is denoted that the main characteristics of an audit committee are guided about its size, which deals with the number of members that compose it; independence when it' composed by members without any kind of bond or subordination to other levels within the organization and expertise, which cover the academic formation and the professional experience needed to comply with the credibility from the roles determined by the members of the audit committee. All of these characteristics contribute to improve the

transparency quality of the information generated, which increases the investor's reliability and improves the corporate governance adopted by the organization.

3 RESEARCH METHODS AND PROCEDURES

It was made a study with a descriptive nature through a documental research with a quantitative approach.

3.1 Population and sample

From the site of BM&FBovespa (www.bmfbovespa.com.br), it was researched all companies listed according with its level of corporate governance. Initially, the collection of data resulted in 739 companies. This is the constitution of the population within the research. From this population, 332 companies from the financial sector were excluded, since they present peculiarities that can't be applied to this research, leaving 407 companies.

The subsequent procedure was to verify which companies had an audit committee between 2010 and 2013, which resulted in a sample composed by 68 companies, as evinced on table 1. It is appropriate to emphasize that the sample's selection criteria considered that, at least during a certain period, the companies should have an audit committee. This way, it composed the sampling companies that created an audit committee only in 2013, as well as companies that had a committee in 2010 and eliminated it in subsequent periods.

Table 1

Number of companies considered for data analysis

Economic Sector	Number of companies	Without the Audit Committee	Participation %	With the Audit Committee	Participation %
Industrial Goods	36	34	94.44%	2	5.56%
Construction and transportation	71	62	87.32%	9	12.68%
Cyclical Consumption	74	63	85.14%	11	14.86%
Non-cyclical Consumption	59	48	81.36%	11	18.64%
Basic Materials	42	33	78.57%	9	21.43%
Oil, Gas and Biofuels	12	8	66.67%	4	33.33%
Information technology	25	21	84.00%	4	16.00%
Telecommunications	13	9	69.23%	4	30.77%
Public Utility	75	61	81.33%	14	18.67%
TOTAL (without considering the financial industry)	407	339	83.29%	68	16.71%

Note. Source: Research data.

Most of the companies are focused on the sectors of Public Utility with 75 companies, Cyclical Consumption with 74 companies and Construction and Transportation with 74 companies. However, when analyzing the percentage of participation with companies that have an audit committee, we see that the oil, gas and biofuels and telecommunications are the most representative, with 33,33% and 30,77%, respectively, in other words, there are the sectors that have a higher representativeness in percentage terms of the audit committee. They are subject to specific regulations, which might contribute for the constitution of the audit committees. In a general way, we observe that the presence of the audit committee is still on early stages in the companies listed at BM&FBovespa. According to the IBGC (2009a), the institution with the audit committee is recommended to analyze the financial reports and to promote the supervision of the financial area, ensure the development of reliable internal controls, confirm that the internal audit perform its role and that the independent auditors evaluate the practices from the board and from the internal audit.

3.2 Variables analyzed

The characteristics of the audit committees analyzed were measured using the variables exposed in Figure 2 below.

Features	Form of calculation and measurement	Authors
Size	Number of members of the Audit Committee.	CVM (2002); Resolution 3.198 (2004); Yang and Krishnan (2005)
Independence	Number of independent members. The independence was considered when the member was not found in other committee or a board within the organization. These data were researched on the Reference Form (item 12.7 – Composition of committees and 1.1 – Statement and identification of the responsible for the form).	Beuren et al. (2013); CVM (2002); IBGC (2009a).
Expertise	Quantity of members with knowledge in accounting, audit and finances. The knowledge was considered when the profession found on the Reference Form (item 12.7 – Composition of committees) from the members of the audit committee was equal to: Auditor, accountant and/or economist/finances.	Dezoort, Hermanson e Houstn (2003); IBGC (2009a); Ika e Ghazali (2012); NYSE (2003); Cunha, Pletsch, & Silva, 2015).

Figure 2. Characteristics reviewed

Source: Own elaboration.

After the delimitation of the variables selected for the study and the way to measure them, it started a collection and analysis of data.

3.3 Procedures of collection and analysis of data

It was used the site of BM&FBovespa to research the companies listed between 2010 and 2013, according with their acting sector and their level of corporate governance. The data related to the audit committee's characteristics were collected at BM&FBovespa site, more specifically on the Reference Form, subsection 12.7 (composition of committees), which describes the composition of all committees connected to the administration board. In this form, it was researched the information about size, independence and expertise of the audit committee.

The data in what concerns the characterization of companies of the sample were taken from the institutional pages of the own organizations, as well as the publication on the site Valor Econômico® da Revista Valor 1000, in 2013. For the analysis of data, it was used the descriptive statistic, where it was determined the minimum and maximum value, averages, trend, standard deviation and variable coefficient of the variables; Size, independence and expertise in each period.

4 DESCRIPTION AND ANALYSIS OF DATA

In this section, it is primarily presented the profile of companies that had an audit committee in any one of the years investigated, which was between 2010 and 2013. Up next, it is presented the characteristics from the audit committees in terms of size, independence and expertise. Finally, with the goal to identify any tendency through the descriptive statistic, it was analyzed the characteristics over the analyzed period.

4.1 Companies' profile

Data were collected from 68 companies listed at BM&FBovespa and that had an audit committee between the years of 2010 and 2013. The profile of these companies was delimited based on the sectors, corporate governance level, number of employees and net profit of the year 2013, whose information is synthesized in table 2.

Table 2
Profile of the companies analyzed

Sector	Quantity	%	Number of employees	Quantity	%
Industrial Goods	2	2.94%	From 0 to 500	11	16.18%
Construction and transportation	9	13.24%	From 501 to 1,000	4	5.88%
Cyclical Consumption	11	16.18%	From 1,001 to 1,500	3	4.41%
Non-cyclical Consumption	11	16.18%	From 1,501 to 3,000	7	10.29%
Basic Materials	9	13.24%	From 3,001 to 6,000	9	13.24%
Oil, Gas and Biofuels	4	5.88%	From 6,001 to 16,000	21	30.88%
Information technology	4	5.88%	From 16,001 to 40,000	8	11.76%
Telecommunications	4	5.88%	From 40,000 to 100,000	3	4.41%
Public Utility	14	20.59%	Over 100,001	2	2.94%
Total	68	100%	Total	68	100%
Level of governance	Quantity	%	Net result (million)	Quantity	%
Traditional Organized Counter	1	1.47%	Loss	14	20.59%
BDR Level 3	2	2.94%	From 01 to 250	25	36.76%
Bovespa Mais	2	2.94%	From 251 to 500	9	13.24%
Level 1 of Corporate Governance	4	5.88%	From 501 to 750	7	10.29%
Level 2 of Corporate Governance	4	5.88%	From 751 to 1,000	4	5.88%
New Market	44	64.71%	From 1,001 to 2,000	7	10.29%
Traditional-Bovespa	11	16.18%	Over 2,001	2	2.94%
Total	68	100%	Total	68	100%

Note. Source: Research data.

It is observed that the industry with higher representativeness is the Public utility one. In this group, it is reunited all open capital companies that have activities related to the provision of basic needs services for the population in general: electrical energy, natural gas and water supply, with 20,59% of the analyzed companies, followed by the sectors of Cyclical Consumption representing the wholesale and retail markets, and the Non-Cyclical Consumption, representing all companies that has the agriculture, cattle, forest production, hunt, fishing and nourishing and textile industrial transformation as main activity, with 16,18% each. The sector of industrial goods, which encompass all the companies that produces metal, machinery, wood, paper and chemicals, is the sector that have the lower index with audit committees on the years researched, with 2,94%.

When analyzing by the level of corporate governance, we see that 64,7% of them are regulated on the New Market level. According to BM&FBovespa (2014), this is the group that conducts the companies to the most elevated standard of Corporate Governance, which explains the concerns to keep the audit committees in their organizational structures. The lowest representativeness in this index is on the level of the traditional organized counters, with 1,47% of the companies analyzed. In this groups, it is grouped the lower companies that does not have all requirements to fit in other levels. According with the information contained at BM&FBovespa (2014) site, the rules that are applied to the segments of the listed companies define not only the governance level, but they also attract investors when they ensure rights and warranties to the shareholders and there's the reduction of risk when disclosing more complete information to the controllers, managers of the companies and participants of the market. However, Sorrentino, Teixeira e Vicente (2016, p. 241) did not fund a "relation" between the different levels of corporate governance and the index of adequacy from the committees, in other words, to have the classification on the new market does not ensure a good adequacy to the standards referring to the audit committee".

When evaluating the distribution of companies by the number of employees, it is verified that the highest concentration is on the averages that have between 6.001 and 16.000 and 0 to 500 employees in their productive framework. And only 02 companies from the sample had more than 100.000 collaborators in 2013. These companies belong to the non-cyclical consumption sector, more precisely to the nourishing industrial transformation and the net profit of both of them in 2013 was superior to R\$1 billion. Still talking about the number of employees, the lowest number found was 12 in a company on the basic materials area, and the highest number was 216.693 employees.

Considering the result presented by the companies in 2013, the highest portion is focused on organizations that had from 01 to 250 million in net profit (36,76%), followed by 20,59% that represent the companies that showed a negative result within the period. The highest prejudice was of R\$17.4 billion from a company in the oil, gas and biofuels segment, to the extent that the higher result found was of R\$23 billion in the same sector, which evince the heterogeneity from the analyzed sample.

it is denoted, in a general way, that the companies with an audit committee focus on the public utility sector; in what concerns the level of corporate governance, the majority belongs to the New Market. They have between 6.001 to 16.000 employees and most of them presented a net profit in 2013 in an average of up to R\$250 million.

4.2 Audit Committees Characteristics

With regard to the characteristics of the Audit Committee, a general analysis of the data raised in the survey was initially conducted.

A) Audit Committee Size

Table 3 shows the number of members of the Audit Committee and the respective amount of companies in the period from 2010 to 2013.

Table 3

Numbers of members of the Audit Committee and the respective number of companies

Numbers of members of the Audit Committee	2010		2011		2012		2013	
	Number of Companies	%	Number of Companies	%	Number of Companies	%	Number of Companies	%
Without Committee	12	17.65%	12	17.65%	10	14.71%	9	13.24%
1 member	0	0.00%	1	1.47%	2	2.94%	1	1.47%
2 members	10	14.71%	9	13.24%	9	13.24%	11	16.18%
3 members	29	42.65%	29	42.65%	34	50.00%	31	45.59%
4 members	9	13.24%	10	14.71%	7	10.29%	9	13.24%
5 members	3	4.41%	3	4.41%	3	4.41%	4	5.88%
6 members	4	5.88%	3	4.41%	2	2.94%	2	2.94%
7 members	0	0.00%	0	0.00%	0	0.00%	0	0.00%
8 members	0	0.00%	1	1.47%	1	1.47%	1	1.47%
9 members	1	1.47%	0	0.00%	0	0.00%	0	0.00%
TOTAL	68	100%	68	100%	68	100%	68	100%

Note. Source: Research data.

In relation to the number of members that compose the audit committee, it is noted that in all years where the majority of companies kept between 03 to 04 members, with a representativeness between 55,89% and 60,29% on the period. The companies that presented more than 05 members in their composition correspond to an average of 10,29% on the researched years. It was also identified 12 companies that did not had an audit committee in 2010 and 2011, number that was reduced in 2012 to 10 companies, and for 09 companies in 2013. There were companies that, during the period where they instituted the audit committee in their organizational framework, fact that might confirm the hypothesis of the companies being

more worried about the transparency and reliability of the generated information. By contrast, there were 09 companies that had the audit committee instituted in at least one of the first analyzed years, reaching in 2013 without this established department.

When analyzing the disposal of *Sarbanes-Oxley law* and the Resolution n. 3.198/04, that establish that the audit committee must be composed by at least 03 members, it is verified that among the companies with the instituted committee, there are those that present members in an inferior number than the recommended practice. It is noticed that in 2010 there were 56 companies with a constituted audit committee, being 10 of them with only two members. Such panorama did not suffer alterations on the subsequent periods. In 2013, for instance, there were 59 companies with an audit committee. From those, 11 of them had only two members and one of them with a unique member. Therefore, these companies kept an audit committee with an inferior number of members proclaimed by the legislation. It is even observed that just one single company had eight and/or nine members in its audit committee. This company belongs to the telecommunication sector from the New Market (governance level) and has 10.300 employees.

B) Audit Committee Independence

Table 4 shows the number of independent members on the Audit Committee and the respective amount of companies.

Table 4

Numbers of members of the Audit Committee and the respective number of companies

<i>Independent members of the Audit Committee</i>	2010		2011		2012		2013	
	Number of Companies	%	Number of Companies	%	Number of Companies	%	Number of Companies	%
No Member	12	17.65%	12	17.65%	10	14.71%	9	13.24%
1 member	0	0.00%	1	1.47%	2	2.94%	1	1.47%
2 members	15	22.06%	14	20.59%	14	20.59%	14	20.59%
3 members	29	42.65%	28	41.18%	33	48.53%	32	47.06%
4 members	7	10.29%	8	11.76%	5	7.35%	7	10.29%
5 members	3	4.41%	2	2.94%	1	1.47%	2	2.94%
6 members	1	1.47%	2	2.94%	2	2.94%	2	2.94%
7 members	1	1.47%	1	1.47%	1	1.47%	0	0.00%
8 members	0	0.00%	0	0.00%	0	0.00%	1	1.47%
TOTAL	68	100%	68	100%	68	100%	68	100%

Note. Source: Research data.

It is noticed that the number of independent members is also focused on the average of 03 members, with 44,85% followed by the average of 02 members, with 20,96% of them supporting the CVM determinations (2002) and the IBGC (2009a), to keep the majority of their independent members so that there's no influence capable to be impartial on the analysis of accounting and financial reports and opinions about the company's management. The data presented as "neither member" represents the same number of companies that do not have an audit committee, as evinced on table 3, which represents that all audit committees found on the researched years counted with at least 01 independent member, as the IBGC recommendation. This fact was corroborated by the research performed by Cunha *et al.* (2014), in which it was identified the reflexes from the audit committee's characteristics and the management of results. In this study, the authors verified that in the years of 2010 and 2011, more than 50% of the researched companies had audit committees composed by a majority of independent members.

c) Audit Committee Expertise

In order to characterize the members of the Audit Committee for its professional qualification, defining its expertise, table 5 presented in the sequence was drafted.

Table 5
Qualification of the Audit Committee members

Qualification	2010		2011		2012		2013	
	Qty.	%	Qty.	%	Qty.	%	Qty.	%
Administrator	37	19.37%	39	20.86%	33	17.84%	41	21.35%
Lawyer	16	8.38%	14	7.49%	15	8.11%	16	8.33%
Systems analyst	0	0.00%	1	0.53%	0	0.00%	1	0.52%
Architect	0	0.00%	1	0.53%	1	0.54%	1	0.52%
Auditor	0	0.00%	0	0.00%	0	0.00%	1	0.52%
Banker	3	1.57%	3	1.60%	2	1.08%	3	1.56%
Consultant	0	0.00%	2	1.07%	1	0.54%	1	0.52%
Accountant	26	13.61%	23	11.76%	24	14.05%	26	13.54%
Judge of Justice	1	0.52%	0	0.00%	0	0.00%	0	0.00%
Economist/Finance	46	24.08%	46	24.60%	45	24.86%	45	23.44%
Engineer	51	26.70%	50	26.74%	51	27.57%	48	25.00%
Physicist	0	0.00%	1	0.53%	1	0.54%	1	0.52%
Civil servant	0	0.00%	0	0.00%	0	0.00%	1	0.52%
Statistician	3	1.57%	0	0.00%	0	0.00%	0	0.00%
Investor	1	0.52%	1	0.53%	0	0.00%	0	0.00%
Journalist	1	0.52%	1	0.53%	1	0.54%	1	0.52%
Mathematician	0	0.00%	0	0.00%	1	0.54%	0	0.00%
Physician	1	0.52%	1	0.53%	2	1.08%	1	0.52%
Military	1	0.52%	1	0.53%	1	0.54%	1	0.52%
Professor	4	2.09%	4	2.14%	4	2.16%	4	2.08%
Total	191	100%	187	100%	185	100%	192	100%

Note. Source: Research data.

On table 5, it is observed that the quantity of members presented on the audit committees of the companies did not suffered significant alterations over the period. it is number was between 185 to 192 members. it is noticed that the highest concentration has formation in engineering, with an average of 50 members, economy/finances, with nearly 45 members by year and per administration, with an average of 37 members. The highest number of members was identified in 2013, with the participation of 192 members on the audit committees from the 59 companies that had committees instituted in this period.

According to Dezoort, Hermanson and Houston (2003), IBGC (2009a), Ika and Ghazali (2012), NYSE (2003) and Cunha, Pletsch and Silva (2015), the expertise needed to keep the discernment on the audit committee must come from knowledges about accounting, finances or audit. At least one member of the committee must be an expert in one of these areas. In the case of knowledges about accounting, it is noted that it was possible to find members with this expertise in all years. In 2010, they represented 14,29% from the total of members found. This participation was reduced to 13,56% of the cases in 2013, but the quantity of professionals in this area of acting did not suffered alterations. About the knowledges about finances, it was considered the members with a profession related to economy. In 2010, these professionals represented 24,08% from the total of members, passing to 23,44% in 2013. By contrast, in 2013 it was found only 01 professional with knowledges about audits.

Therefore, it is noted that in 2010 only 37,7% of the audit committee members had the mentioned needed expertise to ensure the quality and efficiency of the committee. In 2011, it

was 36,9%, passing to 37,3% in 2012 and increasing in 2013, when 72 of the 192 members (37,5%) were experts in some of these areas.

The expertise can be obtained through professional experiences or academic formation, but, in this research, it was considered just the information of professions described on the Reference Form of each member of the audit committee. Therefore, it might exist professionals with the needed expertise and that aren't faced on the data collected by this research.

However, as seen on the theoretical referential of this work, it is appropriate to emphasize that the audit committee's function is to ensure the transparency and the probity of accounting and financial information that'll be used as a management tool for the investors. This way, it is important for the companies to have at least one member constitute with the formation and/or experience in accounting.

4.3 Descriptive statistics of the characteristics of the audit committees between 2010 and 2013

The descriptive statistic (minimal, maximum, medium, average, trend, standard deviation and variation coefficient) was applied on the variables size, independence and expertise with the goal to analyze the tendencies of the audit committees from the investigated companies over time, whose results are summarized on tables 6. These data refer to the companies that effectively have an audit committee formally constituted, in other words, 56 companies in 2010 and in 2011, 58 companies in 2012 and 59 companies in 2013.

Table 6
Descriptive statistics applied in the variables

2010							
Variable	Minimum	Maximum	Average	Medium	Fashion	Standard Diversion	Variation Coefficient
Size	2	9	3.41	3.00	3.00	1.30	38.2%
Independence	2	7	3.09	3.00	3.00	1.03	33.4%
Expertise	0	6	1.25	1.00	1.00	1.12	89.3%
2011							
Variable	Minimum	Maximum	Average	Medium	Fashion	Standard Diversion	Variation Coefficient
Size	1	8	3.34	3.00	3.00	1.21	36.2%
Independence	1	7	3.11	3.00	3.00	1.11	35.6%
Expertise	0	4	1.23	1.00	1.00	1.04	84.8%
2012							
Variable	Minimum	Maximum	Average	Medium	Fashion	Standard Diversion	Variation Coefficient
Size	1	8	3.19	3.00	3.00	1.16	36.4%
Independence	1	7	2.98	3.00	3.00	1.07	35.8%
Expertise	0	4	1.19	1.00	1.00	1.00	84.0%
2013							
Variable	Minimum	Maximum	Average	Medium	Fashion	Standard Diversion	Variation Coefficient
Size	1	8	3.25	3.00	3.00	1.17	35.9%
Independence	1	8	3.10	3.00	3.00	1.14	36.8%
Expertise	0	4	1.22	1.00	1.00	1.07	87.5%

Note. Source: Research data.

It is observed on table 6 that the size of the audit committee varies between the companies that have 02 members on the referred committee and the companies that have up to 09 members in 2010 and from 01 to 08 members on the previous years. Considering the

average, it is noticed that most organizations have an audit committee with nearly 03 members. The *Sarbanes Oxley* law, CVM instructions (2002), CMN instructions (2004) and the studies performed by Yang and Krishnan (2005) states that the audit committee must be composed by at least 03 members indicated by the Administration Board. However, when analyzing the standard deviation and the variation coefficient presented during the period, it is observed that the sample is heterogeneous, in other words, there's a great dispersion and low concentration of data around the average. Therefore, there's a great quantity of values that differs from the average. With the average fragility in mind, it is confirmed that the number of members on the committee through average and trend analysis. All years researched point out that the size of the committee is of 03 members, as recommended by the legislation presented. So, dealing with the characteristics, we have: size, a conformity and an adherence to the current legislations and recommendations.

About the independence variable, it is noticed that there are organizations with up to 07 independent members in their audit committees from 2010 to 2012, and up to 08 members in 2013. The independence of members in the committee is recommended by departments such as IBGC and CVM. Klein (2002) determined that higher the number of independent members in a committee, better the quality of the information available to the user. When analyzing the average of the period, it is possible to see that in all of the researched years there's been around 03 members with independence from other committees or departments bonded to the company. However, this perception is not homogeneous, since the variation coefficient was higher than 30% and the standard deviation practically did not suffer any alteration over the researched years, linking a high dispersion to these samples and a distance of close information to the average found. However, it is observed that three members was the number found in most of the companies investigated.

Analyzing the expertise of the audit committee's members, it is noticed that most companies have at least one member with expertise in accounting, finances or audit, as the IBGC (2009a) recommendations. Ika and Ghazali (2012) also state that the formation and experience on the accounting, audit and finances area has an influence over the audit committee. The dispersion on the number of members with this expertise vary from zero to six members in 2010, and four members over the next years. The average presented in all periods confirms that there's at least one member with the needed knowledge on the composition of the audit committees. However, the descriptive statistic evinces a heterogeneous sample when presenting a standard deviation and a high variation coefficient. Thus, the sample is heterogeneous in this point. From the trend, it is noticed that one member was the most found value on the researched years. This way, it is noticed that, in what concerns the expertise, some companies aren't in conformity with the recommended practices.

When verifying the obtained results, it is noticed that most organizations studied attend to the recommended specifications in prior studies and the current legislation. It is showed that the characteristics: size, independence and expertise are dominant in all companies that have a formalized audit committee. However, there are those that do not attend to the minimal precepts of the recommended practices in what concerns size, independence and expertise.

5 CONCLUSIONS

The study aimed to verify the characteristics of size, independence and expertise of the audit committees of the companies listed at BM&FBovespa in the years 2010 to 2013. Among the 407 companies listed on the Stock Exchange, only 68 of them have duly formed audit committees in any of the periods analyzed. 2013 presented 59 companies with an audit committee. This was the highest number found, which represents just 14,50% of the population. The majority of these companies belong to the New Market in what concerns the categories of corporate governance and covers mainly the following areas: public utility, cyclical consumption, not-cyclical consumption, construction and transportation and basic materials. The main results showed that, in relation to size, the most part obey to the precepts of the recommended practices, in other words, they have three participant members of the audit committee. However, the companies presented heterogeneous practices in this characteristic. There are

those with one or two members, while other have six members. In relation to the independence, most of the investigated companies have two or three members considered independent, which attends the good practices of corporate governance. However, it is noticed that there are few active members in these committees with formation in accounting and experience in audits. In 2013, there were 192 members from the committees of 59 companies. From those, 25% are engineers and 21,35% are managers. One of the roles of this committee refers to the analysis of accounting reports and procedures of internal control, which demands more specific knowledges. In this sense, the expertise is characterized by the knowledge in accounting, audit and finances. In 2013, the members of an audit committee were 26 accountants and 45 economists, which represents 0,52%, 13,54% and 23,44%, respectively, in relation to the total of participants.

In a general way, it is concluded that the creation of an audit committee it is still not a practice formalized by the Brazilian companies and it manifest itself in a different way between the organizations. The study contributed to strengthen the results of the researches that were already made about the theme, besides to extend the comprehension about the characteristics present on the audit committees from the Brazilian companies and that specially offers some insights for future researches.

In this research, it was investigated the not-financial companies listed at BM&FBOVESPA without making any distinction on the results of a specific sector. Thus, it is suggested a deepen of the study, facing the financial sector and sample comparability. Other suggestion is the realization of studies with the goal to comprehend the reasons which the companies did not institutionalized the audit committees within their organizations. Besides, a specific study would be capable to investigate the reasons that make the companies eliminate the committee previously created, which was the case of nine Brazilian companies. The small portion of the companies with an audit committee causes some worries about its effectiveness. Why the Brazilian companies do not have audit committees in their schedules? Which are the resistances for the formation of this department? Which is the effective role of this department on the Brazilian companies? Thus, the roles and activities exercised by such committees can also be an object of investigation to collate what the literature advocate. Besides, the small number of members with formation in accounting also instigates future studies.

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