

INVESTMENT OPPORTUNITY AND CORPORATE GOVERNANCE MECHANISMS IN THE FORMATION OF THE AUDIT COMMITTEE

OPORTUNIDADE DE INVESTIMENTO E MECANISMOS DE GOVERNANÇA CORPORATIVA NA FORMAÇÃO DO COMITÊ DE AUDITORIA

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ABSTRACT

We analyze the influence of investment opportunities and other corporate governance mechanisms on forming the audit committee of listed companies. We conducted quantitative research on 100 public companies listed on the Brazilian stock exchange from 2017 to 2022. The econometric model chosen to test the hypotheses, considering the estimations in unrestricted and restricted form, was the logit for panel data with random effects. The results indicated that investment opportunities do not significantly influence the voluntary constitution of an audit committee. However, there is a relationship between the audit committee and the board's independence, size, and the entrenchment effect.

Keywords: Investment opportunity. Audit committee. Corporate governance.

RESUMO

Analizamos a influência das oportunidades de investimento e de outros mecanismos de governança corporativa na formação do comitê de auditoria das companhias abertas. Realizou-se pesquisa quantitativa em 100 empresas de capital aberto listadas na bolsa de valores brasileira no período de 2017 a 2022. O modelo econométrico escolhido para testar as hipóteses, considerando as estimações na forma irrestrita e restrita, foi o logit para dados em painel com efeitos aleatórios. Os resultados indicaram que as oportunidades de investimento não influenciam significativamente a constituição voluntária de um comitê de auditoria. Mas existe uma relação entre comitê de auditoria e independência do conselho de administração, tamanho do conselho de administração e efeito de entrenchment.

Palavras-chave: Oportunidade de investimento. Comitê de auditoria. Governança corporativa.

1 INTRODUCTION

Hermalin and Weisbach (2003), as well as Smith and Watts (1992) and Bushman et al. (2000), argue that boards of directors are an endogenous response to agency problems. Smith and Watts suggest that investment opportunities and sector characteristics significantly determine financial and governance policies. Bushman et al. (2000) argue that the structure of the board of directors, the concentration of ownership, and executive remuneration vary according to the financial accounting systems and the organizational complexity of the companies.

Among the monitoring and control mechanisms, the board of directors plays an essential role in the corporate governance system, especially in monitoring the actions and decisions taken by management (Abdeljawad et al., 2020). Given the complexity or specificity of some issues, the board of directors relies on the support of the audit committee, whose responsibility is to oversee the company's risks and assess the integrity of financial statements and internal controls, among others.

From this perspective, the audit committee functions as a significant monitoring instrument within the governance structure, whose primary function is to advise the board of directors, reducing not only agency costs but also the asymmetry of information between management and owners (Sharma et al., 2009; Abdeljawad et al., 2020). On the other hand, the interaction of different governance mechanisms can provide a higher level of control over management at a lower cost (Aguilera & Crespi-Claera, 2012), and the investment opportunity effect can be a determining factor in this interaction, either by demanding more care on the part of management or by encouraging greater scrutiny of the company's operations by stakeholders.

The literature on corporate governance lacks studies to verify the effect of investment opportunities on the choice of best corporate governance practices, specifically, forming an audit committee. We did not find papers in national journals that study, under the same scope, the voluntary constitution of the audit committee, the investment opportunity, and the presence of other corporate governance mechanisms. The latter have been identified as potential determinants of the voluntary formation of the audit committee.

Studies related to the determinants of audit committee formation (Admas, 1997; Bradbury, 1990; Carson, 2002; Chen, 2009; Collier, 1993; Eichenseher & Shields, 1985; Firth & Rui, 2007; Groff & Valentine, 2011; Menon & Williams, 1994; Pincus, 1989; Piot, 2004; Willekens, 2004) have suggested that company characteristics such as leverage and size; the structure of the board of directors; audit quality and ownership structure influences the decision to set up an audit committee. Studies such as those by Abdeljawad et al. (2020) suggest that, in addition to the determinants mentioned above, investment opportunities can also impose contexts in which companies demand more control mechanisms, finding support in their work

for the hypothesis that investment opportunities reinforce the complementary effect between corporate governance mechanisms, acting as a factor that strengthens the formation of an audit committee.

In the context of finance research in Brazil, there are few scientific contributions on the determinants of voluntary audit committee formation, especially the influence of the investment opportunity effect on corporate decisions related to the governance structure of companies that trade their shares on the Brazilian capital market. The research by Cervo (2019), which analyzed the influence of foreign shareholder participation on the voluntary formation of the audit committee, is noteworthy in this area.

Given the above, we justified this study by the need for empirical evidence linking investment opportunities in emerging economies, such as Brazil, and corporate governance mechanisms. In this sense, this article aims to answer the following research question: What is the influence of investment opportunity and other corporate governance mechanisms on the voluntary formation of the audit committee?

In this sense, the main objective of this paper is to analyze the influence of investment opportunities and other corporate governance mechanisms on the formation of audit committees of companies listed on the Brazilian Stock Exchange from 2017 to 2021. To achieve this primary objective, we seek to: (i) identify the association between corporate governance mechanisms and the existence of an audit committee; and (ii) identify the association between investment opportunities, corporate governance mechanisms, and the existence of an audit committee.

The research findings can help companies, shareholders, managers, and regulatory bodies in Brazil, since differences in the determinants of voluntary audit committee formation, such as the size and independence of the board of directors and ownership structure, can lead to different governance structure configurations and greater monitoring of organizational objectives. More specifically, it can affect investment choices and the best allocation of resources in the capital market, since audit committees are directly linked to greater transparency and oversight of companies.

The following section consists of a literature review. Section 3 presents the methodology used in the study, the sample selection procedures, the description and definition of the variables, and the econometric model. Section 4 presents the analysis and discussion of the empirical results. Finally, section 5 concludes the article and makes proposals for future research.

2. REVIEW OF THE LITERATURE AND DEVELOPMENT OF HYPOTHESES

2.1 INVESTMENT OPPORTUNITY, CORPORATE GOVERNANCE, AND AUDIT COMMITTEE

Investment opportunities are options to invest in projects of managers' discretionary choice, freely chosen expenditure that increases company performance and profitability (Meyers, 1977). Thus, it is coherent to assume that the voluntary constitution of the audit committee is associated with environmental factors, such as investment opportunities, and internal factors, such as other internal company governance mechanisms.

In agency theory, companies with high investment opportunities tend to have greater information asymmetry (Hutchinson & Gul, 2004), as managers have more access to information about the value of future projects that is not available to shareholders (Ali, 2018). This agency problem, typical of companies with high investment opportunities, can be reduced with the presence of a strong corporate governance system, which, through monitoring instruments, allows companies' capital providers to receive an adequate return on their investment, making companies more financially attractive (Gamhre et al., 2020; Shleifer & Vishny, 1997).

Ali et al. (2018) clarify that choosing the ideal corporate governance model is related to the different levels of investment opportunities. This means that shareholders of companies with a high investment opportunity index may demand better corporate governance mechanisms. Thus, investment opportunities can contribute significantly to choosing corporate governance policies (Smith & Watts, 1992) and can be a determining factor in establishing an audit committee.

The audit committee is an instrument of the corporate governance structure that can be created by the board of directors to support it in specific matters, acting as a subordinate risk management tool and a means of communication between management and the audit (IBGC, 2009; PWC, 2007).

Over the years, Brazilian regulations have tried to consolidate the need to establish an audit committee in the structure of companies that are accountable to the Brazilian capital market (such as Law 13.303/2016, Article 24, which deals with the establishment of a statutory audit committee in the structures of public companies and mixed-capital companies). In addition, the Brazilian market is proving to be a good field for investigation since, in some segments, the establishment of the audit committee is voluntary on the part of the companies, and, at the same time, different companies are subject to varying levels of investment opportunities. Smith and Watts (1992) suggest that investment opportunities can significantly contribute to determining corporate governance and influence various aspects of its structure.

Based on the understanding that investment opportunities are related to the company's options to invest in projects that can affect the company's value (Trombley, 2001), the free choice to adopt an audit committee voluntarily can be a discretionary decision influenced by the investment opportunity, and we raised the first research hypothesis:

H1: Companies with investment opportunities are more likely to establish an audit committee.

2.2 CORPORATE GOVERNANCE MECHANISMS AND THE AUDIT COMMITTEE

2.2.1 structure of the board of directors

The board of directors is one of the most important bodies in the corporate governance system, playing an important role in supervising and guiding corporate management and reducing information asymmetry and the agency costs of companies (Fama & Jensen, 1983; IBGC, 2009).

The influence of the board of directors on the corporate governance system depends very much on the company's ownership structure. For example, power concentrated in the hands of a controlling shareholder, a frequent characteristic in governance scenarios with a high concentration of ownership, can compromise the essence that justifies the existence of the board of directors and its importance in monitoring the actions of managers. In addition to the ownership structure in which each board is inserted, its composition determines its effectiveness and, consequently, its decisions (Brugni, 2016; Cheng & Courtenay, 2004).

The following are theoretical and empirical considerations on the board of directors' characteristics: board size, independence, and CEO duality, in addition to two other governance mechanisms: the ownership structure and the type of auditor.

2.2.1.1 Size of the board of directors

Bradbury (1990) and Piot (2004) suggest that large boards of directors are more likely to contribute to improving the quality of directors' work, as they can commit more time and effort to carry out their function of monitoring the actions of managers, in addition to being better able to distribute their activities among peers than smaller boards. Boards of directors can delegate activities and functions to specific subcommittees, such as the audit committee, which can contribute positively to the effectiveness of their work. This intersection indicates a correlation between the size of the board and the likelihood of the existence of an audit committee (Piot, 2004).

Research by Bradbury (1990), Carson (2002), Piot (2004), Willekens (2004), Chen (2009), Cai et al. (2015), and Groff and Valentine (2011) found positive results between the size of the board and the

presence of an audit committee, suggesting that companies with large boards in their organizational structure were more likely to voluntarily implement an audit committee as an auxiliary mechanism to control possible agency problems. Thus, we formulated the following hypothesis:

H2: Companies with larger boards of directors are more likely to establish an audit committee.

2.2.1.2 Independence of the board of directors

The board of directors' independence is another recurring issue that has gained prominence among regulations and research, as it is understood that the level of independence of a board can inhibit opportunistic actions (Jensen, 1986).

In countries with a high concentration of ownership, we can describe the board's independence as the degree of influence of the majority shareholders over its members rather than that exercised by executives in economies where we observe a dispersed share ownership (Valadares & Leal, 2000).

The effectiveness of board monitoring in this context can be hampered by the asymmetry of information between directors and shareholders since inside directors have access to privileged information about the company's actions and decisions (Menon & Williams, 1994). To minimize this problem, the audit committee can be an elementary alternative, providing direct access to the external auditor and often to the internal audit system. Thus, boards of directors of independent members are more likely to voluntarily form an audit committee (Bradbury, 1990; Piot, 2004) to mitigate information asymmetry and because of their reputation in the market (Willeken, 2004).

As companies with high investment opportunities present greater control problems, the role of the board of directors and its discretionary decision to form an audit committee may be essential in solving agency problems in these companies (Hutchinson & Gul, 2004; Sharma, 2009). Because of this, we raised the third research hypothesis:

H3: Companies with boards of directors with more independent members are more likely to establish an audit committee.

2.2.1.3 CEO duality

CEO duality, a situation in which the chairman of the company also holds the position of chairman of the board, is another characteristic that influences the activities of the board and, consequently, the decision whether or not to have an audit committee. This situation favors the concentration of power and control in a single person, favoring unilateral influence on the body and reducing the board's effectiveness in monitoring and control functions (Fama & Jensen, 1983). As the board of directors' role is to monitor management's actions, the person leading the board must be independent of management (Carson,

2002). The dual role of chairman and CEO compromises the board's independence, even if all its members are independent directors (Kamarudin, 2012).

To the extent that larger boards provide better monitoring (Belghitar & Khan, 2011) and companies with high investment opportunities suffer higher levels of informational asymmetry, it is expected that larger, independent boards will favor the formation of an audit committee. In addition, the person leading the board of directors should, whenever possible, be independent of management (Carson, 2002). Therefore, we proposed the following hypothesis:

H4: Companies with a single individual responsible only for chairing the board are more likely to establish an audit committee.

2.2.2 Ownership structure

The ownership structure can be different depending on the companies and the countries where they are operating (Hassan, 2017). This is because some companies have a dispersed ownership structure, and others, predominantly in emerging economies such as Brazil, have concentrated ownership structures, in which there is one controlling shareholder and a combination of ownership and control (Silveira, 2004).

Although the high concentration of ownership is an alternative to mitigate the problems generated by companies with a dispersed ownership structure, it can be the source of conflict between majority shareholders and minority shareholders, commonly referred to as principal-principal conflict, which is common in emerging economies (Lin & Chuang, 2011; Yiyi, 2008).

This type of ownership structure has costs and benefits for organizations, which Claessens et al. (2002) briefly classified as the alignment or incentive and entrenchment effects. These effects are commonly used in national research to measure the concentrated ownership structure. In research on the factors that encourage the formation of an audit committee, only the work by Cai et al. (2015) presented this variable model to measure the concentrated ownership structure.

For Claessens et al. (2002), the alignment effect or incentive effect of the presence of controlling shareholders in the corporate structure consists of the idea that large shareholders, who own the largest share of the company's total capital, have a greater interest in making decisions that maximize corporate value. This characteristic favors the participation of large shareholders in direct management monitoring without interference from new governance instruments, i.e., there will be less interest in adopting an audit committee, as shareholders' interests are aligned, and informational divergences and opportunistic behavior are controlled.

The entrenchment effect occurs when controlling shareholders begin to undermine the benefits and rights of other investors, i.e., as voting power increases in the hands of the controlling shareholder,

there is a greater likelihood of a reduction in the rights and wealth of minority shareholders (Claessens et al., 2002; Silveira, 2004). This effect may favor the existence of an audit committee to mitigate the losses that minority shareholders may suffer. This monitoring, security, and audit committee can signal to investors that the majority shareholders have less opportunity to expropriate wealth from the company (Cai et al., 2015).

This internal monitoring perspective reduces the potential for managerial opportunism, and the possibility of adding a mechanism offers the opportunity for other mechanisms to present different aspects of the agency problem and become complementary within a corporate governance system.

In companies where control is in the hands of a single shareholder or group of controlling shareholders, who hold most of the voting rights, the use of the audit committee can be a signal to stakeholders that the controlling shareholder is being monitored and, consequently, less likely to expropriate the company's wealth (Cai et al., 2015; Claessens et al., 2002). This suggests that the entrenchment effect, characterized by a greater concentration of control, favors the establishment of the audit committee as an instrument that provides greater security to investors and stakeholders. On the other hand, the positive effect of the concentrated ownership structure tends to discourage the decision to establish an audit committee, as there is an alignment of interest between shareholders, making it unnecessary to incur additional costs with the formation of an audit committee. Supported by these understandings of the entrenchment effect and the incentive effect of ownership concentration, we proposed the following research hypotheses:

H5: Companies with a higher concentration of control (entrenchment effect) are more likely to establish an audit committee.

H6: Companies with a higher concentration of ownership (incentive effect) are less likely to establish an audit committee.

2.2.3 Type of auditor

Auditing is a relevant issue in the corporate governance structure, as it promotes improved information quality (Carson, 2002) and is considered an essential element to act on behalf of the audit committee (Cadbury, 1992).

It is argued that large auditing firms encourage their clients to adopt higher levels of corporate governance (Carson, 2002), and among the visible incentives for this is the auditor's independence from management (Eichenseher & Shields, 1985). Generally, auditing firms with high-quality standards, such as the Big Four, encourage their clients to adopt better corporate governance practices. They are likelier to work with companies with good corporate governance practices (Piot, 2004).

High-quality auditing is associated with less diffuse accounting reports (Dechow, 1996) and more efficient internal controls (Doyle, 2007). This suggests a complementary role for the Big Four with other internal corporate governance mechanisms, specifically the audit committee, as it contributes to increasing their control and reputation.

Audit quality, a characteristic linked to the security of the information disclosed, is another essential tool in the corporate governance structure, as it promotes improvements in the quality of information (Carson, 2002), acting on behalf of the audit committee (Cadbury, 1992). Based on the agency theory, the mixed results of the factors that can determine the establishment of the audit committee, and the literature presented, we formulated the following research hypothesis:

H7: Companies audited by a Big Four are more likely to establish an audit committee.

3 METHODOLOGICAL PROCEDURES

3.1 SAMPLE SELECTION AND DATA COLLECTION

A sample period of 6 (six) years was chosen, from 2017 to 2022. The data required for the research were collected using the Economatica® platform and the Reference Forms (RF) available on the Securities and Exchange Commission website.

3.2 PROCEDURES FOR DATA COLLECTION AND ANALYSIS

Initially, the accounting information needed for the econometric model was collected from the companies listed on the [B]3 between 2017 and 2022 from the Economatica® database. Next, we removed companies with some regulations requiring them to set up an audit committee. This group includes financial, pension, and insurance institutions, as they are obliged to set up an audit committee following the specific criteria of the Central Bank of Brazil (BACEN); companies listed on the Novo Mercado, which, since 2017, has required companies with shares listed on this segment to set up a statutory or non-statutory audit committee ([B]3 and companies with ADRs).

This data collection process identified 460 companies with active registration on the Brazilian stock exchange that are not obliged to adopt an audit committee in their corporate governance structure. We excluded observations with inconsistencies and a lack of information needed to measure the variables from this total, resulting in a sample of 100 companies (600 observations). From the selected sample, we began collecting information related to corporate governance variables in the specific field of the Reference Form (RF) contained in the CVM database (<http://www.cvm.gov.br/>), following Normative Instruction 480 of 2009. All the information collected was processed using Microsoft Excel and R software.

3.3 DESCRIPTION OF THE VARIABLES

3.3.1 Dependent Variable

The dependent variable in this study is the Audit Committee (AC), a dummy that takes on the value of 1 when company *i* has an audit committee in year *t* and 0 otherwise.

3.3.2 Independent Variables

Table 1 below shows all the independent variables used in the study:

Table 1 - Independent Variables

Variable	Expected relationship	Measurement/Identification	Source	Authors
INVEST	Positive	Investment opportunity is a dummy variable that takes on a value of 1 (one) if the asset market-to-book ratio is greater than 1 and 0 (zero) otherwise. Market-to-book ratios of assets = total assets + (market value of equity - book value of equity)/total assets. Market value of equity = number of shares in circulation x price per share	Economatica	Piot (2004); Abdeljawad, Oweidat e Saleh (2020)
TA	Positive	Type of auditor, dummy variable, which takes on a value of 1 (one) if the company is audited by a Big Four firm 0 (zero) otherwise	FR - Item 2.1	Groff e Valentine (2011); Hassan e Hijazi (2015); Cai <i>et al.</i> (2015); Abdeljawad, Oweidat e Saleh (2020)
SCADM	Positive	Size of the board of directors, Natural logarithm of the total number of board members.	FR - Item 12.6	Hassan e Hijazi (2015); Cai <i>et al.</i> (2015); Abdeljawad, Oweidat e Saleh (2020)
ICADM	Positive	Independence of the board of directors, ratio of independent directors to the total number of effective directors on the board of directors.	FR - Item 12.6	Groff e Valentine (2011); Cai <i>et al.</i> (2015); Abdeljawad, Oweidat e Saleh (2020)
DCEO	Negative	CEO duality, dummy variable, which takes on a value of 1 (one) if the CEO is also chairman and 0 (zero) otherwise	FR - Item 12.6	Cai <i>et al.</i> (2015)
V	Positive	Ownership structure (entrenchment effect), Percentage of ordinary shares (voting rights) held by the largest shareholder	FR - Item 15.1/2	Fan e Wong (2005); Caixe e Krauter (2013); Cai <i>et al.</i> (2015)
C	Negative	Ownership structure (incentive effect), Percentage of total shares held by the largest shareholder	FR - Item 15.1/2	Fan e Wong (2005); Caixe e Krauter (2013); Cai <i>et al.</i> (2015)

Source: Prepared by the authors.

3.3.3 Control variables

Table 2 below shows the relationship of control variables used in the study:

Table 2 - Control Variables

Variable	Relationship expected	Measurement/Identification	Source	Authors
LEV	Positive	Leverage, the proportion of the sum of current liabilities to the total assets of the company	Economatica	Groff e Valentine (2011); Cai <i>et al.</i> (2015); Abdeljawad, Oweidat e Saleh (2020)
ROA	Positive or negative	Profitability, net profit divided by total assets	Economatica	Hassan e Hijazi (2015); Cai <i>et al.</i> (2015); Abdeljawad, Oweidat e Saleh (2020)
SIZE	Positive	Company size, natural logarithm of total assets	Economatica	Groff e Valentine (2011); Hassan e Hijazi (2015); Cai <i>et al.</i> (2015); Abdeljawad, Oweidat e Saleh (2020)
COVID-19	Positive or negative	COVID-19, dummy variable, which assumes the value 1 (one) if the year had a COVID-19 pandemic and 0 (zero) otherwise	WHO	

Source: Prepared by the authors.

A logistic regression model for panel data was used to verify the effects of independent variables on the probability of establishing an audit committee. This study applied the pooled data model (Pooled), the logit model with fixed effects, and the logit model with random effects. Subsequently, we used the Akaike goodness criterion (AIC), whose values we reported in the results section. Thus, to investigate the association of relevant factors in the voluntary formation of the audit committee, the following logistic regression model was tested for panel data:

4 RESULTS

4.1 DESCRIPTIVE ANALYSIS

Table 3 presents the descriptive statistics of the study-dependent variable: audit committee.

Table 3 - Descriptive statistics of the dependent variable

Variable	Frequency	Percentage
CA	0	428
	1	172
Total	600	100.00%

Based on the data presented in Table 3, the dummy variable responsible for identifying the existence of voluntarily constituted audit committee evidence, through the frequency of value 1, indicates that 28.69% of the analyzed companies have a voluntarily constituted audit committee. In comparison, 71.31% of the companies surveyed have no audit committee. This result reveals that the sample companies have, on average, little adherence to the voluntary constitution of the audit committee, being similar to that found by national works, such as Cervo (2019) and Furuta (2010), and by sample work in outdoor environments, such as Chiu (2019) and Hassan and Hijazi (2015).

The descriptive analysis of the independent variables was carried out separately for the continuous and categorical variables of the study by presenting some categorical variables in the presence or absence of a particular characteristic by observation, and other variables providing numerical information. Thus, Table 4 presents the quantitative independent variables of the model with their respective means, minimum and maximum values, as well as the standard deviation:

Table 4 - Descriptive statistics of quantitative independent variables

Variable	Obs.	Minimum	Maximum	Mean	Median	Stand. Deviation
SCADM	600	2.0000	28.0000	7.2390	6.0000	4.0914807
ICADM	600	0.2000	1.0000	0.8337	0.9091	0.2018849
V	600	0.1113	1.0000	0.6319	0.6008	0.2605724
C	600	0.1050	1.0000	0.4729	0.3899	0.2600874

Concerning the Board of Directors, the average number of directors over the period analyzed was 7. The minimum value for this variable was 2, and the maximum value was 28. This result indicates that some companies in the sample do not respect the minimum number of three (03) members on the Board of Directors, as established in Article 138 of Law 6.404/76. From this analysis, we found two companies with 2 (two) members on the Board of Directors: Ectl Maranhão and Hoteis Othon. The others comply with the size of the Board of Directors established by current legislation.

As for the independence of the Board of Directors, the average percentage of independent members was (0.8337). The standard deviation of this variable (ICADM) was (0.2018849), the lowest standard deviation of all the variables analyzed. According to the Agency Theory, this result suggests that the companies in the sample use the Board of Directors as a guardian of the interests of shareholders and related parties, as they have significant percentages related to their independence.

The ownership structure variables, represented by variables V (entrenchment effect) and C (alignment effect), had an average of 0.6319 and 0.4729, respectively. This result is similar to that of Cervo (2019)

and suggests that the sample has a high concentration of ownership, a predominant characteristic of companies listed on the Brazilian stock exchange.

To describe the dichotomous variables, we summarized the results without presenting them in a table. In this sense, we found that the dummy variable that categorizes the level of investment opportunity (INVEST) reveals that 76.91% of the companies analyzed presented high investment opportunities, while 23.09% did not. Regarding the Type of Auditor (TA) variable, one of the Big Four auditing firms certified 50.80% of the companies' financial statements. For CEO Duality (DCEO), we found that 24.50% of the executive director and chairman of the board of directors positions are held by the same person.

The descriptive analysis of the control variables was also carried out separately for the study's continuous and categorical variables. Table 5 shows the quantitative descriptive analysis of the model's control variables, in which we provided the means, minimum and maximum values, and standard deviations.

Table 5 - Descriptive statistics of quantitative control variables

Variable	Obs.	Minimum	Maximum	Mean	Median	Stand. Deviation
LEV	600	0.0038	55.5361	1.1755	0.6418	3.9783098
ROA	600	-6.1106	15.4922	0.04678	0.04450	0.7056294
SIZE	600	8.5630	20.7110	14.6180	14.5280	2.2271183

The companies' average indebtedness (LEV) is 1.1755, with a minimum of 0.0038 and a maximum of 55.5361. Regarding the Profitability (ROA) variable, the companies in the sample had an average of 0.0478 in total assets. The minimum value was (-6.1106), and the maximum was (15.4922). The variable representing company size (SIZE), expressed as a natural logarithm, had an average of Ln (14.62). The minimum and maximum values were (8.5630) and (20.7110), respectively.

Finally, the dummy variable responsible for identifying the existence of a Public Health Emergency of International Concern (PHEIC) corresponds to three of the six years in the sample period.

4.2 ECONOMETRIC ANALYSIS

We conducted econometric analysis to evaluate three different models: pooled, fixed effects, and random effects. We used the Akaike goodness-of-fit criteria (AIC) to determine the best fit between the methodologies presented. Thus, when considering the results of the AIC goodness of fit criterion shown in Table 6, it was found that the logit model for panel data with random effects was the one that showed the best fit to the observed data.

Table 6 - Quality of fit criterion

Criteria	Pooled	Fixed Effect	Random effect
AIC	526.47	423.2762	289.9283

Table 7 shows the estimates of the proposed model, using logit for panel data with random effects. It shows two models: the unrestricted model, which considers all the variables predicted for the model; and the restricted model, which considers the set of variables that best fit the model, based on the quality of fit criteria considered.

Table 7 - Estimates of the random effects of the Logit model

Unrestricted Model					Restricted Model				
Variables	Coef.	T-value	P-Value	Sign.	Variables	Coef.	T-Value	P-Value	Sign.
Intercept	-46.0320	-5.9220	3.18e-09	***	Intercepto	-42.2742	-6,0040	1,93e-09	***
INVEST	1.6040	2.3720	0.0177	*	INVEST				
TA	-1.1001	-1.4290	0.1529		TA				
SCADM	0.4705	4.9040	9.39e-07	***	SCADM	0.3073	4,3930	1,12e-05	***
ICADM	8.0822	3.7270	0.0002	***	ICADM	7.8288	3,9770	6,98e-05	***
DCEO	-1.0784	-1.4230	0.1546		DCEO				
V	4.8762	1.9660	0.0493	*	V	6.9201	4,088	4,34e-05	***
C	-0.1770	-0.0900	0.9283		C				
LEV	-0.1018	-0.2230	0.8234		LEV				
ROA	-0.5159	-0.2570	0.7973		ROA				
SIZE	1.9127	5.4900	4.02e-08	***	SIZE	1.6846	5,1900	2,10e-07	***
COVID-19	0.8348	1.5390	0.1238		COVID-19				
Sigma	6.8487	6.5410	6.12e-11	***	Sigma	7.0114	6,5730	4,92e-11	***
Notes:					Notes:				
Significance level (Sign.):					Significance level (Sign.):				
0 "****" 0,001 "****" 0,01 "****" 0,05 "****" 0,1 "****" 1					0 "****" 0,001 "****" 0,01 "****" 0,05 "****" 0,1 "****" 1				
A I C :					A I C :				
289,9283					282.7704				
No. Observations: 600					No. Observations: 600				

Comparing the results found in the AIC fit quality criteria of the unrestricted or complete model (289.92) and the restricted model (282.77) shown in Table 6, it can be seen that the restricted model for panel data with random effects is the best fit.

The restricted model showed statistical significance between the dependent variable Audit Committee (AC) and the independent variables Independence of the Board of Directors (ICADM), Size of the Board of Directors (SCADM), and Ownership Structure Entrenchment Effect (V). However, the results indicated that there was no statistical significance at the 10% level between the dependent variable Audit Committee (AC) and the variables Investment Opportunity (INVEST), Type of Auditor (TA), CEO Duality (DCEO), and Ownership Structure Effect-Alignment (C).

As for the group of control variables, only the variable Company Size (TAM) showed statistical significance ($2.10e-07^{**}$). The others were not statistically significant at the 10% level.

The model's results do not reject the research's second H2, third H3, and fifth H5 hypotheses. There was no statistical significance at the 10% level, i.e., the estimated parameter associated with the variable is statistically equivalent to zero, for the first hypothesis raised in this study, H1, the fourth hypothesis, H4, the sixth hypothesis of this research, H6, and the seventh hypothesis of this study, H7.

The positive and non-significant relationship between the existence of an audit committee and investment opportunities (hypothesis H1) differs from the findings of Abdeljawad, Oweidat, and Saleh (2020), which demonstrates that companies experiencing high investment opportunities are not necessarily more likely to strengthen internal control through the creation of an audit committee. Furthermore, this finding contradicts the idea that investors in companies with high growth potential require more rigorous management control measures to increase the reliability of the quality of the reports published by the companies, and the audit committee can play this role (Piot, 2001; Ghafran, 2013; Tsui et al., 2001; Abdeljawad, Oweidat, and Saleh, 2020). Future research could seek new evidence to explore further this relationship in other samples or privately held companies.

The theory surrounding this topic suggests that investors in companies with high growth potential need stricter management control measures to increase the reliability of the reports released by the companies, a role that the audit committee can play. However, the results of this research indicate that although more investment opportunities influence the corporate governance structure of companies, this does not significantly corroborate the voluntary creation of an audit committee.

The hypothesis that companies with a single individual with sole responsibility as board chairman are more likely to establish an audit committee was rejected (Hypothesis H4). This contradicts the literature, as the concentration of power caused by the accumulation of positions is expected to hinder the adoption

of control instruments that strengthen the governance structure, specifically the formation of the audit committee (Collier, 1993).

The alignment effect (C) showed no significant relationship with the voluntary establishment of an audit committee (Hypothesis H6), contradicting previous studies (Fan and Wong, 2005; Caixe and Krauter, 2013; Cai et al. 2015), whose findings suggest that when there is greater alignment of interests between managers and shareholders, the voluntary creation of an audit committee becomes less necessary.

Finally, the results show no statistical significance at the 10% level between the dependent variable Audit Committee (AC) and the variable Auditor Type (TA). These estimates do not confirm the seventh hypothesis of this study, H7: Companies audited by a Big Four firm are more likely to establish an audit committee. This result indicates that hiring high-quality auditors from the Big Four group reinforces the audit committee substitution effect; that is, the existence of an audit committee can replace the marginal effects of a Big Four firm. This result is in line with the studies of Bradbury (1990); Collier (1993); Firth; Rui (2007); Carson (2002); Willeken (2004); Abdel-Meguid; Samaha; Dahawy (2014), but diverges from the other studies reviewed (Pincus; Rusbasky; Wong, 1989; Menon; Williams, 1994; Adams, 1997; Carson, 2002; Willekens; Bauwhede; Gaeremynck, 2004; Piot, 2004; Groff; Valentinc, 2011; Hassan; Hijazi, 2015; Cervo, 2019; Abdeljawad; Oweidat; Saleh, 2020).

In addition, the results suggest that larger, independent boards promote decisions that align with shareholder interests and are more likely to have an audit committee. This positive relationship between these two characteristics of the board of directors supports the hypothesis that the audit committee complements the responsibilities of the members of the board of directors and that these two mechanisms reciprocally enhance each other's role in controlling management and reducing agency costs. However, when the CEO of the organization does not hold the position of chairman of the board of directors, the likelihood of constituting an audit committee is reduced. Therefore, the occupation of these positions by different people does not favor the voluntary formation of the audit committee in the companies that comprise this research sample.

We inferred from the results that in scenarios with a greater risk of entrenchment, where managers are more concerned with protecting their interests, and where there is greater agreement between managers and shareholders, the voluntary adoption of an audit committee tends to be encouraged. In this sense, if there is alignment between the interests of executives and shareholders or between majority and minority controllers, establishing an audit committee voluntarily becomes relevant.

Concerning audit quality, the evidence found in this study indicates that the voluntary adoption of the audit committee tends to be more likely to occur when Big Four auditors conduct the company's audit. However, the restricted model identified no statistical significance for this variable. This result

differs from the findings of Bradbury (1990), Collier (1993), and Abdel-Meguid (2014). The company's size showed a positive and significant relationship with the formation of the audit committee. Therefore, larger companies are more likely to reduce agency costs by implementing robust governance mechanisms like audit committees.

5 CONCLUDING REMARKS

Investment opportunities are an essential feature of business management, and analyzing their influence on the corporate governance structure was one of the purposes of this research. The general objective of this study was to investigate the impact of investment opportunities and other corporate governance mechanisms on the voluntary formation of the audit committee of [B]3 listed companies between 2017 and 2022. We used the logit model for panel data with random effects to achieve this objective.

We based the relevance of this research on the interaction between the audit committee and other internal governance mechanisms, as well as the effect of an investment opportunity on this interaction in companies listed on the Brazilian capital market. This analysis highlights the importance of considering the specific context of each company and the power relations between managers and shareholders when evaluating the effects, complementary or substitutive, of corporate governance mechanisms. In addition, its main contribution is to advance the national literature in the area of Corporate Governance by highlighting the effect of investment opportunities on the voluntary constitution of the audit committee, expanding the evidence on corporate governance mechanisms in emerging markets.

The results suggest that more investment opportunities do not influence corporate governance structure in such a way as to favor the adoption of more monitoring and control mechanisms, specifically the voluntary adoption of an audit committee. The theory surrounding this topic suggests that a strong and independent audit committee can increase investor confidence and reduce risk perception, making the company a more attractive option for potential investments. Therefore, the results indicate the need to understand the topic better, opening up space for new evidence on the subject.

From a practical point of view, the findings can help investors and creditors mitigate the risks of providing capital since mapping the presence of greater investment opportunities and some internal CG mechanisms suggests better-structured governance, culminating in the voluntary institutionalization of an audit committee.

As a social contribution of the study, we highlight that the presence of an audit committee in companies and the analysis of how external and internal characteristics influence its formation can

generate positive externalities for society. Greater enforcement of corruption and mismanagement of resources by companies and greater transparency regarding economic, environmental, and social impacts can exemplify this. Thus, we hope to encourage companies and civil society to seek more robust governance mechanisms, especially in scenarios with opportunities for investment and strategic advancement.

The research limitations include the small sample size used in this study. Although the results are significant, they cannot be generalized. The lack of further similar studies, especially on international and national investment opportunities, has made it somewhat difficult to compare the results.

In future research, we suggest changing how the dependent variable is measured, instead of a committee's voluntary constitution using the audit committee's effectiveness. This perspective makes it possible to assess the performance and effectiveness of the audit committee that has already been set up, and to what degree the levels of investment opportunity influence the proper fulfillment of the audit committee's responsibilities. We also recommend that research be carried out using the methodology of this study to investigate the influence of investment opportunity on the corporate governance structure of companies listed on the [B]3 that are obliged to set up an audit committee. This is because investment opportunity levels can generate situations where companies demand more complementary control mechanisms, using internal mechanisms and incorporating external corporate governance mechanisms into the analysis.

Finally, the insertion of the COVID-19 variable as a control variable contributes to the advancement of future research insofar as the COVID-19 variable may have influenced the outcome of the model by affecting several independent and control variables that are associated with the voluntary formation of the audit committee. A more detailed analysis of the data and the specific context of the companies involved may provide additional results on the impact of the pandemic on [B]3 listed companies.

REFERENCES

ABDEL-MEGUID, A.; SAMAHA, K.; DAHAWY, K. Preliminary evidence on the relationship between corporate governance attributes and audit committee functionality in Egypt: beyond checking the Box. **Esmerald Group Publishing Limited**, v. 14, n. 2, p. 197-210, 2014. Retrieved from: <https://doi.org/10.1108/CG-01-2011-0004>. Acesso em: 27 jun. 2025.

ABDELJAWAD, I.; OWEIDAT, G. A. I.; SALEH, N. M. Audit committee versus other governance mechanisms and the effect of investment opportunities: evidence from Palestine. **Esmerald Publishing Limited**, v. 20, n. 3, 2020. Retrieved from: <https://doi.org/10.1108/CG-06-2019-0185>. Acesso em: 27 jun. 2025.

AGUILERA, R. V.; CRESPI-CLADERA, R. Firm family firms: current debates of corporate governance in family firms. **Journal of Family Business Strategy**, v. 3, n. 2, p. 66-69, 2012. Retrieved from: <https://doi.org/10.1016/j.jfbs.2012.03.006>. Acesso em: 27 jun. 2025.

ALI, S.; LIU, B.; SU, J. J. Does corporate quality affect default risk? The role of growth opportunities and stock liquidity. **International review of economics and finance**, v. 58, p. 422-448, 2018. Retrieved from: <https://doi.org/10.1016/j.iref.2018.05.003>. Acesso em: 27 jun. 2025.

BRADBURY, M. E. The incentives for voluntary audit committee formation. **Journal of Accounting and Public Policy**, v. 9, n. 1, p. 19-36, 1990. Retrieved from: [https://doi.org/10.1016/0278-4254\(90\)90019-V](https://doi.org/10.1016/0278-4254(90)90019-V). Acesso em: 27 jun. 2025.

BRUGNI, T. Governança corporativa, conselhos de administração e fiscal e propriedade dos números contábeis no Brasil. 2016. **Tese** (Doutorado) – Universidade de São Paulo, São Paulo, 2016. Retrieved from: <https://doi.org/10.11606/T.12.2016.tde-24112016-154235>. Acesso em: 27 jun. 2025.

CADBURY COMMITTEE. Report of the committee on the financial aspects of corporate governance. London: Gee, 1992. Retrieved from: <https://www.ecgi.global/sites/default/files/codes/documents/cadbury.pdf>. Acesso em: 27 jun. 2025.

CAI, C. X.; HILLIER, D.; TIAN, G.; WU, Q. Do audit committees reduce the agency costs of ownership structure? **Pacific-Basin Finance Journal**, 2015. Retrieved from: <https://doi.org/10.1016/j.pac-fin.2015.01.002>. Acesso em: 27 jun. 2025.

CAIXE, D. F.; KRAUTER, E. A influência da estrutura de propriedade e controle sobre o valor de mercado corporativo no Brasil. **R. Cont. Fin. USP**, São Paulo, v. 24, n. 62, 2013. Retrieved from: <https://doi.org/10.1590/S1519-70772013000200005>. Acesso em: 27 jun. 2025.

CARSON, E. Factors associated with the development of board sub-committees. **Corporate Governance: International Review**, v. 10, n. 1, p. 4-18, 2002. Retrieved from: <https://doi.org/10.1111/1467-8683.00263>. Acesso em: 27 jun. 2025.

CERVO, L. F. Acionistas estrangeiros como determinante explicativo na constituição voluntária do comitê de auditoria nas firmas listadas no mercado de capitais brasileiro. 2019. **Dissertação** (Mestrado em Ciências Contábeis) – Universidade do Vale dos Sinos, Porto Alegre, RS, 2019. Retrieved from: https://repositorio.jesuita.org.br/bitstream/handle/UNISINOS/8766/Lucas%20Felice%20Cervo_.pdf. Acesso em: 27 jun. 2025.

CHEN, L.; KILGORE, A.; RADICH, R. Audit committees: voluntary formation by ASX non-top 500. **Managerial Auditing Journal**, v. 24, n. 5, p. 475-493, 2009. Retrieved from: <https://doi.org/10.1108/02686900910956829>. Acesso em: 27 jun. 2025.

CHENG, E. C.; COURTENAY, S. M. Board composition, regulatory regime, and voluntary disclosure. **The International Journal of Accounting**, v. 41, n. 3, p. 262-289, 2006. Retrieved from: <https://doi.org/10.1016/j.intacc.2006.07.001>. Acesso em: 27 jun. 2025.

CLAESSENS, S. et al. Disentangling the incentive and entrenchment effects of large shareholdings. **The Journal of Finance**, v. 57, n. 6, p. 2741-2771, 2002. Retrieved from: <https://doi.org/10.1111/1540-6261.00511>. Acesso em: 27 jun. 2025.

COLLIER, P. Factors affecting the formation of audit committees in major UK-listed companies. **Accounting and Business Research**, v. 23, n. 91, p. 421-430, 1993. Retrieved from: <https://doi.org/10.1080/00014788.1993.9729909>. Acesso em: 27 jun. 2025.

DOYLE, J. T.; GE, W.; MCVAY, S. Accruals quality and internal control over financial reporting. **The Accounting Review**, v. 82, n. 5, p. 1141-1170, 2007. Retrieved from: <https://doi.org/10.2308/accr.2007.82.5.1141>. Acesso em: 27 jun. 2025.

EICHENSEHER, J. W.; SHIELDS, D. Corporate director liability and monitoring preferences. **Journal of Accounting and Public Policy**, v. 4, n. 1, p. 13-31, 1985. Retrieved from: [https://doi.org/10.1016/0278-4254\(85\)90010-9](https://doi.org/10.1016/0278-4254(85)90010-9). Acesso em: 27 jun. 2025.

FAMA, E. F.; JENSEN, M. C. Separation of ownership and control. **The Journal of Law and Economics**, v. 26, n. 2, p. 301-325, 1983. Retrieved from: <https://www.jstor.org/stable/725104>. Acesso em: 27 jun. 2025.

FIRTH, M.; RUI, O. M. Voluntary audit committee formation and agency costs. **International Journal of Accounting, Auditing and Performance Evaluation**, v. 4, n. 2, p. 142-160, 2007. Retrieved from: <https://doi.org/10.2139/ssrn.954675>. Acesso em: 27 jun. 2025.

FURUTA, F. A relação das características das empresas com a adoção do comitê de auditoria x conselho fiscal adaptado. 2010. 189f. **Tese** (Doutorado em Ciências Contábeis) – Universidade de São Paulo, São Paulo, 2010. Retrieved from: <https://doi.org/10.11606/T.12.2010.tde-19042010-104120>. Acesso em: 27 jun. 2025.

GROFF, M. Z.; VALENTINE, A. Determinants of voluntary audit committee formation in a two-tier board system of a post-transitional economy: case of Slovenia. **Accounting in Europe**, v. 8, n. 2, p. 235-256, 2011. Retrieved from: <https://doi.org/10.1080/17449480.2011.621674>. Acesso em: 27 jun. 2025.

HASSAN, Y.; HIJAZI, R.; NASER, K. Does audit committee substitute or complement other corporate governance mechanisms: evidence from an emerging economy. **Managerial Auditing Journal**, v. 32, p. 658-681, 2017. Retrieved from: <https://doi.org/10.1108/MAJ-08-2016-1423>. Acesso em: 27 jun. 2025.

HASSAN, Y. M.; HIJAZI, H. Determinants of the voluntary formation of a company audit committee: evidence from Palestine. **Asian Academy of Management Journal of Accounting and Finance**, v. 11, n. 1, p. 27-46, 2015. Retrieved from: [http://web.usm.my/journal/aamjaf/vol%2011-1-2015/AAMJAF%2011\(1\)%202015-Art.%202\(27-46\).pdf](http://web.usm.my/journal/aamjaf/vol%2011-1-2015/AAMJAF%2011(1)%202015-Art.%202(27-46).pdf). Acesso em: 27 jun. 2025.

HERMALIN, B. E.; WEISBACH, M. S. Boards of directors as an endogenously determined institution: a survey of the economic literature. **Economic Policy Review**, v. 4, p. 7-26, 2003. Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=794804. Acesso em: 27 jun. 2025.

HUTCHINSON, M.; GUL, F. A. Investment opportunity set, corporate governance practices, and firm performance. **Journal of Corporate Finance**, v. 10, n. 4, p. 595-614, 2004. Retrieved from: [https://doi.org/10.1016/S0929-1199\(03\)00022-1](https://doi.org/10.1016/S0929-1199(03)00022-1). Acesso em: 27 jun. 2025.

JENSEN, M. Agency costs of free cash flows, corporate finance, and takeovers. **American Economic Review**, v. 76, p. 323-329, 1986. Retrieved from: <https://www.jstor.org/stable/1818789>. Acesso em: 27 jun. 2025.

KAMARUDIN, K. A.; ISMAIL, W. A. W.; SAMSUDDIN, M. E. The influence of CEO duality on the relationship between audit committee independence and earnings quality. **International Congress on Interdisciplinary Business and Social Science**, p. 919-924, 2012. Retrieved from: <https://doi.org/10.1016/j.sb-spro.2012.11.220>. Acesso em: 27 jun. 2025.

LIN, C. P.; CHUANG, C. M. Principal-principal conflicts and IPO pricing in an emergent economy. **Corporate Governance: An International Review**, v. 19, n. 6, p. 585-600, 2011. Retrieved from: <https://doi.org/10.1111/j.1467-8683.2011.00870.x>. Acesso em: 27 jun. 2025.

MENON, K.; WILLIAMS, J. D. The use of audit committees for monitoring. **Journal of Accounting and Public Policy**, v. 13, p. 121-139, 1994. Retrieved from: [https://doi.org/10.1016/0278-4254\(94\)90016-7](https://doi.org/10.1016/0278-4254(94)90016-7). Acesso em: 27 jun. 2025.

PINCUS, K.; RUSBARSKY, M.; WONG, J. Voluntary formation of corporate audit committees among NASDAQ firms. **Journal of Accounting and Public Policy**, v. 8, n. 4, p. 239–265, 1989. Retrieved from: [https://doi.org/10.1016/0278-4254\(89\)90014-8](https://doi.org/10.1016/0278-4254(89)90014-8). Acesso em: 27 jun. 2025.

PIOT, C. The existence and independence of audit committees in France. **Accounting and Business Research**, v. 34, n. 3, p. 223–246, 2004. Retrieved from: <https://doi.org/10.1080/00014788.2004.972996>. Acesso em: 27 jun. 2025.

SHARMA, V.; NAIKER, V.; LEE, B. Determinants of audit committee meeting frequency: evidence from a voluntary governance system. **Accounting Horizons**, v. 23, n. 3, p. 245–263, 2009. Retrieved from: <https://doi.org/10.2308/acch.2009.23.3.245>. Acesso em: 27 jun. 2025.

SHLEIFER, A.; VISHNY, R. W. Survey of corporate governance. **The Journal of Finance**, 1997. Retrieved from: <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>. Acesso em: 27 jun. 2025.

SILVEIRA, A. D. M. da. Governança corporativa e estrutura de propriedade: determinantes e relação com o desempenho das empresas no Brasil. 2004. **Tese** (Doutorado em Administração) – Universidade de São Paulo, São Paulo, 2004. Retrieved from: <https://doi.org/10.11606/T.12.2004.tde-23012005-200501>. Acesso em: 27 jun. 2025.

SMITH, C.; WATTS, R. The investment opportunity set and corporate financing, dividend, and compensation policies. **Journal of Financial Economics**, v. 32, n. 3, p. 263–292, 1992. Retrieved from: [https://doi.org/10.1016/0304-405x\(92\)90029-w](https://doi.org/10.1016/0304-405x(92)90029-w). Acesso em: 27 jun. 2025.

TROMBLEY, S. K. A. The investment opportunity set: determinants, consequences, and measurement. **Managerial Finance**, v. 27, n. 3, p. 3–15, 2001. Retrieved from: <https://doi.org/10.1108/03074350110767060>. Acesso em: 27 jun. 2025.

VALADARES, S.; LEAL, R. Ownership and control structure of Brazilian companies. **Revista Abante**, v. 3, n. 1, p. 29–56, 2000. Retrieved from: <https://doi.org/10.2139/ssrn.213409>. Acesso em: 27 jun. 2025.

WILLEKENS, M.; BAUWHEDE, H. V.; GAEREMYNCK, A. Voluntary audit committee formation and practices among Belgian listed companies. **International Journal of Auditing**, p. 207–222, 2004. Retrieved from: <https://doi.org/10.1111/j.1099-1123.2004.00091.x>. Acesso em: 27 jun. 2025.

YIYI, S.; XU, D.; PHAN, P. Principal-principal conflict in the governance of the Chinese public corporation. **Management and Organization Review**, v. 4, n. 1, p. 17–38, 2008. Retrieved from: <https://doi.org/10.1111/j.1740-8784.2007.00090.x>. Acesso em: 27 jun. 2025.