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**Original Article** 

# Corporate governance and earnings management in brazilian financial institutions

Governança corporativa e gerenciamento de resultados em instituições financeiras brasileiras

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#### **ABSTRACT**

**Purpose:** This study aimed to verify how corporate governance measures relate to earnings management in Brazilian publicly traded financial institutions.

**Design/methodology/approach:** To carry out the research, 20 financial institutions listed on B3 were analyzed, with annual data from 2010 to 2019 obtained from the websites of the Brazilian Securities and Exchange Commission (CVM) and the IF.Data of the Central Bank of Brazil (Bacen). To obtain the results, regression models were estimated for each attribute of corporate governance in comparison with the selected earnings management measure.

**Findings:** The results point to several associations of corporate governance attributes with earnings management measures. That is, corporate governance attributes reduce/increase earnings management in financial entities.

**Research limitations/implications:** The findings of this study aim to assist company managers in improving their corporate governance policies to reduce accounting choices related to accounting management.

**Originality/value:** The study proves to be original by the use of a broad panorama referring to corporate governance measures. Generally, studies that analyze the effects of governance on earnings management use few measures for this attribute. The study also advances by specifically analyzing financial institutions, generally excluded from studies on information quality due to their particularities.

Keywords: Corporate governance; Earnings management; Accruals; Financial institution

## **RESUMO**

**Objetivo**: Este estudo teve como objetivo verificar como as medidas de governança corporativa se relacionam com o gerenciamento de resultados em instituições financeiras de capital aberto brasileiras.

Desenho/metodologia/abordagem: Para a realização da pesquisa, foram analisadas 20 instituições financeiras listadas na B3, com dados anuais de 2010 a 2019 obtidos dos sites da Comissão de Valores Mobiliários (CVM) e do IF.Data do Banco Central do Brasil (Bacen). Para obter os resultados, foram estimados modelos de regressão para cada atributo de governança corporativa em comparação com a medida de gerenciamento de resultados selecionada.

Resultados: Os resultados apontam para diversas associações de atributos de governança corporativa com medidas de gerenciamento de resultados. Ou seja, atributos de governança corporativa reduzem/ aumentam o gerenciamento de resultados em entidades financeiras.

Limitações/implicações da pesquisa: Os achados deste estudo visam auxiliar os gestores das empresas a melhorar suas políticas de governança corporativa para reduzir as escolhas contábeis relacionadas à gestão contábil.

Originalidade/valor: O estudo mostra-se original pela utilização de um amplo panorama referente às medidas de governança corporativa. Geralmente, os estudos que analisam os efeitos da governança no gerenciamento de resultados utilizam poucas medidas para esse atributo. O estudo também avança ao analisar especificamente as instituições financeiras, geralmente excluídas dos estudos sobre qualidade da informação por suas particularidades.

Palavras-chave: Governança corporativa; Gerenciamento de resultados; Provisões; Instituição financeira

## 1 INTRODUCTION

The quality of information is essential for user safety when examining a company because the greater the number of attributes identified, the better the company will be at disclosing accurate and relevant facts for decision-making. One of the attributes of information quality, which has gained prominence in the literature, is earnings management. According to Schipper (1989) earnings management represents the deliberate alteration of the statements by the administrators with a view to obtaining private benefits.

Within this context, the concern with the relevance of information disclosed by companies to their users came to the fore. As a result of this fact, the relationship between earnings management and corporate governance has gained importance in national and international scenarios (Ramos & Martinez, 2006; Cornett et al., 2009; Ahmed, 2013).

Existing studies on this relationship, although using different approaches and methods, aimed to establish structures to explain earnings management based

on corporate governance attributes, thus seeking to describe the influence that governance attributes exert on the economic performance of companies finances. Consequently, the main points of analysis of Corporate Governance attributes took place on the characteristics of the board of directors, executive body, audit committee, disclosure and transparency, fiscal council, or, more comprehensively, broad corporate governance indices (Nizaeva & Uyar, 2017).

On the other hand, it is noteworthy that financial institutions can present interesting results due to the specificities of the sector. According to Matuszak et al. (2019), several opinions about the influence of the banking sector on economies and societies of different countries are pointed out in the literature, mainly because these entities are subject to legal regulations regarding capital requirements, as a reflection of the Great Depression of 1929-1932.

It is also worth mentioning that in 2022, Ben Bernanke, Douglas Diamond and Philip Dybvig received the Nobel Prize in Economics, for work on the functioning of banks. The authors revealed that the banking system is dynamic that can get out of control, making it necessary to better regulate and control this system so that risks are minimized, and thus, the stability of an economy can be restored (Ball, 2022). Therefore, it is noted that measures, such as corporate governance instruments, become necessary for the better functioning of these entities. Thus, understanding the instruments that best align the interests of stakeholders in these organizations becomes relevant to be investigated.

In this sense, the purpose of this study is to bring this discussion to financial institutions, seeking to answer the following question: do corporate governance practices adopted by financial institutions inhibit the use of earnings management? Therefore, this research aims to verify how corporate governance measures are related to earnings management in Brazilian publicly traded financial institutions.

Despite many studies on attributes of corporate governance and earnings management, this one aims to offer new ways to understand how specific attributes

of governance are associated with management practices. The findings may have important implications for regulators, auditors, investors, and other users of accounting information. This research seeks to contribute to corporate governance by analyzing the attributes of quantitative composition, mandate, remuneration, and capital structure individually, as well as those related to the management of results of financial entities.

The use of Brazilian financial institutions was due to the relevance of the segment to the Brazilian market. Furthermore, the sector has undergone several transformations over time, such as increased concentration, reduced importance of public banks, and increased participation of foreign banks, among others (Azevedo & Gartner, 2020). Therefore, due to its particularities and influence on the national economy, the segment becomes of critical analysis.

This article is structured in four more sections in addition to this introduction: the theoretical framework, which addresses financial institutions, agency theory and information asymmetry, corporate governance, and earnings management. The third session refers to the methodological procedures. The fourth section presents the research results, and finally, in the last section, the final considerations.

## 2 THEORETICAL FRAMEWORK

## 2.1 Financial institutions in Brazil

The National Financial System (SFN) is a body that regulates, supervises, and executes the operations essential for the circulation of currency and credit in the economy. The structure of the SFN is divided into two subsystems, normative and operational. Included in the operating subsystem are Financial Institutions (FIs), which are public or private legal entities whose primary focus is the collection, intermediation, or application of their own or third-party financial resources, in national or foreign currency and the custody of third-party property value (art. 17 of Law No. 4,595/64).

The activities performed by FIs are essential for the economic development of a country, especially those related to financial intermediation. Due to the market's expansion, a solid Financial System (FS) has become essential. The primary basis for solid FS is the Transparency of the FIs before the financial market and economic agents (Sousa & Bressan, 2018).

According to Mutuszak et al. (2019), banks, as financial institutions, play a crucial role in the socioeconomic and sustainable development of countries, as they perform essential functions in economic and social life related to capital allocation and resource accumulation, through deposit, credit or compensation. In other words, these institutions contribute to the economic development of countries, by creating a financial infrastructure that aims to enable the functioning and development of individuals and companies (Matuszak et al., 2019).

Because of this, international organizations began to defend that FIs need to provide information that evidences the equity, financial situation, and results, in addition to covering aspects related to internal control and Risk Management. However, it happens that some managers use discretion to manage the results. In this way, the information can be distorted about the actual situation of the entity, thus causing informational asymmetry between the information users, which ends up harming the resource allocation process (Sousa & Bressan, 2018).

# 2.2 Agency theory and information asymmetry

In emerging economies, the organizational structure of companies was marked by a high level of ownership concentration, however, during the process of development and privatization of large companies, there was a process of decentralization between ownership and management, that is, the ownership of companies became less concentrated (Zhang & Cang, 2021). In this environment, ensuring that the interests of owners and managers culminate in the same path has become increasingly difficult. The Agency Theory developed by Jensen and Meckling (1976) tries to explain the agency relationship between the principal and the agent, where conflicts of interest may arise. Moreover, these become inevitable when both parties act to maximize their utility (Bendickson et al., 2016).

The conflict occurs when the agent, in exchange for benefits, acts according to the principal's interests. However, with time this would no longer happen because the agent starts to maximize its utility function, that is, acting motivated exclusively for their interests, because, while shareholders are interested in maximizing the value of the company, the objectives of managers may include increasing personal wealth, job security and professional prestige (Mak & Li, 2001).

In addition to agency conflicts, the issue of information asymmetry also permeates companies because not all agents have the same information about the company's actual situation. Therefore, information asymmetry limits the ability of economic agents to make decisions. According to Jensen and Meckling (1976), information asymmetry is the difference in information in a contractual relationship between the agent and the principal because one party has more information than the other. That is, there is hidden information.

This conflict affects the performance of companies, since the holder of more information will be able to use it to benefit himself. It is in this context that the study of corporate governance practices has gained great importance within the national and international scenarios, because these mechanisms are aimed at improving the general protection of investors and corporate transparency (Ahmed, 2013), thus reducing information asymmetry.

## 2.3 Corporative governance

According to the Brazilian Institute of Corporate Governance (IBGC), with the growth of the financial market and the expansion of financial transactions on a global scale, many companies emerged in this segment, promoting, with their activities, the readjustment of their control structure, resulting from the separation between

management and ownership. Furthermore, the Corporate Governance (CG) theme was evident due to the questions raised about transparency in the disclosure of companies' financial statements.

Good corporate governance should provide adequate incentives and rewards that allow monitoring of the management of the business, not only by insiders but also by outsiders, with a view to facilitating effective monitoring and resolving agency conflicts that may arise within an organization (Al-Najjar, 2010). For Ramos and Martinez (2006), the principles that make up the CG intrinsically contribute to good management practices in companies, defined as transparency, equity, accountability, and compliance.

Corporate governance research is using different approaches and disciplines to highlight the three purposes of efficient governance, namely: a) facilitating and stimulating the performance of companies by creating and maintaining incentives for monitoring insiders and maximizing performance; b) limit the abuse of power by insiders over managed resources; and c) provide means for monitoring the behavior of managers and providing protection to investors (Ahmed, 2013).

The IBGC, in its Code of Best Practices of Corporate Governance, establishes means by which all types of companies, whether publicly or privately held, corporations or limited liability companies, achieve satisfactory performance through various stimuli that may include: auditing of financial statements, the performance of reliable internal control, supervision and accountability of the financial area, among others (IBGC, 2015). Therefore, it is noted that governance practices affect financial statements.

# 2.4 Earnings management

The quality of information is essential for user safety when examining a company because the greater the number of attributes, the better the company will be in disclosing accurate and relevant facts for decision-making. For example, Earnings Management (EM) as a quality attribute can be understood as a manipulation of operational activities by administrators within limits allowed by accounting norms and standards to achieve performance goals (Paulo et al., 2012).

According to Salem et al. (2021), the literature on EM classifies it from two perspectives, being opportunistic or informative. From the opportunistic perspective, managers manipulate information in order to protect their reputation and ensure higher remuneration. In the informative perspective, managers manipulate information in order to provide more relevant information to investors (Salem et al., 2021).

However, studies on EM, for the most part, comprise the measure of the manager's discretionary behavior on profit, that is, they work from an opportunistic perspective. According to Piccoli et al. (2014) the study models in EM were directed to the accruals studies, and this is justified, since the difference between the financial result achieved and the reported accounting result would mislead the market. Thus, accounting accruals can be defined as the difference between profit and cash flow, such as movements in income accounts that make up profit but do not affect cash and cash equivalents (Nazaré, 2020).

Accruals are divided into non-discretionary accruals and discretionary accruals. Non-discretionary ones represent reality, not being manipulated since they are linked to criteria and determinations of accounting standards, while discretionary ones are intended to "manage" the accounting result. On the other hand, discretionary accruals are intrinsically linked to earnings management and are defined as a proxy for EM (Martinez, 2010). Therefore, they may present negative or positive results according to the manipulation made by the manager.

Most studies on accruals focus on two approaches: firstly, the models used are focused on aggregated accruals, where it is possible to intertwine a large number of managed accruals. The second approach focuses on specific accruals, where the investigation is done through an exclusive account (Dantas et al., 2013). For the present work, the approach will be the specific accruals of the FIs.

In FIs, the primary specific accrual used in the studies is the Loan Loss Provisions (LLP) which plays a fundamental role in managers' decisions on accounting manipulations (Dantas et al., 2013), making it the main target of regulators.

# 2.5 Delineation of hypotheses

Several factors are pointed out in the literature as relevant to an entity's information quality. Among them, aspects of corporate governance that affect the earnings management of entities from different segments are pointed out. Therefore, hypotheses that relate attributes of corporate governance (quantitative, mandate, remuneration, composition, and capital structure) with earnings management will be highlighted below:

Table 1- Research Hypotheses

	Hypotheses	Source
	The greater the number of members that	The size of boards and committees, in terms
H1	make up the boards and committees,	of the number of members, may be related
П	the greater the propensity for earnings	to companies' use of earnings management
	management in financial entities.	practices (Martinez, 2010).
H2	The composition of boards and committees with independent and external members tends to inhibit earnings management in financial entities.	Boards and committees composed of external and independent members can influence earnings management in entities (Cornett et al., 2009).
НЗ	The longer the term of office exercised by the directors, the greater the propensity to manage earnings in financial entities.	The term of office stipulated to members may relate to earnings management. Board members have a different tendencies according to their term of office (Ali & Zhang, 2015).
H4	The higher the executive compensation, the higher the level of earnings management in financial entities.	The remuneration of the board of directors, supervisory board, and executive board influence the use of management practices.  Executives manage results for their rewards (Panucci & Carmona, 2016).
H5	Attributes related to ownership structure influence earnings management in financial entities.	The capital structure can influence the quality of information. Thus attributes related to the capital structure of companies can be related to earnings management (Lassoued, 2022).

Source: Elaborated by the authors

## **3 METHODOLOGICAL ASPECTS**

## 3.1 Definition and data collection

For the research objective, 120 companies listed on Brazil Bolsa Balcão (B3) were initially analyzed between 2010 and 2019. However, it was chosen not to consider the years 2020 onwards due to the Covid-19 pandemic, which caused substantial changes in the national and international capital markets (Souza & Silva, 2021). Therefore, this condition may have affected how companies disclosed information regarding their governance and the management proxy.

Thus, this temporal choice sought to assess the effects of the measures under more normal conditions without reflecting the pandemic's uncertainty. From the 120 companies selected for the survey, exclusion criteria were adopted given some characteristics, as shown in the following table:

Table 2 – Selected Financial Institutions - Final Sample

Specification	Quantity
Financial Institutions (Fls) listed on B3, from 2010 to 2019	120
(-) Fls not included in B3's special Corporate Governance segments	(95)
(-) Fls with governance levels but no information on IF.Data and CVM	(5)
(=) Final Sample	120

Source: Elaborated by the authors

According to the definition of exclusion criteria, the research sample, within the specified period, consisted of 20 financial institutions that are included in some level of corporate governance defined by B3 and have information available in the database on the Brazilian Securities and Exchange Commission (CVM) website's and the Central Bank of Brazil (Bacen) - IF Data, thus corresponding to a total of 183 observations in the period under analysis.

The information collected regarding the Corporate Governance variables was obtained from the Reference Forms (RF), and the Standardized Financial Statements

(SFS) presented on the CVM website. In addition, information on Earnings Management proxies was collected on Bacen's IF.data website, using the following information: Result of Loan Loss Provisions (LOSS); Loan Loss Provisions (LLP), and Total Assets (TA), to be later tabulated in electronic spreadsheets, which serves as the basis for the statistical system used to obtain the results.

## 3.2 Definition o

The Loan Loss Provisions (LLP) was defined as the dependent variable in that study, which, according to Cornett et al. (2009) and Nazaré (2020), is considered a measure that represents the management discretion of a financial entity. Therefore, the statistical models will have the earnings above management measure as variables of interest. This proxy was represented by two different measures, which represent account discretion. The way of measuring the dependent variables is shown in the following table:

Table 3 – Dependent Variables

Variables	Definition	Source	Metric	Authors
LOSS	Result of Loan Loss Provisions. Column (b5) of the "Income Statement" report.	Bacen IF.data	LOSS/TA	Silva (2016) and Nazaré (2020).
LLP	Loan Loss Provisions. Column (d2) of the "Asset" report.	Bacen IF.data	LLP/TA	Elnahass et al. (2018) and Nazaré (2020).

Source: Elaborated by the authors.

To obtain the necessary information, CSV files were extracted referring to the "assets", "liabilities" and "income statements" reports for the selected FIs. With such data, the metrics presented in Table 3 were prepared. The Total Assets (TA), which make up the selected metrics, were obtained from the IF.data system of Bacen in the "Assets" report.

As independent variables in the research, several proxies were used related to different characteristics of an entity's corporate governance. The proxies used were

segregated into five distinct attributes, namely: Quantitative, containing 6 variables; Composition, containing 5 variables; Mandate, containing 4 variables; Remuneration, containing 7 variables and Capital Structure, containing 8 variables. The variables were obtained through the Reference Forms (RF) of the CVM. These attributes, with their respective variables, measurement, source, and hypotheses, are better evidenced in the following table:

Table 4 – Independent Variables - Corporate Governance Attributes

Attribute	Independent Weasurement Variable		Source	Authors	Hypothesis
	NCADM	Identification of the total number of directors.	ltems 12.6/8 and 13.2 of the CVM's RF.	Panucci and Carmona (2016) and Ramos and Martinez (2006).	
	NCCF	Identification of the total number of tax advisors.	Items 12.6/8 and 13.2 of the CVM's RF.	Ramos and Martinez (2006)	
	NCDIR	Identification of the total number of board members.	ltems 12.6/8 and 13.2 of the CVM's RF.	and Silva and Leal (2005).	H1
Quantitative	NCAUD	Identification of the total number of members of the audit committee.	Item 12.7 of the CVM's RF.		
Ü	MEMIND	Ratio between independent members and audit committee members.	Item 12.7 of the CVM's RF.	Kent <i>et al.</i> (2010).	
	EXPER	Identify expert members by the total number of members of the audit committee.	Item 12.7 of the CVM's RF.	DeFond <i>et al.</i> (2005).	
Composition	COMPADM	Ratio between the number of external members and the total number of directors.	Item 12.6/8 of the CVM's RF.	Cunha <i>et al.</i> (2016) and Silva and Leal (2005).	H2

Table 4 – Independent Variables - Corporate Governance Attributes

Attribute	Independent Variable	Measurement	Source	Authors	Hypothesis
	INDEPCADM	Ratio between external and independent directors of the total number of directors.	Item 12.6/8 of the CVM's RF.	Silva and Leal (2005).	
Composition		Dummy variable that takes the value 1 if the chairman of the board of directors and the president of the company are different people, and 0 otherwise.	Item 12.6/8 of the CVM's RF.	Cunha <i>et al.</i> (2016).	H2
0	TIPOCF	Dummy variable that assumes value 1 for permanent Fiscal Council, and 0, if provisional or not installed.	Item 12.1 of the CVM's RF.	Ramos and Martinez (2006) and Silva and Leal (2005).	
	CAUD	Dummy variable that takes the value 1 if there is an Audit Committee, and 0 otherwise.	Item 12.1 of the CVM's RF.	IBGC (2015).	
Mandate	MANDCADM	A value of 1 is assigned when the directors' term of office is 2 years, according to IBGC, and 0, otherwise.	Item 12.6/8 of the CVM's RF.	Ramos and Martinez (2006) - and Silva and Leal	H3
Mar	MAND CADM2	A value of 1 is assigned when the mandate is extended, and 0 otherwise.	Item 12.6/8 of the CVM's RF.	(2005).	

Table 4 – Independent Variables - Corporate Governance Attributes

Attribute	Independent Variable	Measurement	Source	Authors	Hypothesis
date	MANDCF	A value of 1 is assigned when the term of office is as recommended, and 0 otherwise.	Item 12.6/8 of the CVM's RF.	Ramos and Martinez (2006)	
Mandate	MAND2CF	A value of 1 is assigned when the mandate is extended, and 0 otherwise.	Item 12.6/8 of the CVM's RF.	and Silva and Leal (2005).	НЗ
	RFADM	Identification of the fixed compensation of the directors of the administration.	Item 13.2 of the CVM's RF.	Cunha <i>et al.</i> (2016) - and Panucci and	
	RVADM	Identification of the variable compensation of the directors.	Item 13.2 of the CVM's RF.	Carmona (2016).	H4
tion	RFCF	Identification of the fixed remuneration of the fiscal councilors.	Item 13.2 of the CVM's RF.		
Remuneration	RVCF	Identification of the variable remuneration of the fiscal councilors.	Item 13.2 of the CVM's RF.	S RF. Panucci and Carmona (2016).  2 of S RF. 2 of	
	RFDIR	Identification of the fixed remuneration of the directors.	Item 13.2 of the CVM's RF.		
	RVDIR	Identification of the directors' variable remuneration.	Item 13.2 of the CVM's RF.		
	CUSTOAUD	Identification of the amount paid to the independent audit.	Item 2 of the CVM's RF.	Ramos and Martinez (2006).	

Table 4 – Independent Variables - Corporate Governance Attributes

Conclusion

Attribute	Independent Variable	Measurement	Source	Authors	Hypothesis
	GCADV	Dummy variable where a value of 1 is assigned to less than 50% of the	Item 15 of the CVM's RF.		
		voting shares, and 0 otherwise.		Silva and Leal	
	ASDV	Dummy variable where a value of 1 is assigned to less than 20% of nonvoting shares, and 0 otherwise.	Item 15 of the CVM's RF.	(2005).	
Capital Structure	CONCAC	Identification of the percentage of participation of the largest shareholders.	Item 15.1 of the CVM's RF.		
	INST	Ratio of the number of institutional investors to the total number of investors.	Item 15.3 of the CVM's RF.	Cunha <i>et al.</i> (2016) and Ramos and Martinez (2006).	Н5
	ESTR	Ratio of the number of foreign investors to the total number of investors.	Item 15.3 of the CVM's RF.		
	CVCT	Ratio between voting capital and total capital.	Item 15.3 of the CVM's RF.		
	AF2AT	Ratio between fixed assets (investment, AF2AT fixed assets, and intangible assets) by total assets.	SFS's	Silva and Leal (2005).	
	DAT	Ratio between cash and cash equivalents, by total assets.	SFS's		

Source: Elaborated by the authors

Altogether, 30 independent variables are used, which will be tested with two distinct dependent variables grouped by similar characteristics. Next, the regression models adopted in that research will be highlighted, with their respective variables grouped by similar aspects.

## 3.3 Regression models

In order to achieve the objectives of this research, the method of multiple linear regression by ordinary least squares was adopted. According to the characteristics of the sample, not all companies presented data in all periods of analysis, therefore the regression model with panel data could not be used. In addition, tests for heteroscedasticity, normality, and multicollinearity were performed to provide greater robustness to the results presented.

In all, results are generated for ten different regression models. For each dimension, two models were run with two distinct dependent variables and the respective independent variables, as shown in the following table:

Table 5 – Regression Model

Dimension	Model
	$LOSSTA_{i} = \beta_{0} + \beta_{1}NCADM_{i} + \beta_{2}NCCF_{i} + \beta_{3}NCDIR_{i} + \beta_{4}MEMIND_{i} + \beta_{5}EXPERT_{i} + \mu_{i,t}$
Quantitative	$LLPTA_i = \beta_0 + \beta_1 NCADM_i + \beta_2 NCCF_i + \beta_3 NCDIR_i + \beta_4 MEMIND_i + \beta_5 EXPERT_i + \mu_i$
	$LOSSTA_i = \beta_0 + \beta_1 COMPADM_i + \beta_2 INDEPCADM_i + \beta_3 DUAL_i + \beta_4 TIPOCF_i + \beta_5 CAUD_i + \mu_i$
Composition	$LLPTA_i = \beta_0 + \beta_1 COMPADM_i + \beta_2 INDEPCADM_i + \beta_3 DUAL_i + \beta_4 TIPOCF_i + \beta_5 CAUD_i + \mu_i$
N/a sa al a tra	$LOSSTA_{i} = \beta_{0} + \beta_{1}MANDCADM_{i} + \beta_{2}MANDCADM2_{i} + \beta_{3}MANDCF_{i} + \beta_{4}MANDCF2_{i} + \mu_{i}$
Mandate	$LLPTA_i = \beta_0 + \beta_1 MANDCADM_i + \beta_2 MANDCADM2_i + \beta_3 MANDCF_i + \beta_4 MANDCF2_i + \mu_i$
	$LOSSTA_i = \beta_0 + \beta_1 RFADM_i + \beta_2 RVADM_i + \beta_3 RFCF_i + \beta_4 RVCF_i + \beta_5 RFDIR_i + \beta_6 RVDIR_i$
5	$+ \beta_7 CUSTOAUD_i + \mu_i$
Remuneration	$LLPTA_{l} = \beta_{0} + \beta_{1}RFADM_{l} + \beta_{2}RVADM_{l} + \beta_{3}RFCF_{l} + \beta_{4}RVCF_{l} + \beta_{5}RFDIR_{l} + \beta_{6}RVDIR_{l}$
	$+ \beta_7 CUSTOAUD_1 + \mu_t$
	$LOSSTA_{t} = \beta_{0} + \beta_{1}GCADV_{t} + \beta_{2}ASDV_{t} + \beta_{3}CONCAC_{t} + \beta_{4}INST_{t} + \beta_{5}ESTR_{t} + \beta_{6}CVCT_{t}$
Capital	$+\beta_7 AF2AT_i + \beta_8 DAT_i + \mu_i$
Structure	$LLPTA_i = \beta_0 + \beta_1 GCADV_i + \beta_2 ASDV_i + \beta_3 CONCAC_i + \beta_4 INST_i + \beta_5 ESTR_i + \beta_6 CVCT_i$
	$+\beta_7 AF2 AT_t + \beta_8 DAT_t + \mu_t$

Source: Elaborated by the authors

## **4 RESULTS**

# **4.1 Descriptive statistics results**

In this subsection, the results related to descriptive statistics will be presented, which aim to provide information on measures of position and dispersion of data. Thus, Table 6 provides information regarding the variables' Mean, Minimum, Maximum, Standard Deviation, and Coefficient of Variation.

Table 6 – Result of the descriptive statistics of the sample

Variable	Average	Minimum	Maximum	Standard Deviation	Coefficient of Variation
	1	Depend	lent Variables		
LOSSTA	0,0111	0,0000	0,0741	0,0109	0,9831
LLPTA	0,0244	0,0014	0,0725	0,0141	0,5770
		Indepen	dent Variables		
NCADM	7,6281	0,0000	18,0000	3,2818	0,4302
COMPADM	3,8191	0,0000	13,0000	2,3968	0,6276
INDEPCADM	0,7103	0,0000	1,0000	0,4548	0,6402
MANDCADM	0,5136	0,0000	1,0000	0,5011	0,9757
MANDCADM2	0,7978	0,0000	1,0000	0,4027	0,5047
DUAL	0,8032	0,0000	1,0000	0,3986	0,4962
RFADM	4.331.100	0,0000	70.000.000	9.311.600	2,1501
RVADM	1.585.800	0,0000	90.492.000	8.074.900	5,0921
NCCF	4,3155	0,0000	18,0000	3,4348	0,7959
TIPOCF	0,5989	0,0000	1,0000	0,4914	0,8205
MANDCF	0,9367	0,0000	1,0000	0,4453	0,4753
MAND2CF	0,5235	0,0000	1,0000	0,5009	0,9568
RFCF	297.790	0,0000	1.323.000	284.690	0,9560
RVCF	218,390	0,0000	31.000	2.406,30	11,0181
NCDIR	17,3370	3,0000	94,0000	20,1610	1,1629
RFDIR	57.517.000	694.180	4.145.200.000	312.800.000	5,4383
RVDIR	20.047.000	0,0000	339.200.000	47.958.000	2,3923
CAUD	0,7322	0,0000	1,0000	0,4440	0,6063
NCAUD	1,5064	0,0000	6,0000	1,4525	0,9641

Table 6 – Result of the descriptive statistics of the sample

Conclusion

Variable	Average	Minimum	Maximum	Standard Deviation	Coefficient of Variation			
	Independent Variables							
MEMIND	1,9359	0,0000	4,0000	1,1842	0,6117			
EXPER	0,9102	0,0000	4,0000	0,8604	0,9452			
CUSTOAUD	2.149.600	1006	25.200.000	4.094.000	1,9046			
GCADV	0,0382	0,0000	1,0000	0,1923	5,0282			
ASDV	0,1038	0,0000	1,0000	0,3058	2,9463			
CONCAC	113,5300	26,4200	7.883	577,87	5,0901			
INST	0,0258	0,0000	0,2672	0,0543	2,1054			
ESTR	9,8407	0,0000	93,9393	23,5910	2,3973			
CVCT	0,5244	0,0000	5,1563	0,5121	0,9765			
AF2AT	0,0726	0,0008	0,9971	0,1981	2,7259			
DAT	2.680.600	0,0005	509.320.000	36.950.000	13,7842			

Source: Research data (2023)

*Note*. The variables in bold represented qualitative aspects of the model and were transformed into dummies.

Given the results, in general, it is observed that the level of earnings management measures in financial institutions, in the period of analysis of the research, reaches the range between 0,0111 (LOSSTA) and 0,0244 (LLPTA), with observations comprising minimum and maximum values of 0,0001 and 0,0741, for LOSSTA, and 0,0014 and 0,0725 for LLPTA.

When analyzing the independent variables of the research, it is observed that the boards of directors of the financial institutions, on average, are composed of 8 members, where 3,81% are external members with an independent majority. On average, 51% of the board of directors members serve a two-year term, of which most members have their term of office extended. The duality of the CEO is present on the boards of financial institutions. The directors, who make up the boards of directors of financial institutions, receive, on average, a fixed remuneration of R\$ 4.331.100,00, and variable remuneration of R\$ 1.585.800,00.

When looking at the fiscal councils, on average, they are composed of 4 members, most of which serve a one-year term, but many of these have an extended

term. The expenses for the fiscal councilors' fixed compensation are around R\$297.790,00, and variable compensation for R\$218,39. In addition, in most financial institutions, Audit Committees are present, which are composed, on average, of 2 members, most of whom are independent and have expertise.

On average, the financial institutions boards are composed of 17 members. The expenditure on the fixed compensation of directors is around R\$57.517.000,00, and the variable compensation of R\$20.047.000,00.

The capital structure of financial institutions shows that the minority of controlling shareholders has less than 50% of the voting rights, with a high concentration of shares. The participation of institutional investors is around 0,25%, and that of foreigners is, on average, 9.84% within financial institutions.

Finally, when analyzing the dispersion measures, it is observed that the standard deviation of the research variables oscillates in values below and above 1,00. Regarding the coefficient of variation, which represents how much dispersed a variable is around its mean, it was observed that the variable representing the ratio between cash and cash equivalents by total assets is the one with the most excellent dispersion around the mean, followed by the variables: variable remuneration of the fiscal council, fixed remuneration of the executive board, variable remuneration of the board of directors. The variable that represents the number of members of the board of directors is the least dispersed, followed by the variables: term of office of the supervisory board, duality, and the extension of the term of office of the board of directors.

## **4.2 Diagnostic test results**

In order to attest to the most appropriate regression model for the research sample, validation tests were performed for the 20 FIs of this research. The tests used to validate the models were: White test for heteroscedasticity; the residual normality test and the multicollinearity test through the Variance Inflation Factors (VIF), as shown in Table 7 below:

Tabela 7 – Heteroscedasticity, normality and multicollinearity tests

Madalaa	White Test	Normality Test	Multicollinearity
Modelos —	p-v	alues	Test
Model 1	0,8239	0,0001	VIF between 1,077 e 1,483
Model 2	0,3592	0,0001	VIF between 1,077 e 1,483
Model 3	0,0001	0,0001	VIF between 1,109 e 1,265
Model 4	0,0002	0,0001	VIF between 1,109 e 1,265
Model 5	0,6874	0,0001	VIF between 1,123 e 1,264
Model 6	0,0035	0,0001	VIF between 1,123 e 1,264
Model 7	0,9999	0,0001	VIF between 1,004 e 2,616
Model 8	0,9168	0,0001	VIF between 1,004 e 2,616
Model 9	0,5358	0,0001	VIF between 1,048 e 1,346
Model 10	0,1640	0,0001	VIF between 1,048 e 1,346

Source: Research data (2023)

*Note.* White H0: absence of heteroscedasticity; H1: presence of heteroscedasticity; Normality H0: normality in the distribution; H1: does not follow a normal distribution.

Regarding the heteroscedasticity test, it can be noted, based on the table shown above, that of the ten models, three have a significant p-value (p-value < 0.05), which denotes the rejection of the null hypothesis, thus, making it necessary to use the HAC matrix for robust standard errors. On the other hand, the use of the HAC matrix was unnecessary for the seven models that did not show significance in this test (p-value > 0.05).

In the residual normality test, the null hypothesis was also rejected, thus showing normal distribution. Finally, when analyzing the values referring to the VIF of the models, it is noticed that none of the model's variables presented values above 3.0, showing no correlations between them.

## 4.3 Results of regression models

This subsection presents five tables containing the ten regression models that aim to verify how corporate governance attributes influence the earnings management of financial companies listed on B3.

The first corporate governance attribute analyzed refers to the number of members belonging to the various boards of a financial entity, as well as some other characteristics related to this attribute. Thus, Table 8 provides results from two regression models that differ in their earnings management proxy.

Table 8 - Regression Models for the "Quantitative" attribute

Variables	Model 1 (LOSSTA)	Model 2 (LLPTA)
Constant	-0,0013	0,0053
Constant	(0,6659)	(0,1573)
NCADM	0,0017	0,0024
NCADM	(0,0001) ***	(0,0001) ***
NCCE	-9,13E-06	0,0007
NCCF	(0,9707)	(0,0174) **
NCDID	-3,52E-05	-3,75E-05
NCDIR	(0,394)	(0,4421)
NCALID	-0,0011	-0,0008
NCAUD	(0,0965) *	(0,2937)
MEMINIO	0,0005	0,0001
MEMIND	(0,5222)	(0,9137)
TVDED.	-0,0009	-0,0024
EXPER	(0,3916)	(0,0539) *
R <sup>2</sup>	0,2031	0,3238
N	156	156

Source: Research data (2023)

Note. This table reports the results for two models by Clustered Ordinary Least Squares. NCADM = number of members of the board of directors; NCCF = number of members of the fiscal council; NCDIR = number of board members; NCAUD = number of directors comprising the Audit Committee; MEMIND = number of independent members in the Audit Committee; EXPER = number of experts in the composition of the Audit Committee - Qualification in accounting, auditing and/or finance areas. The constant values outside the parentheses represent the regression coefficients. Values within parentheses represent p-values. \*Significance at 10% level. \*\*Significance at 5% level. \*\*\*Significance at 1% level.

In the table above, the variable "number of members of the board of directors" (NCADM) showed a positive relationship with a significance level of 1% for the variables LOSSTA and LLPTA, showing that the greater the number of members on the board of directors, the greater the propensity to manage earnings through provisions for difficult-to-settle credits. This finding agrees with the study by Martinez (2010), which showed that a more significant number of members on a

board of directors tends to encourage the practice of earnings management.

The second, "number of members of the fiscal council" (NCCF) variable showed a positive relationship with 5% significance for the LLPTA variable, so the more members make up the fiscal council, the greater the incentive for earnings management. This result differs from that reported by Trapp (2009), which showed that the size of the fiscal council does not have a significant relationship with earnings management.

The "number of directors comprising the Audit Committee" (NCAUD) variable showed a negative relationship with a significance of 10% for the LOSSTA variable, thus showing that the smaller the number of members that make up the Audit Committee, the greater the earnings management can be. The "number of experts in the composition of the Audit Committee" (EXPERT) variable showed a negative relationship with a significance of 10% for the LLPTA variable, so the smaller the number of members with expertise in the audit committee area, the greater the stimulus to earnings management. These findings corroborate the study carried out by Kent et al. (2010), which showed that a more significant number of members composing the smaller audit committee tends to be the propensity to use management practices, as well as demonstrated that the presence of members with expertise tends to inhibit earnings management.

According to the discussions presented in the previous paragraphs, it is observed that the analyzed attribute presents itself as influential in the practices of earnings management in financial entities, partially corroborating the H1 of this research, which predicted that the greater the number of members in committees and advice, the greater the earnings management. However, the partial result is because some measures referring to this attribute have shown an inverse relationship to what was expected.

The second attribute analyzed refers to the composition of the boards and committees of a financial entity, including some characteristics of this attribute.

Thus, Table 9 provides results from two regression models that differ in their earnings management proxy.

Table 9 – Regression Models for the "Composition" attribute

Variables	Model 3 (LOSSTA)	Model 4 (LLPTA)
Constant	0,00427157	0,00968728
Constant	(0,2201)	(0,0731) *
COMPADM	0,0018652	0,00189282
COMPADM	(0,0294) **	(0,0059) ***
INIDEDCADM	-0,00125094	1,52388E-05
INDEPCADM	(0,4436)	(0,9957)
DUAL	-1,18368E-05	0,00538456
DUAL	(0,9965)	(0,2639)
TIDOCE	0,000438096	0,00484643
TIPOCF	(0,8601)	(0,26)
CALID	-0,00100746	-0,000919426
CAUD	(0,6383)	(0,8169)
R <sup>2</sup>	0,129646	0,181635
N	183	183

Source: Research data (2023)

*Note.* This table reports the results for two models by Clustered Ordinary Least Squares. COMPADM = Composition of the Board of Directors: Number of external members in relation to the total number of members of the board of directors; INDEPCADM = independence of the board of directors; DUAL = Cons leadership structure. Management; TIPOCF = Explaining whether the fiscal council is permanent or provisional, not installed; CAUD = Audit Committee Presence.

The constant values outside the parentheses represent the regression coefficients. Values within parentheses represent p-values. \* Significant at 10% level. \*\* Significant at 5% level. \*\*\* Significant at 1% level.

In the table above, only the "Composition of the Board of Directors" (COMPADM) variable showed significance, with a positive relationship, in the two regression models. For the LOSSAT variable, the significance was 5%, and for the LLPTA variable, the significance was 1%. Therefore, the more external members in the composition of the board of directors, the greater the practice of earnings management. This finding contradicts the result presented by Hermalin and Weisbach (1988) and Cornett et al. (2009), who showed that a board of directors composed chiefly of external and independent members tends to minimize earnings management practices.

Thus, it can be seen that the analysis of the attribute proves to be not influential in the practices of earnings management in financial institutions, unexpectedly, thus refuting the H2 of this research, which predicted that the presence of independent and external members in the committees and boards could inhibit the practice of earnings management.

The third corporate governance attribute analyzed refers to the mandate of the components of the boards of a financial entity, including characteristics of term and extension. Thus, Table 10 provides results from two regression models that differ in their earnings management proxy.

Table 10 – Regression Models for the "Mandate" attribute

Variables	Modelo 5 (LOSSTA)	Modelo 6 (LLPTA)
Constant	0,0076522	0,0233498
Constant	(0,0092) ***	(0,0001) ***
MANDCADM	0,00294773	0,00205549
MANDCADM	(0,0957) *	(0,3786)
MANDCADM2	0,00494292	0,00260083
IVIANDCADIVIZ	(0,0376) **	(0,4058)
MANDCE	-0,000566246	0,00154097
MANDCF	(0,7832)	(0,5717)
MANDOCE	-0,0040156	-0,00666689
MAND2CF	(0,025) **	(0,0051) ***
R <sup>2</sup>	0,048574	0,052187
N	169	169

Source: Research data (2023)

*Note.* This table reports the results for two models by Clustered Ordinary Least Squares. MANDCADM = Term of office of the members of the board of directors; MANDCADM2 = Extension of the term of office of the members of the board of directors; MANDFC = Term of office of the members of the fiscal council; MAND2CF = Extension of the term of office of the members of the fiscal council.

The constant values outside the parentheses represent the regression coefficients. Values within parentheses represent p-values. \*Significance at 10% level. \*\*Significance at 5% level. \*\*\*Significance at 1% level.

In the table above, the variable "term of office of the members of the board of directors" (MANDCADM) denotes the existence of a positive and significant relationship at the 10% level with the LOSSTA proxy. The result represents that the longer the term of office of the members, the greater the propensity to manage results, with reflections on the LLP account recognized in the company's results. Thus, this finding corroborates the study by Ali and Zhang (2015). They proved a relationship between the term of office and earnings management practices, indicating that CEOs have a different tendency according to their term of office.

For the variable "extension of the term of office of the members of the board of directors" (MANDCADM2), a positive and significant relationship was observed at the level of 5% with LOSSTA. This finding shows that when the term of office is extended, there is a greater incentive to manage earnings, given that this variable reported greater significance than the one previously analyzed. This finding disagrees with the study by Dal Magro et al. (2019), which defines that the CEO with a long term strives for reputation and maintenance of their status and income, therefore, tends to reduce earnings management practices, in order not to be discovered.

When analyzing the variable "extension of the term of office of the members of the fiscal council" (MAND2CF), a negative and significant relationship at the levels of 5% and 10% is observed with the management measures LOSSTA and LLPTA, respectively. In other words, these findings show that the existence of the extension of the term of office of the fiscal councilors tends to reduce the incentive to the practices of earnings management, since there is an inverse relationship between these measures analyzed. This finding does not agree with the study by Ramos and Martinez (2006), which showed no significant relationship with earnings management practices.

Therefore, when observing the analysis of the mandate attribute, it is influential in earnings management practices in the financial institutions, partially corroborating the research's H3, which predicted that the longer the term of office exercised by the directors, the greater the propensity to manage of results in financial entities. This partial result is due to the fact that one of the measures presents a relationship contrary to the expected, in addition to another measure without significance.

The fourth corporate governance attribute analyzed refers to the remuneration of members of the boards and directors of a financial entity, including characteristics of fixed and variable remuneration and external audit costs. Thus, Table 11 provides regression model results that differ in their earnings management proxy.

Table 11 – Regression Models for the "Remuneration" attribute

Variables	Model 7 (LOSSTA)	Model 8 (LLPTA)
Constant	0,0108733	0,0209744
Constant	(0,0001) ***	(0,0001) ***
DEADM	-6,03383E-12	-1,06675E-10
RFADM	(0,9583)	(0,4468)
RVADM	-8,70943E-11	-1,63997E-10
KVADIVI	(0,5942)	(0,4089)
RFCF	1,48682E-09	1,73467E-08
KFCF	(0,7105)	(0,0005) ***
RVCF	-1,19317E-07	-3,68803E-07
RVCF	(0,741)	(0,4005)
RFDIR	-5,12987E-13	-7,37324E-13
KFDIK	(0,8569)	(0,8309)
RVDIR	1,36787E-11	3,92273E-13
KVDIK	(0,6265)	(0,9908)
CUSTOAUD	-1,44183E-10	-1,38503E-10
COSTOAOD	(0,5373)	(0,6253)
R <sup>2</sup>	0,006578	0,089147
N	171	171

Source: Research data (2023)

Note. This table reports the results for two models by Clustered Ordinary Least Squares. RFADM = Average fixed remuneration of the board of directors; RVADM = Average variable remuneration of the board of directors; RFCF = Average fixed remuneration of the fiscal council; RVCF = Average variable remuneration of the fiscal council; RFDIR = Average Fixed Remuneration of the Executive Board; RVDIR = Average variable remuneration of the executive board; CUSTOAUD = Cost of Independent Audit. The constant values outside the parentheses represent the regression coefficients. Values within parentheses represent p-values. \*Significance at 10% level. \*\*Significance at 5% level. \*\*\*Significance at 1% level.

Analyzing Table 11, only the "average fixed remuneration of the fiscal council" (RFCF) variable showed a result with a significance of 1% with the LLPTA management

measure. In other words, this finding shows us that the higher the fixed remuneration of the fiscal councilors, the greater the management of a financial company tends to be. This result agrees with Panucci and Carmona's study (2016). Furthermore, when investigating the relationship of the reward systems of executives belonging to the fiscal council, they presented evidence that these executives manage the results in favor of their rewards.

In this way, it is noted that the analyzed attribute referring to the remuneration of directors and directors presents itself as not influential in the practices of earnings management in financial entities, not corroborating the H4 of this study, which predicted that the higher the remuneration of the executives, the higher the level of earnings management in financial entities. This result is because only one measure obtained significance, so the others represent an inverse relationship.

The fifth corporate governance attribute analyzed refers to a financial entity's ownership (capital) structure. Thus, Table 12 provides results from two regression models that differ in their earnings management proxy.

Table 12 – Regression models of the attribute "Capital Structure"

Variables	Model 9 (LOSSTA)	Model 10 (LLPTA)
Caracharah	0,0191687	0,0433384
Constant	(0,0001) ***	(0,0001) ***
CCADV	-0,0070623	-0,00224417
GCADV	(0,09) *	(0,6495)
\CD\/	-0,00446903	-0,00469463
ASDV	(0,103)	(0,1497)
CONCAC	-3,95383E-05	-0,000156057
CONCAC	(0,3295)	(0,0014) ***
INICT	-0,0446653	-0,0911146
INST	(0,005) ***	(0,0001 ***
ESTR	-4,01E-06	-1,85295E-05
ESTR	(0,9119)	(0,6675)

Table 12 - Regression models of the attribute "Capital Structure"

Conclusion

Variables         Model 9 (LOSSTA)         Model 10 (LLPTA)           CVCT         -0,0028237         -0,00394361           (0,111)         (0,0618) *           AF2AT         -0,0128995         -0,0217099           (0,0018) ***         (0,0001) ***           DAT         -0,00796161         -0,00774984           (0,0332) **         (0,0809) *           N         183         183			
CVCT (0,111) (0,0618) *  AF2AT (0,0018) *** (0,0001) ***  DAT (0,0332) ** (0,0809) *  R <sup>2</sup> 0,130192 0,267531	Variables	Model 9 (LOSSTA)	Model 10 (LLPTA)
(0,111) (0,0618) *  AF2AT (0,0018) *** (0,0001) ***  DAT (0,0032) ** (0,0809) *  R2 (0,130192 0,267531	CVCT	-0,0028237	-0,00394361
AF2AT (0,0018) *** (0,0001) ***  -0,00796161 -0,00774984 (0,0332) ** (0,0809) *  R <sup>2</sup> 0,130192 0,267531	CVCI	(0,111)	(0,0618) *
(0,0018) ***  -0,00796161  (0,0332) **  R <sup>2</sup> 0,130192  0,267531	٨٢٦٨٣	-0,0128995	-0,0217099
R <sup>2</sup> 0,130192 0,267531	AFZAT	(0,0018) ***	(0,0001) ***
(0,0332) ** (0,0809) *  R <sup>2</sup> 0,130192 0,267531	DAT	-0,00796161	-0,00774984
7	DAT	(0,0332) **	(0,0809) *
N 183 183	R <sup>2</sup>	0,130192	0,267531
	N	183	183

Source: Research data (2023)

*Note.* This table reports the results for two models by Clustered Ordinary Least Squares. GCADV = Does the controlling group own less than 50% of the voting shares?; ASDV = Is the percentage of non-voting shares less than 20% of the total capital?; CONCAC = Ownership concentration - % shareholding of the 4 largest shareholders; INST = Institutional Investors % shareholding of institutional investors in the company; ESTR = Foreign Investors - % pat. shareholding of foreign investors in the company; CVCT = Voting/total capital; AF2AT = Fixed assets (investment, fixed assets, intangibles)/total assets; DAT = Availability/total assets.

The constant values outside the parentheses represent the regression coefficients. Values within parentheses represent p-values.\*Significance at 10% level. \*\*Significance at 5% level. \*\*\*Significance at 1% level.

In the table above, the variable "controlling group own less than 50% of the voting shares" (GVADV) denotes the existence of a negative relationship with the variable LOSSTA and is significant at the level of 10%, thus demonstrating that the smaller the number of shares with voting rights that the controlling group owns, the greater the propensity to manage the results of an IFs. However, this result does not corroborate the research by Baldez (2015), who demonstrated from his study that a greater concentration of the controlling power of votes tends to higher levels of earnings management.

For the Ownership Concentration (CONCAC) variable, there was a negative and significant relationship at the 1% level with the LLPTA management proxy. The greater the ownership concentration within a financial entity, the lower the propensity to

manage earnings. This result corroborates the findings of Silva (2017), who showed that a high concentration of controlling shareholders' voting power negatively impacts managers' discretionary behavior.

The Institutional Investors (INST) variable showed a negative and significant relationship of 1% in the two earnings management measures. Therefore, the greater the participation of institutional investors, the smaller the earnings management within the entity. This finding indicates that the presence of institutional investors can be a good tool for reducing monitoring costs. Furthermore, this result corroborates Dechow et al. (1995) research, which showed that greater participation of institutional investors in the membership is related to a lower practice of earnings management in an entity.

The "Voting/Total Capital" (CVCT) variable showed a negative relationship with a significance of 10% with LLPTA earnings management proxy. Thus, the lower the percentage of voting capital, the greater the propensity to manage earnings. However, this finding does not corroborate Baldez's (2015) research, which showed that a greater concentration of voting capital tends to result in a more excellent manipulation of results.

The Fixed Assets (AF2AT) variable showed a negative relationship with a significance of 1% in both earnings management measures. Thus, the greater the representation of fixed assets in FIs, the smaller the earnings management tends to be. This finding partially corroborates the study by Thomas et al. (2004), which denote that results from disposals of fixed assets influence the earnings management of Japanese companies.

Finally, the Availability/Total Assets (DAT) variable shows a negative relationship in both models. However, with different significance: the LOSSTA management proxy it presented a significance of 5%, and with the LLPTA proxy, the significance was at the level of 10%. Therefore, the greater the representativeness of availabilities, the lower the propensity to manage earnings, that is, it is clear that the greater the resource applied in available, the lower the opportunity for administrators to manipulate

accounts in order to manage earnings. However, this finding does not corroborate the result shown in the study by Silva and Fonseca (2015), which did not show a significant relationship with earnings management practices in Brazilian companies.

Therefore, it appears that the analyzed attribute is influential in earnings management practices in financial institutions, thus corroborating the H5 of this study, which predicted that attributes related to ownership structure influence earnings management in financial entities. This result is because five measures are significant.

## 5 CONCLUSIONS

This research aimed to verify the existence of a relationship between the attributes of corporate governance and earnings management in entities belonging to the Brazilian financial sector. Several attributes from the literature on corporate governance were observed as significant with earnings management practices, thus denoting that the effort of governance devices has affected opportunistic management practices, but not always positively. At times it was observed that a governance attribute that should minimize the opportunistic practice of management ended up getting worse.

The research becomes relevant because financial institutions have a significant market share, and due to numerous scandals regarding the manipulation of accounting information, it is necessary to verify if the entities are prone to manage their results. As a result, the present work sought to verify this relationship in Brazilian financial institutions to contribute to studies in this area. The results pointed to several associations between the attributes of CG and the measures of EM. That is, attributes of corporate governance reduce/contribute to earnings management in the entities.

Therefore, the primary contribution of this research is to present a comprehensive overview of the various agency costs (corporate governance mechanisms) that may aid in mitigating agency conflicts and reducing information asymmetry within financial institutions. It is therefore understood that not all agency costs, whether in the form

of contracts, monitoring, compensation, or residual costs, possess the potential to align the interests of the principal and the agent. In fact, some of these costs may exacerbate the problems rather than minimize them.

By providing a broad picture of governance measures that influence opportunistic management practices in different ways, a significant contribution was made, especially to users of accounting information, who constantly use, in addition to information arising from accounting, information on the quality of governance for their decisions about a particular company. It also contributes to the managers of financial institutions, who can observe how implemented governance attributes to reduce or increase opportunities for handling accounting information, thus helping them to formulate better corporate governance policies.

The research limitations can be defined as (i) the absence of financial institutions because they are not listed in any B3 corporate governance segment and (ii) financial institutions that were included in B3's governance segments but without information on the B3 platforms. IF.Data and CVM. Thus, many companies could not be analyzed, thus limiting the result to only entities interested in providing information to users.

For future research, it is suggested that the governance attributes be analyzed individually in a more specific way, as well as other variables related to corporate governance, such as shareholdings by the body, international investors and characteristics of CEOs, and the use of a larger sample in international companies.

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Contribution	[Author 1]	[Author 2]	[Author 3]
1. Definition of research problem	√		
<ol><li>Development of hypotheses or research questions (empirical studies)</li></ol>	4		
<ol> <li>Development of theoretical propositions (theoretical work)</li> </ol>	4		
4. Theoretical foundation / Literature review	4	√	√
5. Definition of methodological procedures	√		
6. Data collection		√	√
7. Statistical analysis	√		
8. Analysis and interpretation of data	√		
9. Critical revision of the manuscript	√		
10. Manuscript writing	√	√	√

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