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Influence of operational levels of corporate governance on earnings management in companies listed on B3

Influencia de los niveles operativos de gobierno corporativo en la gestión de resultados en empresas que cotizan en B3

Influência dos níveis operacionais de governança corporativa no gerenciamento de resultado em empresas listadas na B3

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Abstract

Purpose: To analyze the influence of operational levels of corporate governance on earnings management in companies listed on B3.

Methodology: Descriptive research with a documentary procedure and a quantitative approach was adopted. The sample consisted of 207 companies listed on B3, which are classified in the operational levels of corporate governance. Data were collected through Economática® from 2013 to 2018 and, subsequently, the model developed by Kang and Sivaramakrishnan (1995) was used. To estimate the result management, the software SPSS, LhStat and Excel were used.

Results: The results show that in the result management aspect there is not a trend or an evolutionary line, that the segments which require higher corporate governance standards, companies have accounting choices to manage less results, or, that in the segments with lower corporate governance requirements, companies have accounting choices to manage more results. After all, the operational levels that have the best corporate governance concepts, do not negatively influence the practice of earnings management, as well as, the operational levels that do not have the best concepts, do not positively influence the earnings management practice.

Contributions of the Study: The study brought contributions to the corporate sphere, addressing the promotion of governance as a mechanism for transparency in companies accountability in the aspect of earnings management. This allows users to infer the quality of accounting information disclosed by B3. Likewise, contributions in the academic sphere when analyzing accounting choices directly from companies' accounting statements, bringing the theory discussed in the academy closer to the associations reality.

Keywords: Accounting Choices; Earnings Management; Corporate Governance, Operational Levels.

Resumen

Objetivo: Analice la influencia de los niveles operativos de gobierno corporativo en la gestión de ganancias en las empresas que figuran en B3.

Metodología: Se adoptó una investigación descriptiva con un procedimiento documental y un enfoque cuantitativo. La muestra estuvo formada por 207 empresas que cotizan en B3, las cuales están clasificadas en los niveles operativos de gobierno corporativo. Los datos se recolectaron a través de Economática® de 2013 a 2018 y, posteriormente, se utilizó el modelo desarrollado por Kang y Sivaramakrishnan (1995). Para estimar la gestión de resultados se utilizó el software SPSS, LhStat y Excel.

Resultados: Los resultados muestran que en el aspecto de la gestión de resultados no existe una tendencia ni una línea evolutiva, que los segmentos que requieren mayores estándares de gobierno corporativo, las empresas tienen opciones contables para gestionar menos resultados, o que, en los segmentos con menores requerimientos de gobierno corporativo, las empresas tienen opciones contables para gestionar más resultados. Después de todo, los niveles operativos que tienen los mejores conceptos de gobierno corporativo, no influyen negativamente en la práctica de la gestión de resultados, así como, los niveles operativos que no tienen los mejores conceptos, no influyen positivamente en la práctica de gestión de resultados.

Contribuciones del Estudio: El estudio aportó aportes al ámbito empresarial, al abordar la relevancia del gobierno corporativo como mecanismo de transparencia en la rendición de cuentas de las empresas en el aspecto de la gestión de resultados. Esto permite a los usuarios inferir la calidad de la información contable divulgada por B3. Asimismo, aportes en el ámbito académico al analizar las opciones contables directamente desde los estados financieros de las empresas, acercando la teoría discutida en la academia a la realidad de las organizaciones.

Palabras clave: Opciones contables; gestión de ingresos; gobierno corporativo; niveles operativos.

Resumo

Objetivo: Analisar a influência dos níveis operacionais de governança corporativa no gerenciamento de resultado em empresas listadas na B3.

Metodologia: Foi adotada uma pesquisa descritiva com procedimento documental e abordagem quantitativa. A amostra foi composta de 207 empresas listadas na B3 que estão classificadas nos níveis operacionais de governança corporativa. Os dados foram coletados através da Economática® no período de 2013 a 2018 e, posteriormente, foi empregado o modelo desenvolvido por Kang e Sivaramakrishnan (1995). Para estimar o gerenciamento de resultado foram utilizados os softwares SPSS, LhStat e Excel.

Resultados: Os resultados mostram que no aspecto de gerenciamento de resultado não há uma tendência ou uma linha evolutiva que os segmentos que exigem maiores padrões de governança corporativa, as empresas tenham escolhas contábeis de gerenciar menos resultado, ou, que nos segmentos com menores exigências de governança corporativa, as empresas tenham escolhas contábeis de gerenciar mais resultado. Afinal, os níveis operacionais que possuem os melhores conceitos de governança corporativa não influenciam negativamente na prática de gerenciamento de resultado, bem como, os níveis operacionais que não dispõem dos melhores conceitos, não influenciam positivamente na prática de gerenciamento de resultado.

Contribuições do estudo: O estudo trouxe contribuições para o âmbito corporativo, ao abordar a relevância da governança como mecanismo de transparência na prestação de contas das companhias no aspecto de gerenciamento de resultado. Isso possibilita aos usuários inferirem sobre a qualidade da informação contábil divulgada pela B3. Do mesmo modo, contribuições no âmbito acadêmico ao analisar as escolhas contábeis diretamente das demonstrações contábeis das empresas, ocasionando aproximação da teoria discutida na academia com a realidade das organizações.

Palavras Chaves: Escolhas Contábeis; Gerenciamento de Resultado; Governança Corporativa, Níveis operacionais.

1 Introduction

Accounting standards allow flexibility for the existence of accounting choices in companies, so that a reliable representation of the business economic and financial situation can be achieved through financial statements (Braganca & Melillo, 2017). This flexibility is indispensable, since the disclosure environment is dynamic and varies according to the development of markets, legal, tax and regulatory systems, which makes it impossible or prevents the existence of totally uniform accounting standards (Silva, Martins, & Lemes, 2016).

The flexibility in accounting standards allows managers to have distinct paths in their options. One of them occurs when the decision is made to ensure the interest of all parties and another when the manager has opportunistic behavior, leading him or her to think only of his or her well-being (Nardi & Nakao, 2009). These practices of self-interest result from discretionary adjustments, motivated by exogenous influences to the company that lead its executives to manage results in the direction they covet (Oliveira, Almeida, & lemes, 2009; Martinez, 2001).

In order to ensure transparency and increase reliability, corporate governance (CG) is a relevant tool in aligning the managers' interests regarding the stakeholders, in order to reduce the informational asymmetry between the agents (managers) and the main shareholders (Watts & Zimmerman, 1990). Therefore, B3 (Bolsa Brasil Balcão) created operational levels according to the CG practices adopted. According to Moura, Franz and Cunha (2015), the operational levels are listing segments assigned to the trading of shares issued by companies that voluntarily undertake to the adoption of additional CG practices concerning what is required by the legislation, expanding shareholders' rights and maximizing the quality of information. Thus, these listing segments help investors differentiate between companies that are aligned with more modern and transparent management practices (Leal, 2004).

Previous studies in the international and national literature explored and contributed around the theme of result management (RM) and CG. Issues on correlation between RM and operational levels of CG (Santos, Verhagem and Bezerra, 2011; Erfurth and Bezerra, 2013; Edwards, Soares and Lima, 2013), on the influence of CG on RM structure (Mazzioni, Prigol, Moura and Klann, 2015; Kawai, 2017; Goulart, 2007; Martinez, 2001), repercussions resulting from the adoptions of international accounting standards (Cardoso, Souza and Dantas, 2015; Coelho, Niyama and Rodrigues, 2011; Silva, Ylunga and Fonseca, 2015; Baldissera, Gomes, Zanchet and First, 2018) and good CG practices (Shan, 2015; Hazarik, Karpoff and Nahata, 2012). Despite the advances already achieved with these studies, it is possible to perceive the lack of research that would affect the operational levels of CG in RM in a temporal series in recent periods.

More specifically, the studies by Erfurth and Bezerra (2013) and Kawai (2017) concluded that it was not possible to confirm that a higher CG level necessarily means a lower degree of RM. These studies, however, obtained limited results due to sample types and scope of operational levels. The study by Edwards et al. (2013), on the other hand, concluded that CG mechanisms behave as RM inhibitors, but the range was limited by involving a short time series and a small sample. Considering these results, theneed to investigate the practices of RM in the various operational levels of CG in periods after the researched and with a superior sample of previous studies is realized.

This study was guided by the following research question: **What is the influence of the operational levels of corporate governance on result management in companies listed in B3?** As a way to answer this question, the objective of the study is to analyze the influence of the operational levels of corporate governance on the results management in companies listed in B3.

The study brings contributions to the corporate scope, discussing the relevance of CG as a transparency mechanism in the companies accountability and in the RM aspect. **Likewise, contributions in the academic sphere when analyzing accounting choices directly from companies' accounting accounts allows to bring the theory discussed in the academy closer to the associations reality.** Also, when studying periods after those already researched and covering a relevant sample of companies listed in B3, this study is justified by advancing the search for greater clarity on the influence of CG in RM, considering the various operational levels.

2 Theoretical reference

2.1 Theory of accounting choices and result management

Although the corporate legislation establishes rules for the elaboration and dissemination of economic and financial information, it allows certain flexibility for managers to opt for alternative accounting procedures (Cosenza & Grateron, 2003). Sharing this same point of view, Cabello (2001) mentions that flexibility in accounting standards exists because there is no accounting standard that can offer a disclosure language that meets the needs of all companies in all markets. Due to this reality of malleability in the accounting process, the theory of accounting choices seeks to understand the reasons that lead managers to make certain options (Silva, Martins, & Lemes, 2014).

Fields, Lys and Vicent (2001) define an accounting choice as any decision whose purpose is to influence the accounting result, including not only the published financial statements in accordance with generally accepted accounting principles, but also tax statements and regulatory documents. In addition, Francis (2001) reports that accounting choices can cover decisions of managers, auditors, audit committee members and regulatory bodies and may be different from enterprise to enterprise.

Murcia and Wuergues (2011) explain that accounting choices occur in the three stages of the accounting process: a) recognition – choice of whether or not to recognize a particular economic event; b) measurement – choice of which evaluation method to use; c) disclosure – choice on whether or not to highlight certain information of a voluntary nature. The determining factors of accounting choices are essentially based on three conceptual sets: the set provided by the Agency Theory, the set of concepts provided by the so-called Positive Theory of Accounting and the broader set, supplied by the Institutional Theory (Silva et al., 2016).

In this process of choice, managers can use the judgment in financial reports and transaction structure to change the data reporting, with the aim of misleading business stakeholders or managing contract results that depend on numbers processed by accounting (Edwards at al., 2013).

Cardoso and Martinez (2006) define RM as the use of managerial discretion in the realization of accounting choices (recognition and measurement), in the making of operational decisions and in the selection of criteria for presentation of the income statement (*disclosure*). According to Martinez (2013), the companies are not willing to disclose accounting information that would otherwise contradict their interests.

The research by Healy and Wahlen (1999) summarizes the emergence of this practice from three sets of motivations: i) Motivations involving the capital market: the use of accounting data by users such as investors and financial analysts when it comes to valuing the stock price, which may give incentives to managers to maneuver profits in an attempt to manage the assets price performance in the short term; ii) Contractual motivations: accounting information is used to monitor contractual arrangements between the company and the interested parties, that use accounting information in an opportunistic manner to build an opinion on the company's conditions and make decisions; and (iii) Regulatory motivations: advantages associated to profit manipulation of companies operating in markets monitored by regulatory agencies. According to Jensen and Meckling (1976) the RM practice is an opportunistic conduct, which can be qualified as an agency problem and which arises from the confrontation of divergent interests of managers, controlling shareholders, minority shareholders and creditors among others.

2.2 Corporate governance and discretionary *accruals*

In an attempt to resolve conflicts between *stakeholders' interests* and maintain transparency and equity in the accountability of companies, CG uses the main accounting concepts (Erfurth & Bezerra, 2013). According to the researchers, with CG practices, companies become more reliable in disseminating information to all their internal and external users. Hence, the agents will account for all the acts practiced and will be responsible for the sustainability or perpetuity of the company (Edwards et al., 2013).

Although there is no consensus on a definition of CG, it can be understood, according to Martinez (2008), as an aggregation of incentive and control mechanisms that can minimize conflicts of interest between agents (managers) and main shareholders. Shleifer and Vishny (1997) explain CG as a set of mechanisms by which resource providers ensure that they will obtain return to their investments by minimizing the costs of the agency problem.

B3 contributed to the CG applicability in the capital market in Brazil by creating classifications for the companies listed according to the CG practices adopted (Erfurth & Bezerra, 2013). According to IBCG, these classifications created by B3 are operational levels with distinct CG requirements and their adherence is voluntary by the company. Thus, the Investor's Compass (2019) describes each of them and points out their characteristics.

Novo Mercado: This segment was created in 2000 and requires the highest levels of corporate CG. Since the creation of this segment, it has become a reference in transparency and respect for shareholders. Among the main rules of this segment are companies that can only issue common shares – on (with voting power) and, also, in the case of sale of control, all minority shareholders have the right to sell their shares for the price offered (Bússola do Investidor, 2019).

Level 1: This segment has some additional requirements to those recommended by the law and guarantees a minimum of 25% of the shares in circulation in the market. This is the first step to be taken by companies that intend to adopt CG standards beyond what is required by law (Bússola do Investidor, 2019).

Level 2: The CG standard is similar to Novo Mercado, the main difference is that the company can offer preferred shares (PN). Companies listed in this segment usually seek an evolution to other levels, which is not always so easy due to the company's equity composition (Bússola do Investidor, 2019).

Bovespa Mais: This level is quite different from the others, it was developed to serve small and medium-sized enterprises that wish to enter the market gradually (Bússola do Investidor, 2019).

Cia. Bovespa Mais Level 2: At this level the companies listed have the right to maintain preferred shares (PS). In the case of company sale control, holders of common and preferred shares are assured the same treatment granted to the controlling shareholder, which provides for the *tag along* control of 100% of the price paid for the common shares of the controlling shareholder (Bússola do Investidor, 2019).

Cia. Balcão Org. Tradicional: This CG level requires a minimum of 3 members (according to legislation) in the board of Directors and its share capital may be composed of common and preferred shares (Bússola do Investidor, 2019).

One of the most relevant elements of accounting for the various users of financial information is the result (profit/loss) (Martinez, 2008). It happens that part of this result may be due to discretionary accounting adjustments, without any connection to the business reality (Kawai, 2017). According to the researcher, the managers evaluate the results of the operations carried out during the financial year and define the amount to be released as management by *the accruals*. These operational decisions constitute a type of RM, conducted mainly between the closure of the financial year and the publication of the financial statements (Rezende & Nakao, 2012).

Erfurth and Bezerra (2013) define as *accruals* the difference between net profit and net operating cash flow. Whereas Coelho and Lima (2009) explain argue *accrual* as a discernment between cash receipt, cash right, cash disbursement and the legal obligation to pay. In the same direction, Goulart (2007, p.42) "*accruals* refer to revenue and expenses recognized on the basis of the regime of competence and not as a result of the effective receipt of cash income or the actual payment of expenditure".

Discretionary *accruals* are a *proxy* of RM in the accounting process, which are either positive or negative, distinguishing in this order, how the company is managing its results to improve or worsen them (Cupertino & Martinez, 2008). Moreira (2006, p. 6) explains that "the registration of *accruals* in accounting aims to measure the result in the economic sense of representing the effective increase in the wealth of the economic unit, regardless of the financial movement".

2.3 Previous studies

For the formulation of the study hypotheses, the questions of previous studies on the themes discussed in the present study were analyzed and, with this, the research gap was observed in the concatenation of the CG and RM themes, specifically regarding the operational levels.

Thus, among the themes, findings were noticed regarding the prerogatives of the RM practice, since Martinez (2001) verified about the Brazilian open companies that manage their results as a response to the capital market stimuli, because with this practice, they manage in the short term to seduce investors. In the same sense, Goulart (2007) investigated that

Brazilian financial institutions manage results in the accounting process of credit operations for the purpose of positive adjustments in the market value.

Due to the fact that the companies use RM practice in order to achieve their own well-being and self-interest and, knowing, according to the literature that the CG operates as a tool that aims to maintain transparency and equity in the accountability of the companies, previous studies have investigated its effectiveness. Hazarik, Karpoffe and Nahata (2012) noted that in US companies CG is effective in disciplinary action against RM problems before they become serious enough to attract the public attention. Mazzioni et al. (2015) showed that CG reduced RM in companies listed in B3 in the period of 2010.

Therefore, when dealing specifically with the operational levels of CG, there are divergences about its effectiveness. Erfurth and Bezerra (2013) did not conclude that a higher CG level necessarily means a lower degree of RM in companies belonging to the following levels: Level 1, level 2 and Novo Mercado in the period from 2000 to 2007. Whereas Edwards et al. (2013) observed the association between CG and RM in Brazilian companies with open capital, since the intensity of RM is lower in companies with operational levels with a more marked presence of CG attributes.

Thus, motivated by the lack of research that would affect the influence of the operational levels of CG in the RM, the following research hypotheses are investigated:

H1 - Companies with a higher level of corporate governance have lower result management.

H2 - The level of corporate governance has a greater negative influence on the level of result management.

3 Methodology

As a design, following the classification by Raupp and Beuren (2006), this study is characterized as a descriptive research regarding the objective, documental regarding the procedures and quantitative regarding the approach to the problem. Regarding data, they are considered to be of a secondary nature, since they were collected from Economática® database. Concerning analysis, SPSS, LHStat and Excel software were used. The study population comprises companies categorized and named by B3 at operational levels: Novo Mercado, Level 1, Level 2, Bovespa Mais, Cia. Bovespa Mais Level 2 and Cia. Balcão Org. Tradicional. The sample was selected from the group of 544 companies participating in the CG levels that they published on the B3 website from 2013 to 2018. It was opted for those that have OS shares in their class. As a result, 226 companies were excluded from the financial sector and 111 companies that did not belong to any CG level. Thus, the sample totaled a number of 207 companies and 1,035 observations.

For the purpose of operationalization, the CG levels were named with the following codes: 1-(Cia. Balcão Org. Tradicional), 2-(Cia. Bovespa Mais Level 2), 3-(Bovespa Mais), 4-(Level 2), 5-(Level 1), 6-(Novo Mercado). To obtain the RM level, the model proposed by Kang and Sivaramakrishnan (KS) (1995) was assumed. KS model is one of the most robust models, both in the accounting sense of describing more efficiently the process of defining accumulations and in the aspect related to statistical accuracy (Martinez, 2008).

In equation 1, the model is shown:

$$\frac{AB_{it}}{At_{it-1}} = \beta_0 + \beta_1\left(\frac{\delta_1 Rec_{it}}{At_{it-1}}\right) + \beta_2\left(\frac{\delta_2 D_{it}}{At_{it-1}}\right) + \beta_3\left(\frac{\delta_3 PPE_{it}}{At_{it-1}}\right) + \varepsilon_{it} \qquad (1)$$

Figure 1 discriminates the items of equation 1.

Variable	Concept
AB_{it}	Company i's accruals balance in t period, weighted by total assets at the end of the t-1 period.
AB_{it}	CR + INV + OCA − CL – Deprec.
CR	Accounts receivable of company I in period t.
INV	Stock of company I in period t.
OCA	Other current assets excluding cash, receivables and stocks in the t.. Period
$Deprec$	Depreciation of company I in period t.
At_{it}	Total assets of company I in period t.
Rec_{it}	Net revenues of company I in period t.
D_{it}	Operational Expenditures of company I in period t.
PPE_{it}	Fixed Assets of company I in period t.
δ_1	Refers to quotient of $\frac{CR_{i,t}}{Rec_{it-1}}$ and.
δ_2	Refers to quotient of $\frac{INV_{i,t-1}+OCA_{i,t-1}+CL_{i,t-1}}{D_{i,t-1}}$ and.
δ_3	Refers to quotient of $\frac{Depr_{i,t-1}}{PPE_{i,t-1}}$
$\beta_0,\beta_1,\beta_2,\beta_3$	Linear and angular coefficients.
ε_{it}	Accounts receivable of company I in period t.

Figure 1 *KS model variables*
Source: *Adapted from Kang and Sivaramakrishnan (1995).*

For CG purposes, the level available on the B3 website was chosen. Simple linear regression with panel data was used in relation to the procedure, as described in equation 02.

RMit=$\beta_0 + \beta_1 NGit + \varepsilon$ (2)

RM – Result management provided by the KS model;

NG – Level of corporate governance provided by B3.

4 Analysis and discussion of results

4.1 Descriptive analysis of results

For the purpose of the robustness analysis procedure, it was decided to make the mean calculation of RM that was divided by the total number of companies. For the means calculation, the number of companies at each level was considered.

Table 1 shows the mean in each RM level, and the calculation that it considered with and without equivalence was evidenced. To verify the significance of the mean between the groups, corroborating with the data robustness tests, ANOVA test was performed. The results point to statistical significance at a level of 1%. That is, there is a difference in mean between the groups and it is significant.

Table 1
Descriptive analysis of results

CG levels	N.	Mean RM eq	RM level	Mean RM without eq.	RM level
1	110	0.002491965	1	0.515836819	1
3	80	0.001030625	2	0.213339301	2
6	665	0.000823365	3	0.170436639	3
4	100	0.000660669	4	0.136758528	4
2	10	0.000538572	5	0.111484304	5
5	70	0.000534368	6	0.110614138	6

ANOVA between SIG groups *0.000.
Source: *Research data (2019).*

The results show that the highest rates of RM are concentrated in companies located at level 1-(Cia. Balcão Org. Tradicional). In the sequence, the second largest RM index is presented in companies at level 3-(Bovespa Mais). The results also show that level 6-(Novo Mercado) has the third highest RM index and that level 4-(level 2) is the fourth highest index. On the other hand, the second lowest RM index is found in companies at level 2-(Cia. Bovespa Mais Level 2) and, finally, the lowest RM index is at level 5-(Level 1).

Thus, it is possible to infer that the Novo Mercado segment, which requires one of the highest CG standards, did not obtain the lowest RM index. Likewise, the segment Cia. Bovespa Mais level 2, which does not have a high CG level requirement compared to the others, was the least managed result.

However, it is possible to observe that some segments had behaviors consistent with their enunciations, as is the case with the Cia Balcão Org. segment. Trad. This segment has the lowest CG level requirements and has proved to be a segment that has managed result the most. In the same sense of behavior, the level 1 segment, which requires one of the highest CG standards, was the one that least managed results.

From these results it is possible to realize that in some CG levels that are considered stronger, the RM is higher. Similarly, some CG levels that are considered weaker, the RM is lower. These results indicate the rejection of Hypothesis 1, which stated that companies with higher CG levels RM is lower.

These results differ from those found in the study by Edwards et al. (2013) which analyzed 108 companies in the period from 2008 to 2009. In this study, the conclusions indicated that the intensity of RM is lower in companies that present a more marked presence of CG attributes. It must be considered, however, that the study by Edwards et al. (2013) studied a sample and a temporal series smaller than the present study. Therefore, comparisons of the results should be made with carefully.

On the other hand, the results obtained in this study strongly coincide with those observed in the study by Erfurth and Bezerra (2013), which considered 163 companies belonging to the levels: Level 1, Level 2 and Novo Mercado, in the period from 2000 to 2007, and in the study by Kawai (2017), which observed 169 companies in the period from 2009 to 2019. Both studies noticed that a higher CG level does not necessarily mean a lower degree of RM.

4.2 Analysis of the regression model adopted in the research

In the procedure of regression analysis by CG level, level 1 served as a reference and complement to the other levels, as a result of its omission. However, in addition to the above tests, regression analysis was performed with panel data.

Table 2

Robust Regression Fixed Effects by level of Corporate Governance

Prob>F	**R²**	**DW**		**Test BP/CW**	**White Test**				**Nº NOTE**
0.0067	0.0155	1.946		0.0000	6.6e-05				1035

Dependent Variable	**Coefficient**	**Standard Error**	***T***	**P-Value**	**Confidence Interval 95%**	
n_gov 1	-------	-------	-----	--------	--------	------
n_gov2	.113318	.18021	0.63	**0,530**	-.2403031	.4669392
n_gov3	.2354726	.0801715	2.94	0.003***	.0781543	.392791
n_gov4	.2251798	.0753873	2.99	0.003***	.0772495	.3731101
n_gov5	.2033518	.083421	2.44	0.015**	.0396571	.3670466
n_gov6	.2174787	.0561602	3.87	0.000***	.1072771	.3276802
CONS	-.1945381	.0520222	-3.74	0,000	-.2966197	-.0924564

***Significance at the level of up to 1; ** Significance at the level of up to 5; *Significance at the level of up to 10

Legend: Prob>F: Significance of the Model; R2: Explanatory power of the model; DW: *Durbin-Watson* - self correlation; BP/CW Test: *Breuch-Pagan/Cook-Weisberg* - residualsheteroscedasticity test; White Test: Residuals heteroscedasticity test.

Source: *Research data (2019).*

It is observed that the modeling used to verify the existence of the influence of CG levels in RM (equation 02) is consistent, since the model composed by 1,035 observations is significant at the level of 1%. In this study, not necessarily the RM determinants were investigated, but the isolated influence of governance levels in RM. Therefore, R^2 presented explanatory power of 1%, which is justified to consider only one explanatory variable in statistical modeling.

The model adopted does not present problems of self-correlation, since *Durbin-Watson (*1.946) in addition to not showing multicollinearity problems, there is only one returned variable divided into different CG levels. The *Breusch-Pagan/Cook-Weisberg test*(0.0000*)* and *the White test* (6.6e-05) indicate that the sample has heteroscedasticity residuals problems. To equalize the residuals homogeneity, White's robust correction was performed.

After analysis of the regression assumptions, the influence of the different CG levels in the RM was verified, considering that the N_GOV 1 was a reference point to the others in the regression model.

It is observed that in level 2-(Cia. Bovespa Mais Level 2) there is a positive influence on RM. However, there was no statistical significance, since its P-value presented a value of 0.530. Whereas at level 3-(Bovespa Mais) , a positive influence was observed on RM and its P-value presented a value of 0.003, which corresponds to a significance of up to 1%. The same occurred at level 4-(Level 2) , a positive influence was observed on RM and its P-value presented a value of 0.003, which corresponds to a significance of up to 1%. Whereas at level 5-(Level 1) , a positive influence was observed on RM and its P-value presented a value of 0.015, which corresponds to a significance of up to 5%. Level 6-(Novo Mercado) has a positive influence on RM and its P-value presented a value of 0.000, which corresponds to a significance of up to 1%.

It is observed that the operational levels that require the highest CG standards do not negatively influence the RM practice. In the operational levels that demand lower CG standards, they do not influence the RM positively either. Therefore, with these results, hypothesis 2 was rejected, which proposed that the CG level should have a greater negative influence on the RM level.

5 Conclusion

The objective of this study was to analyze the influence of the operational levels of CG in RM in companies listed in B3. Descriptive research with a documentary procedure and a quantitative approach was adopted. In order to achieve the objective, 207 companies classified at CG operating levels were explored in the period from 2013 to 2018.

The results presented allow to infer by the absence of a trend or an evolutionary line that shows an inversely proportional relationship among operational levels with higher requirements of CG and lower RM standards by companies through accounting choices. Or even, that operational levels with lower CG standards requirements lead companies to manage results more through accounting choices. Thus, the two research hypotheses were rejected, where the first indicated that companies with a higher level of corporate governance have lower result management and, the second indicated that the level of corporate governance had a greater negative influence on the level of result management.

The conclusions of this study contradict the study of Edwards et al. (2013) who, although adopted a different methodology, observed that companies classified at operational levels that require better CG attributes, presented lower RM practices. On the other hand, the conclusions presented here, although obtained from the observation of a larger number of companies and distinct periods, are similar to those of Erfurth and Bezerra (2013) and Kawai (2017), whose results indicated that a higher CG level does not necessarily mean a lower degree of RM.

Taking into account the methodology used in this research, it is concluded that CG, understood as a mechanism that aims to minimize agency costs arising from conflicts of interest among stakeholders and to maintain transparency and equity in the accountability of companies, does not inhibit the managers' behavior in the practice of accounting choices in order to influence the results processed by accounting.

The study brought contributions to the corporate scope by considering the relevance of governance as a mechanism of transparency in the accountability of companies regarding the RM, allowing stakeholders to infer on the quality of accounting information disclosed by B3. Such contributions in the academic sphere when analyzing accounting choices directly from companies' accounting statements allows to bring the theory discussed in the academy closer to the associations reality.

The study has limitations regarding the temporal cut-off that was from 2013 to 2018, since, with the adoption of IFRS in a mandatory manner, the RM may have been higher by the companies. With this, it is suggested as future research, studies that address periods before, during and after the IFRS.

References

Almeida-Santos, P. S., Verhagem, J. A., & Bezerra, F. A. (2011). Gerenciamento de resultados por meio de decisões operacionais e a governança corporativa: análise das indústrias siderúrgicas e metalúrgicas brasileiras. *Revista de Contabilidade e Organizações, 5(13).*

Baldissera, J. F., Gomes, A. R. V., Zanchet, A., &Fiirst, C. (2018). Gerenciamento de resultados em companhias do setor de construção civil: influência da adoção do CPC 17. *Revista Universo Contábil, 14(2), 100.*
DOI: https:10.4270/ruc.2018213

Barros, C. M., Soares, R. O., & de Lima, G. A. F. (2013). A relação entre governança corporativa e gerenciamento de resultados em empresas brasileiras. *Revista de Contabilidade e Organizações*, *7*(19), 27-39.
DOI: http://dx.doi.org/10.11606/rco.v7i19.55509

Bragança, C. G., & Melillo, P. H. (2017). Escolhas contábeis e gerenciamento de resultados: um estudo de caso sobre o reconhecimento de subvenções governamentais em um hospital filantrópico. *In Anais do Congresso Brasileiro de Custos-ABC.*

Bussola do Investidor (2019). Níveis de governançacorporativana B3. Acessoem:06 de agosto de 2019. Disponívelem:https://www.bussoladoinvestidor.com.br/niveis-governanca-corporativa-bovespa/

Cabello, O. G. (2012). *Análise dos efeitos das práticas de tributação do lucro na EffectiveTax Rate (ETR) das companhias abertas brasileiras: uma abordagem da Teoria das escolhas Contábeis* (Doctoraldissertation, Universidade de São Paulo).

Cardoso, R. L., & Martinez, A. L. (2006). Gerenciamento de resultados contábeis no Brasil mediante decisões operacionais. *Encontro Nacional dos Programas de Pós-Graduação em Administração, XXX.*

Cardoso, R. L., de Souza, F. S. R. N., & Dantas, M. M. (2015). Impactos da Adoção do IFRS na Acumulação Discricionária e na Pesquisa em Gerenciamento de Resultados no Brasil. *Revista Universo Contábil, 11(2), 65-84.*
DOI: https:10.4270/ruc.2015212

Coelho, A. C., & Siqueira Lima, I. (2009). Gerenciamento de resultados contábeis no Brasil: comparação entre companhias de capital fechado e de capital aberto. *Revista de Administração-RAUSP, 44(3).*

Coelho, C. M. P., Niyama, J. K., & Rodrigues, J. M. (2011). Análise da qualidade da informação contábil frente a implementação dos IFRS: uma pesquisa baseada nos periódicos internacionais (1999 a 2010). *Sociedade, Contabilidade e Gestão, 6(2).*

Cosenza, J. P., &Grateron, I. R. G. (2003). A auditoria da contabilidade criativa. *Revista Brasileira de Contabilidade, (143), 42-61.*

Cupertino, C. M., & Martinez, A. L. (2008). Qualidade da auditoria e earnings management: riskassessment através do nível dos Accruals Discricionários. *Contabilidade Vista & Revista, 19(3), 69-93.*

Da Silva, C. O. S. T. A., Ylunga, P., & Da Fonseca, M. (2015). Gerenciamento de resultados: estudo empírico em empresas brasileiras e portuguesas antes e após a adoção das IFRS. *Base, 12(3).*
DOI: https:10.4013/base.2015.123.03

Da Silva, D. M., Martins, V. A., & Lemes, S. (2014). Escolhas contábeis: reflexões para a pesquisa no Brasil. *In Anais do Congresso Brasileiro de Custos-ABC.*

Da Silva, D. M., Martins, V. A., & Lemes, S. (2016). Escolhas Contábeis: reflexões para a pesquisa. *Revista Contemporânea de Contabilidade, 13(29), 129-156.*

Dani, A. C., Panucci Filho, L., dos Santos, C. A., &Klann, R. C. (2017). Utilização de Provisões para a Prática de Gerenciamento de Resultados em Empresas Brasileiras. *Revista Evidenciação Contábil & Finanças, 5(3), 37-56.*
DOI:http://dx.doi.org/10.18405/recfin20170303

Edwards, S. M., Soares, R. O., & de Lima, G. S. (2013). A relação entre governança corporativa e gerenciamento de resultados em empresas brasileiras. *Revista de Contabilidade e Organizações, 7(19), 27-39.*
DOI: http://dx.doi.org/10.11606/rco.v7i19.55509

Erfurth, A. E., &Bezerra, F. A. (2013). Gerenciamento de resultados nos diferentes níveis de governança corporativa. *Revista Base (Administração e Contabilidade) da UNISINOS, 10(1).*

Francis, J. (2001). Discussion of empirical research on accounting choice. *Journal of Accounting and Economics, 31(1-3), 309-319.*
DOI: https://doi.org/10.1016/S0165-4101(01)00017-9

Goulart, A. M. C. (2007). *Gerenciamento de resultados contábeis em instituições financeiras no Brasil. Tese de doutorado*. Departamento de Contabilidade e Atuária da Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo.SP. Brasil.

Hazarika, S., Karpoff, J. M., &Nahata, R. (2012). Internal corporate governance, CEO turnover, and earnings management. *Journal of Financial Economics, 104(1), 44-69.*

Healy, P. M., &Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons, 13(4), 365-383.*

Jensen, M. C., &Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure*. Journal of financial economics, 3(4), 305-360.*

Kang, S. H., &Sivaramakrishnan, K. (1995). Issues in testing earnings management and an instrumental variable approach. *JournalofAccountingResearch, 353-367.*

Kawai, R. (2017). *Influência da governança corporativa na prática de gerenciamento de resultados.*Dissertação de mestrado. Programa de Pós-Graduação em Administração da Universidade Metodista de São Paulo. SP. Brasil.

Leal, R. P. C. (2004). Governance practices and corporate value: a recent literature survey. *Revista de Administração de Empresas da USP–RAUSP, 39(4), 327-337.*

Martinez, A. L. (2001). *Gerenciamento dos resultados contábeis: estudo empírico das companhias abertas brasileiras* (Doctoraldissertation, Universidade de São Paulo).

Martinez, A. L. (2008). Detectando earnings management no Brasil: estimando os accruals discricionários. *Revista Contabilidade & Finanças, 19(46), 7-17.*

Martinez, A. L. (2013). Gerenciamento de resultados no Brasil: um survey da literatura. BBR-*Brazilian Business Review, 10(4), 1-31.*

Mazzioni, S., Prigol, V., de Moura, G. D., &Klann, R. C. (2015). Influência da governança corporativa e da estrutura de capital no gerenciamento de resultados. *Revista Contemporânea de Contabilidade, 12(27), 61-86.*
DOI: http://dx.org/10.5007/2175-8069.2015v12n27p61

Moreira, J. (2006). Accruals discricionários: O erro de estimação induzido pelo conservantismo. *Centro de Estudos de Economia Industrial, do Trabalho e da Empresa (CETE).*

Moura, G. D., Franz, L., & da Cunha, P. R. (2015). Qualidade da informação contábil em empresas familiares: influência dos níveis diferenciados de governança da BM&FBovespa, tamanho e independência do conselho de administração. *Contaduría y Administración, 60(2), 423-446.*
DOI: https://doi.org/10.1016/S0186-1042(15)30008-5.

Murcia, F. D. R., & Wuerges, A. (2011). Escolhas contábeis no mercado brasileiro: divulgação voluntária de informações versus gerenciamento de resultados. *Revista Universo Contábil, 7(2), 28-44.*
DOI: http:doi:10.4270/ruc.2011211
Nardi, P. C. C., &Nakao, S. H. (2009). Gerenciamento de resultados e a relação com o custo da dívida das empresas brasileiras abertas. *Revista Contabilidade & Finanças, 20(51), 77-100.*
DOI: https://doi.org/10.1590/S1519-70772009000300006

Oliveira, V. A., de Almeida, L. C. F., & Lemes, S. (2009). Gerenciamento de resultados contábeis por meio de ativos fiscais diferidos. *Revista Contabilidade, Gestão e Governança, 11(1-2).*

Raupp, F. M., &Beuren, I. M. (2006). *Metodologia da Pesquisa Aplicável às Ciências. Como elaborar trabalhos monográficos em contabilidade: teoria e prática*. São Paulo: Atlas, 76-97.

Rezende, G. P., &Nakao, S. H. (2012). Gerenciamento de resultados e a relação com o lucro tributável das empresas brasileiras de capital aberto. *Revista Universo Contábil, 8(1), 06-21*.
DOI: https://doi.org/10.4270/ruc.2012101

Santos, P. S. A. D., Verhagem, J. A., & Bezerra, F. A. (2011). Gerenciamento de resultados por meio de decisões operacionais e a governança corporativa: análise das indústrias Siderúrgicas e Metalúrgicas brasileiras. *Revista de Contabilidade e Organizações*, 5(13), 55-74.

Shan, Y. G. (2015). Value relevance, earnings management and corporate governance in China*. Emerging Markets Review, 23, 186-207.*
DOI: https://doi.org/10.1016/j.ememar.2015.04.009

Shleifer, A., &Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance, 52(2), 737-783.*

Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: a ten year perspective. *Accounting Review, 131-156.*