

# The effect of corporate reputation, based on accounting transparency, on earnings management in public companies on B3

## Abstract

**Objective:** According to the Signaling theory, reputation derives from the issuing of signals that reduce the information asymmetry and the opportunistic management actions. In that sense, this study aims to investigate the relation between corporate reputation, based on transparency, and earnings management in public companies listed on B3 (Brasil, Bolsa, Balcão).

**Method:** The sample consists of 231 companies (1,355 observations) from the group of all non-financial companies listed on B3 between 2010 and 2017. Earnings management is measured by Jones (1991) and modified by Dechow, Ge and Schrand (1995), Larcker and Richardson (2004) and Kothari, Leone and Wasley (2005). Corporate reputation (REP) is a binary variable, based on the Transparency Trophy.

**Results:** Based on accounting transparency, a negative relationship exists between corporate reputation and discretionary accruals, mitigating opportunistic and aggressive earnings management attitudes, enhancing the quality of the financial information, so that the study hypothesis is not rejected. Therefore, a good reputation represents a signal for the shareholders, creditors and other stakeholders with regard to the financial information quality, consequently granting the companies a competitive advantage, and signaling that companies renowned for their accounting transparency are a good investment.

**Contributions:** The corporate reputation generates a competitive advantage and superior performance. Hence, the companies would tend not to use opportunistic and aggressive practices like earnings management. The study signals that the companies should focus on the quality of their financial reports to achieve a corporate reputation and, thus, maintain a competitive advantage and superior performance.

**Keywords:** Earnings management, discretionary accruals, corporate reputation, signaling theory.

## Practical implications

The corporate reputation generates a competitive advantage and superior performance. Thus, companies would tend not to use opportunistic and aggressive practices like earnings management. The study signals that the companies should focus on the quality of their financial reports to achieve a corporate reputation and, thus, maintain a competitive advantage and superior performance.

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## 1. Introduction

In order to gain competitiveness and remain sustainable, companies resort to different attitudes, called signals, which differentiate them from others. Spence (1973) states that signals function as discretionary mechanisms, in an environment of informational asymmetry, capable of changing beliefs and transmitting information to other individuals.

These signals are intended to reach the various stakeholders, because they are the ones who will attribute, through direct and/or indirect experiences, different characteristics to the companies, distinguishing them from one another. Thus, over time, companies start to obtain a certain prestige, which is granted to them by the stakeholders, constituting their corporate reputation.

Corporate reputation consists of the set of organizational attributes developed over time, influencing how stakeholders perceive the company with good corporate behavior (Roberts & Dowling, 2002). Based on the Signaling theory, corporate reputation is a non-measurable intangible asset, which the stakeholders perceive through the different signals that firms emit (Spence, 1973; Bergh, Ketchen, Boyd & Bergh, 2010; Walker, 2010).

In addition, reputed companies would perform better and persistently because of their competitive advantage (Roberts & Dowling, 2002; Bergh et al., 2010). Thus, companies with a better reputation would tend not to engage in opportunistic earnings management practices to improve business performance, as these companies already derive economic benefits from the competitive advantage of reputation.

Earnings management occurs when managers “use judgment in financial reporting and structuring transactions to change financial reporting to mislead some stakeholder on the underlying economic performance of the company, or to influence contractual outcomes that depend on the reported financial figures” (Healy & Wahlen, 1999, p.368).

Among the many signals that constitute the reputation, transparency is one of the most relevant. Thus, companies recognized for greater transparency of their accounting practices make less use of earnings management, as they do not want to lose the competitive advantage gained through reputation, and as they are exposed in the media, tending to be careful with their practices (Agarwal, Taffler & Brown, 2011; Cao, Myers & Omer, 2012; Dyck, Volchkova & Zingales, 2008; Garrett, Hoitash & Prawitt, 2014; Luchs, Stuebs & Sun, 2009).

Departing from the literature review (Roberts & Dowling, 2002; Agarwal et al., 2011; Cao et al., 2012; Garrett et al., 2014; Luchs et al., 2009), this study aims to investigate the relationship between corporate reputation and earnings management in companies listed on B3 - Brazil, Bolsa, Balcão.

According to Davies, Chun, Silva, and Roper (2003), there are several ways of measuring corporate reputation, such as The Most Admired Companies, the Best Companies to Work, the Best and Largest. In order to observe the reputation effect obtained through accounting transparency, this study analyzes the companies indicated in the Transparency Trophy of Anefac, Fipecafi and the Serasa Experian Initiative.

As for the award being a proxy of reputation, Henrique Haddad, the director of management, finance and investor relations at Duratex, argues: “without a doubt, the transparency of financial statements increases the knowledge about the company, transmitting credibility to both investors and to other stakeholders and generating a positive environment for our company” (Revista Anefac, 2018). Therefore, the participants in the award consider that it grants prestige and reputation to the companies.

This is because the few studies that have analyzed the effect of corporate reputation on earnings management (Cao et al., 2012; Garret et al., 2014, Luchs, Stuebs & Sun, 2009; Wu, Gao, & Li, 2016) mostly use rankings with different foci and directly or indirectly adopt past business performance as one of the factors as, in many rankings, analysts answer the questions for the creation of the ranking. Therefore, using a ranking that disregards business performance factors and is concerned about the transparency of financial statements is most relevant academically and professionally, because it does not address the problem of the effect of past business performance on reputation and analyze reports that various stakeholders, specifically shareholders and creditors, use to make investments.

Therefore, this study differs from the others by using a new approach to corporate reputation aligned with Accounting. And it is justified by addressing a topic of great relevance for companies, considering that it is through a good corporate reputation that they are able to stand out in the market, get new customers, suppliers and investors. That is, this set of interactions helps the company to gain competitive advantages over its competitors, thus reducing opportunistic actions by management.

## 2. Literature Review

Yoon, Guffey, and Kijewski (1993) argue that the use of reputation only makes sense in a scenario that contemplates informational asymmetry. That is the context for the Signalling theory, based on the problem of information asymmetry, in which managers have information about the company, which investors do not know (Spence, 1973). Spence (1973) further states that signals function as discretionary mechanisms in an environment of information asymmetry, capable of changing beliefs and transmitting information to other individuals.

Information asymmetry can be reduced if one company offers more information than others, leading reputed business managers to seek to differentiate themselves from low-repute firms through signals (Bergh et al., 2010). In this way, high-quality companies would be evaluated by stakeholders which, based on the signals they emit, would grant these companies a better reputation.

Corporate reputation consists of a perceptive representation of a company's past actions and future prospects, which describe the attractiveness of the company to all its key stakeholders compared to its main competitors (Fombrun, 1996). In this way, corporate reputation becomes valuable because, when positive, it strengthens the attractiveness of an organization, attracts and retains employees, and attracts new sources of financial capital. Thus, companies with a positive reputation are less likely to encounter risk (Van Riel & Fombrun, 2007). Reputation is also considered important because it is seen as a solution for information asymmetry (Melo & Garrido-Morgado, 2012).

In this sense, too, reputation is important both for the owners of the reputation and for subjects who have that reputation stored in their long-term memory, considering that when a company has a favorable reputation, the transmission of its positive reputation constitutes an essential pre-requisite to establish a commercial relationship with its stakeholders (Van Riel & Fombrun, 2007).

In this way, corporate reputation is a potential source of competitive advantage, as it is associated with countless strategic benefits such as sustainable financial performance, higher margins and prices, perceived value, contracting firms and positive reactions of investors (Walker, 2010).

Several authors, such as Bergh et al. (2010), argue that companies with a better reputation can gain a competitive advantage. Thus, companies with a better reputation would not need to use earnings management, because earnings management opportunistically seeks to change the financial figures of the period.

According to Healy and Wahlen (1999: 368), earnings management occurs when managers "use judgment in financial reporting and in structuring transactions to alter financial reporting to deceive some stakeholder on the underlying economic performance of the firm, or to influence contractual outcomes that depend on the reported financial figures".

Not very different from that, Ball (2009) argues that earnings management is used to express the manipulation of managers in reporting their own financial performance, encompassing several practices, including: legal practices that do not violate accounting rules or principles and are generally seen as ethical; and legal practices that do not violate accounting rules or principles, but may violate the accepted disclosure standards.

In this sense, earnings management ends up triggering opportunistic behavior of the manager, which changes the financial figures, affecting the quality of the accounting information. Xie, Davidson III, and DaDalt (2003) explain that this happens because Accounting, through accruals, gives managers the ability to determine the actual earnings in a given period. In turn, Scott (2012) states that managers will choose an accounting policy among the various possibilities to achieve their goals.

Wu et al. (2016) argue that managers tend to use earnings management to achieve goals, reduce or alleviate the pressures they suffer from the media, and to remedy any loss of reputation, as negative media exposure results in even higher levels of earnings management activities. Therefore, companies with a better reputation and/or trust are less likely to distort their annual financial statements (Cao et al., 2012; Garrett et al., 2014), and have a better quality of provision and lesser probability of disclosure of material weaknesses in internal control (Garrett et al., 2014).

Other attributes that relate to, or even make up the corporate reputation are also capable of reducing earnings management practices and improving the quality of financial information, such as corporate social responsibility (CSR) and corporate ethics.

As for CSR practices, companies tend not to smoothen the income and to show less interest in avoiding losses and income reductions, while remaining prone to engage in more aggressive earnings management practices in countries with weak enforcement (Chih, Shen & Kang, 2008). Scholtens and Kang (2013) evidenced that firms with relatively good CSR are significantly less involved in earnings management, while Kim, Park, and Wier (2012) and Bozzolan, Fabrizi, Mallin, and Michelon (2015) are also less prone to manipulate operational activities and to be the subject of SEC investigations.

In relation to the corporate commitment to business ethics, companies with a higher level of ethical commitment are involved in less earnings management; report earnings more conservatively; and predict future cash flows more accurately than those with a lower level of ethical commitment (Choi & Pae, 2011).

Thus, considering the precepts of the Signaling theory and the recommendations of the literature on the relationship between corporate reputation and earnings management, it is expected that the signals issued to the market in relation to accounting transparency, which generates the reputation to companies, inhibit managers' earnings management practices, as reputation creates competitive advantage and makes the company more visible to diverse stakeholders. Therefore, this study proposes the following research hypothesis:

- **Hypothesis:** Corporate reputation negatively influences earnings management.

### 3. Method

The study population consists of all non-financial companies listed on Brasil, Bolsa, Balcão (B3), totaling 325 companies. The sample is composed of all companies that presented the variables to measure earnings management: company size; return on equity; leverage, sales growth; market-to-book; audit quality; and corporate governance, between 2010 and 2017, in the Capital IQ database and on the B3 website. Thus, the sample is composed of 231 companies (1,355 observations).

Earnings management is based on the discretionary accruals approach, developed by Jones (1991) and modified by Dechow, Sloan, and Sweeney (1995). Thus, regressions were estimated by sector and year. Discretionary accruals (DACC) represent the residuals of Equation 1. In addition, this study uses the absolute value of discretionary accruals for analyses, whereas earnings management may involve accruals with the intention of increasing or decreasing earnings (Warfield, Wild & Wild, 1995; Klein 2002). Equation 1 represents the model of Dechow et al. (1995).

$$AT_{it} = \beta_1 1/A_{it-1} + \beta_2(\Delta REC - \Delta CREC)_{it} + \beta_3 IMOB_{it} + \varepsilon_{it} \quad (1)$$

Where:

$AT_{it}$ : Total Accruals in year  $t$  for company  $i$ , defined as  $AT = [\Delta \text{Current Assets} - \Delta \text{Cash and Cash Equivalents}] - [\Delta \text{Current Liabilities}] - \text{Depreciation and Amortization Expense}$ , divided by total lagged assets;

$A_{it}$ : Total Assets in year  $t - 1$  for company  $i$ ;

$REC_{it}$ : Sales Revenues in year  $t$  for company  $i$ , divided by total lagged assets;

$CREC_{it}$ : Accounts Receivable in year  $t$  for company  $i$ , divided by total lagged assets;  
 $IMOB_{it}$  = Fixed Assets in year  $t$  for company  $i$ , divided by total lagged assets;  
 $\varepsilon_{it}$  = error term in year  $t$  for company  $i$ .

The variable of interest is Corporate Reputation (REP) based on the Transparency Trophy of Anefac, Fipecafi and Serasa Experian. To run for the Transparency Trophy, there are no enrollments. The candidates are all public and private companies based in Brazil that publish their financial statements, acting in the areas of commerce, industry, and services - except financial services. The Transparency Trophy does not consider the company earnings or the economic-financial situation, which does not interfere with the selection process. It considers the transparency and clarity of the information the companies provide to the market though, generating added value for the business. The Transparency Trophy does not evaluate the company management either, but the quality of the financial statements presented.

In the selection process to receive the Transparency Trophy, the following are analyzed: Quality and degree of information contained in the financial statements and notes to the financial statement; Transparency of information provided; clarity of the management report and its consistency with the information disclosed; Full compliance with accounting standards; Non-presentation of the changes (qualifications) in the independent auditors' report; Presentation of the disclosure as to layout, readability, conciseness, clarity, etc.; and Disclosure of relevant aspects, even if not legally required, but important for the business, such as: EBITDA, aggregate economic value, social and environmental balance, etc.

In this study, REP (reputation) is measured as a lagged binary variable, equal to 1 if the firm is listed in the Transparency Trophy ranking by Anefac, Fipecafi, and Serasa Experian at  $t-1$  and 0 otherwise. The literature tends to investigate the effects of past reputation ( $t-1$ ), business performance, or other corporate characteristics (Roberts & Dowling, 2002). Thus, in this study, the same approach is used.

To avoid the problem of correlated omitted variables, this study includes some control variables that can affect earnings management and corporate reputation. Dechow, Ge, and Schrand (2010) suggest that the opportunity for growth, profitability, indebtedness, firm size, audit quality, and corporate governance can influence earnings management.

Likewise, in this study, to capture the relationship between earnings management and corporate reputation, and in order to test the research hypothesis, we estimate Equation 2.

$$\begin{aligned}
 DACC_{it} = & \beta_0 + \beta_1 REP_{it-1} + \beta_2 TAM_{it} + \beta_3 ROE_{it} + \beta_4 END_{it} + \beta_5 CRES_{it} + \beta_6 MTB_{it} \\
 & + \beta_7 AUD_{it} + \beta_8 GOV_{it} + Efeitos\_Fixos + \varepsilon_{it}
 \end{aligned} \quad (2)$$

Equation 2 is estimated by means of multiple linear regression with panel data (POLS), with robust standard errors and controlled by fixed effects of sector and year. As Dechow et al. (2010) argue, there are problems in the calculations of the discretionary accruals, so that in this study two other models of discretionary accruals (Larcker & Richardson, 2004; Kothari, Leone & Wasley, 2005) are used as robustness tests. As another robustness test, discretionary accruals were analyzed by signs (positive and negative values) instead of analyzing only by absolute value.

As in the proposed model by Dechow et al. (1995), sector and year regressions were estimated for the model by Larcker and Richardson (2004), and the absolute value of the residuals of Equation 3 represents discretionary accruals (DACC).

$$AT_{it} = \beta_1 1/A_{it-1} + \beta_2 (\Delta REC - \Delta CREC)_{it} + \beta_3 IMOB_{it} + \beta_4 BTM_{it} + \beta_5 FCO_{it} + \varepsilon_{it} \quad (3)$$

Where:

$BTM_{it}$ : Book-to-market ratio in year  $t$  for company  $i$ , defined as net worth divided by market value;  
 $FCO_{it}$ : Operating Cash Flow in year  $t$  for company  $i$ , divided by total lagged assets.

The second Robustness model is based on Kothari *et al.* (2005), in which regressions were estimated per sector and year. The absolute residuals in Equation 4 represent the discretionary accruals.

$$AT_{it} = \beta_1 1/A_{it-1} + \beta_2(\Delta REC - \Delta CREC)_{it} + \beta_3 IMOB_{it} + \beta_4 ROA_{it} + \varepsilon_{it} \quad (4)$$

Where:

$ROA_{it}$ : Return on assets in year  $t$  for company  $i$ , defined as the profit before the extraordinary items divided by the total assets.

In Table 1 below, all variable definitions are displayed.

Table 1

**Definition of the variables**

Variables	Metric	Operationalization
DACC1	Discretionary accruals by Dechow <i>et al.</i> (1995)	Absolute residual of Equation 1.
DACC2	Discretionary accruals by Larcker and Richardson (2004)	Absolute residual of Equation 3.
DACC3	Discretionary accruals by Kothari <i>et al.</i> (2005)	Absolute residual of Equation 4.
REP	Corporate Reputation	Lagged binary variables: 1 if the firm is listed on the Transparency Trophy of Anefac, Fipecafi and Serasa Experian at $t-1$ and 0 if the opposite.
TAM	Company size	Natural logarithm of total assets.
ROE	Return on Net equity	Net profit divided by net equity.
END	Indebtedness	Total debt divided by total assets
CRES	Sales growth	Percentage variation of sales revenue.
MTB	Market-to-Book	Market value divided by net worth.
AUD	Audit Quality	Binary variable: 1 if the firm is audited by a Big Four (EY, KPMG, Deloitte or PwC) and 0 if the opposite.
GOV	Corporate Governance	Binary variable: 1 if the firm is listed on the New Market of B3 and 0 if the opposite.

All continuous variables, used to estimate Equation 2, are winsorized in the 1st and 99th percentile for each year.



## 4. Results and Discussion

To verify the behavior of the data, initially, descriptive analysis was performed. Table 2 shows the minimum and maximum values, mean and standard deviation of the variables analyzed in this study, as well as the test of difference of means (t-test), except those indicated by audit quality and corporate governance, as these are binary variables. Therefore, the frequency distribution is presented and the chi-square test is performed.

Table 2  
**Descriptive statistics**

Continuous variables	REP	Obs.	Mean	Standard deviation	Minimum	Maximum	T test
DACC1	1	121	0.039	0.035	0.000	0.200	2.916***
	0	1.234	0.062	0.086	0.000	1.287	
DACC2	1	121	0.036	0.031	0.000	0.203	3.469***
	0	1.234	0.066	0.094	0.000	1.367	
DACC3	1	121	0.038	0.032	0.000	0.188	2.869***
	0	1.234	0.063	0.098	0.000	2.093	
TAM	1	121	23.654	1.244	21.119	26.405	-13.389***
	0	1.234	22.089	1.225	20.083	26.204	
ROE	1	121	0.090	0.257	-1.465	0.659	-1.676*
	0	1.234	0.019	0.463	-5.060	2.157	
END	1	121	0.346	0.159	0.019	0.756	-1.523
	0	1.234	0.320	0.175	0.000	0.859	
CRES	1	121	0.091	0.167	-0.405	0.716	1.463
	0	1.234	0.145	0.400	-0.990	4.882	
MTB	1	121	2.302	2.581	0.114	19.274	-0.220
	0	1.234	2.241	2.944	0.015	33.057	

  

Binary variables	Category	REP=0	REP=1	Frequency	Percentage	Cumulative	Chi-squared
AUD	0	169	5	174	12.84	12.84	9.004***
	1	1.065	116	1181	87.16	100.00	
GOV	0	618	55	673	49.67	49.67	0.9435
	1	616	66	682	50.33	100.00	

Obs.: \*, \*\*, \*\*\* Indicates statistical significance at 0.10, 0.05 and 0.01, respectively.

DACC1: Discretionary accruals by Dechow *et al.* (1995); DACC2: Discretionary accruals by Larcker e Richardson (2004); DACC3: Discretionary accruals by Kothari *et al.* (2005); REP: Lagged corporate reputation; TAM: Company size; ROE: Return on Equity; END: Indebtedness; CRES: Sales Growth; MTB: Market-to-book; AUD: Audit Quality; GOV: Corporate Governance.

The average absolute value of discretionary accruals (DACC1, DACC2, and DACC3) is about 0.06 for the companies listed on B3. Thus, compared with the 0.065 Wu *et al.* (2016) found for Chinese companies, and the 0.20 that Kim *et al.* (2012) found in US-listed companies, earnings management in Brazil is consistent with other countries. In addition, discretionary accruals have high dispersion, so the companies listed on B3 differ at the level of performance management practices.

Only 8% of the sample has a good reputation (REP) through accounting transparency. It is worth mentioning that this is because the Transparency Trophy only selects 25 companies as the best companies in Brazil. This type of behavior is observed in other studies, as reputation is, in most cases, measured by rankings, which establish a maximum number of reputed companies (Fombrun, 2007). Thus, the companies included in the Transparency Trophy are the ones with the best reputation.

Analyzing all the variables, based on the Transparency Trophy, in relation to having or not having a better reputation, on average, the indicated companies have less earnings management by discretionary accruals (DACC), are larger (TAM), present better corporate performance (ROE) and are more closely associated with better audit quality (AUD). These results suggest that reputation signals guarantee a competitive advantage over other competitors (Bergh et al., 2010; Van Riel & Fombrun, 2007; Walker, 2010), thus constituting a desirable attribute for companies.

In relation to the control variables, only the company size (TAM) presents low dispersion, indicating that the companies have homogeneous size, all are large companies, which is consistent with the studies by Wu et al. (2016) and Choi and Pae (2011), who found size ranges between 22,115 and 19,225 for Chinese and Korean companies, respectively.

The sample presents a positive business performance (ROE), similar to Cao et al. (2012) and Wu et al. (2016). Based on Garrett et al. (2014), Wu et al. (2016), Cao et al. (2012), Choi and Pae (2011) and Kim et al. (2012), which admit levels of indebtedness (END) inferior to 50%, the companies listed on B3 have a good level of indebtedness, equal to 0.3227. As for sales growth (CRES), the companies listed on B3 show solid growth in sales revenue, as the average is positive. The sample presents a high level of intangibility, as the MTB is greater than 1, consistent with Garrett et al. (2014).

Regarding audit quality (AUD), almost 90% of the sample is audited by a Big Four company (Deloitte, EY, KPMG, and PwC). In this case, based on Wu et al. (2016), the sample has high audit quality. Finally, corporate governance (GOV) is represented by the listing on the B3 Novo Mercado segment of corporate governance, which has the best governance practices, indicating that almost half of the sample (50.33%) has the best corporate governance practices.

Considering the literature reviewed by Dechow et al. (2010), the characteristics of the companies in the sample refer to companies that, on average, would tend to engage less in earnings management practices. Thus, to deepen these results, Table 3 presents the Pearson correlation coefficients between the variables used in the regression analyses.

Table 3

**Pearson correlation**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(2)	0.805***	1								
(3)	0.954***	0.791***	1							
(4)	-0.079***	-0.094***	-0.078***	1						
(5)	-0.089***	-0.114***	-0.075***	0.342***	1					
(6)	-0.042***	-0.040***	-0.031***	0.045***	0.057**	1				
(7)	-0.048***	-0.073***	-0.042***	0.041***	0.231***	-0.237***	1			
(8)	0.140***	0.103***	0.109***	-0.039***	0.016***	0.117***	-0.019***	1		
(9)	0.032**	0.022***	0.048***	0.006***	-0.003***	0.110***	0.031***	0.045***	1	
(10)	0.019**	-0.025***	0.021***	0.081***	0.098***	0.105***	0.036***	0.030***	0.094***	1
(11)	0.065***	0.035***	0.072***	0.026***	-0.000***	-0.023***	0.068***	0.001***	0.131***	0.144***

Obs.: \*, \*\*, \*\*\* Indicates statistical significance at 0.10, 0.05 and 0.01, respectively.

(1) DACC1: Discretionary accruals by Dechow et al. (1995); (2) DACC2: Discretionary accruals by Larcker e Richardson (2004); (3) DACC3: Discretionary accruals by Kothari et al. (2005); (4) REP: Lagged corporate reputation; (5) TAM: Company size; (6) ROE: Return on Equity; (7) END: Indebtedness; (8) CRES: Sales Growth; (9) MTB: Market-to-book; (10) AUD: Audit Quality; (11) GOV: Corporate Governance.

First, it is observed that the variables that represent the discretionary accruals (DACC1, DACC2, and DACC3) have a high mutual correlation, thus demonstrating that they represent the same construct, in accordance with the precepts of Dechow et al. (2010), which advise using more than one metric to achieve a consistent result.



Based on the literature (Cao et al., 2012, Garrett et al., 2014, Wu et al., 2016), this study predicted a negative correlation between corporate reputation (REP) and earnings management measures (DACC1, DACC2, and DACC3), and this forecast is not rejected for all earnings management measures. Thus, companies that have a better reputation for accounting transparency engage less in earnings management practices.

In addition, it is observed that company size (TAM) and indebtedness (END) are negatively related to discretionary accruals, showing that large and more indebted companies engage less in earnings management practices, as larger companies tend to possess better internal controls, mitigating opportunistic actions (Dechow et al., 2010), and higher indebtedness limits the management of earnings, as companies are pressured by creditors, and are subject to a reduction in the expenses the creditors induce (Zamri, Rahman & Isa, 2013).

Sales growth (CRES) and corporate governance (GOV), however, are positively related to discretionary accruals. According to Dechow et al. (2010), companies with higher growth tend to have less persistent earnings, favoring the use of earnings management. As for governance, some studies show that greater monitoring would not reduce the manipulation of financial figures (Dechow et al., 2010). This may be due to the governance mechanism the company uses, as well as the lack of governance and not just compliance-oriented culture.

The results of the multivariate regression analyses of the discretionary accruals are presented in Table 4. In this sense, this study estimated three models for each discretionary accrual measure, based on Dechow et al. (1995), Larcker and Richardson (2004), and Kothari et al. (2005).

Table 4

**Analysis of the relation between earnings management and corporate reputation**

		Discretionary accruals		
		Model 1	Model 2	Model 3
Corporate Reputation	REP <sub>(t-1)</sub>	-0.010* (0.006)	-0.015*** (0.005)	-0.014** (0.006)
Company Size	TAM <sub>(t)</sub>	-0.004** (0.002)	-0.004** (0.002)	-0.004** (0.002)
Return on Net Equity	ROE <sub>(t)</sub>	-0.012** (0.005)	-0.011* (0.006)	-0.009* (0.006)
Indebtedness	END <sub>(t)</sub>	-0.008 (0.013)	-0.026 (0.016)	-0.006 (0.014)
Sales Growth	CRES <sub>(t)</sub>	0.029** (0.012)	0.023* (0.014)	0.025** (0.012)
Market-to-Book	MTB <sub>(t)</sub>	0.001 (0.001)	0.001 (0.001)	0.002** (0.001)
Audit Quality	AUD <sub>(t)</sub>	0.004 (0.007)	-0.009 (0.011)	0.003 (0.006)
Corporate Governance	GOV <sub>(t)</sub>	0.004 (0.005)	0.001 (0.005)	0.007 (0.005)
Intercept		0.153*** (0.042)	0.192*** (0.047)	0.158*** (0.045)
Fixed effect - Year		Yes	Yes	Yes
Fixed effect - Sector		Yes	Yes	Yes
R <sup>2</sup>		0.123	0.107	0.124
F-test		4.164***	4.411***	4.241***
N		1,355	1,355	1,355

Obs.: \*, \*\*, \*\*\* Indicates statistical significance at 0.10, 0.05 and 0.01, respectively.

Each cell contains an estimated coefficient and a robust standard error between parentheses below.

Model 1: Discretionary accruals by Dechow *et al.* (1995); Model 2: Discretionary accruals by Larcker and Richardson (2004); Model 3: Discretionary accruals by Kothari *et al.* (2005); REP: Lagged corporate reputation; TAM: Company size; ROE: Return on Equity; END: Indebtedness; CRES: Sales Growth; MTB: Market-to-book; AUD: Audit Quality; GOV: Corporate Governance.

Based on the F-test, all models are significant at 1%, indicating that at least one of the variables in the models is significant. Corporate reputation, through accounting transparency (REP), has a negative relationship with discretionary accruals (DACCI1, DACCI2, and DACCI3), as expected. Therefore, the study hypothesis is not rejected. It should be noted, once again, that companies that are nominated for the Transparency Trophy award reduce, on average, 0.01 in discretionary accruals and the average of discretionary accruals is 0.06 (Table 2). Thus, based on this average, being indicated to the premium reduces by approximately 16.67% the practice of earnings management.

The Signaling theory advocates that companies disclose information to the market in order to reduce information asymmetry and create trust towards their stakeholders, so that reputation based on the quality of accounting information is well viewed by investors and creditors, as well as by other stakeholders, by being able to reduce opportunistic earnings management practices that sometimes arise due to agency conflicts. In addition, when companies seek to have high-quality and transparent financial reports, managers reduce their opportunistic management practices, perhaps by using discretionary accruals only to demonstrate the company's actual economic situation, considering that, as Scott (2012) comments, earnings management has not only has a negative connotation, but there may be good management. Therefore, managers would be using earnings management for the benefit of the company and not for their own interests, thus increasing the quality of accounting information.

This finding is consistent with Li (2010), Choi and Pae (2011); Cao et al. (2012); Kim et al. (2012); Scholtens and Kang (2013); Garrett et al. (2014); Bozzolan et al. (2015) and Wu et al. (2016), which argue that corporate social responsibility, media exposure, business ethics, aspects of reputation as well as reputation itself increase the quality of financial information and reduce earnings management by discretionary accruals.

The regression models also include several control variables. Sales growth (CRES) is positively associated with discretionary accruals for all models. In this case, growing companies exhibit a higher level of discretionary accruals. It is assumed that these firms have aggressive earnings management practices precisely to increase their performance, as they do not have persistent results, which is consistent with the findings of Skinner and Sloan (2002) and the discussion by Dechow et al. (2010). On the other hand, firm size (TAM) and business performance (ROE) are significantly and negatively associated with discretionary accruals for all models, indicating that large and profitable firms are generally less likely to engage in earnings management based on accruals (Kim et al., 2012), because they have a better organizational structure, which helps to mitigate opportunistic practices (Dechow et al., 2010).

Also as a Robustness test, we analyzed the effect of corporate reputation on earnings management, distinguishing between the aggressive strategy (positive accruals) and conservative (negative accruals), as shown in Table 5.

Table 5

**Analysis of the relation between aggressive and conservative earnings management and corporate reputation**

	Discretionary accruals					
	Model 1		Model 2		Model 3	
	Aggressive	Conservative	Aggressive	Conservative	Aggressive	Conservative
REP <sub>(t-1)</sub>	-0.010 (0.009)	0.008 (0.006)	-0.023** (0.011)	0.011* (0.006)	-0.018 (0.012)	0.011* (0.006)
TAM <sub>(t)</sub>	0.001 (0.003)	0.006*** (0.002)	-0.002 (0.003)	0.006*** (0.002)	0.002 (0.004)	0.006*** (0.002)
ROE <sub>(t)</sub>	-0.012 (0.011)	0.011* (0.006)	-0.011 (0.013)	0.012** (0.006)	-0.010 (0.013)	0.010* (0.006)
END <sub>(t)</sub>	0.001 (0.018)	0.020 (0.019)	-0.026 (0.024)	0.023 (0.019)	-0.003 (0.026)	0.011 (0.017)
CRES <sub>(t)</sub>	0.038** (0.015)	-0.011 (0.015)	0.021 (0.021)	-0.020 (0.014)	0.038** (0.015)	-0.011 (0.015)
MTB <sub>(t)</sub>	0.000 (0.001)	-0.002 (0.001)	0.001 (0.001)	-0.002 (0.002)	0.002 (0.001)	-0.002* (0.001)
AUD <sub>(t)</sub>	-0.001 (0.011)	-0.005 (0.007)	-0.028 (0.019)	-0.011 (0.007)	0.001 (0.013)	-0.004 (0.006)
GOV <sub>(t)</sub>	-0.005 (0.008)	-0.007 (0.005)	-0.007 (0.008)	-0.009* (0.005)	-0.005 (0.008)	-0.012** (0.005)
Intercept	0.071 (0.064)	-0.185*** (0.050)	0.176** (0.076)	-0.185*** (0.049)	0.042 (0.095)	-0.184*** (0.047)
Fixed effect – Year	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effect – Sector	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.141	0.141	0.112	0.146	0.126	0.150
F-test	2.644	2.821	2.810	3.930	3.340	3.919
N	608	747	632	723	607	748

Obs.: \*, \*\*, \*\*\* Indicates statistical significance at 0.10, 0.05 and 0.01, respectively.

Each cell contains an estimated coefficient and a robust standard error between parentheses below.

Model 1: Discretionary accruals by Dechow *et al.* (1995); Model 2: Discretionary accruals by Larcker and Richardson (2004); Model 3: Discretionary accruals by Kothari *et al.* (2005); REP: Lagged corporate reputation; TAM: Company size; ROE: Return on Equity; END: Indebtedness; CRES: Sales Growth; MTB: Market-to-book; AUD: Audit Quality; GOV: Corporate Governance.

The results presented in Table 5 support the results found in Table 4, especially with regard to Model 2, not rejecting the study hypothesis, as they indicate that companies that have a better reputation through accounting transparency engage less in aggressive earnings management practices, that is, they do not use accounting in order to increase earnings, thus using more conservative attitudes, which reduce the earnings.

## 5. Conclusion

The objective of this study was to investigate the relationship between corporate reputation based on accounting transparency and the management of results by discretionary accruals in companies listed on Brasil, Bolsa, Balcão (B3), departing from the Signaling Theory. Therefore, multiple linear regression analysis with panel data and robust standard errors was applied in a sample of 231 companies (1,355 observations).

Corporate reputation, through accounting transparency, showed a negative relationship with earnings management of results by discretionary accruals. Thus, companies nominated for the Transparency Trophy by Anefac, Fipecafi and Serasa Experian, that is, those with a better corporate reputation, have managers who engage less in opportunistic and aggressive attitudes, managing the company earnings less. Thus, this study does not reject the hypothesis presented.

The results show that companies that signal the quality of their statements to the market tend to gain more confidence and esteem in the market (corporate reputation) from the accounting point of view, besides having a competitive advantage, engaging less in opportunistic practices such as earnings management, as they are likely to have the best corporate social responsibility practices, corporate governance, and corporate ethics, retaining and attracting talent and having bargaining power with suppliers.

Hence, corporate reputation would be a valuable strategic resource, capable of highlighting the reputed company from others in the same industry and, from an accounting point of view, is reflected in the financial reporting quality. This quality of the financial statements, which emerges from transparency, is reflected in management practice as companies do not want to lose the competitive advantage gained through reputation and, being exposed in the media, they tend to be careful about their practices accounting policies. Davies et al. (2003) argue that reputation can be lost more easily than being created, being fragile as an investment in credibility. In this sense, bad actions (fraud, corruption, etc.) carried out by companies corrode reputation, as stakeholders lose confidence in the company, which would drive investors away.

As corporate reputation grants competitive advantage and, generally, companies with a better reputation tend to be highly performing and provide great compensation to managers, they have no reason to use discretionary choices (Chaney, Faccio & Salsa, 2011).

It is observed, therefore, that this study offers contributions both for the professional field and for the academic field. For the professional, the study provides insights for companies, indicating that they should focus on issuing signals to the market about the quality of their financial reports, aiming to gain a corporate reputation. In addition, a good reputation is a signal to shareholders, creditors and other stakeholders regarding the quality of accounting information, reducing information asymmetry and conferring a competitive advantage, thus demonstrating that companies with a better reputation would be a better investment.

For the academy, this study demonstrates that the ranking of the Anefac, Fipecafi, and Serasa Experian Transparency Trophy is a proxy of the reputation about the quality of accounting information, in which the awards would be a signal of reduction in the practice of discretionary accruals. In addition, this study expands the literature that relates reputation and earnings management, as not many studies on this topic are found in both the Brazilian and international literature.

The limitations of this study relate to metrics for earnings management and corporate reputation and to the sample. Dechow et al. (2010) state that metrics that measure discretionary accruals are problematic, but there are still no perfect metrics for this. Thus, for the first problem, this study adopted three different metrics and found the same result. For the second problem, considering the statement by Davies et al. (2003) that reputation is a complex construct and difficult to measure, in this study, we chose to use a metric with a specific aspect, accounting transparency, which is related to the quality of accounting information. Regarding the third problem, the metrics were adopted only for companies listed on B3, which, despite being a small sample, is especially relevant for the Brazilian market, and the ranking of the Transparency Trophy includes only Brazilian companies.

It should be noted that the second and third problems create selection biases as they consider only the best companies and do not allow variability among companies due to being a dummy variable. This is a problem in reputation searches that use rankings though, because there is not yet a proper proxy for reputation, and the proxies closest to the reputation construct are measured by means of a questionnaire.

Finally, this study suggests that future studies expand the analysis to the Latin American market, using the Merco Companies ranking for companies with better reputation; or the Merco Responsabilidad and Gobierno Corporativo ranking for companies with greater corporate social responsibility and corporate governance. Also, it is suggested to analyze the effect of the reputation of the leader in earnings management. For this purpose, one can use the Merco Líderes ranking. Because companies can manage less by discretionary accruals and compensate through management and operational activities, we suggest analyzing the effect of corporate reputation on the trade-off between discretionary accruals management and activity-based management operations.

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