The current issue and full text archive of this journal is available on Emerald Insight at: www.emeraldinsight.com/2531-0488.htm

# CEOs' extensive term of office inhibits discretionary accruals

extensive term of office

Cristian Baú Dal Magro, a,\* Roberto Carlos Klannb and Vanessa Edv Dagnoni Mondini<sup>c</sup>

<sup>a</sup>Contabilidade, Universidade Comunitaria da Regiao de Chabeco, Chabeco/SC, Brazil <sup>b</sup>Contabilidade, Universidade Regional de Blumenau, Blumenau/SC, Brazil, and <sup>c</sup>Instituto Federal de Educação Ciencia e Tecnologia de Santa Catarina, Florianopolis/SC. Brazil

Received 5 May 2017 Accepted 13 February 2018

#### Abstract

Purpose - CEOs' (chief executive officer) term of office may explain discretionary accruals as a result of opportunistic behavior arising during certain periods of the term of office. Therefore, CEOs, in their early years of office, have incentives to report results that meet market expectations. In turn, CEOs in their senior year may be motivated to use discretionary accruals to gain private benefits. In this scenario, corporate governance mechanisms play an important role in monitoring relationships. Hence, the purpose of this study is to verify the influence of monitoring mechanisms on the relationship between CEOs' term of office and discretionary accruals.

Design/methodology/approach - Descriptive statistics, multiple cross-sectional regression to estimate the accruals and regression of panel data to test the hypotheses were used. The sample comprised 195 companies listed on BM&FBovespa.

Findings - The results indicated that CEOs' long term of office has a negative impact on the level of discretionary accruals, and thus, Brazilian CEOs with a longer term of office tend to establish a certain reputation in the stock market. On the other hand, it is concluded that CEOs' intentions, in the first years of term, are positively related to the use of accruals and that the monitoring mechanisms can minimize these CEOs' opportunistic practices.

Originality/value - The results broaden the literature on corporate governance, pointing that different systems of variable remuneration may influence CEOs' willingness to manage results in their last year of

**Keywords** Discretionary accruals, CEOs' term of office, Corporative governance, Result management

Paper type Research paper

#### 1. Introduction

The financial scandals that led to the collapse of large corporations resulted, partly, from opportunistic manipulation of accounting information. From this, questions emerged about

© Cristian Baú Dal Magro, Roberto Carlos Klann and Vanessa Edy Dagnoni Mondini. Published in RAUSP Management Journal. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode



DOI 10.1108/RAUSP-06-2018-0033

the true effectiveness of the performance of corporate governance mechanisms, responsible for protecting investors' interests (Ebrahim, 2007).

The manipulation of accounting information has been studied from the perspective of results management and associated with behavioral, political, economic and social factors. Regarding managers' behavior, it is understood that the practice of results management can be intensified according to the CEOs' term of office (Brickley *et al.*, 1999; Ali and Zhang, 2015), exemplifying agents' opportunism and leading to agency conflicts (Healy and Wahlen, 1999).

Hermalin and Weisbach (1998) and Ali and Zhang (2015) argue that, in the early years of office, the CEO's opportunistic behavior is accentuated as the market is still assessing their ability to generate profitability for the organization. Unsatisfactory results lead CEOs to be perceived as incompetent by stakeholders, inducing them to use discretionary accumulations due to career concern (Graham *et al.*, 2005). Aware of this judgment, CEOs tend to exaggerate the presentation of favorable results to demonstrate their competence (Holmstrom, 1982; Cella, Ellul and Gupta, 2014).

As for the end of the term, managers use discretionary accruals to report satisfactory results, to increase their remuneration (Kalyta, 2009). Studies such as those by Dechow and Sloan (1991), Pourciau (1993), Murphy and Zimmerman (1993) and Kalyta (2009) show that the last year of the CEO's term is the catalyst for opportunistic behavior, as in the case of using practices of results management aimed at obtaining private benefits.

Such weightings indicate that manipulation in accounting information can be explained by behaviors derived from the term of office the CEOs are due. At the beginning of the term, they are motivated by career aspirations and reputation concerns and, in the final period, by the possibility of obtaining private benefits from the bonuses linked to the results.

In this sense, to mitigate CEOs' opportunistic behavior in specific periods of term of office, governance mechanisms are assigned the monitoring role to ensure the alignment of stakeholders' interests (Shleifer and Vishny, 1997). Governance efficiency is associated with a combination of different mechanisms aimed at securing shareholders' interests and minimizing agency conflicts, such as: independence of the board of directors, presence of the audit committee, independent auditing by *Big Four* and presence of institutional investors (Stigler, 1961; Lam and Chang, 1994; Thomson and Davis, 1997, Bushee, 1998; Bratton and Mccahery, 1999; Pinheiro, 2001; Klein, 2002; Xie *et al.*, 2003; Collins *et al.*, 2003).

In this context, the motivation of the research lies in discussing the link between the time horizon of the CEO's term of office and its relation to the capacity to develop opportunistic attitudes. This is an important research area, as previous studies (Pourciau, 1993; Huson *et al.*, 2012; Kuang *et al.*, 2014; Ali and Zhang, 2015) do not privilege the perspective of assigning to the elements (independence of the board of directors, presence of the audit committee, independent auditors and institutional investors) the ability to reduce CEOs' opportunistic behavior. In view of the aforementioned gap, this article aims to verify the influence of monitoring mechanisms on the relationship between CEO's term of office and discretionary accruals.

The research findings point out that, in the first years of their term, CEOs are more likely to use opportunistic results management practices. On the other hand, there are indications that CEOs with a long term of office seek to preserve the reputation created over the course of their careers, and for this reason, use less discretion in their accounting choices. In addition, the application of the study in the Brazilian context may present new findings, as the CEOs' average term is shorter than that in other countries and the importance given by CEOs to variable remuneration may be a preponderant factor for possible divergences.

CEOs'

One of the contributions provides users of accounting information with an assessment of newly appointed CEOs' behavior or of that at the end of their term of office, given their flexibility in accounting choices. By associating CEOs' term of office with their propensity to manage results, the study also contributes, by favoring the stock market, to assessing the quality of accounting information. For the literature, the contribution is linked to the effect of the CEO's reputation on results management, using the number of years of the term of office as a measurement criterion (Milbourn, 2003), and in this factor, the long term was preponderant to the conclusion that the reputation contributed by the career surpasses the CEOs' opportunistic interests.

#### 2. CEOs' term of office and results management

The accounting information originates from the process of recognition, measurement and disclosure (Lopes and Martins, 2005). In scenarios with asymmetric information, there is a risk that the accounting results disclosed by the CEOs are not consistent with the specific economic, financial and patrimonial reality of the organizations (Martinez, 2001).

In this way, managers can opportunistically exercise discretionary information about the accounting information to report positive results that satisfy shareholders and exceed market analysts' expectations (Healy and Wahlen, 1999). Given the above, discretionary accumulation has been a widely used proxy for measuring the management of results through accounting choices. Therefore, discretionary accumulations are used by managers seeking to obtain ex post benefits, with redistributive effects of profits between the parties to a contract (Watts and Zimmerman, 1986).

The objectives of management accounting may be linked to the expectation of changes in the manager's image and/or in the business image, facing investors and the market, interests in dividend policies, capital requirements and/or remuneration related to profits (Martinez, 2001).

In this sense, career concerns have been an incentive for the CEOs to use accounting practices (Graham *et al.*, 2005), and the term of office period may be a preponderant factor, especially in the early years, at the moment in which CEOs have their capacity evaluated by the market (Deangelo, 1988; Pourciau, 1993; Hermalin and Weisbach, 2012; Ali and Zhang, 2015). The last year in office is also capable of eliciting opportunistic behavior by the CEOs, as the absence of a future link with the organization may lead them to focus only on the private benefits derived from satisfactory accounting results (Dechow *et al.*, 1995; Pourciau, 1993; Murphy and Zimmerman, 1993; Kalyta, 2009).

The use of discretionary accumulations is a risky choice capable of generating an opportunistic label for the CEO (Ali and Zhang, 2015). However, disclosure of bad results in the first few years of the term is also equally risky, classifying the CEO as incompetent and/or incapable of generating satisfactory results for organizations (Hermalin and Weisbach, 1998). Thus, during the first years of the CEOs' term of office, career concerns are raised, generating motivations and behaviors capable of distorting accounting information in order to extend the manager's permanence in the corporate market (Fudenberg and Tirole, 1995).

Ali and Zhang (2015) examined the CEO's incentive to manage results during different term periods. The results showed opportunistic behavior in the first years of the office term, higher than in the last ones, being at a lower level in the companies with more adjusted monitoring mechanisms.

Besides the use of opportunistic management at the beginning of the term of office, studies show that such practice is also used by CEOs to increase their income at the end of the term (Kalyta, 2009). The management of results in the last year of term aims to increase

earnings linked to profits (Dechow et al., 1995; Pourciau, 1993; Murphy and Zimmerman, 1993; Kalyta, 2009).

Although they agree with the increased frequency of discretionary accruals in the first few years of CEOs' term, some authors argue that the differences become insignificant after the CEOs stay in charge for a long time (Diamond, 1989; Fudenberg and Tirole, 1995, Cella *et al.*, 2013, Kuang *et al.*, 2014). CEOs' concerns about the career decline over the tenure and shareholder's uncertainty about their ability diminishes as information are revealed over time (Holmstrom, 1982).

In general, in relation to discretionary accruals, the literature points out that there is greater use of results management in companies whose CEOs are in the first and last year of their term. On the other hand, the lesser practice of results management can be associated with CEOs who are in office for a long term (minimum of five years). From these perspectives, the hypotheses were established:

- H1. CEOs' attitude in the early years of their term is positively related to the increased use of discretionary accruals.
- H2. CEOs' attitude in the last year of their term is positively related to increased use of discretionary accruals.
- H3. CEOs' attitude over the long office term is negatively related to increased use of discretionary accruals.
- H4. The shorter CEOs' term of office is positively related to the increased use of discretionary accruals.

The next topic addresses the effect of monitoring mechanisms on the relationship between CEOs' term of office and the practice of results management by discretionary accruals.

## 3. Mechanisms of corporate governance and the practice of results management

Accounting information serves the purpose of monitoring and producing information that supports the relationships between CEOs and shareholders (Watts and Zimmerman, 1986). Organizations with rigid corporate governance mechanisms report higher quality information to shareholders and align managers' interests with those of owners (Lopes and Martins, 2005). Likewise, companies with deficiencies in monitoring mechanisms are more likely to manage results (Dechow and Skinner, 2000).

Boards of directors and audit committees are some of the monitoring mechanisms used to mitigate opportunistic behavior by CEOs. The first is a deliberative body composed of professionals elected by shareholders whose duties are related to the control and supervision of managers (Bratton and Mccahery, 1999). The second one has the direct responsibility of hiring, compensating and supervising the independent audit, as well as promoting the resolution of conflicts between management and independent auditors, regarding the disclosure of accounting reports (Furuta and Santos, 2010).

Goulart (2007) argues that companies with results management practices are more likely to have no audit committees, and the board of directors is dominated by people associated with the company. Thus, the presence of boards of directors and independent audit committees is associated with the lowest level of results management (Klein, 2002).

To mitigate the effects of greater intensity in the use of discretionary accumulations by the CEOs who are in the first years of their term, in relation to those who are in the last year in office, the following hypotheses were established: H5. The greater independence of the board of directors negatively affects the relationship between CEOs' intention, in the early years and also in the long term, with the intensity of accruals discretionary.

CEOs' extensive term of office

H6. The presence of the audit committee negatively affects the relationship between CEOs' intention, in the early years and also in the long term, with the intensity of accruals discretionary.

Ali and Zhang (2015) indicate that management of results in the early years of CEOs' term is lower in companies with strong monitoring mechanisms. This way, the *Big Four* audits disclose high-quality accounting information to the market (Stigler, 1961). The services performed by large global audit corporations demonstrate a greater primacy over accounting quality to the capital market (Lam and Chang, 1994). Likewise, corporate governance mechanisms help CEOs who are in the long run to maintain their reputation earned over the course of their careers, making the statements even better about the disclosed information.

It is assumed that the *Big Four* have greater independence than other audit firms and therefore would be more competent in monitoring and reducing informational asymmetry. At the national level, Almeida and Almeida (2009) showed that *Big Four* audit firms are less tolerant to results management, suggesting a better quality of the provided services. Based on the above, the hypothesis *H7* is presented:

H7. The audit performed by Big Four companies negatively affects the relationship between CEOs' intention, in the early years and also in the long term, with the intensity of accruals discretionary.

Institutional investors also exercise monitoring power, being legal entities that compulsorily invest part of their capital in the stock market, by governmental resolution, composing an investment portfolio (Pinheiro, 2001). This way, such investors can assume the role of owners with the means and motivations to pressure managers and boards (Thompson and Davis, 1997), even reducing discretionary accumulations (Cornett *et al.*, 2008).

Bushee (1998) and Collins *et al.* (2003) suggest that the presence of institutional investors minimizes CEOs' opportunistic behavior in their early years of office. By focusing on long-term results, institutional investors play a monitoring role over CEOs who sometimes have short-term financial intentions or goals (Healy and Wahlen, 1999).

According to the previous arguments, Cella *et al.* (2014) concluded that results management is frequent in companies with a lower intensity of institutional investors. Ali and Zhang (2015) found that the practice of results management is lower in companies with greater institutional participation. Thus, *H8* of the study was established:

H8. The greater presence of institutional investors negatively affects the relationship between CEOs' intent, in the early years and also in the long term, with the intensity of discretionary accruals.

### 4. Methodological procedures

#### 4.1 Population and sample

The research population comprised the Brazilian publicly traded companies with data available in the Economática database and in the reference form. The sample was delineated considering the companies that had the information to operationalize the variables. Initially, companies that did not contain information on the regression models that evidenced the dependent variable discretionary accruals were excluded. Subsequently,

companies that did not contain information for the calculation of control variables were also excluded, as well as those that did not provide information on the independent variables of CEOs' term of office. The final sample consisted of 195 companies. The period of analysis included the years 2009 to 2013, totaling 975 observations.

#### 4.2 Procedures for collecting and analyzing data

The partial adoption of international accounting standards by Brazilian companies was a preponderant factor for the timing of the study, which began in 2008. Moreover, the study comprised a period of five years, due to CEOs' term of office in Brazil (average of four years), which is lower than the global average (5.3 years) (Strategy &, 2014).

Data collection was performed in two stages. First, collecting information related to the calculation of discretionary accruals and control variables, based on financial information resulting from the financial statements (equity at market value, leverage, return on assets, loss, operating cash flow, of the assets and size of the company), obtained in Economática.

Then, from the reference form of each company and with reference to all the studied years, it was collected information related to the CEOs' age and term of office, institutional investors, independence of the board of directors, presence of the audit committee and *Big Four* auditing. To meet the objective of the study, it was necessary to calculate the accruals variation in working capital, considered as a variable dependent on the Dechow and Dichev (2002) model, adapted by Dechow *et al.* (2012), as follows:

$$\Delta WC_{it} = (\Delta CA_{it} - \Delta CL_{it} - \Delta Cash_{it} + \Delta STD_{it})/A_{it-1}$$
(1)

In which:

 $\Delta CA_{it}$  = change in current assets;

 $\Delta CL_{it}$  = change in current liabilities;

 $\Delta Cash_{it}$  = change in cash;

 $\Delta STD_{it}$  = change in short-term debt; and

 $A_{it-1}$  = total assets at the end of t-1 period.

The next step was to establish the level of discretionary accruals by the variation of accruals in working capital ( $\Delta WC_{it}$ ), cash flows for t-1 period, t period and t+1 period. For this, the model of Dechow and Dichev (2002) was used, as follows:

$$\Delta WC_{it} = \alpha_0 + \beta_1 (CFO_{t-1}) + \beta_2 (CFO_t) + \beta_3 (CFO_{t+1}) + \varepsilon_t$$
 (2)

In which:

 $AD(GR_{it})$  = level of discretionary accruals obtained by the residuals of equation (2); and CFO = operating cash flow.

Then, the models used to verify the influence of the CEOs' term of office in the intensity of discretionary accruals, according to the equations (3a)-(3d), were established.

$$AD(GR)_{it} = a_0 + a_1CEOPAM_{it} + a_2CEOIdade_{it} + a_3PLVM_{it-1}$$
$$+ a_4Alavancagem_{it-1} + a_5ROA_{it-1} + a_6Perda_{it-1} + a_7CFO_{it}$$
$$+ a_8CrescAtivo_{it} + a_9Tam_{it} + \varepsilon_{it}$$
(3a)

In which:

 $AD(GR_{ii})$  = discretionary accumulations of firm i in year t, estimated by the residuals of equation (3), in module; and

extensive term of office

CEOPAM<sub>it</sub> = first two years of CEO's term, it is a dummy variable that equals one (1) for the first two years of CEO's term and zero (0) otherwise.

Control variables:

 $CEOIdade_{it}$  = CEO's age in year t; this variable was not established in Log because

Wooldridge (2006) comments that, generally, measured variables in

years do not take the logarithmic form;

 $PLVM_{it-1}$  = Log of shareholders' equity at market value in the year t-1;

*Alavancagem*<sub>it -1</sub> = total debt weighted by total assets in the year t -1;

 $ROA_{it-1}$  = return on assets in the year t-1;

 $Perda_{it-1}$  = dummy variable that equals one (1) for companies with net loss for

year t - 1, and zero (0) otherwise;

 $CFO_{it}$  = cash flow from operations of year t, staggered by total assets at the

beginning of year t;

 $CrescAtivo_{it}$  = change in total assets during year t, staggered by total assets at the

beginning of year t; and

 $Tam_{it}$  = Log of total assets in year t.

$$AD(GR)_{it} = a_0 + a_1CEOFINAL_{it} + a_2CEOIdade_{it} + a_3PLVM_{it-1}$$

$$+ a_4Alavancagem_{it-1} + a_5ROA_{it-1} + a_6Perda_{it-1} + a_7CFO_{it}$$

$$+ a_8CrescAtivo_{it} + a_9Tam_{it} + \varepsilon_{it}$$
(3b)

In which:

 $CEOFINAL_{it}$  = dummy variable that equals one (1) for CEOs who are in the last year of their term in year t and zero (0), otherwise.

$$AD(GR)_{it} = a_0 + a_1CEOLONG_{it} + a_2CEOIdade_{it} + a_3PLVM_{it-1}$$

$$+ a_4Alavancagem_{it-1} + a_5ROA_{it-1} + a_6Perda_{it-1} + a_7CFO_{it}$$

$$+ a_8CrescAtivo_{it} + a_9Tam_{it} + \varepsilon_{it}$$
(3c)

In which:

 $CEOLONG_{it}$  = dummy variable that equals one (1) for CEOs who are at least five years in the term of office in year t and zero (0), otherwise.

$$AD(GR)_{it} = a_0 + a_1 TMCEO_{it} + a_2 CEOIdade_{it} + a_3 PLVM_{it-1}$$

$$+ a_4 Alavan cage m_{it-1} + a_5 ROA_{it-1} + a_6 Perda_{it-1} + a_7 CFO_{it}$$

$$+ a_8 Cresc Ativo_{it} + a_9 Tam_{it} + \varepsilon_{it}$$
(3d)

In which:

 $TMCEO_{it}$  = variable that considers the number of years of the CEO's term of office at business i in year t.

581

582

Finally, it was observed the effect of the monitoring mechanisms in the relationship between the first years and also the long term of the CEOs' term of office on the intensity of use of discretionary accruals. To do so, the following equations were used:

$$AD_{it} = a_0 + a_1CEOPAM_{it} + a_2CEOPAM_{it} IndConselhoADM_{it-1}$$

$$+ a_3CEOIdade_{it} + a_4PLVM_{it-1} + a_5Alavancagem_{it-1}$$

$$+ a_6IndConselhoADM_{it-1} + a_7ROA_{it-1} + a_8Perda_{it-1} + a_9CFO_{it}$$

$$+ a_{10}CrescAtivo_{it} + a_{11}Tam + \varepsilon_{it}$$

$$(4a)$$

In which

CEOPAM X  $IndConselhoADM_{it-1}$  = variable that verifies the effect of the independence of the Board of Directors in year t-1, in relation to the first two years of CEOs' term; and

 $IndConselhoADM_{it-1}$  = independence of the board of directors in year t-1.

$$AD_{it} = a_0 + a_1 CEOLONG_{it} + a_2 CEOLONG X Ind Conselho ADM_{it-1}$$

$$+ a_3 CEOIdade_{it} + a_4 PLVM_{it-1} + a_5 Alavan cage m_{it-1}$$

$$+ a_6 Ind Conselho ADM_{it-1} + a_7 ROA_{it-1} + a_8 Perda_{it-1}$$

$$+ a_9 CFO_{it} + a_{10} Cresc Ativo_{it} + a_{11} Tam + \varepsilon_{it}$$
(4b)

In which:

CEOLONG X  $IndConselhoADM_{it-1}$  = variable that verifies the effect of the independence of the board of directors in year t-1, in relation to the CEOs' long term:

$$AD_{it} = a_0 + a_1CEOPAM_{it} + a_2CEOPAMX PresenComit Aud_{it-1}$$

$$+ a_3CEOIdade_{it} + a_4PLVM_{it-1} + a_5Alavancagem_{it-1}$$

$$+ a_6PresenComit Aud_{it-1} + a_7ROA_{it-1} + a_8Perda_{it-1} + a_9CFO_{it}$$

$$+ a_{10}CrescAtivo_{it} + a_{11}Tam_{it} + \varepsilon_{it}$$
 (5a)

In which:

CEOPAM X  $IndConselhoADM_{it-1}$  = variable that verifies the effect of the audit committee in year t-1, in relation to the first two years of CEOs' term: and

 $PresenComit\hat{e}Aud_{it-1}$  = Presence of the Audit Committee in year t-1.

$$AD_{it} = a_0 + a_1 CEOLONG_{it} + a_2 CEOLONG_X PresenComit Aud_{it-1}$$

$$+ a_3 CEOIdade_{it} + a_4 PLVM_{it-1} + a_5 Alavan cagem_{it-1}$$

$$+ a_6 PresenComit Aud_{it-1} + a_7 ROA_{it-1} + a_8 Perda_{it-1}$$

$$+ a_9 CFO_{it} + a_{10} CrescAtivo_{it} + a_{11} Tam_{it} + \varepsilon_{it}$$
 (5b)

In which:

CEOLONG X IndConselhoAD $M_{it-1}$  = variable that verifies the effect of the audit committee in year t-1, in relation to the CEOs' long term.

$$AD_{it} = a_0 + a_1CEOPAM_{it} + a_2CEOPAM_X AudBigFour_{it-1} + a_3CEOIdade_{it}$$
 CEOs'  
  $+ a_4PLVM_{it-1} + a_5Alavancagem_{it-1} + a_6AudBigFour_{it-1} + a_7ROA_{it-1}$  extensive term  
  $+ a_8Perda_{it-1} + a_9CFO_{it} + a_{10}CrescAtivo_{it} + a_{11}Tam_{it} + \varepsilon_{it}$  (6a)

In which:

 $CEOPAM \ X \ Aud BigFour_{it-1} =$  variable that verifies the effect of the  $Big \ Four$  audit in year t-1, in relation to the first two years of CEOs' term; and  $Aud BigFour_{it-1} = Big \ Four$  Auditing in year t-1.

$$AD_{it} = a_0 + a_1 CEOLONG_{it} + a_2 CEOLONG_{it} AudBigFour_{it-1} + a_3 CEOIdade_{it}$$

$$+ a_4 PLVM_{it-1} + a_5 Alavan cagem_{it-1} + a_6 AudBigFour_{it-1} + a_7 ROA_{it-1}$$

$$+ a_8 Perda_{it-1} + a_9 CFO_{it} + a_{10} CrescAtivo_{it} + a_{11} Tam_{it} + \varepsilon_{it}$$
(6b)

In which:

CEOLONG X  $AudBigFour_{it-1}$  = variable that verifies the effect of the BigFour audit in year t-1, in relation to the CEOs' long term.

$$AD_{it} = a_0 + a_1 CEOPAM_{it} + a_2 CEOPAM X Institucional Prop_{it-1} + a_3 CEOIdade_{it}$$

$$+ a_4 PLVM_{it-1} + a_5 A lavan cage m_{it-1} + a_6 Institucional Prop_{it-1} + a_7 ROA_{it-1}$$

$$+ a_8 Perda_{it-1} + a_9 CFO_{it} + a_{10} Cresc A tivo_{it} + a_{11} Tam_{it} + \varepsilon_{it}$$
(7a)

In which:

CEOPAM X InstitucionalPro $p_{it-1}$  = variable that verifies the effect of institutional investors in year t-1, in relation to the first two years of CEOs' term; and = percentage of shares held by institutional investors in year t-1.

$$AD_{it} = a_0 + a_1 CEOLONG_{it} + a_2 CEOLONG_X Institucional Prop_{it-1} + a_3 CEOIdade_{it}$$

$$+ a_4 PLVM_{it-1} + a_5 Alavan cage m_{it-1} + a_6 Institucional Prop_{it-1} + a_7 ROA_{it-1}$$

$$+ a_8 Perda_{it-1} + a_9 CFO_{it} + a_{10} CrescAtivo_{it} + a_{11} Tam_{it} + \varepsilon_{it}$$
(7b)

In which:

CEOLONG X InstitucionalPro $p_{it-1}$  = variable that verifies the effect of institutional investors in year t-1, in relation to CEOs' long term.

The analysis of the results was performed using descriptive statistics, cross-sectional regression to estimate accruals [equation (2)] and regression of panel data to test the hypotheses of the research [equations (3) to (7)].

## 5. Results analysis

This study sought to verify the intensity of use of discretionary accruals, but not the level of positive or negative intensity of discretionary accruals. Thus, the variables  $AD(GR_t)$  that

had negative values were transformed by module, into positive values. In this sense, we have the descriptive statistics of all variables used in the research, according to Table I.

It can be seen in Table I, in relation to term time, that 35 per cent of CEOs are in the first two years, totaling 345 observations. Long-term CEOs represent 33 per cent, totaling 326 observations, confirming the estimate that many CEOs remain in the position for a longer time than the first few years of their appointment (Milbourn, 2003). CEOs in the last year of their mandate represent 22 per cent of the sample, totaling 210 observations. Finally, the CEOs of the Brazilian companies studied remain in the function (TMCEO), on average, approximately 4.3 years, corroborating the estimate presented by Strategy& (2014), which established that the Brazilian CEOs remain, on average, four years in the office, less than the overall average of approximately five years.

CEOs' average age was 52.6 years (minimum 30 and maximum 87). The average leverage of the companies studied was 0.16 and the return on assets was 0.04. It is important to note that 21 per cent of the companies presented losses in different periods, totaling 210 observations. Regarding the monitoring mechanisms, it can be observed that the average proportion of institutional investors was 0.84 and the independence of the board of directors was 0.17. In addition, 29 per cent of companies have an audit committee and 73 per cent are audited by *Big Four* companies.

Finally, the sectors with the highest concentration of companies were: construction and transportation (175 observations), public utility (170 observations) and cyclical consumption (165 observations). On the other hand, the most representative sectors were: information technology (25 observations), telecommunications (15 observations) and oil, gas and biofuels (5 observations).

| Variables                      | N   | Minimum | Maximum | Average | SD    | Total    |
|--------------------------------|-----|---------|---------|---------|-------|----------|
| $AD(GR_t)$                     | 975 | 0.00    | 1.60    | 0.08    | 0.11  | 80.48    |
| $CEOPAM_{it}$                  | 975 | 0.00    | 1.00    | 0.35    | 0.48  | 345.00   |
| $CEOLONG_{it}$                 | 975 | 0.00    | 1.00    | 0.33    | 0.47  | 326.00   |
| $CEOFINAL_{it}$                | 975 | 0.00    | 1.00    | 0.22    | 0.41  | 210.00   |
| $TMCEO_{it}$                   | 975 | 1.00    | 15.00   | 4.33    | 2.96  | 4328.00  |
| $CEOIdade_{it}$                | 975 | 30.00   | 87.00   | 52.61   | 9.90  | 51295.00 |
| $PLVM_{it-1}$                  | 975 | 8.95    | 19.75   | 15.66   | 17.11 | 22.54    |
| $Alavancagem_{it-1}$           | 975 | 0.00    | 0.79    | 0.16    | 0.12  | 151.25   |
| $ROA_{it-1}$                   | 975 | -0.82   | 0.75    | 0.04    | 0.10  | 36.09    |
| $Perda_{it-1}$                 | 975 | 0.00    | 1.00    | 0.21    | 0.41  | 202.00   |
| $CFO_{it}$                     | 975 | 3.58    | 17.43   | 13.66   | 14.84 | 20.55    |
| $CrescAtivo_{it}$              | 975 | -0.88   | 3.38    | 0.16    | 0.34  | 154.13   |
| $Tam_{it}$                     | 975 | 9.96    | 20.44   | 16.22   | 17.67 | 25.40    |
| $Institucional Prop_{it-1}$    | 975 | 0.00    | 53.00   | 0.84    | 4.66  | 370.00   |
| $IndConselhoADM_{it-1}$        | 975 | 0.00    | 0.93    | 0.17    | 0.22  | 164.31   |
| $PresenComit\hat{e}Aud_{it-1}$ | 975 | 0.00    | 1.00    | 0.29    | 0.45  | 280.00   |
| $AudBigFour_{it-1}$            | 975 | 0.00    | 1.00    | 0.73    | 0.44  | 714.00   |

**Notes:**  $AD(GR_{it})$  = discretionary accumulations;  $CEOPAM_{it}$  = first two years of CEOs' term;  $CEOFINAL_{it}$  = CEOs who are in their last year of office term;  $CEOLONG_{it}$  = CEOs who have been in office term for at least five years;  $TMCEO_{it}$  = number of years of CEO's term;  $CEOIdade_{it}$  = CEO's age;  $PLVM_{it-1}$  = log of equity at market value;  $Alavancagem_{it-1}$  = total debt weighted by total assets;  $ROA_{it-1}$  = return on assets;  $Perda_{it-1}$  = companies with net loss;  $CFO_{it}$  = Cash flow from operations;  $CescAtivo_{it}$  = growth of total assets;  $Tam_{it}$  = size by total assets;  $Tam_{it-1}$  = percentage of shares held by institutional investors;  $Tam_{it-1}$  =  $Tam_{it$ 

**Table I.**Descriptive statistics of the studied variables

extensive term

CEOs'

Table II shows the relationship between the assumptions of CEOs' term time length and the use of the discretionary accruals measured by equation (2).

It can be seen in Table II that all models presented a reasonable explanatory power for the level of use of discretionary accruals, with an  $R^2$  of approximately 26 per cent. The results show that CEOs' first years of office term have a positive (significant) relationship with the use of discretionary accruals. Thus, indications point out that CEOs, in the first years of their term of office, use [Gerenciamento de Resultados (Earnings Management) (GR)] management practices more intensively and can sometimes seek, by means of such practices, to demonstrate greater capacity to the market, which constantly monitors its performance with regard to generating results for the organization. In this way, it is considered that HI is accepted, corroborating the evidences of Holmstrom (1982), Hermalin and Weisbach (1998), Brickley *et al.* (1999), Cella *et al.* (2014), Ali and Zhang (2015).

In relation to CEOs in their last year of office term (equation 3b), the results revealed that there is no significant effect on the level of discretionary accruals, rejecting *H2*, contrary to the findings of Dechow and Sloan (1991), Pourciau (1993), Murphy and Zimmerman (1993), Brickley *et al.* (1999), Kalyta (2009), Ali and Zhang (2015). Therefore, the evidence that CEOs in the last year of their term have opportunistic interests tied to performance pay cannot be proven and they would use GR opportunistic practices to do so.

In addition, important results are demonstrated in front of the observation of the CEOs with long office term. Thus, the evidence indicates that CEOs with a long term are negatively related to the use of discretionary accruals, accepting H3 of the research. It is concluded that CEOs with a long term of office tend to use discretion (results management) with less intensity, corroborating the inferences made by Diamond (1989), Kuang *et al.* (2014), Cella *et al.* (2014), Ali and Zhang (2015), in which career concerns and shareholder uncertainties about CEO capacity decline with the increase in term of office, and thus, not requiring the use of opportunistic practices when reporting accounting information.

Finally, the premise of the variable of time of office term is presented by the equation (3d). In this sense, the results demonstrate that CEOs' time of office term is negatively related to the use of discretionary accruals, accepting H4 of the research. Therefore, it is inferred that an increase in the CEOs' term of office leads to a decrease in the probability of occurrence of the opportunistic practices, being the reverse also true, that is, the shorter CEOs' term causes an increase in the occurrence probability of GR. This result corroborates the one found for the first two years of office [equation (3a)].

Table III shows the effect of monitoring mechanisms on the relationship between the first two years and the last year of CEOs' term with the intensity of discretionary accruals.

It can be seen in Table III that the models presented reasonable explanatory power for the level of use of the discretionary accruals, with  $R^2$  close to 26 per cent. The results showed that the presence of institutional investors negatively affects the relationship between CEOs in the first years of their term of office and the intensity of use of discretionary accruals, accepting H8 of the research. It is inferred, therefore, that the CEOs' first years of office are related to GR practices, although institutional investors act as mitigators of such opportunistic practices, improving the quality of accounting information. Thus, the evidences pointed by Thompson and Davis (1997), Bushee (1998), Collins *et al.* (2003), Cornett *et al.* (2008), Cella *et al.* (2014), Ali and Zhang (2015) that institutional investors act to minimize corporate opportunistic practices and, therefore, assist shareholders in corporate monitoring, are confirmed.

Regarding the independence of the board of directors, the findings show that this factor negatively affects the relationship between CEOs in the first years of their term of office and the intensity of use of discretionary accruals, accepting *H5*. This finding demonstrates that

Standard error 0.0175 0.0557 0.04950.0140 0.01050.0114 0.0296 0.1695Equation (3d) Fixed effects  $AD(GR_t)$ \*0000.0 \*00000 \*9000.0 \*6000.0 0.18380.10640.2651 975 H4Coefficient 0.0012\*\* 0.0863\*\* 0.0204\*\*.0.0398\* 0.1626\*0.0701\* 0.5315\*0.0037\* 0.1166\*0.0120 Standard error 0.0130 0.04940.0140 0.0105 0.0296 90000 0.01750.05540.0114 0.1681Fixed effects Equation (3c) 0.0001\* 0.00008\* H3  $AD(GR_t)$ 975 0.0009\* \*0000.0 0.12620.1883Coefficient 0.0195\*\*0.1063\*\* 0.0401\* 0.1650\*0.0705\*-0.0302\*0.0015\*0.5574\* 0.0797 0.0097 Standard error 9000.00.01750.05550.0495 0.0114 0.0141 0.0105 0.0294 0.1677 Equation (3b) Fixed effects  $AD(GR_t)$ \*9000.0 0.0002\* \*0000.0 \*0000.0 0.16320.2617 0.0926975 H2Coefficient -0.0014\* 0.0109 -0.1015\*\* 0.1651\*\*7870.0 +0.0396\*0.5873\* 0.0813 0.0185-0.0113Standard error 0.0140 0.05560.01130.0105 0.16720.0077 0.01740.04940.0294 Equation (3a) Fixed effects 0.1688 0.0000\*975 0.0008\*  $AD(GR_t)$ \*00000.0 0.0005\* 0.2668 HICoefficient 0.0875\*\* 0.5794\* 0.1174\*0.0385\*0.1635\*0.0819\* 0.0208\*0.0013\* 0.0178 0.0131 ndependent variables Significance model Alavancagem<sub>it-1</sub> Breusch-Pagan **CEOFINAL**<sub>it</sub>  $CEOLONG_{it}$  $CEOIdade_{it}$ CrescAtivo<sub>it</sub>  $R^2$  Between Hypothesis CEOPAM;  $PLVM_{it-1}$  $Perda_{it-1}$  $R^2$  Overall  $TMCEO_{it}$  $R^2$  Within  $ROA_{it-1}$ Hausman  $Tam_{it}$  $CFO_{it}$ Cons Chow

**Notes:**  $AD(GR_i)$  = discretionary accumulations;  $CEOPAM_{ii}$  = first two years of CEOs' term;  $CEOFINAL_{ii}$  = CEOs who are in their last year of office term;  $CEOLONG_{ii}$  = CEOs who have been in office term for at least five years;  $TMCEO_{ii}$  = number of years of CEO's term;  $CEOL_{andiei}$  = CEO's age;  $PVM_{ii-1}$  = log of equity at market value;  $Alavancagem_{ii-1}$  = total debt weighted by total assets;  $ROA_{ii-1}$  = return on assets;  $Perda_{ij-1}$  = companies with net loss;  $CFO_{ii}$  = cash flow from operations;  $CrescAttivo_{ii}$  = growth of total assets;  $Tam_{ii}$  = size by total assets; \*\*significance at the level of 5%; \*\*\*significance at the level of 10%

Table II.
Relationship between the assumptions of CEOs' term time length and the use of discretionary accruals

| CEOs' extensive term of office   | (continued) |                 |        |                    |                   |        |                     | -0.0170<br>0.0266 |                   | Equation (6b) $R_{t}$ Fixed effects   |
|--|-------------|-----------------|--------|--------------------|-------------------|--------|---------------------|-------------------|-------------------|---|
| 587  |             |                 |        |                    |                   |        |                     |                   | 0.0704*<br>0.0152 | Equation (6a) Equation (6b)  AD(GR)  Fixed effects Fixed effects            |
|  |             |                 |        |                    |                   |        |                     | -0.0366<br>0.0149 |                   | Equation (5b) $\mathcal{GR}_t$ Fixed effects                                |
|  |             |                 |        |                    |                   |        |                     |                   | 0.0318*           |   |
|  | 0.0373      | -0.024 $0.0373$ | 0.0333 |                    |                   |        |                     | -0.0361* $0.0152$ |                   | Equation (4b) Equation (5<br>GR <sub>t</sub> )  Fixed effects Fixed effects |
|  | 0.0341      | 0.0151          |        | -0.0699*<br>0.0345 |                   |        |                     |                   | 0.0332*           | Equation (4a) AD((  |
|  |             |                 |        |                    | 900000            | 0.0002 |                     | -0.0321* 0.0152   |                   | Equation (7b) <i>Rt</i> <sub>j</sub> Fixed effects                          |
|  |             |                 |        |                    | -0.0003<br>0.0007 |        | -0.0009**<br>0.0005 |                   | 0.0305*           | Equation (7a) Equation (7b) $AD(GR_t)$ Fixed effects                        |
| Table III.  Effect of monitoring mechanisms on the relationship between the assumptions of |             |                 | × IDC  | IDC                |                   | ×IIT   | IIT                 |                   |                   | variables   |

## Table III. monitoring

sms on the ip between mptions of CEOs' time of office term with the use of discretionary accruals

| RAUSP<br>53,4 | nation (6b)  |   |  |                      |   | -0.0140<br>0.0271   | -0.0123<br>0.0149    | -0.0015*<br>0.0006                      | 0.0098<br>0.0175<br>(continued)       |
|---------------|--|---|--|----------------------|---|---|----------------------|---|---------------------------------------|
| 588           | Equation (6a) Equation (6b) $AD(GR)$ , Fixed effects     |   |  |                      | -0.0660*<br>0.0176  | ı   | 0.0083               | -0.0011**<br>0.0006                     | 0.0129<br>0.0173                      |
|               | Equation (5b) $GR_t$ Fixed effects                       |   | 0.0234                                     | 0.0472*<br>0.0242    |   |   |                      | -0.0016* 0.0006                         | 0.0119<br>0.0175                      |
|               | Equation (5a) Eq AD(GR,) Fixed effects Fix               | -0.0365*<br>0.0167  |  | 0.0713*<br>0.0245    |   |   |                      | -0.0013*<br>0.0006                      | 0.0160                                |
|               | 4a) Equation (4b) AD(GR <sub>i</sub> ) cts Fixed effects |   |  |                      |   |   |                      | -0.0015*                                | 0.0089                                |
|               | Equation (4a)  AD  Fixed effects                         |   |  |                      |   |   |                      | -0.0013*<br>0.0006                      | 0.0135<br>0.0175                      |
|               | Equation (7b) $SR_t$ Fixed effects                       |   |  |                      |   |   |                      | -0.0016* 0.0006                         | 0.0093                                |
|               | Equation (7a) Ec $AD(GR_i)$ Fixed effects Fi             |   |  |                      |   |   |                      | -0.0014* $0.0006$                       | 0.0114<br>0.0175                      |
| Table III.    | Independent variables                                    | $\begin{array}{c} CEOPAM \times PCA \\ Coeffic \\ SE \end{array}$ | $CEOLONG_{it} \times PCA$<br>Coeffic<br>SE | PCA<br>Coeffic<br>SE | $\begin{array}{l} CEOPAM \times ABF \\ Coeffic \\ SE \end{array}$ | $\begin{array}{l} CEOLONG_{it} \times ABF \\ Coeffic \\ SE \end{array}$ | ABF<br>Coeffic<br>SE | CEOIdade <sub>it</sub><br>Coeffic<br>SE | PLVM <sub>it-1</sub><br>Coeffic<br>SE |

|   | Equation (7a) Equation $AD(GR_t)$ | Equation (7a) Equation (7b) $AD(GR_t)$ | Equation (4a) Eq $AD(GR_r)$ | Equation (4a) Equation (4b) $AD(GR_t)$ |                    | Equation (5a) Equation (5b) $AD(GR_t)$ | Equation (6a) Equation (6b) $AD(GR_t)$ | Equation (6b) $\Re R_t$ |
|---|-----------------------------------|--|-----------------------------|--|--------------------|--|--|-------------------------|
| Independent variables                     | Fixed effects                     | Fixed effects                          | Fixed effects               | xed effects                            | Fixed effects      | Fixed effects                          | Fixed effects                          | Fixed effects           |
| $Alavanc_{it-1}$ Coeffic SE               | -0.1181*<br>0.0556                | -0.107**<br>0.0555                     | -0.1159*<br>0.0557          | -0.1029**<br>0.0557                    | -0.1143*<br>0.0555 | -0.106**<br>0.0555                     | $-0.1166* \\ 0.0551$                   | 0.104**<br>0.0555       |
| $ROA_{it-1}$<br>Coeffic<br>SE             | 0.0828**                          | 0.0789                                 | 0.0883**                    | 0.0810                                 | 0.0903**           | 0.0817**                               | 0.0861**                               | 0.0814                  |
| $Perda_{ii-1}$<br>Coeffic<br>SE           | 0.0180                            | 0.0194**<br>0.0114                     | 0.0183<br>0.0114            | 0.0195**<br>0.0114                     | 0.0169<br>0.0113   | 0.0182                                 | 0.0174                                 | 0.0213**<br>0.0115      |
| <i>CFO<sub>it</sub></i><br>Coeffic<br>SE  | -0.0379*<br>0.0140                | -0.0404* 0.0140                        | -0.0386* 0.0140             | -0.0402*<br>0.0140                     | -0.0379*<br>0.0139 | -0.0408* 0.0139                        | -0.0386*<br>0.0139                     | -0.0399*<br>0.0140      |
| CrescAtivo <sub>it</sub><br>Coeffic<br>SE | 0.1620*                           | 0.1648*<br>0.0105                      | 0.1619*                     | $0.1646* \\ 0.0105$                    | 0.1644* $0.0105$   | 0.1667*<br>0.0105                      | 0.1595* 0.0105                         | 0.1641*<br>0.0106       |
| Tam <sub>it</sub><br>Coeffic<br>SE        | -0.0775* 0.0294                   | -0.0691* $0.0297$                      | -0.0848*<br>0.0296          | -0.0685*<br>0.0299                     | -0.0840*<br>0.0293 | -0.0697* $0.0295$                      | -0.0797* $0.0295$                      | -0.0662*<br>0.0299      |
| _Cons<br>Coeffic<br>SE                    | 0.5699*<br>0.1671                 | 0.5584*<br>0.1683                      | 0.5930*<br>0.1678           | 0.5539*<br>0.1689                      | 0.5537*<br>0.1669  | 0.5289*<br>0.1682                      | 0.5525*<br>0.1669                      | 0.5353*<br>0.1692       |
|   |                                   |  |                             |  |                    |  |  | (continued)             |

CEOs' extensive term of office

589

Table III.

|                           | Equation (7a) $AD(0)$ | Equation (7b) $GR_t$ | Equation (4a)<br>AD(G | Щ Ж           | Equation (5a) $AD$ ( | Equation (5b) $GR_t$ | Equation (6a) Equation (0a) $AD(GR_t)$ | Equation (6b) $R_t$ |
|---------------------------|-----------------------|----------------------|-----------------------|---------------|----------------------|----------------------|--|---------------------|
| Independent variables     | Fixed effects         | Fixed effects        | Fixed effects         | Fixed effects | Fixed effects        | Fixed effects        | Fixed effects                          | Fixed effects       |
| $R^2$ Within              | 0,2704                | 0.2656               | 0.2708                | 0.2657        | 0.2767               | 0.27707              | 0.2817                                 | 0.2664              |
| $R^2$ Between             | 0,0862                | 0.1115               | 0.1014                | 0.1281        | 0.0940               | 0.1131               | 0.1083                                 | 0.1206              |
| $R^2$ Overall             | 0,1674                | 0.1825               | 0.1705                | 0.1908        | 0.1712               | 0.1828               | 0.1835                                 | 0.1866              |
| Significance of the model | *00000                | *00000               | *0000.0               | *00000        | *00000               | *00000               | *00000                                 | *00000              |
| Number of observations    | 975                   | 975                  | 975                   | 975           | 975                  | 975                  | 975                                    | 975                 |
| Breusch-Pagan             | 0,0014*               | 0.0019*              | *20000                | *6000.0       | *8000.0              | *6000.0              | *20000                                 | 0.0011*             |
| Chow                      | *00000                | 0.0001*              | *0000.0               | 0.0001*       | *00000               | *00000               | 0.0001*                                | 0.0001*             |
| Hausman                   | *900000               | 0.0013*              | 0.0016*               | 0.0026*       | 0.0003*              | 0.0005*              | 0.0031*                                | 0.0025*             |
| Hypothesis                | H                     | ∞                    | H                     | 2             | H                    | 91                   | H                                      |                     |

**Notes:**  $AD(GR_{ii}) =$  discretionary accumulations;  $CEOPAM_{ii} =$  first two years of CEOs' term;  $CEOLONG_{ii} =$  CEOs who have been in office term for at least 5 years,  $CEOPAM \times IIT =$  effect of institutional investors in relation to the first two years of CEOs' term;  $CEOLONG \times IIT =$  effect of institutional investors in relation to the CEOs' long term of office; IIT = percentage of shares held by institutional investors;  $CEOPAM \times IDC =$  effect of the independence of the board of directors with regard to the first two years of CEOs term,  $CEOLONG \times DC =$  effect of the independence of the board of directors with regard to the CEOs to the CEOs to the CEOs to CEOS term of office; DC = independence of the board of directors;  $CEOPAM \times PCA = effect$  of the audit committee with regard to the first two years of CEOs' term,  $CEOLONG \times PCA =$  effect of the audit committee with regard to CEOs' long term of office; PCA = presence of the audit committee;  $CEOPAM \times ABF =$  effect of the Big Four audit in relation to the first two years of CEOs' term;  $CEOLONG \times ABF =$  effect of the Big Four audit in relation to o CEOs' long term of office; ABF = ABF == Big Four audit,  $CEOIdade_{ii}$  = CEO's age;  $PLVM_{ii-1}$  =  $\log$  of equity at market value,  $Alavancagem_{il-1}$  = total debt weighted by total assets;  $ROA_{il-1}$  = Return on assets;  $Perda_{il-1}$  = companies with net loss;  $CFO_{il}$  = cash flow from operations;  $CrescAtivo_{il}$  = growth of total assets;  $Tam_{il}$  = size by total assets; \*significance at the level of 5%; and \*\*significance at the level of 10%

CEOs'

the independence of the board of management exercises a preponderant factor in mitigating opportunistic practices, mainly, acting against companies with a tendency towards GR, as in the case of those with CEOs in the first years of their term. In addition, the finding corroborates Klein's (2002) and Goulart's (2007) studies, in light of the evidence that the board should be composed of independent members to be effective in corporate monitoring.

In addition, it is noted that the audit committee has negatively affected the relationship between CEOs in the first years of their term of office and the intensity of use of discretionary accruals, leading to the acceptance of *H6*. Thus, it is inferred that the audit committee has effectively acted in corporate monitoring, especially in companies that are more likely to use opportunistic practices, in this case when there are CEOs who are in their first years of office term. This result corroborates Klein's (2002) and Goulart's (2007) evidences on the performance of the audit committee as a mechanism of corporate governance and also in its work toward improving the quality of accounting information.

Finally, it is noticed that the auditing of *Big Four* firm negatively affects the relationship between CEOs in the first years of their term of office and the intensity of use of discretionary accruals, which allows the acceptance of *H7*. In view of the above, it is considered that the *Big Four* auditing has been a major factor in helping to improve the quality of accounting information, even in companies that are prone to GR, as those with CEOs who are in their first years of office term. The results converge with Stigler (1961), Lam and Chang (1994) and Almeida and Almeida (2009), who demonstrated that the audit by *Big Four* increases the quality of accounting information, acting as a mechanism that improves corporate monitoring and making managers more concerned about the use of opportunistic practices.

Based on the evidence presented in the international literature, it was hoped to confirm all hypotheses. However, inferences could not be made regarding CEOs' long term in Scenarios 5, 6, 7 and 8. In this sense, it can be concluded that CEOs' long term management is already a factor restricting GR opportunistic practices, and therefore, the inclusion of corporate governance mechanisms does not improve the monitoring effect. Thus, it is assumed that CEOs who have a long term are concerned with the quality of accounting information reported to the market, which may directly interfere with the gain or loss in the CEOs' reputation.

In addition, panel data regressions were developed to test the moderating effect of corporate governance mechanisms on the relationship between TMCEO and GR practices and also on the relationship between CEOFINAL and GR practices. The results showed that the mechanisms of corporate governance do not bring significant differences on the relationships found in the models that evaluated the direct relationship between TMCEO and GR practices and that between CEOFINAL and GR practices; therefore, it was decided that such data will not be presented as they are not relevant to the results presented so far.

Regarding the control variables, the results were consistent with the tested models, indicating that the CEOs' age shows a negative and significant relationship with the level of discretionary accruals. Therefore, younger CEOs tend to use GR practices more intensively. This result indicates the reputation factor as preponderant for non-use of opportunistic practices, and there may be a tendency for older CEOs to have gained a reputation and professional prestige and therefore would not be willing to engage in practices that may be rejected or not well seen by the market.

In addition, the models show that the degree of leverage is negatively related to the level of discretionary accruals; therefore, more leveraged companies would be associated with a lower use of discretionary accruals. In relation to return on assets, it can be inferred that this is positively related to the level of discretionary accruals. In addition, organizations that

present losses are more likely to use the discretionary power resulting from the accounting choices. Companies with lower operating cash flow also tend to use more discretionary accruals and, lastly, those with higher asset growth and smaller size are positively related to the use of discretionary accruals.

### 6. Discussion of findings

The results indicated that the level of discretionary accumulations is higher in firms with CEOs in the first years of their term, confirming the findings of previous studies (Holmstrom, 1982; Hermalin and Weisbach, 1998; Brickley *et al.*, 1999; Cella *et al.*, 2014; Ali and Zhang, 2015), which may indicate that such CEOs would be concerned about demonstrating market competence and/or that they would seek to increase earnings linked to results.

This result is also evidenced by the test of the time of CEOs' term variable, whose findings demonstrated a negative relation between term time and the use of discretionary accruals, indicating that the shorter the term of CEOs, the better the results management practices.

On the other hand, the level of discretionary accumulations is lower in firms where CEOs are on a long term of office, corroborating previous studies (Diamond, 1989; Kuang *et al.*, 2014; Cella *et al.*, 2014; Ali and Zhang, 2015). The results, therefore, suggest that CEOs that have a long term have a conservative attitude/intent to the intensity of discretionary accruals, presuming they are concerned with a reputation built up over a career.

The results obtained in the tests of means was evidenced by the regressions, in which the intention of the CEOs with long-term management is related negatively to the level of discretionary accruals, inferring that Brazilian managers tend to use with less intensity of discretion in the accounting choices. In this perspective, Cella *et al.* (2014) argue that CEO compensation increases with term of office time, and therefore, the results can prove the lesser use of discretionary accumulations of CEOs with a long term of office, reinforcing the evidence that managers in that position are not concerned with remuneration associated with reported results, but with the reputation they have built up over the course of their career.

Based on the empirical evidence, it was possible to show that CEOs in the last year of their office term are not willing to manage results with higher remuneration prospects, contrary to previous studies (Dechow and Sloan, 1991; Murphy and Zimmerman, 1993; Kalyta, 2009), in which CEOs in the last year of their term use discretionary accumulations to inflate results, with the goal of earning higher pay.

The dissonance of results in relation to international studies, in relation to the last year of the CEOs' term, can be explained by the difference between the variable remuneration system of Brazilian companies (more directed to profit sharing) and that of other countries (based on stock options), the former less likely to attract CEOs to the results management exercise in their last year in office, suggesting that reputation is more relevant than compensation. These results are supported by Graham *et al.*'s (2005) suggestions that CEOs are concerned with reputation and not with being labeled opportunists.

This result broadens the literature on the subject of international corporate governance, noting that the different systems of variable remuneration adopted by countries may influence CEOs' willingness to manage the results in their last year of office term.

In relation to monitoring mechanisms, the results of the present study are consistent with previous evidences (Thompson and Davis, 1997; Bushee, 1998; Collins *et al.*, 2003; Cornett *et al.*, 2008) by indicating that the proportion of institutional investors, the independence of the board of directors, the presence of the *Big Four* audit and audit committee have had a

CEOs'

of office

extensive term

significant impact on the decrease of discretionary accumulations in companies with CEOs in the early years of their term. It is inferred, therefore, that the mistrust of the accounting information reported by companies with CEOs in the first years of their term can be minimized through the use of such corporate governance mechanisms.

## 7. Conclusion and recommendations

The objective of the study was to verify the influence of monitoring mechanisms on the relationship between CEOs' term time and discretionary accruals. Predominantly, there are indications that CEOs with a longer term of office seek to preserve their reputation, created over the course of their careers, and, therefore, use less discretionary choice in their accounting choices. The control variable CEO's age is a useful criterion for proving that, over time, managers are more concerned with their reputation, as older CEOs use the discretionary choice of accounting with less intensity. Having already demonstrated to the market their managerial capacity, such CEOs prioritize the maintenance of a positive image, while the younger ones need to outline positive results on their capacity, tending to use more discretionary accruals.

CEOs, in the last year of their term, had no influence on the intensity of use of discretionary accruals. It is suggested that the last year in office, in the Brazilian context, was not predominant to offer incentives to agency conflicts. Much of the literature related to accounting choices focuses on the observation of CEOs in North American companies.

The performance-based pay culture seems to be more effective for the USA, whose managers, in their last year in office, are more likely to use discretionary accruals, differing from Brazilian CEOs, according to the findings of this research. Finally, the average time of office term for Brazilian CEOs is lower than that for other countries' CEOs, and may also be a plausible explanation for divergent findings.

It is concluded that the CEOs in their first years of office are more likely to use opportunistic results management practices. On the other hand, the mandate of CEOs' who have a long term has predominantly been that the quality of accounting information be maintained and agency conflicts be reduced. In this sense, these results are relevant for auditors, analysts, investors and shareholders to take greater care of companies that have a high turnover of CEOs and tend to hire younger CEOs.

In general, the research succeeded in proposing to associate the time horizon of the CEO's mandate to the propensity to develop opportunistic attitudes and elements of monitoring, research gap and main motivation of the study.

For companies that have a tendency to use results management practices by CEOs in the first years of their term, it is useful to monitor the mechanisms of performance, minimizing the impacts of opportunistic practices. In this sense, companies with high turnover of CEOs need to establish strong mechanisms of corporate governance, using independent management councils, creating audit committees, focusing on the presence of institutional investors as shareholders and hiring *Big Four* audit firms.

The limitation of the findings of the first years in office is a function of the high turnover of CEOs (stay in office for a year or two). When participating in the sample, in the first two years and also in the last year of office, this profile, not controlled by the research, may have generated temporal problems.

In addition, several models have been used extensively to test results management, with admittedly limited effectiveness. The limitation of the Dechow and Dichev's (2002) model is related to the low adequacy for results management tests in which the hypothesis implies smoothing the results (Dechow *et al.*, 2012). Still as a limitation, it is important to list that the

results are indicative/associative and not causal, given the endogenous nature of the relationships.

For future research, evaluations of the effect of CEOs' time in office on the management of results by operational decisions are recommended. The results of research with this perspective may support the premises established by Holmstrom (1982), Healy and Wahlen (1999), Cella *et al.* (2014) and Ali and Zhang (2015), that CEOs in the early years of their term tend to increase the practice of managing results. The same applies to CEOs in the last year of their term of office who, according to Kalyta (2009) and Ali and Zhang (2015), tend to manage results in order to increase remuneration.

#### References

- Ali, A. and Zhang, W. (2015), "CEO tenure and earnings management", *Journal of Accounting and Economics*, Vol. 59 No. 1, pp. 60-79.
- Almeida, J.E.F. and Almeida, J.C.G. (2009), "Auditoria e earnings management: estudo empírico nas empresas abertas auditadas pelas big four e demais firmas de auditoria", Revista Contabilidade and Finanças, Vol. 20 No. 50, pp. 62-74.
- Bratton, W.W. and McCahery, J.A. (1999), "Comparative corporate governance and the theory of the firm: the case against global cross reference", *Columbia Journal of Transnational Law*, Vol. 38 No. 2, p. 213.
- Brickley, J.A., Linck, J.S. and Coles, J.L. (1999), "What happens to CEOs after they retire? New evidence on career concerns, horizon problems, and CEO incentives", *Journal of Financial Economics*, Vol. 52 No. 3, pp. 341-377.
- Bushee, B.J. (1998), "The influence of institutional investors on myopic R&D investment behavior", *The Accounting Review*, Vol. 73 No. 3, pp. 305-333.
- Cella, C. Ellul, A. and Gupta, N. (2014), "Learning through a smokescreen: earnings management and CEO compensation over tenure", available at: SSRN2544262
- Collins, D.W., Gong, G. and Hribar, P. (2003), "Investor sophistication and the mispricing of accruals", Review of Accounting Studies, Vol. 8 Nos 2/3, pp. 251-276.
- Cornett, M.M., Marcus, A.J. and Tehranian, H. (2008), "Corporate governance and pay-for-performance: the impact of earnings management", *Journal of Financial Economics*, Vol. 87 No. 2, pp. 357-373.
- DeAngelo, L.E. (1988), "Managerial competition, information costs, and corporate governance: the use of accounting performance measures in proxy contests", *Journal of Accounting and Economics*, Vol. 10 No. 1, pp. 3-36.
- Dechow, P.M. and Dichev, I.D. (2002), "The quality of accruals and earnings: the role of accrual estimation errors", *The Accounting Review*, Vol. 77 No. S1, pp. 35-59.
- Dechow, P.M. and Skinner, D.J. (2000), "Earnings management: reconciling the views of accounting academics, practitioners, and regulators", *Accounting Horizons*, Vol. 14 No. 2, pp. 235-250.
- Dechow, P.M. and Sloan, R.G. (1991), "Executive incentives and the horizon problem: an empirical investigation", *Journal of Accounting and Economics*, Vol. 14 No. 1, pp. 51-89.
- Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1995), "Detecting earnings management", *Accounting Review*, Vol. 70, pp. 193-225.
- Dechow, P.M., Hutton, A.P., Kim, J.H. and Sloan, R.G. (2012), "Detecting earnings management: a new approach", *Journal of Accounting Research*, Vol. 50 No. 2, pp. 275-334.
- Diamond, D.W. (1989), "Reputation acquisition in debt markets", *The Journal of Political Economy*, Vol. 97 No. 4, pp. 828-862.
- Ebrahim, A. (2007), "Earnings management and board activity: an additional evidence", *Review of Accounting and Finance*, Vol. 6 No. 1, pp. 42-58.

CEOs'

of office

extensive term

- Fudenberg, D. and Tirole, J. (1995), "A theory of income and dividend smoothing based on incumbency rents", Journal of Political Economy, Vol. 103 No. 1, pp. 75-93.
- Furuta, F. and Santos, A.D. (2010), "Comitê de auditoria versus conselho fiscal adaptado: a visão dos analistas de mercado e dos executivos das empresas que possuem ADRs", *Revista Contabilidade and Finanças*, Vol. 21 No. 53, pp. 1-23.
- Goulart, A.M.C. (2007), "Gerenciamento de resultados contábeis em instituições financeiras no Brasil. 211 fls. (Tese Doutorado em Ciências Contábeis)", Universidade de São Paulo, São Paulo/SP, Brazil.
- Graham, J.R., Harvey, C.R. and Rajgopal, S. (2005), "The economic implications of corporate financial reporting", *Journal of Accounting and Economics*, Vol. 40 Nos 1/3, pp. 3-73.
- Healy, P.M. and Wahlen, J.M. (1999), "A review of the earnings management literature and its implications for standard setting", Accounting Horizons, Vol. 13 No. 4, pp. 365-383.
- Hermalin, B.E. and Weisbach, M.S. (1998), "Endogenously chosen boards of directors and their monitoring of the CEO", *American Economic Review*, Vol. 88 No. 1, pp. 96-118.
- Hermalin, B.E. and Weisbach, M.S. (2012), "Information disclosure and corporate governance", *The Journal of Finance*, Vol. 67 No. 1, pp. 195-233.
- Holmstrom, B. (1982), "Moral hazard in teams", The Bell Journal of Economics, Vol. 13 No. 2, pp. 324-340.
- Huson, M.R., Tian, Y., Wiedman, C.I. and Wier, H.A. (2012), "Compensation committees' treatment of earnings components in CEOs' terminal years", *The Accounting Review*, Vol. 87 No. 1, pp. 231-259.
- Kalyta, P. (2009), "Accounting discretion, horizon problem, and CEO retirement benefits", The Accounting Review, Vol. 84 No. 5, pp. 1553-1573.
- Klein, A. (2002), "Audit committee, board of director characteristics, and earnings management", Journal of Accounting and Economics, Vol. 33 No. 3, pp. 375-400.
- Kuang, Y.F., Qin, B. and Wielhouwer, J.L. (2014), "CEO origin and accrual-based earnings management", Accounting Horizons, Vol. 28 No. 3, pp. 605-626.
- Lam, S.S. and Chang, S.L. (1994), "Auditor service quality and auditor size: evidence from initial public offerings in Singapore", Journal of International Accounting, Auditing and Taxation, Vol. 3 No. 1, pp. 103-114.
- Lopes, A.B. and Martins, E. (2005), Teoria da Contabilidade: Uma Nova Abordagem, Atlas, Clifton Hill.
- Martinez, A.L. (2001), "Gerenciamento dos resultados contábeis: Estudo empírico das companhias abertas Brasileiras. 167 fls. (Tese Doutorado em Contabilidade)", Universidade de São Paulo, São Paulo/SP, Brazil.
- Milbourn, T.T. (2003), "CEO reputation and stock-based compensation", *Journal of Financial Economics*, Vol. 68 No. 2, pp. 233-262.
- Murphy, K.J. and Zimmerman, J.L. (1993), "Financial performance surrounding CEO turnover", *Journal of Accounting and Economics*, Vol. 16 Nos 1/3, pp. 273-315.
- Pinheiro, J.L. (2001), Mercado de Capitais: Fundamentos E Técnicas, Atlas, Clifton Hill.
- Pourciau, S. (1993), "Earnings management and nonroutine executive changes", *Journal of Accounting and Economics*, Vol. 16 Nos 1/3, pp. 317-336.
- Shleifer, A. and Vishny, R.W. (1997), "A survey of corporate governance", *The Journal of Finance*, Vol. 52 No. 2, pp. 737-783.
- Stigler, G.J. (1961), "The economics of information", *The Journal of Political Economy*, Vol. 69 No. 3, pp. 213-225.
- Strategy& (2014), "Empresas no país estão entre as que mais trocam de CEOs", Disponível, available at: www.strategyand.pwc.com/br/home/imprensa/noticias/display/empresas-ceos (accessed 19 July 2014).
- Thompson, T.A. and Davis, G.F. (1997), "The politics of corporate control and the future of shareholder activism in the United States", *Corporate Governance: An International Review*, Vol. 5 No. 3, pp. 152-159.

## RAUSP 53.4

- Watts, R.L. and Zimmerman, J.L. (1986), Positive Accounting Theory, Prentice-Hall, NJ.
- Wooldridge, J.M. (2006), *Introdução à Econometria: Uma Abordagem Moderna*, Pioneira Thomson Learning.
- Xie, B., Davidson, W.N. and DaDalt, P.J. (2003), "Earnings management and corporate governance: the role of the board and the audit committee", *Journal of Corporate Finance*, Vol. 9 No. 3, pp. 295-316.

#### 596

#### Further reading

- Ashbaugh, H., LaFond, R. and Mayhew, B.W. (2003), "Do no audit services compromise auditor independence? Further evidence", The Accounting Review, Vol. 78 No. 3, pp. 611-639.
- Cheng, S. (2004), "R&D expenditures and CEO compensation", The Accounting Review, Vol. 79 No. 2, pp. 305-328.
- Frankel, R.M., Johnson, M.F. and Nelson, K.K. (2002), "The relation between auditors' fees for nonaudit services and earnings management", *The Accounting Review*, Vol. 77 No. s-1, pp. 71-105.
- Healy, P.M. (1985), "The effect of bonus schemes on accounting decisions", *Journal of Accounting and Economics*, Vol. 7 Nos 1/3, pp. 85-107.
- Jones, JJ. (1991), "Earnings management during import relief investigations", Journal of Accounting Research, Vol. 29 No. 2, pp. 193-228.
- Kini, O. and Williams, R. (2012), "Tournament incentives, firm risk, and corporate policies", Journal of Financial Economics, Vol. 103 No. 2, pp. 350-376.
- Kothari, S.P., Leone, A.J. and Wasley, C.E. (2005), "Performance matched discretionary accrual measures", *Journal of Accounting and Economics*, Vol. 39 No. 1, pp. 163-197.
- Lansberg, I. (1999), Succeeding Generations: Realizing the Dream of Families in Business, Harvard Business Press, Brighton, Boston.
- McConaughy, D.L. (2000), "Family CEOs vs. nonfamily CEOs in the family-controlled firm: an examination of the level and sensitivity of pay to performance", *Family Business Review*, Vol. 13 No. 2, pp. 121-131.
- Matta, E. and Beamish, P.W. (2008), "The accentuated CEO career horizon problem: evidence from international acquisitions", *Strategic Management Journal*, Vol. 29 No. 7, pp. 683-700.
- Tsai, J.L., Knutson, B. and Fung, H.H. (2006), "Cultural variation in affect valuation", *Journal of Personality and Social Psychology*, Vol. 90 No. 2, p. 288.
- Yim, S. (2013), "The acquisitiveness of youth: CEO age and acquisition behavior", *Journal of Financial Economics*, Vol. 108 No. 1, pp. 250-273.

#### \*Corresponding author

Cristian Baú Dal Magro can be contacted at: cristianbaumagro@gmail.com