



REVISTA AMBIENTE CONTÁBIL

Universidade Federal do Rio Grande do Norte

ISSN 2176-9036

Vol. 14, n. 2, Jul./Dez., 2022

Sítios: <http://www.periodicos.ufrn.br/ambiente>

<http://www.atena.org.br/revista/ojs-2.2.3-06/index.php/Ambiente>

Article received: 05 March 2021. Peer reviewed: 03 August 2021.
Reformulated: 02 September 2021. Evaluated by using the double-blind review system.

DOI: 10.21680/2176-9036.2022v14n2ID29385

Overconfidence and audit fees: does the fiscal council influence this relationship?

Exceso de confianza y honorarios de auditoría: ¿influye el consejo fiscal en esta relación?

Excesso de confiança e honorários de auditoria: o conselho fiscal exerce influência nessa relação?

Authors

Jorge Luiz De Santana Júnior

Ph.D. student in Controllershship and Accounting at University of São Paulo. Address: Rua Etelvino Alves Lima, nº 34. Atalaia. Aracaju, Sergipe. CEP: 49037-200. Identifiers (ID):

ORCID: <https://orcid.org/0000-0001-7423-2566>

Lattes: <http://lattes.cnpq.br/7935012360141664>

E-mail: santanajr.prof@gmail.com

Thiago Rios Sena

Ph.D. student in Accounting at Federal University of Pernambuco. Address: Rua Doutor Mário Campos, 47, apt 102, Parque Bela Vista. Salvador, Bahia. CEP: 40279-220. Identifiers (ID):

ORCID: <https://orcid.org/0000-0003-0261-7381>

Lattes: <http://lattes.cnpq.br/2013578941925235>

E-mail: thiagoriossena@gmail.com

Abstract

Purpose: This study aims to investigate the role of fiscal council as a mechanism capable of changing the manager's ability to influence audit fees.

Methodology: 231 observations of publicly-held companies that traded their shares on [B]³ in 2017 were analyzed. To investigate the relationship object of this study, an analysis was performed using multiple linear regression with the OLS estimator.

Results: In the analyzed sample, it was identified that managers' overconfidence increases audit costs, which is consistent with the argument that managers' overconfidence can increase the risk of material error. However, possibly due to characteristics of the emerging environment or different levels of efficiency of the fiscal council, it was not possible to

confirm the hypothesis that the fiscal council exerts a significant influence on the relationship between manager overconfidence and audit fees.

Study Contributions: In the empirical field, this research provides subsidies for investors and regulators regarding the role of governance mechanisms - more specifically the fiscal council - in the relationship between the auditor and the client. From a theoretical perspective, the accounting literature is added to fill in the existing gap about the consequences of behavioral biases of managers on the audit fees under the moderation of the supervisory board.

Keywords: Behavioral Accounting. Decision Making. CEO. Material Risk.

Resumen

Objetivo: Este estudio tiene como objetivo investigar el papel del consejo fiscal como un mecanismo capaz de cambiar la capacidad del administrador para influir en los costos de auditoría.

Metodología: se analizaron 231 observaciones de empresas públicas que cotizaron sus acciones en [B] ³ en 2017. Para investigar la relación objeto de este estudio se realizó un análisis mediante regresión lineal múltiple con un estimador MCO.

Resultados: En la muestra analizada, se identificó que el exceso de confianza de los gerentes aumenta los costos de auditoría, lo cual es consistente con el argumento de que el exceso de confianza de los gerentes puede incrementar el riesgo de error material. Sin embargo, posiblemente por las características del entorno emergente o los diferentes niveles de eficiencia del consejo fiscal, no fue posible confirmar la hipótesis de que el consejo fiscal ejerce una influencia significativa en la relación entre el exceso de confianza de los administradores y los costos de auditoría.

Contribuciones del Estudio: En el campo empírico, esta investigación otorga subsidios a inversionistas y reguladores sobre el rol de los mecanismos de gobernanza - más específicamente el consejo fiscal - en la relación entre el auditor y el cliente. Desde una perspectiva teórica, la literatura contable se agrega para llenar el vacío existente sobre las consecuencias de los sesgos de comportamiento de los gerentes sobre el costo de auditoría bajo la moderación del consejo de supervisión.

Palabras clave: Contabilidad del comportamiento. Toma de decisiones. CEO. Riesgo material.

Resumo

Objetivo: Esse estudo tem como objetivo investigar o papel do conselho fiscal enquanto mecanismo capaz de alterar a capacidade do gestor de influenciar os custos de auditoria.

Metodologia: Foram analisadas 231 observações de empresas abertas que negociaram suas ações na [B]³ no ano de 2017. Para investigar a relação objeto desse estudo, realizou-se análise por meio de regressão linear múltipla com estimador MQO.

Resultados: Na amostra analisada, foi identificado que o excesso de confiança dos gestores aumenta os custos de auditoria, sendo consistente com o argumento de que o excesso de

confiança dos gestores pode elevar o risco de erro material. Contudo, possivelmente em função de características do ambiente emergente ou diferentes níveis de eficiência do conselho fiscal, não foi possível confirmar a hipótese de que o conselho fiscal exerce influência significativa na relação entre o excesso de confiança do gestor e os custos de auditoria.

Contribuições do Estudo: No campo empírico, essa pesquisa fornece subsídios para investidores e reguladores no tocante a atuação dos mecanismos de governança - mais especificamente o conselho fiscal - na relação entre o auditor e o cliente. Sob a perspectiva teórica, acrescenta-se a literatura contábil ao preencher lacuna existente acerca das consequências dos vieses comportamentais dos gestores no custo de auditoria sob a moderação do conselho fiscal.

Palavras-chave: Contabilidade Comportamental. Tomada de Decisão. CEO. Risco Material.

1 Introduction

The Brazilian fiscal council can play similar functions to the statutory audit committee (SAC) and substitute it when Brazilian companies are listed in the US capital market, even having structural differences in relation to SAC, since it meets Sarbanes-Oxley act requirements (Baioco & Almeida, 2017). Still, while previous literature documents that audit committee affects audit-client relationship under several aspects (e.g., audit quality, financial reporting quality, audit fees and auditor choice) (Abbott & Parker, 2000; Abbott, Parker, Peters & Raghunandan 2003; He, Pittman, Rui & Wu, 2017; Krishnan, Wen & Zhao, 2011), little attention has been paid to fiscal council role in external auditor independence.

In the Brazilian setting, where firms have a concentrated ownership structure with few shareholders owning a large number of shares, corporate governance mechanisms play a fundamental role in minority shareholders' protection (Procianoy & Decourt, 2014). For this type of user, accounting information tends to be the main source of decision making. Hence, corporate governance bodies (e.g., fiscal council) are necessary to financial reporting users to the extent that they improve accounting numbers quality and reduce information asymmetry between managers and shareholders (Baioco & Almeida, 2017).

With regard to the relationship between fiscal council and external auditors in Brazil, according to the Brazilian law nº 6.404/1976 and its subsequent alterations, the fiscal council can, through any of its members, require clarifications or information and investigation of specific facts to external auditors. In order to improve the performance of its functions, the fiscal council can also choose the accountant and the audit firm and establish audit fees, at a reasonable price and compatible with the firm's economic size, in case the firm does not have external auditors. Moreover, the fiscal council members can be held responsible by the Brazilian security exchange commission (CVM) for allowing the reporting of misleading information (e.g., CVM decision nº RJ2014/7072 which fined fiscal council members for not having examined the financial reporting appropriately).

One relevant factor that can be associated with material misstatement in financial reporting may be the cognitive bias of the management. Overconfident managers tend to overestimate their performance and adopt more aggressive accounting measures which tend to increase the risk of material misstatement (Cormier, Lapointe-Antunes & Magnan, 2016; Schrand & Zechman, 2012). In turn, aggressive (or less conservative) accounting choices tend

to increase audit fees because it demands more effort from auditors to ensure that the financial reporting is free from material misstatement (DeFond, Lim & Zang 2015; Lee, Li & Sami, 2015).

Nevertheless, audit fees are the result of a negotiation between audit firms and their clients. Doing so, managerial biases may also affect auditor-client agreements. Overconfident managers seek to enable more aggressive measurements decreasing audit quality and, consequently, its costs (e.g., hiring smaller auditors with less reputation risk and less independence and reducing additional and relevant procedures to decrease audit risks) (Davidson III, Jiraporn & DaDalt, 2006; Duellman, Hurwitz & Sun, 2015). Lisic, Neal, Zhang and Zhang (2016) show that audit committee effectiveness depends on CEO power. According to the authors, the quality of the monitoring of the audit committee, even when compounded by experts and independent members, can be reduced by CEO influence. Moreover, narcissistic CEOs tend to increase inherent risk and control risk which affect how auditors establish audit fees (Judd, Olsen & Stekelberg, 2017).

As the fiscal council has similar responsibilities to the audit committee but has received little attention in the accounting literature, we establish the following research question: **does the presence of the fiscal council reduce the influence of overconfident managers on the audit fees?** Duellman, Hurwitz and Sun (2015) show that a strong audit committee may decrease interference of overconfident managers on audit fees. Unlike the audit committee, the fiscal council is independent from the board of directors and its members are external professionals appointed by the shareholders. Thus, we aimed to investigate the fiscal council role on auditor-client relationship from the perspective of the overconfidence bias literature.

Managers who overestimate their performance tend to mislead financial reporting users (Kim, Wang & Zhang, 2016; Kothari, Mizik & Roychowdhury, 2012). Consequently, the incentives to an aggressive accounting measure, as overconfidence bias, can lead firms to decrease financial reporting quality which increases litigation risk (DuCharme, Malatesta & Sefcik, 2004), penalties from regulators (Beneish, 1999) and adverse market consequences to the financial reporting issuers and the audit firms (Chaney & Philipich, 2002).

Hence, our results contribute to accounting literature addressing the existing gap regarding the fiscal council role in mitigating managerial overconfidence bias in the auditor-client relationship. We also contribute to society providing evidence of the fiscal council effectiveness as a corporate governance mechanism which exists to protect shareholder interests in the Brazilian market and which is subject to the interest of market agents and regulatory institutions.

2 Literature review

2.1 Audit fees and decision maker characteristics

To assess the risk of material misstatements, it is relevant to consider the auditor-client relationship and how this can affect auditor's independence. Frankel, Johnson and Nelson (2002) show that amounts paid to auditors for non-audit services are positively related to the levels of earnings management in the financial reporting and amounts paid to auditors for audit fees are negatively related to earnings managements, which can be explained by a decrease in auditor independence due to client influence on auditors' revenues through other services. That is, audit quality is related with audit fees as well as it is influenced by the size of the audit firm (DeAngelo, 1981). This relationship comes from the expertise of the audit

team that demands higher salaries for the job and increases the quality of the audit process (Hossain, Yazaka & Monroe, 2017).

As well as some characteristics of the audit team can be an important factor for the audit pricing, the literature shows that managers' characteristics of the audited firms can affect audit-client relationship, mainly when these characteristics impact on financial reporting quality (Duellman et al., 2015; Hsieh, Bedard & Johnstone, 2014; Huang, Rose-Green & Lee, 2012). After all, management has incentives to manage earnings through accounting choices or operational decisions, which can decrease earnings quality (Bergstresser & Philippon, 2006).

Studying the "off-the-job" behavior of CEOs, Davidson, Dey e Smith (2015) find that frugal CEOs in their life outside the workplace tend to incur future misstated financial statements, including fraud and unintentional material reporting errors during their tenure. Also, Huang et al. (2012) show that CEO age is negatively related to financial reporting restatements and to the likelihood of meeting or exceeding analyst earnings forecasts, which is an indicator of financial reporting quality. Consistent with the literature about gender differences in conservatism and risk aversion, Peni and Vähämaa (2010) document that having women as CEO or CFO improves financial reporting quality.

The decrease in financial reporting quality due to the characteristics of the decision maker seems to be an additional aspect to be considered for the auditors who accept the audit services and need to guarantee that financial statements are free from material misstatements (material risk). Schelleman and Knechel (2010) evidence that the level of discretionary accruals is considered by auditors who have to increase the working hours to complete audit services, assistance and supervision, which increases audit fees as a consequence. In this sense, Greiner, Kohlbeck and Smith (2016) find a positive association between the level of real earnings management and audit fees. Besides that, auditors tend to increase audit fees in order to compensate the risk of reputational damages that come from misstatements, which can make harder to close contracts with new or old clients (business risk) (Bell, Landsman & Shackelford, 2001; Lyon & Maher, 2005).

2.2 Overconfidence bias and decision making

According to Pompian (2011), overconfident people tend to believe that they are more smart or better informed than they really are. Because of that, overconfident managers may make bad decisions based on their own bias and get suboptimal returns. Malmendier and Tate (2005) argue that overconfident CEOs overestimate the returns to their investment projects and regard external funds as overly expensive. This leads them to engage in suboptimal decisions (Malmendier & Tate 2005). Consistent with this view, Hribar and Yang (2016) show that CEO overconfidence is positively associated with the likelihood that they will issue earnings forecasts and that these forecasts are inaccurate and optimistic. Besides that, after committing mistakes, Overconfident CEOs are less likely to respond to corrective feedback, increasing the likelihood of the mistakes occurring again (Chen, Crossland & Luo, 2015).

Besides influencing operating decisions, the optimism of managers to overestimate their own skills and capacity also impacts accounting estimates. Schrand and Zechman (2012), using a sample of 49 firms listed in Accounting and Auditing Enforcement Releases (AAER), showed that part of the distortions created by managers occurred because of over optimism and, not necessary, meant that it was intentional. However, in subsequent periods, after getting engaged in unintentional distortions, there was a greater likelihood that these firms are in a situation where they are constrained to distort earnings intentionally. Similarly,

Hsieh et al. (2014) find that overconfident CEOs tend to engage in increased-earnings management through accounting choices about discretionary accruals.

Considering the mentioned literature, overconfidence can affect decision making and financial statements in a negative way, increasing the risk of material misstatements and the auditor reputational risk (Yu, 2014; Sutrisno, 2019; Mitra, Jaggi & Al-Hayale, 2019). Because of both risks, auditors tend to charge additional fees in order to compensate for the increased audit efforts to guarantee the reliability of financial reporting and also to get a premium for the residual reputational risk caused by unnoticed material distortion. This evidence leads us to follow Duellman et al. (2015) and to propose our first hypothesis as follow:

H1 – There is a positive association between management overconfidence and audit fees.

2.3 Fiscal council and audit committee

On one hand the literature suggests a positive association between managers overconfidence and audit fees (material misstatement risk). On the other hand, overconfident managers may be less likely to value audit firms and may require and/or accept less audit services (decreasing audit fees) (Duellman et al., 2015). Nevertheless, part of the managers' influence on financial reporting and audit procedures can be mitigated through corporate governance mechanisms, such as the audit committee which participates in the auditor-client relationship.

Active and independent members of the audit committee require high audit quality due to concerns about financial or reputational losses that may come from litigation (Abbott & Parker, 2000). Also, some characteristics of the audit committee are associated with lower levels of abnormal accruals (Klein, 2002), lower cost of capital (Anderson, Mansi & Reeb, 2004) and high quality of financial reporting (Cohen et al., 2014).

In the Brazilian context, Trapp (2009) finds that the fiscal council represents a governance mechanism which can decrease the level of earnings management, and that in firms with a well-established corporate governance, the quality of the fiscal council is positively associated with the quality of financial information. Moreover, Baioco and Almeida (2017) documents some degree of conditional conservatism only in the group of firms which have a fiscal council and argue that the presence of this board is positively related to the relevance of the book value of equity.

Due to the influence of fiscal council on audit procedures and financial reporting, similarly to Duellman et al. (2015), we propose the second hypothesis research as follow:

H2 – The association between overconfidence and audit fees is more pronounced in firms that have a permanent fiscal council.

3 Research methods

3.1 Research classification

The research is classified as descriptive, through documental analysis and data-quantitative approach. We use a multiple regression analysis to test our research hypothesis about CEO overconfidence, audit fees and fiscal council influence.

In the initial steps of the research, we identify the estate of art, establish an overall view of the topic, and find a gap in the actual literature. From that, we based the paper in Duellman et al. (2015), adapting some aspects because of the scope, the analyzed variables and the economic environment.

3.2 Population and sample

Population comprises the public firms traded in [B]³ during the year of 2017. We excluded financial institutions and firms which have missing data that was necessary to calculate the variables. Table 1 presents a summary of the procedures adopted to establish the sample used in our analysis.

Table 1
Population and sample

Description	Obs.	Percentage
Total number of firms	287	100%
Financial institutions	21	7.3%
Missing data	35	12.2%
Final sample	231	80.5%

Source: Research data (2020)

We excluded 21 observations from financial institutions, which represents 7,3% of the population. Also, we remove 35 observations that did not have all data necessary to calculate the variables analyzed. Most of the missing data is due to firms that do not disclose the audit fees in detail, either because audit fees are grouped with non-audit fees, with audit fees from other periods or with other firms of the same business group. The final sample comprises 231 observations which represents 80.5% of the population. Table 2 summarizes the number of firms by industry.

Table 2
Number of observations by industry

Industry	Obs.	Percentage
Business management	21	9.1%
Agriculture, livestock, forestry, fishing and hunting	3	1.3%
Arts and entertainment	1	0.4%
Medical and social assistance	7	3.0%
Wholesale business	5	2.2%
Retail business	14	6.1%
Constructions	17	7.4%
Education	5	2.2%
Utilities	33	14.3%
Hotel e restaurant	2	0.9%
Real estate	14	6.1%
Manufacturing	81	35.1%
Information	6	2.6%
Mining and oil extraction	6	2.6%
Support services in waste management and remediation	3	1.3%
Scientific and technical services	2	0.9%
Transport and storage	11	4.8%
Total	231	100%

Source: Research data (2020)

One can notice that the industries with the greatest numbers of firms follow this order: manufacturing; utilities; business management; constructions; real estate; retail business; and transport and storage. This industry proportions are similar in the whole population. Even though the database is only from the year of 2017, this data can be considered relevant because of the constancy of the firms listed along the years, so representing an actual information.

3.3 Data analysis

All data related to the financial reporting items was collected from the Economática database, while the information about the management bodies and audit fees was collected from the site of the Brazilian Securities Exchange Commission, which are presented in the reference form filed by the firms.

Following Duellman et al. (2015), overconfidence is measured through investment decisions made by the managers. Ben-David, Graham and Harvey (2013) show the firms with overconfident executives tend to increase capital expenditures (capex). Moreover, Malmendier and Tate (2005) find that CEO overconfidence is positively related to overinvestments. Thus, our overconfidence measure is a dummy variable equal 1 when capex is higher than the industry median and zero otherwise.

In order to test our research hypotheses, we used a multiple linear regression that verify the association between the amount paid as audit fees and the overconfidence bias of managers, similarly to Duellman et al. (2015), which results in the following model:

$$\begin{aligned} AUDIT_i = & \beta_0 + \beta_1 OVER_i + \beta_2 FC_i + \beta_3 OVER_i * FC_i + \beta_4 COM_i \\ & + \beta_5 OVER_i * COM_i + \beta_6 SIZE_i + \beta_7 NON_i + \beta_8 BIG4_i + \beta_9 ADR_i \\ & + \beta_{10} LEV_i + \varepsilon_{i,t} \end{aligned}$$

Where AUDIT is the natural logarithm of the audit fees. OVER is the proxy for the management overconfidence which is measured using the capex. FC is a dummy variable equal 1 if the firm has a permanent fiscal council and zero otherwise. COM is a dummy variable equal 1 if the has a statutory audit committee and zero otherwise. SIZE is measured by the natural logarithm of the total assets. NON is the natural logarithm of the amount paid to audit firms for non-audit services. BIG4 is a dummy variable equal 1 if the firm is one of the biggest audit firms and zero otherwise. ADR is a dummy variable that is equal to 1 if the firm trades in the United States market through American Depositary Receipts (ADR) and zero otherwise. LEV is the long-term debt divided by the total assets.

The estimation of the parameter associated with the OVER variable, which measures the overconfidence bias, tests our first research hypothesis (H1), while the parameter associated with the interaction between OVER and FC variables measures our second research hypothesis (H2). Doing so, if the β_1 value is positive and statistically significant, there is evidence that firms with overconfident managers tend to pay more for audit services. Additionally, if the β_3 value is positive and statistically significant, there is evidence that the fiscal council increases the effect of the overconfidence on audit fees and, consequently, increases audit independence.

Control variables follow previous literature about the determinants of audit fees in the Brazilian firms (Borges, Nardi & Silva, 2017; Castro, Peleias & Silva, 2015; Hallak & Silva, 2012). Size is one of the most relevant determinants of the audit fees since bigger firms tend to demand more audit effort than smaller ones. More levered firms (Lev) are associated with

higher default risk which increase the risk of misstatements and audit fees. Audit firms' size (BIG4) is associated with audit fees considering the reputation risk and the audit quality of bigger audit firms. We also control corporate governance mechanisms using American Depositary Receipts (ADR) as a proxy.

Table 3 summarizes the variables used in this paper, their operational description, data source and the previous studies which used them.

Table 3

All variable used in the research

Variable	Initials	Description	Data source	Previous studies
Audit fees	AUDIT	Natural logarithm of audit fees	Reference form	Hallak & da Silva (2012); Baioco & Almeida (2017)
Overconfidence	OVER	Proxy for overconfidence measured by CAPEX	Economática	Duellman et al. (2015); Malmendier & Tate (2005)
Fiscal Council	FC	Dummy variable equal 1 if the firm has a fiscal council and zero otherwise.	Reference form	Baioco & Almeida (2017); Trapp, A. C. G. (2009)
Audit Committee	COM	Dummy variable equal 1 if the firm has a statutory audit committee and zero otherwise	Reference form	Baioco & Almeida (2017); Trapp, A. C. G. (2009)
Size	SIZE	Natural logarithm of total assets	Economática	Baioco & Almeida (2017); Duellman et al. (2015); Hallak & da Silva (2012)
Non-audit services	NON	Natural logarithm of the amount paid for non-audit services	Reference form	Duellman et al. (2015); Hallak & da Silva (2012)
Big four	BIG4	Dummy variable equal 1 if the audit firm is one of the Big Four and zero otherwise	Reference form	Duellman et al. (2015); Hallak & da Silva (2012); Trapp, A. C. G. (2009)
Corporate governance	ADR	Dummy variable equal 1 if the firm trades in the US market through American Depositary Receipts and zero otherwise.	Reference form	Hallak & da Silva (2012); Trapp, A. C. G. (2009)
Leverage	LEV	Long-term debt divided by total assets	Economática	Baioco & Almeida (2017); Duellman et al. (2015); Trapp, A. C. G. (2009)

Source: *Research data (2020)*

4 Analysis of the results

4.1 Descriptive Analysis

Table 4 presents the descriptive analysis of the variables used in this study by firms with and without permanent fiscal council. The total sample comprises 231 firms, where 58.44% of the firms have a permanent fiscal council.

Table 4

Descriptive analysis by firms with/without permanent fiscal council

Variables	Firms with fiscal council				Firms without fiscal council			
	Minimum	Median	Mean	Maximum	Minimum	Median	Mean	Maximum
AUDIT	10.62	13.22	13.39	16.77	9.508	12.931	12.975	16.146
OVER	0	0	0.4444	1	0	1	0.5417	1
NON	0	0	7.515	15.545	0	0	3.448	14.766
COM	0	0	0.2148	1	0	0	0.1354	1
ADR	0	0	0.2815	1	0	0	0.1354	1
BIG4	0	1	0.763	1	0	1	0.6458	1
SIZE	17.98	22.22	22.17	27.45	14.69	21.16	21	24.53
LEV	0.007547	0.577607	0.710383	11.038226	0.1086	0.5872	1.3037	46.1242
n	135				96			

Source: Research data (2020)

The mean of the audit fees is greater in the group of firms that have fiscal council. Even though the fiscal council has a similar role to that of the audit committee, the number of firms with an audit committee is greater in the group of firms with a fiscal council. That is, several firms adopt both corporate governance mechanisms. Furthermore, most firms which have ADR also have a fiscal council, due to the possibility of firms using the fiscal council as an audit committee in the United States market regulation.

4.2 Overconfidence, fiscal council and audit fees

Figure 1 shows the box-plot of the variable that measures audit fees by firms with/without overconfident managers. As mentioned previously, firms were classified as having overconfident managers through the comparison of the firm's CAPEX with that of its peers.

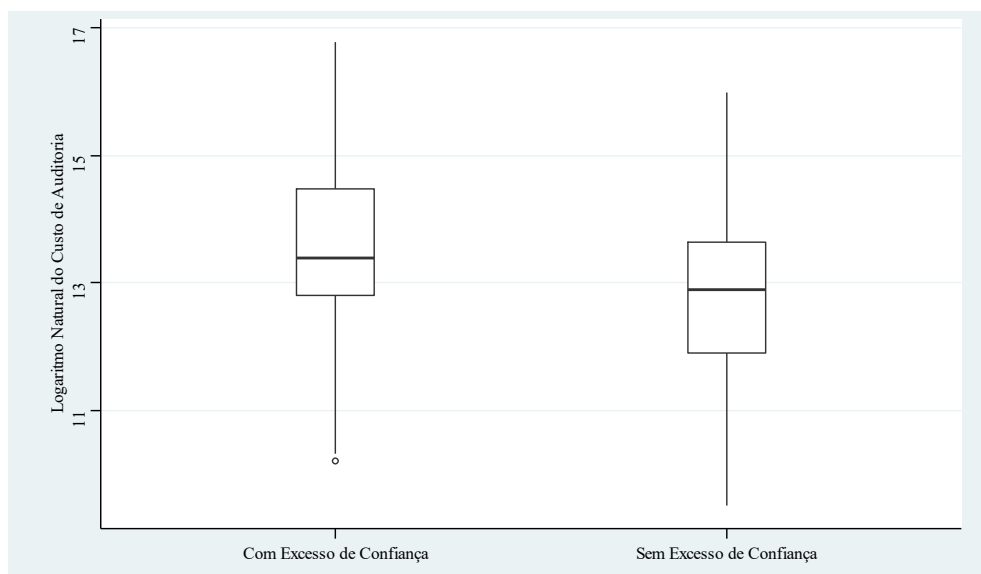


Figure 1 Audit fees comparison between group classified by overconfidence
 Source: Research data (2020)

Boxplot show that the upper limit, the third quartile, the median and the first quartile of audit fees are higher for the firm with higher overconfidence, which is consistent with the notion that risk associated with overconfident managers is related to audit pricing (Duellman et al., 2015; Mitra et al., 2019). Moreover, one can notice that only one observation is out of the upper or lower limit – but not far from it – which means that there is no significant influence of outliers.

Figure 2 shows the means of the audit fees for firms grouped by the presence or absence of a permanent fiscal council and by the classification of overconfidence.

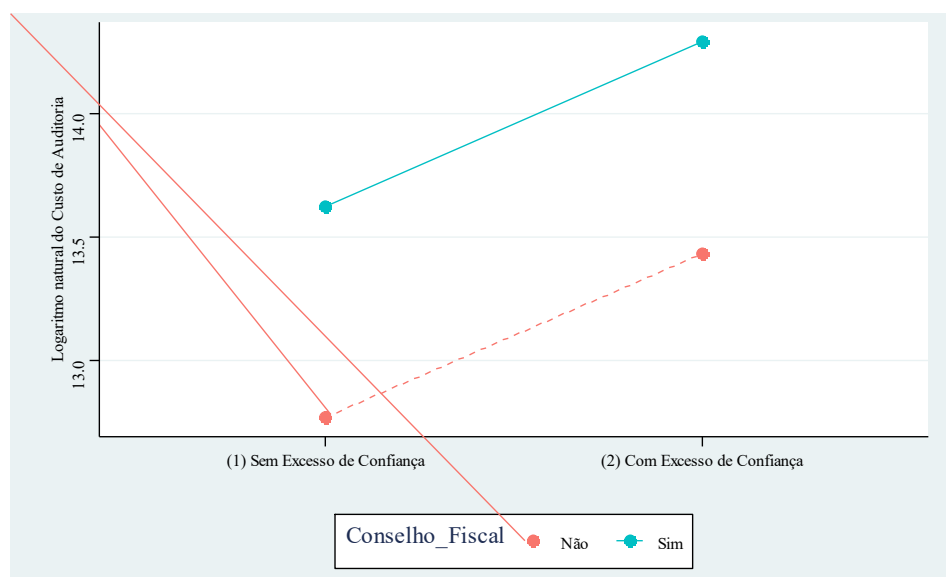


Figure 2 Means of audit fees by overconfidence and fiscal council dummies
 Source: Research data (2020)

In Figure 2, both means of the first group which comprises the firms with fiscal council, show higher audit fees independently of the managers' overconfidence. However,

dividing the sample between firms with and without fiscal council, one can notice that firms with overconfident managers tend to face higher audit fees. Even though this preliminary analysis indicates that fiscal council is positively associated with audit fees, several other variables may drive the result and are included as control variables in the multiple linear regression, following Duellman et al. (2015).

Table 5 shows the regression results where we test both research hypotheses. Unlike Model 2, Model 1 is estimated without interaction between variables, that is, without estimating the moderating effect of the fiscal council and audit committee. Both models test the first research hypothesis. However, only Model 2 tests the second research hypothesis.

Table 5
Multiple linear regression models

Variables	(1)			(2)		
	Coefficient	Std-Dev	p-value	Coefficient	Std-Dev	p-value
Intercept	5.6271	0.6850	0.0000***	5.5898	0.6901	0.0000***
OVER	0.2049	0.1006	0.0428**	0.2827	0.1149	0.0147**
FC	-0.0379	0.1460	0.7956	0.0632	0.1956	0.7471
OVER*FC				-0.1903	0.2850	0.5051
COM	0.3082	0.1381	0.0266**	0.4592	0.1926	0.0179**
OVER*COM				-0.2739	0.2649	0.3022
SIZE	0.3101	0.0340	0.0000***	0.3103	0.0342	0.0000***
NON	0.0378	0.0094	0.0000***	0.0380	0.0094	0.0000***
BIG4	0.6784	0.1244	0.0000***	0.6629	0.1249	0.0000***
ADR	0.4434	0.1353	0.0012***	0.4592	0.1358	0.0009***
LEV	-0.0193	0.0163	0.23805	-0.0184	0.0164	0.2634
R ²		0.6808			0.6807	
Observations (n)		231			231	

Note: ***, **, * = significant at the level of 1%, 5%, 10%, respectively

Source: Research data (2020)

The parameters are estimated through the Ordinary Least Squares (OLS) method. Before making inferences, we verify assumptions of OLS about normality and homoscedasticity of the residuals through the tests Jarque-Bera (valor-p = 0.1852 (1) e valor-p = 0.1933 (2)) and Goldfeld-Quandt (valor-p = 0.5958 (1) e valor-p = 0.5829 (2)), respectively. Both tests indicate that the model meets both assumptions.

The estimate of the parameter associated with the overconfidence variable (OVER) is positive and statistically significant in the model 1 and 2, confirming our first hypothesis. It is not possible to infer the gradual effect of overconfidence bias on audit fees for the reason that OVER is a dummy variable. However, one can interpret that the presence of overconfident managers, according to our classification, increases, on average, approximately in 0.20 the logarithm of audit fees.

The interaction between overconfidence and the presence of a permanent fiscal council (OVER*FC) is not statistically different from zero (valor-p = 0.5051), which indicates that fiscal council has no effect on the relationship between overconfidence and audit fees. Doing so, our second research hypothesis is not confirmed.

The interaction between overconfidence and the presence of an audit committee is not statistically different from zero (valor-p = 0.3022), which suggests that the audit committee also has no effect on the relationship between overconfidence and audit fees. However, there is a positive association between the audit committee and audit fees in Model 1 (0.31) and Model 2 (0.45). This is consistent with the notion that the presence of the audit committee increases the level of monitoring which results in a broader audit scope and higher audit fees (Zaman et al., 2011).

In short, the results are consistent with the argument that manager's overconfidence can increase the risk of financial statements, which leads to higher audit fees. This increase could be in order to compensate for the efforts of decreasing material risks of financial statements and/or to demand a premium for the risk taking (Eissa, 2020; Hribar et al., 2013; Mitra et al., 2019). On the other hand, it was not found evidence that the fiscal council or audit committee interferes in how the auditor prices audit regarding the managers' overconfidence. However, it is possible that the fiscal council and the audit committee are not able to substantially influence overconfident managers' actions in the Brazilian context. Therefore, there would be no difference on pricing audit fees in relation to this aspect.

Auditing is less effective in limiting managers' opportunistic behavior and the level of earnings management in emerging countries (Memis & Cetenak, 2012). Furthermore, the relationship between corporate governance mechanisms and the quality of accounting information becomes more pronounced in countries where legal protection for investors is greater (Gaio & Raposo, 2014). Once the results obtained in this study differ from research carried out in developed markets, it may indicate that the efficiency of the fiscal council in limiting the manager's interference in the audit service depends on an institutional environment conducive to this effect.

Another possible explanation for the results may be the effect of the different levels of efficiency of the fiscal council, considering its composition and how the firm establishes its acting. The literature lacks studies that have shown the effect of the composition of the fiscal council on its efficiency. However, it is possible to show that a better use of the audit committee and the board of directors' benefits is achieved depending on their composition (Abbott, Parker & Peters, 2004; Kim, Mauldin & Patro, 2014; Klein, 2002).

Unlike the result presented by Duellman et al. (2015), the positive relationship between overconfidence and audit fees occurs regardless of the presence of an audit committee in Brazilian firms. This result may indicate that the external auditors establish higher fees in order to compensate for the risk related to overconfident managers that always outweigh any interference that these managers could make in the audit process.

Firm size (SIZE) is positively associated with the dependent variable, consistent with the expectation that larger firms demand longer service time and face higher audit costs (Castro et al., 2015; Hallak & Silva, 2012). Likewise, amounts paid for non-audit services (NON) are positively related to audit fees which corroborates the notion that firms that pay for additional services demand an additional audit effort (Hay et al., 2006).

The dummy that measures corporate governance mechanisms due to the regulatory requirement for trading in the US market (ADR) is positively associated with audit fees, consistent with Hallak and Silva (2012). Also, the variable that ranks the audit firm among the four largest (BIG4) is also associated with higher audit costs (Borges et al., 2017; Hallak & Silva, 2012). On the other hand, the variable that measures one of the risks perceived by auditors and reflected in the price of the audit service (LEV) is not statistically significant, as in other studies carried out in Brazil (Borges et al., 2017; Hallak & Silva, 2012).

4.3 Robustness Analysis with Quantile Regression

We decided to run a robustness analysis using quantile regression although the OLS assumptions were met. The OLS estimator allows analyzing the average effect of the independent variable on the dependent variable, while quantile regression allows analyzing the relationship between the variables of interest in different quantiles of the dependent variable. Therefore, quantile regression admits a wide and robust analysis of the conditional quantiles of the dependent variable. Table 6 presents the results of this analysis.

Table 6
Quantile Regression Model

Variables	25° percentile		Median		75° percentile	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Intercept	6.8087	0.0000***	6.1654	0.0000***	4.3242	0.0000***
OVER	0.2131	0.1902	0.3013	0.0330**	0.2292	0.1367
FC	0.2197	0.5407	0.1668	0.4130	0.1678	0.4690
OVER*FC	0.05491	0.9066	-0.44906	0.2479	-0.3594	0.3651
COM	0.6766	0.0229**	0.5756	0.0077***	0.2154	0.1908
OVER*COM	-0.73674	0.0417**	-0.47285	0.2119	0.1431	0.6955
SIZE	0.2316	0.0000***	0.2833	0.0000***	0.4013	0.0000***
NON	0.0381	0.0103**	0.0566	0.0000***	0.0244	0.0283**
BIG4	0.8517	0.0002***	0.5822	0.0067***	0.4895	0.0065***
ADR	0.2002	0.3094	0.3355	0.1201	0.5998	0.0034***
LEV	-0.0217	0.7655	-0.0256	0.5617	-0.0265	0.7870
Observations (n)	231					

Source: Research data (2020)

The results indicate a positive relationship between overconfidence and the audit fees for the median (coefficient = 0.3013). The coefficient that measures the effect of the fiscal council on the relationship between overconfidence and audit fees is not statistically different from zero for any of the three percentiles analyzed (25th, 50th, 75th). These results are consistent with the OLS model. However, the coefficient that measures the relationship between overconfidence and audit fees was not different from zero for the 25th and 75th percentiles. This result indicates that this relationship occurs only in the central values of the dependent variable, suggesting that management overconfidence becomes less relevant in the most extreme audit pricing (up or down).

5 Conclusions

This study aimed to investigate the effect of the fiscal council on the relationship between overconfidence and audit fees. The fiscal council is an important corporate governance mechanism used in the Brazilian market and has a similar role to the audit committee (Baioco & Almeida, 2017). So, fiscal council performance can influence the audit fees as it reduces the interference of managers in the scope of auditing and in its pricing (Duellman et al., 2015). Therefore, it was hypothesized that the presence of the permanent fiscal council increases the effect of overconfidence on audit fees.

We use public firms which negotiated their shares on [B]³ (Brasil, Bolsa, Balcão) during 2017 to test our hypothesis. Our data is collected from the Economática® database and the CVM website. The sample comprises 231 observations after removing the financial firms and some firms that did not disclose all information necessary for estimating the model. The hypothesis test was performed using the multiple linear regression model with the main variables of the research and other control variables are included following previous studies performed in Brazil (Borges et al., 2017; Castro et al., 2015; Hallak & Silva, 2012).

The results were estimated using OLS and indicated that managers' overconfidence increases audit fees regardless of the presence of the fiscal council. This result may indicate that auditors establish high audit fees to compensate for the risk of material misstatement related to managers' overconfidence in the Brazilian economic environment. However, the presence of the fiscal council does not seem to influence this relationship. This result also indicates that the presence of the fiscal council is not enough to increase the independence of the external auditor in regard to the pricing of audit in the Brazilian context. This governance mechanism does not seem to influence the sensitivity of the audit cost to managers' overconfidence despite evidence about the relevance of the fiscal council for the quality of accounting information in Brazil (Baioco & Almeida, 2017; Trapp, 2009). This result could be explained by the power of the CEO. According to Lisic et al. (2016), CEOs with greater power can limit aspects of the effectiveness of governance mechanisms.

The research findings contribute to society as it shows aspects of the performance of the fiscal council, a corporate governance mechanism widely used by Brazilian firms. In addition, the results contribute to the literature on the effect of behavioral factors on audit procedures and on the auditor-client relationship. However, an important limitation of the research is related to the variable that measures overconfidence which is based on investment decisions. That is, the result of the firm's decision is used to infer the characteristics of the decision maker. Despite this, this proxy has been used in several studies that argue that this metric is close enough to the manager's characteristics to be included in the audit fees model (Duellman et al., 2015; Mitra et al., 2019). Future research could explore the topic by identifying more or less efficient fiscal councils and verifying whether differences between their characteristics influence or not the relationship between the auditor and the audited company.

References

- Abbott, L. J., & Parker, S. (2000). Auditor Selection and Audit Committee Characteristics. *Auditing: A Journal of Practice & Theory*, 19(2), 47–66. <https://doi.org/10.2308/aud.2000.19.2.47>
- Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit Committee Characteristics and Restatements. *Auditing: A Journal of Practice & Theory*, 23(1), 69–87. <https://doi.org/10.2308/aud.2004.23.1.69>
- Abbott, L. J., Parker, S., Peters, G. F., & Raghunandan, K. (2003). The Association between Audit Committee Characteristics and Audit Fees. *AUDITING: A Journal of Practice & Theory*, 22(2), 17–32. <https://doi.org/10.2308/aud.2003.22.2.17>
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of accounting and economics*, 38(3), 315–342. <https://doi.org/10.1016/j.jacceco.2004.01.004>
- Baioco, V. G., & Almeida, J. E. F. de. (2017). Efeitos do comitê de auditoria e do conselho fiscal na qualidade da informação contábil no Brasil. *Revista Contabilidade & Finanças*, 28(74), 229–248. <https://doi.org/10.1590/1808-057x201703250>
- Bell, T. B., Landsman, W. R., & Shackelford, D. A. (2001). Auditors' Perceived Business Risk and Audit Fees: Analysis and Evidence. *Journal of Accounting Research*, 39(1), 35–43. <https://doi.org/10.1111/1475-679X.00002>
- Ben-David, I., Graham, J. R., & Harvey, C. R. (2013). Managerial Miscalibration*. *The Quarterly Journal of Economics*, 128(4), 1547–1584. <https://doi.org/10.1093/qje/qjt023>
- Beneish, M. D. (1999). Incentives and Penalties Related to Earnings Overstatements that Violate GAAP. *The Accounting Review*, 74(4), 425–457. <https://doi.org/10.2308/accr.1999.74.4.425>
- Bergstresser, D., & Philippon, T. (2006). CEO incentives and earnings management. *Journal of financial economics*, 80(3), 511–529.
- Borges, V. P., Nardi, P. C. C., & da Silva, R. L. M. (2017). Determinantes dos Honorários de Auditoria das Empresas Brasileiras de Capital Aberto. *Revista Contabilidade, Gestão e Governança*, 20(2), 216–230.
- Castro, W. B. de L., Peleias, I. R., & Silva, G. P. da. (2015). Determinantes dos honorários de auditoria: Um estudo nas empresas listadas na BM&FBOvespa, Brasil. *Revista Contabilidade & Finanças*, 26(69), 261–273.
- Comissão de Valores Mobiliários (2014). *Irregularidades contábeis na elaboração das demonstrações financeiras*. Recuperado em 23 de agosto de 2021, de http://conteudo.cvm.gov.br/sancionadores/sancionador/2018/20180327_PAS_RJ20147072.html.
- Chaney, P. K., & Philipich, K. L. (2002). Shredded Reputation: The Cost of Audit Failure. *Journal of Accounting Research*, 40(4), 1221–1245. <https://doi.org/10.1111/1475-679X.00087>
- Chen, G., Crossland, C., & Luo, S. (2015). Making the same mistake all over again: CEO overconfidence and corporate resistance to corrective feedback. *Strategic Management Journal*, 36(10), 1513–1535.

- Cohen, J. R., Hoitash, U., Krishnamoorthy, G., & Wright, A. M. (2014). The Effect of Audit Committee Industry Expertise on Monitoring the Financial Reporting Process. *The Accounting Review*, 89(1), 243–273. <https://doi.org/10.2308/accr-50585>
- Cormier, D., Lapointe-Antunes, P., & Magnan, M. (2016). CEO power and CEO hubris: A prelude to financial misreporting? *Management Decision*, 54(2), 522–554. <https://doi.org/10.1108/MD-04-2015-0122>
- Davidson III, W. N., Jiraporn, P., & DaDalt, P. (2006). Causes and consequences of audit shopping: An analysis of auditor opinions, earnings management, and auditor changes. *Quarterly Journal of Business and Economics*, 69–87.
- Davidson, R., Dey, A., & Smith, A. (2015). Executives’ “off-the-job” behavior, corporate culture, and financial reporting risk. *Journal of Financial Economics*, 117(1), 5–28. <https://doi.org/10.1016/j.jfineco.2013.07.004>
- DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183–199. [https://doi.org/10.1016/0165-4101\(81\)90002-1](https://doi.org/10.1016/0165-4101(81)90002-1)
- DeFond, M. L., & Francis, J. R. (2005). Audit research after sarbanes-oxley. *Auditing: A Journal of Practice & Theory*, 24(s-1), 5–30.
- DeFond, M. L., Lim, C. Y., & Zang, Y. (2015). Client Conservatism and Auditor-Client Contracting. *The Accounting Review*, 91(1), 69–98. <https://doi.org/10.2308/accr-51150>
- DuCharme, L. L., Malatesta, P. H., & Sefcik, S. E. (2004). Earnings management, stock issues, and shareholder lawsuits. *Journal of Financial Economics*, 71(1), 27–49. [https://doi.org/10.1016/S0304-405X\(03\)00182-X](https://doi.org/10.1016/S0304-405X(03)00182-X)
- Duellman, S., Hurwitz, H., & Sun, Y. (2015). Managerial overconfidence and audit fees. *Journal of Contemporary Accounting & Economics*, 11(2), 148–165. <https://doi.org/10.1016/j.jcae.2015.05.001>
- Eissa, A. M. K. (2020). Auditor’s perceptions of CEOs overconfidence in Egypt: A quasi-experimental study. *Journal of Accounting, Finance and Auditing Studies*, 6(2), 1-30.
- Frankel, R. M., Johnson, M. F., & Nelson, K. K. (2002). The Relation between Auditors’ Fees for Nonaudit Services and Earnings Management. *The Accounting Review*, 77(s-1), 71–105. <https://doi.org/10.2308/accr.2002.77.s-1.71>
- Gaio, C., & Raposo, C. C. (2014). Corporate governance and earnings quality: International evidence. *Journal of Accounting and Finance*, 14(3), 52.
- Greiner, A., Kohlbeck, M. J., & Smith, T. J. (2016). The relationship between aggressive real earnings management and current and future audit fees. *Auditing: A Journal of Practice & Theory*, 36(1), 85–107.
- Hallak, R. T. P., & da Silva, A. L. C. (2012). Determinantes das despesas com serviços de auditoria e consultoria prestados pelo auditor independente no Brasil. *Revista Contabilidade & Finanças*, 23(60), 223–231.
- Hay, D. C., Knechel, W. R., & Wong, N. (2006). Audit Fees: A Meta-analysis of the Effect of Supply and Demand Attributes. *Contemporary Accounting Research*, 23(1), 141–191. <https://doi.org/10.1506/4XR4-KT5V-E8CN-91GX>

- He, X., Pittman, J. A., Rui, O. M., & Wu, D. (2017). Do Social Ties between External Auditors and Audit Committee Members Affect Audit Quality? *The Accounting Review*, 92(5), 61–87. <https://doi.org/10.2308/accr-51696>
- Hossain, S., Yazawa, K., & Monroe, G. S. (2017). The Relationship between Audit Team Composition, Audit Fees, and Quality. *Auditing: A Journal of Practice & Theory*, 36(3), 115–135. <https://doi.org/10.2308/ajpt-51682>
- Hribar, P., KIM, J., Wilson, R., & Yang, H. I.-H. (2013). Counterparty responses to managerial overconfidence. *Research Collection School Of Accountancy*. https://ink.library.smu.edu.sg/soa_research/1233
- Hribar, P., & Yang, H. (2016). CEO overconfidence and management forecasting. *Contemporary Accounting Research*, 33(1), 204–227.
- Hsieh, T., Bedard, J. C., & Johnstone, K. M. (2014). CEO Overconfidence and Earnings Management During Shifting Regulatory Regimes. *Journal of Business Finance & Accounting*, 41(9-10), 1243-1268. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jbfa.12089>
- Huang, H.-W., Rose-Green, E., & Lee, C.-C. (2012). CEO Age and Financial Reporting Quality. *Accounting Horizons*, 26(4), 725–740. <https://doi.org/10.2308/acch-50268>
- Judd, J. S., Olsen, K. J., & Stekelberg, J. (2017). How do auditors respond to CEO narcissism? Evidence from external audit fees. *Accounting Horizons*, 31(4), 33-52. <https://doi.org/10.2308/acch-51810>
- Kim, J.-B., Wang, Z., & Zhang, L. (2016). CEO Overconfidence and Stock Price Crash Risk. *Contemporary Accounting Research*, 33(4), 1720–1749. <https://doi.org/10.1111/1911-3846.12217>
- Kim, K., Mauldin, E., & Patro, S. (2014). Outside directors and board advising and monitoring performance. *Journal of Accounting and Economics*, 57(2–3), 110–131. <https://doi.org/10.1016/j.jacceco.2014.02.001>
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3), 375–400. [https://doi.org/10.1016/S0165-4101\(02\)00059-9](https://doi.org/10.1016/S0165-4101(02)00059-9)
- Kothari, S. P., Mizik, N., & Roychowdhury, S. (2012). *Managing for the moment: The role of real activity versus accruals earnings management in SEO valuation*. Working paper.
- Krishnan, J., Wen, Y., & Zhao, W. (2011). Legal Expertise on Corporate Audit Committees and Financial Reporting Quality. *The Accounting Review*, 86(6), 2099–2130. <https://doi.org/10.2308/accr-10135>
- Lee, H. S. (Grace), Li, X., & Sami, H. (2015). Conditional Conservatism and Audit Fees. *Accounting Horizons*, 29(1), 83–113. <https://doi.org/10.2308/acch-50928>
- Lei nº 6.404, de 15 de dezembro de 1976. *Dispõe sobre as Sociedades por Ações*. Brasília, DF. Recuperado em 23 de agosto de 2021, de http://www.planalto.gov.br/ccivil_03/leis/l6404consol.htm.
- Lisic, L. L., Neal, T. L., Zhang, I. X., & Zhang, Y. (2016). CEO power, internal control quality, and audit committee effectiveness in substance versus in form. *Contemporary Accounting Research*, 33(3), 1199-1237. <https://doi.org/10.1111/1911-3846.12177>

- Lyon, J. D., & Maher, M. W. (2005). The Importance of Business Risk in Setting Audit Fees: Evidence from Cases of Client Misconduct. *Journal of Accounting Research*, 43(1), 133-151. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1475-679x.2005.00165.x>
- Malmendier, U., & Tate, G. (2005). CEO overconfidence and corporate investment. *The journal of finance*, 60(6), 2661–2700.
- Memis, M. U., & Cetenak, E. H. (2012). Earnings management, audit quality and legal environment: An international comparison. *International Journal of Economics and Financial Issues*, 2(4), 460.
- Mitra, S., Jaggi, B., & Al-Hayale, T. (2019). Managerial overconfidence, ability, firm-governance and audit fees. *Review of Quantitative Finance and Accounting*, 52(3), 841–870.
- Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*.36 (7), 629-645. <https://doi.org/10.1108/03074351011050343>
- Pompian, M. M. (2011). *Behavioral finance and wealth management: how to build investment strategies that account for investor biases* (Vol. 667). John Wiley & Sons.
- Procianoy, J. L., & Decourt, R. F. (2014). The Brazilian Fiscal Council—Protecting Minority Shareholders in a Weak Legal System. In S. Boubaker& D. K. Nguyen, Corporate Governance and Corporate Social Responsibility (p. 159–180). *WORLD SCIENTIFIC*. https://doi.org/10.1142/9789814520386_0006
- Schelleman, C., & Knechel, W. R. (2010). Short-Term Accruals and the Pricing and Production of Audit Services. *Auditing: A Journal of Practice & Theory*, 29(1), 221–250. <https://doi.org/10.2308/aud.2010.29.1.221>
- Schrand, C. M., & Zechman, S. LC. (2012). Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics*, 53(1-2), 311-329. <https://doi.org/10.1016/j.jacceco.2011.09.001>
- Sutrisno, P. (2019). CEO Overconfidence, Audit Firm Size, Real Earnings Management and Audit Opinion. *Academy of Accounting and Financial Studies Journal*, 23, 1-13.

Trapp, A. C. G. (2009). *A relação do conselho fiscal como componente de controle no gerenciamento de resultados contábeis*. Tese de Doutorado, Faculdade de Economia, Administração e Contabilidade. Universidade de São Paulo, São Paulo. Recuperado de <https://www.teses.usp.br/teses/disponiveis/12/12136/tde-08072009-160920/pt-br.php>

Yu, C. F. (2014). CEO overconfidence, CEO compensation, and earnings manipulation. *Journal of Management Accounting Research*, 26(2), 167-193. <https://doi.org/10.2308/jmar-50722>

Zaman, M., Hudaib, M., & Haniffa, R. (2011). Corporate Governance Quality, Audit Fees and Non-Audit Services Fees. *Journal of Business Finance & Accounting*, 38(1–2), 165–197. <https://doi.org/10.1111/j.1468-5957.2010.02224.x>