Brazilian Market Reaction to Auditor's Opinions

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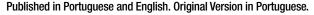*https://orcid.org/0000-0001-8091-2744*

Abstract

Objective: This study's objective was to analyze the Brazilian market's reaction to independent auditors' opinions disclosed in explanatory notes.

Method: This empirical and quantitative study addressed the relationship between independent auditors' opinions and stock returns, considering contexts in which there is a Big Four firm, and before and after periods of economic crisis. The effects of other control variables, such as GDP, dollar and SELIC, volatility, size, equity, net income, and share liquidity, were also considered in the multiple regression analysis. The estimation of the Multiple regression was performed with Stata 17. Quarterly data were collected from the explanatory notes and Economatica from 2010 to 2019.

Results and contributions: The results indicate that the Brazilian market reacts negatively when a non-Big Four independent auditor issues a qualified opinion in times with no economic crisis. These results benefit companies because they show empirical evidence that when an external audit firm identifies that a company's financial statements do not comply with accounting standards and manifests such a finding by issuing a qualified opinion, the market may have an adverse reaction, depending on the quality of the audit firm and the Brazilian economic context. Additionally, this study contributes to the Brazilian and international literature as it analyzes the market reaction to external auditors' qualified opinions, depending on the audit firm's quality and economic scenario.

Keywords: auditor's qualified opinions; accounting information relevance; Brazilian stock market.

1. Introduction

Monitoring the activities of companies through internal and external audits is a topic widely discussed in the Brazilian and international literature (Brandão et al., 2021; Parreira et al., 2021; Sena et al., 2020; Hartmann & Martinez, 2020; Alzeban, 2021; Almarayeh et al., 2020; Carvalho et al., 2019; Pakdaman, 2018; Muslih & Ami, 2018; Hoti et al., 2012; Al-Attar, 2017; Kipkosgei, 2010; Takinakis et al., 2010; Batista, 2009; Almeida & Almeida, 2009; Necula, 2014; Hendriksen & Van Breda, 1999; Chen et al., 1999). In this study, the focus is on the external audit.

In Brazil, Brandão et al. (2021) address the issuance of "red flags" and the disclosure of deficient internal controls in IBrX100 companies, which may contribute to the role of internal audit in reducing risks and information asymmetry between stakeholders. When studying earnings management and external auditing, Parreira et al. (2021) identified that audit firm rotation does not affect total accruals, positively impacting stakeholders. Sena et al. (2020) concluded that Big Four external audits do not impact the level of earnings management due to operational (non-accounting) decisions. Almeida and Almeida (2009) show that external audits carried out by a Big Four firm reflect greater information quality given reduced earnings management. However, Hartmann and Martinez (2020) have already identified that companies audited by Big Four firms are more aggressive at the tax level than those audited by non-Big Four firms.

At an international level, Alzeban (2021) found that when the remuneration of executive directors of internal audit firms is based on results, it affects the quality of financial statements, reducing audit objectivity. In addition, Almarayeh et al. (2020) identified that audit impacts earnings management differently in emerging countries compared to Anglo-Saxon and Western European countries.

Hendriksen and Van Breda (1999) state that companies whose statements receive an unqualified opinion from an external audit firm may signal confidence in the stock market. Likewise, a company with its financial reports qualified by an external auditor is expected to give a signal different from the signal given by a company with an unqualified opinion (Spense, 1973; Santana et al., 2014).

Regarding the signal sent to the stock market by companies with unqualified and qualified opinions, studies addressing the same subject were conducted in several countries, such as the United States (Necula, 2014), China (Chen et al., 1999), Iran (Pakdaman, 2018), Indonesia (Muslih & Ami, 2018), Croatia and Slovenia (Hoti et al., 2012), Jordan (Al-Attar, 2017), Kenya (Kipkosgei, 2010) and Greece (Takinakis et al., 2010); though, no consensus was found regarding their findings.

Chen et al. (1999), Hoti et al. (2012), Al-Attar (2017), and Pakdaman (2018) show that the opinions of external auditors are significantly related to the return on assets. Kipkosgei (2010) identified a negative and weak relationship, while Takinakis et al. (2010), Necula (2014), and Muslih and Ami (2018) did not identify a significant relationship between the two due to the low informative power of external auditors' qualified opinions.

In Brazil, Batista (2009) conducted a study relating the stock market's reaction to external auditors' opinions. However, Batista (2009) estimated it without using other explanatory or control variables to assess the effect on asset returns. Carvalho et al. (2019) did not identify a relationship between changing external auditors' opinions (in general terms) and the companies' variation in market value. However, a sample of only 231 companies was addressed without specifically testing the auditors' qualified opinions.

International studies have already tested the effect of several variables on the return on assets and measured the quality of accounting information in external audits, testing the efficiency of qualified opinions in the market. However, the Brazilian stock market still lacks studies of this nature, comparing companies audited with qualified and unqualified opinions in contexts with Big Four and non-Big Four firms and considering contexts with and without an economic crisis.

Considering this controversy in the literature and a lack of studies addressing this topic in Brazil with the controls included in this study, the objective is to analyze the reaction of the Brazilian stock market toward independent auditors' qualified and unqualified opinions disclosed in explanatory notes. Therefore, this study's relevance lies in measuring the effects on stock returns under the influence of independent auditors' unqualified and qualified opinions and other explanatory variables and important controls identified in the literature to gauge the reaction of the Brazilian stock market.

Article 177, § 3rd, of Law No. 6,404, of December 15th, 1976 (Brazil, 1976), determines that publicly-held companies are obliged to carry out annual and quarterly independent audits. Hence, all companies listed on B3 from 2010 to 2019 were identified and classified according to independent auditors' reports: qualified opinion and others (unqualified, adverse, and disclaimer of opinion), under NBC TA 700 (CFC, 2016a) and NBC TA 705 (CFC, 2016b).

A one-year period is too long to verify the impact of qualified opinions on stock returns, as several factors may arise and influence stock returns (Ball & Brown, 1968). Hence, quarterly secondary data were collected in the Economatica database using a historical series. A multiple regression model estimated by the Ordinary Least Squares (OLS) method with errors robust to heteroscedasticity, including time- and sector-fixed effects control, was performed to test this study's hypotheses. The dependent variable was the abnormal return on the day companies' statements were disclosed.

The results suggest that when a company discloses its statements with a qualified opinion issued by a non-Big Four external audit firm in times of no economic crisis, its abnormal returns are lower than those of companies with unqualified opinions. However, the abnormal return of companies with qualified opinions issued by a Big Four (whether in a period of crisis or not) or which had a qualified opinion issued in a period of economic crisis (regardless of whether a Big Four issued it or not) are not statistically different from those with unqualified opinions.

The results contribute to the companies' managers, showing the relevance of financial statements complying with accounting rules. The stock market may react negatively when a company does not comply with rules and is identified by an external audit firm. This study also contributes to the Brazilian and international literature by providing empirical evidence that the Brazilian market responds to qualified opinions issued by external audit companies. Additionally, the stock market's reaction differs depending on the audit quality and the Brazilian economic context.

2. Theoretical Framework

2.1 Accounting Information and Return on Shares

Ball and Brown (1968), Beaver (1968), and Ohlson (1995) stand out among the studies addressing the relevance of accounting information in the stock market.

Ball and Brown (1968) studied the effect of disclosing accounting information on stock returns. They also state that the market is efficient and impartial; that is, data disclosed through financial statements are helpful for price formation in securities markets, as previous earnings reflect future earnings trends, and the market reacts rapidly by minimizing additional abnormal gains for long periods. Faced with the controversial reactions of investors in the stock market, Beaver (1968) sought to assess their perceptions of earnings disclosure (results) and the consequent movement in price and volume of operations in common shares carried out in the weeks immediately following the disclosure of accounting information. Although Ball and Brown (1968) indicate that accounting information is just one of several variables taken into account when making a decision, interim reports, rather than only annual disclosures, show that this is important information. Ball and Brown (1968) and Beaver (1968) state that accounting information has predictive power.

In the same line of reasoning, Ohlson (1995) analyzed American data, while Rezende (2005) analyzed Brazilian data. The conclusion is that accounting information is essential in forecasting and evaluating companies. Rezende (2005) verified that information on profit and net worth was statistically relevant as predictive power, specifically for the telecommunications sector.

The accounting information in Net Income, Comprehensive Income, and Operating Cash Flow are statistically relevant in the Brazilian capital market, at the 1% level, to explain share value (Batista et al., 2017). As for accounting legislation, the CFC (2011) points out that accounting information is only considered relevant if it can influence decision-making; hence, it must have the predictive capacity and confirmatory value, including as a means of feedback, according to Technical Pronouncement CPC 00 R1 (CPC, 2011). Additionally, according to Technical Pronouncement CPC 00 R1 (CPC, 2011), besides relevance, the quality of accounting information presents the following characteristics: materiality, faithful representation, comparability, verifiability, timeliness, and comprehensibility. Hence, there is a need to test the validity and coherence of such reports, verified and applied by a specific area of accounting, which is auditing (CFC, 1983).

Ohlson (1995) concluded that accounting is a means to evaluate companies. However, company valuations should be adjusted through "other" relevant facts that influence market value (Ohlson, 1995). For example, ball and Brown (1968) and Ohlson (1995) highlighted that the distribution of dividends is based on the book value, reducing the value of the company in the future; however, without impacting the earnings of the current year (Ball & Brown, 1968; Ohlson, 1995). Considering the previous discussion, external audit opinions may be another relevant fact to inform the stakeholders as information is disclosed. Even the critical analysis of an external audit can change investors' perceptions of disclosed information.

Other aspects, such as control variables, can be considered in an empirical analysis. In addition to the factors already discussed by Ohlson (1995), several studies show the impact of macroeconomic variables (GDP, Selic, and dollar) to explain accounting variations in debt indicators, in companies' valuation, and consequently, return on assets, in the propensity to undertake risk, and in predicting profits and issuing shares on the stock exchange (Guerra & Ornelas, 2014; Oliveira & Frascaroli, 2014; Moura & Coelho, 2016; Paredes & Oliveira, 2017; Mota et al., 2017). The companies' size was also relevant for pricing risky assets in the international (Fama & French, 2015) and Brazilian markets (Moreira et al., 2021). Yokoyama et al. (2015) and Miralles-Quiros et al. (2017) show that the information generated by large companies has less information power; however, it has greater relevance among smaller companies, including better returns when presented in an investment portfolio.

2.2 Audit, Qualifications, Crisis, and Return on Shares

Camargo et al. (2014), Ribeiro (2015), Costa (2017), and Porte et al. (2018) stand out in the literature, as they identified an increase in the volume of publications both by internal and external audits. The topics most frequently found include audit reports, change of auditors (audit firm rotation), councils/committees, quality, and audit procedures. In this sense, Ribeiro (2015) highlights some of the main topics related to auditing: corporate governance, international accounting standards, internal control, fraud, risk assessment, capital markets, earnings management, social responsibility, company valuation, value creation, and performance, besides strategy, audit committee, external audit, internal audit, internal control, media coverage in accounting, research, and companies' socioeconomic data (Porte et al., 2018).

In Brazil, auditors manifest their opinions regarding accounting reports through an independent audit report. According to NBC TA 700 (CFC, 2016a), such a report can be classified into two types: unmodified opinion (unqualified opinion), when the external auditor identifies all provisions outlined in the general and specific accounting legislation, as applicable. External auditors issue a modified opinion when they identify distortions in accounting information or insufficient audit evidence to make conclusions (CFC, 2016a).

A report with a modified opinion is classified as a qualified opinion when relevant distortion is evidenced or audit evidence in a non-generalized manner was not identified; adverse opinion when accounting information is not fairly and accurately presented; and disclaimer of opinion when the auditor is unable to find audit evidence, and consequently, fails to give an opinion, as recommended by NBC TA 705 (CFC, 2016b).

To better visualize and interpret the information above in the Brazilian context, Figure 1 clarifies and summarizes the circumstances in which modified opinion reports must be issued under the terms of NBC TA 705 (CFC, 2016b).

Nature of the matter leading to a modified opinion	Auditor's judgment on the widespread dissemination off potential effects on the financial statements	
	Relevant but not generalized	Relevant and generalized
Accounting statements present relevant misstatements	Qualified opinion	Adverse opinion
Inability to obtain appropriate and sufficient audit evidence	Qualified opinion	Disclaimer of opinion

Figure 1. Independent auditor's opinion

Source: NBC TA 705 (CFC, 2016b).

Issuing an unqualified report can send a positive signal to the stock market; however, a modified opinion report may send a negative signal (Spence, 1973; Santana et al., 2014; Hendriksen & Van Breda, 1999). In other words, when an auditor issues a qualified opinion, s/he emphasizes that the information disclosed is not the most recommended. Thus, the qualified opinion may represent a negative sign to stakeholders. Thus, the signaling theory applied to the quality and relevance of the information generated by independent audit accounting reports was tested in this study (Spence, 1973; Santana et al., 2014; Hendriksen & Van Breda, 1999).

Hendriksen and Van Breda (1999) agree that disclosing unqualified information may send a confidence signal to the stock market. Regarding the signal sent to the stock market by companies with and without an external auditor's qualified opinion, studies of the same nature were conducted in several countries: the United States (Necula, 2014), China (Chen et al., 1999), Iran (Pakdaman, 2018), Indonesia (Muslih & Ami, 2018), Croatia and Slovenia (Hoti et al., 2012), Jordan (Al-Attar, 2017), Kenya (Kipkosgei, 2010) and Greece (Takinakis et al., 2010), however, no consensus was found regarding the results.

Chen et al. (1999), Hoti et al. (2012), Al-Attar (2017), and Pakdaman (2018) show that the opinions of external auditors are significantly related to the return on assets. Kipkosgei (2010) identified a negative and weak relationship, while Takinakis et al. (2010), Necula (2014), and Muslih and Ami (2018) did not identify a significant relationship between audit opinions and return due to the low informative power of external auditors' opinions. Despite such inconclusive results, we expect that when a company receives a qualified opinion from an external auditor regarding its financial statements, the signal sent to the market is negative (Spense, 1973; Santana et al., 2014).

From this perspective, note that the disclosure of audit reports can mitigate the information asymmetry between internal users (managers) and external users (shareholders and stakeholders), considering that an external user would hardly access privileged information about the validity of the reports generated by accounting, except through audits (Arkelof, 1970).

In this case, an audit serves as a tool to reduce conflicts of interest and information asymmetry. In addition, by disclosing independent audit reports, even if mandatory, companies reveal the level of their care, zeal, commitment, and adherence to legal and accounting standards to the market (Spence, 1973; Hendriksen & Van Breda, 1999; Santana et al., 2014; CFC, 2016a), such as the normative scenario provided for in NBC TA 700 in Brazil.

Research is needed to assess the degree of relevance and impact of accounting information (qualified opinion) on the stock market. This study contributes by testing the signal emitted by independent auditors' reports on decision-making and, consequently, on the companies' shares and returns, considering the theoretical framework proposed by Ohlson (1995). Hence, the first hypothesis is proposed considering the studies showing that audit is a factor that reduces earnings management and information asymmetry by providing better information quality and influencing decision-making. Additionally, an auditor's qualified opinion reveals that a given company is not fully complying with standards and accounting principles; thus, it is signaling to the users of information that it is unreliable.

Hypothesis 1: a qualified opinion negatively impacts the return on shares.

Note that the literature shows that audits performed by Big Four firms (i.e., Deloitte, EY, KPMG, and PWC) show greater information quality by decreasing earnings management (Almeida & Almeida, 2009). Thus, a Big Four audit may reflect the greater quality of accounting information, and, therefore, an increase in its degree of relevance reflected in users' decisions is expected. Thus, we present the second research hypothesis:

Hypothesis 2: The qualified opinion of an external audit has a more negative impact on the return on shares when performed by a Big Four than by other audit firms.

Costa et al. (2012) identified that economic crises affect how analysts evaluate equity and net income. In other words, economic crises affect accounting information and should therefore be considered in decision-making (Costa et al., 2012). Furthermore, net income, equity, and crisis are relevant when estimating and predicting future returns (Rezende, 2005; Costa et al., 2012; Batista et al., 2017). Thus, considering the negative (pessimistic) reaction of the stock market in periods of economic crisis, it is believed that the effects of a qualified opinion combined with such periods would intensify the effect on stock returns, which leads to the third hypothesis:

Hypothesis 3: A qualified opinion has a more negative impact on stock returns in years of economic crisis than in other economic contexts.

Additionally, following the same line of reasoning, it is worth testing more hypotheses associating Big Four audits with times of economic crisis, which is translated in the fourth research hypothesis.

Hypothesis 4: a qualified opinion has a more negative impact on stock returns when performed by a Big Four in years of economic crisis.

Moreira et al. (2021) tested it in several macroeconomic periods. They identified that size and crisis are related and affect the pricing of assets, showing that investors are more sensitive to risk during such times. We observed that risk is also a relevant factor in investors' decision-making (Silva Junior & Machado, 2020) and, therefore, should be considered in the empirical estimation model. Silva Junior and Machado (2020) note that liquidity and volatility are risk indicators and assume Sharpe's CAPM Beta (1964) with the same characteristic.

Thus, the return on shares is empirically tested, taking into account the effect of auditors' qualified opinions: Big Four qualified opinions, times of crisis, external auditors' qualified opinions in a time of crisis, and a Big Four qualified opinion in a time of period. Additionally, controls representing economic aspects and the companies' risk and financial indicators were also considered in the estimation.

3. Methodology

3.1 Study's Sample and Data

The initial sample included all the companies listed on B3 from 2010 to 2019, totaling 15,000 company/year/quarterly observations. In addition, information concerning the external audit company and external auditors' qualified opinions were obtained from the CVM database, and accounting information was collected from the Economatica database.

Table 1 presents the exclusion criteria and the number of observations removed at each step. First, we removed observations containing negative equity, which caused the loss of 1,169 observations. After removing the observations with missing information regarding auditors' opinions and abnormal returns, 1,927 observations remained. Finally, we removed observations with missing information about the control variables. Thus, the final sample comprised 1,368 company/year/quarterly observations from 2011 to 2019. Of the 1,368 resulting observations, 3.07% presented qualified opinions; 83.04% had their statements audited by a Big Four firm, and 33.63% of the observations referred to periods of crisis. All continuous variables were Winsorized at 1% level in both tails.

Table 1
Sampling

	No. of observations removed	No. of resulting observations
Brazilian companies listed on B3 from 2010 to 2019 on a quarterly basis		15,000
Observations with negative PL removed	1,169	13,831
Observations missing information about qualified opinions and Abnormal returns removed	11,904	1,927
Observations missing information on the control variables removed	559	1,368
TOTAL		1,368

Source: Developed by the authors.

3.2 Econometric Model

A multiple linear regression model, similar to the one applied by Beyer et al. (2010), presented in equation (1), was used to test this study's hypotheses. The model was estimated using Ordinary Least Squares (OLS) with errors robust to heteroscedasticity, controlling for time and sector-fixed effects.

$$RA_{it} = \beta_0 + \beta_1 Ressalva_{it} + \beta_2 Ressalva_{it} * Big4_{it} + \beta_3 Ressalva_{it} * Crise_t$$
$$+ \beta_4 Ressalva_{it} * Big4_{it} * Crise_t + \sum \beta_k\, Controles_k + \varepsilon_{it} \tag{1}$$

RA_{it} represents the abnormal return of company i on the day its financial statements were disclosed in quarter t. $Ressalva_{it}$ is a dummy variable that assumes 1 if company i had a qualified opinion issued by an external auditor in quarter t, and 0 otherwise. $Big4_{it}$ is a dummy variable that assumes 1 if company i was audited by a Big Four in quarter t, and 0 otherwise. $Crise_t$ is a dummy variable that assumes 1 if quarter t occurred in 2014, 2015, or 2016, and 0 otherwise.

Hypothesis H1 is tested in coefficient β_1. This coefficient is expected to be negative, indicating that companies that received a qualified opinion from an external auditor regarding their financial statements present a lower abnormal return than companies that did not receive a qualified opinion.

Hypothesis H2 states that the negative association between a qualified opinion and the abnormal return of a company on the day of disclosure is even higher than when the external audit firm is a Big Four. This hypothesis is tested through the β_2 coefficient. According to H2, β_2 is expected to be negative. Hypothesis H3 states that the negative association between a qualified opinion and the company's abnormal return on the day of disclosure is even greater in times of economic crisis. This hypothesis is tested through coefficient β_3. According to H3, β_3 is expected to be negative.

Finally, hypothesis H4 is tested using the β_4 coefficient, which is expected to be negative, indicating that the negative association between a qualified opinion issued by a Big Four firm and the abnormal return of companies on the day their accounting statements are disclosed is even greater in times of economic crisis.

3.3 Variable

A one-year period is too long to verify the reaction of the Brazilian market toward an auditor's qualified opinion, as several factors may arise and influence stock returns (Ball & Brown, 1968). Therefore, we used the event study method to measure the return on shares when the phenomenon under study occurs (Mackinley, 1997). Furthermore, Campbell et al. (1997) determine that the event study is used to assess the impact on the value of a firm as a result of changes in regulation, mergers and acquisitions, and earnings announcements, as well as to assess the effect of macroeconomic variables. Additionally, it must be performed following pre-determined steps: 1) Definition of the event; 2) Selection criteria; 3) Abnormal and normal returns; 4) Estimation procedure; 5) Test procedures; and 6) Empirical results (Campbel et al., 1997).

Beyer (2010) studied the reaction of the stock market considering abnormal returns based on the disclosure of voluntary financial reports, disclosure of financial reports required by regulations, and disclosure of analysts' reports, and identified that voluntary disclosures explain most of the abnormal returns. However, the remaining disclosures, including mandatory ones (i.e., audit reports), are also relevant and statistically significant (Beyer, 2010).

According to article 177, § 3rd of Law No. 6,404/1976, audit reports must be published annually together with consolidated financial statements, further stating the need to comply with standards issued by CVM (Brasil, 1976). However, under article 29th of CVM Instruction No. 480/2009, there is a requirement for the quarterly publication of this same information, within a maximum of 45 days after the end of the period, except for the last quarter of the year, considering that the consolidated information is presented within the expected period of annual publication (CVM, 2009).

The description of the periodicity of disclosure of financial statements and the deadlines are presented in Figure 2. The publication concerning the first quarter of a given fiscal year, which encompasses the months of January, February, and March, must be published by May 15th CVM, 2009). As for the fourth quarter, which ends in December, the maximum period for annual publication is 90 days from the end of the year, that is, March 31st of the following year. Considering the long period between annual publications and several variables explaining abnormal returns, we opted for analyzing quarterly information instead of annual information.

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QUARTER	PERIOD	PUBLICATION DEADLINE
1st quarter	January 1st to March 31st	Up to May 15th
2nd quarter	January 1st to June 30th	Up to August 14th
3rd quarter	January 1st to September 30th	Up to November 14th
4th quarter	January 1st to December 31st	Up to March 31st of the following year

Figure 2. Legal deadline to publish audit reports
Source: developed by the authors.

Thus, the dates of the events were the dates when the companies' financial statements were effectively disclosed quarterly. Therefore, the difference between the return of company *i* on the date of event *t* and the market return (defined here as Ibovespa) was considered to calculate the abnormal return (Campbell et al., 1997), as shown in Equation (2):

$$AR_{it} = R_{it} - Ret\_Ibov_{it} \tag{2}$$

Where represents the abnormal return of company on the date the accounting statements of company were disclosed, containing information for quarter . is the daily return of company on the date when the financial statements of company were disclosed containing information for quarter . refers to the Ibovespa return on the date when the financial statements of company were disclosed containing information for quarter .

To obtain a robust result, control variables with financial accounting indicators were included, besides macroeconomic variables that may also influence the companies' abnormal return. Figure 3 presents the description of the regression model variables exposed in Equation (1) and the respective theoretical foundation that explains its relationship with the topic addressed here.

VARIABLE	VARIABLE DESCRIPTION	SOURCE
	Explained variable	
RA_{it}	Abnormal return $$RA_{it} = R_{it} - Ret\_Ibov_{it}$$	Ball and Brown (1968); Beaver (1968); Ohlson (1995)
	Explanatory variables	
$Ressalva_{it}$	*Dummy* variable indicating when the financial statements of company *i* in quarter *t* present an external auditor's qualified opinion.	NBC TA 705 (CFC, 2016b)
$Big4_{it}$	*Dummy* variable indicating when a Big Four firm audited the financial statements of company *i* in quarter *t*.	Almeida and Almeida (2009); Chen et al. (1999), Hoti et al. (2012), Al-Attar (2017) and Pakdaman (2018).
$Crise_t$	*Dummy* variable indicating when the quarter *t* is part of a crises period. The years of crisis considered for estimation were 2014, 2015, and 2016.	Costa et al. (2012); Rezende (2005); Batista et al. (2017) and Moreira et al. (2021).
	Explanatory control variables	
$\Delta Dolar$	US Dollar quarterly exchange variation	Guerra and Ornelas (2014); Oliveira and Frascaroli (2014); Moura and Coelho, (2016); Paredes and Oliveira (2017); Mota et al. (2017)
$\Delta Selic$	Selic rate quarterly variation	Guerra and Ornelas (2014); Oliveira and Frascaroli (2014); Moura and Coelho, (2016); Paredes and Oliveira (2017); Mota et al. (2017)
ΔPIB	Quarterly GDP variation.	Guerra and Ornelas (2014); Oliveira and Frascaroli (2014); Moura and Coelho, (2016); Paredes and Oliveira (2017); Mota et al. (2017)
PL	Equity Value per share $$PL = \frac{PL}{n^\circ\ de\ ações\ em\ circulação}$$	Ball and Brown (1968); Beaver (1968); Ohlson (1995); Gonçalves et al. (2014)
LL	Value of Net Income per share $$LL = \frac{LL}{n^\circ\ de\ ações\ em\ circulação}$$	Ball and Brown (1968); Beaver (1968); Ohlson (1995); Gonçalves et al. (2014)
$Liquidez_{i;t}$	Market liquidity (risk measure)	Fama and French (2015); Moreira et al. (2021); Yokoyama et al. (2015) and Miralles-Quiros et al. (2017)
$Vol_{i;t}$	Security volatility (risk measure)	Fama and French (2015); Moreira et al. (2021); Yokoyama et al. (2015) and Miralles-Quiros et al. (2017)
$Tam_{i;t}$	Company size represented by the natural logarithm of Asset	Brasil (2007); Leone and Leone (2012); Yokoyama et al. (2015) Miralles-Quiros et al. (2017)

Figure 3. Description of empirical model's variables

Source: developed by the authors.

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4. Analysis of Results

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics of the variables in the regression model presented in Equation (1), used to test this study's hypotheses. In addition, the number of observations, minimum, first quartile, mean, median, standard deviation, third quartile, and maximum for the continuous variables were presented, besides the number of observations, minimum, mean, and maximum concerning the dummy variables.

According to the mean of the dummy variables *Ressalva*, Big4, and Crisis, of the 1,368 observations, 3.07% presented an external audit's qualified opinion, a Big Four audited 83.04%, and 33.63% of the quarters included a period of economic crisis.

The mean abnormal return was negative, -0.02%, indicating that, on average, companies have a return below the market return on the day their financial statements are disclosed. Furthermore, this value is well below the median abnormal return of 0.0037%, indicating that even after winsorization, extreme values are still distorting the mean abnormal return downwards. The mean of the remaining variables, except for PL, is not very far from the median, suggesting no extreme values are biasing the mean.

Table 2
Descriptive Statistics

Variable	N	Min	Q1	Mean	Median	SD	Q3	Max
RA	1,368	-0.0265	-0.0048	-0.0002	0.000037	0.0086	0.0043	0.0263
Ressalva	1,368	0	-	0.0307	-	-	-	1
Big4	1,368	0	-	0.8304	-	-	-	1
Crise	1,368	0	-	0.3363	-	-	-	1
ΔDolar	1,368	-0.0668	-0.0452	0.0035	-0.0121	0.0748	-0.0061	0.1876
ΔSelic	1,368	-0.2272	-0.0414	-0.0182	-0.0195	0.0632	0.0000	0.1132
ΔPIB	1,368	-0.0514	0.0029	0.0099	0.0164	0.0278	0.0272	0.0520
PL	1,368	0.0777	4.7111	15.8248	8.9865	23.3780	17.6409	182.80
LL	1,368	-8.0357	0.0020	0.2794	0.2017	1.3002	0.5148	5.6595
Liquidez	1,368	0.1726	0.6693	1.2612	0.9720	1.0417	1.4559	6.3643
Vol	1,368	0.0867	0.1773	0.2493	0.2550	0.0878	0.3129	0.4860
Tam	1,368	11.2826	14.0825	15.1754	15.1794	1.6360	16.1801	19.5702

Source: developed by the authors.

As for the economic environment, dollar and GDP variations were, on average, positive and close to zero, while the average Selic variation was negative and close to zero. Therefore, on average, these economic indicators varied slightly in the period.

Pearson's correlations between the model's continuous variables were analyzed. The correlations between the model's continuous independent variables were statistically significant at 10%, ranging between -0.3605 and 0.4418, showing no evidence of perfect collinearity in the model since none of the correlations was below -0 .7 or higher than 0.7.

4.2 Analysis of the Regression Model Results

The model presented in Equation (1) was estimated using the Ordinary Least Squares (OLS) method with errors robust to heteroscedasticity, including the control for fixed effects of time and sector to test the hypotheses. The VIF of the estimated model without fixed effect controls was 2.45, ranging from 1.02 to 5.85, which does not present a multicollinearity problem to the model.

The model estimation results are presented in Table 3, Panel 3. Note that the coefficient of the *Ressalva* (β_1) variable was negative and statistically significant at 1%, indicating that companies with a qualified opinion in their financial statements have an abnormal return below that of companies with no qualified opinion. This finding suggests that the market penalizes companies when their financial statements present a qualified opinion. Hence, this finding confirms hypothesis H1.

The coefficient of the interaction variable *Ressalva*Big4* (β_2) was positive and statistically significant at 5%, which, according to hypothesis H2, was not expected. The expectation was that the company presenting a qualified opinion issued by a Big Four firm would face an even more negative market reaction, i.e., among the companies with qualified opinions, those whose qualified opinion had been issued by a Big Four, would have an abnormal return lower than the companies with qualified opinions issued by other external auditing companies, implying a negative β_2 coefficient.

Table 3

Results of the estimation of the Econometric Model presented in Equation (1)

PANEL A: Model Estimation by OLS with Robust errors		
	RA	
	Coefficient	**Statistics t**
Ressalva	-0.0055	(-2.91)***
Ressalva*Big4	0.0065	(2.38)**
Ressalva*Crise	0.0051	(1.76)*
Ressalva*Big4*Crise	0.0002	(0.04)
ΔDolar	0.1297	(2.22)**
ΔSelic	0.0059	(0.40)
ΔPIB	0.1168	(1.68)*
PL	2.64E-05	(2.18)**
LL	6.49E-04	(2.78)***
Liquidez	3.30E-05	(0.14)
Vol	-0.0070	(-1.99)**
Tam	-2.30E-04	(-1.14)
Constante	0.0007839	(0.18)
Efeito Fixo de Tempo	Yes	
Efeito Fixo de Setor	Yes	
N	1.368	
R2	7.43%	
PANEL B: Test for the Sum of Coefficients		
	Sum	F Statistics
β1+β2	0.0010	(0.6264)
β1+β3	-0.0004	(0.8667)

Note: *, **, *** statistical significance at 10%, 5%, and 1%, respectively.

Source: developed by the authors.

Table 3, Panel B presents the test for the sum of coefficients β_1 and β_2, which was not statistically significant. Therefore, there is no statistically significant difference between the abnormal return of companies with qualified opinions issued by a Big Four firm and companies without qualified opinions concerning their financial statements.

The coefficient of the interaction variable *Ressalva*Crise* (β_3) was positive and statistically significant at 10%, which, according to hypothesis H3, was not expected. According to H3, the difference between the abnormal return of companies whose statements received a qualified opinion and the abnormal return of companies without a qualified opinion was expected to be even more significant in times of crisis than in other periods, which would imply a negative β_3 coefficient.

Table 3, Panel B presents the test for the sum of coefficients β_1 and β_3 which was not statistically significant, suggesting that companies with qualified opinions issued in times of crisis do not have abnormal returns significantly different from those without qualified opinions.

The coefficient of the interaction variable *Ressalva*Big4*Crise* (β_4) was not statistically significant. This finding was not expected by hypothesis H4. According to H4, in times of crises, an accounting statement with a qualified opinion issued by a Big Four external audit was expected to have an even more negative association with the abnormal return of companies, leading to a negative β_4. Hence, companies with a qualified opinion issued by a Big Four firm do not have abnormal returns significantly different from those that do not; it does not change during periods of economic crisis.

Regarding the control variables, the coefficients of variables *ΔDolar, ΔPIB, PL, LL,* and *Vol* were statistically significant. According to the sign of the estimated coefficients, all these variables positively affect the abnormal return of companies on the day their financial statements are disclosed.

Therefore, when an external audit firm other than a Big Four issues a qualified opinion in periods with no economic crisis, a company's returns are lower than those of companies without a qualified opinion. Additionally, the abnormal return of companies with qualified opinions issued by a Big Four (whether in a crisis or not) or had a qualified opinion issued in a period of economic crisis (regardless of whether a Big Four issued it or not) are not statistically different from those without qualified opinions.

Therefore, this study's findings indicate that the market reacts to auditors' qualified opinions in certain contexts; hence, we consider that an auditor's opinion is relevant in decision-making (Chen et al., 1999; Batista, 2009; Hoti et al., 2012; Al-attar, 2017; Pakdaman, 2018).

5. Conclusion

This study's objective was to analyze the reactions of the Brazilian stock market to the independent auditors' qualified opinions published in the explanatory notes. The relationship between independent auditors' qualified opinions and stock returns was verified considering the contexts in which a Big Four issues an opinion, compared to a non-Big Four's opinion, and before and after an economic crisis. Additionally, the effects of control variables were considered in the regression analysis, such as GDP, dollar and Selic, volatility, size, equity, net income, and share liquidity.

The results obtained in the hypotheses test were estimated using the Ordinary Least Squares (OLS) method with errors robust to heteroscedasticity, controlling for fixed effects of time and sector.

The estimation results were that the coefficient of the variable *Ressalva* was negative and statistically significant at 1%. This finding indicates that companies with qualified opinions in their financial statements have an abnormal return below that of companies without qualified opinions. Thus, the results suggest that the market penalizes companies whose financial statements receive qualified opinions, confirming hypothesis H1, which is aligned with Spense (1973) and Santana et al. (2014).

However, the coefficient of the interaction variable *Ressalva*Big4* was positive and statistically significant at 5%, which was not expected by hypothesis H2, i.e., the results are not aligned with Almeida & Almeida (2009). A company presenting a qualified opinion issued by a Big Four was expected to face an even more negative reaction. In other words, among the companies with qualified opinions, those with an opinion issued by a Big Four were expected to have an abnormal return lower than those with a qualified opinion issued by a non-Big Four external audit firm, implying a negative coefficient.

The test for the sum of the and coefficients showed no statistical significance. Therefore, there is no statistically significant difference between the abnormal return of companies with qualified opinions issued by a Big Four and those without qualified opinions. The coefficient of the interaction variable *Ressalva*Crise* was positive, i.e., opposed the arguments based on the results reported by Costa et al. (2012) and Moreira et al. (2021). This finding was not expected by hypothesis H3. Additionally, the fact that the sum of the coefficients and was not statistically significant suggests that companies with qualified opinions issued in times of crisis do not have abnormal returns significantly different from companies without qualified opinions. Finally, the interaction variable *Ressalva*Big4*Crise* was not statistically significant. In other words, this result goes against hypothesis H4. According to H4, in periods of crisis, an accounting statement with a qualified opinion issued by a Big Four external audit firm was expected to present an even more negative relationship with the abnormal return, leading to a negative. Hence, companies with qualified opinions issued by a Big Four firm do not have abnormal returns significantly different from companies without qualified opinions, regardless of periods of economic crisis.

This study was restricted to assessing the effect of auditors' qualified opinions and the remaining variables listed before on the return on shares. Therefore, a limitation of this study concerns the number of observations of companies with qualified opinions. However, this is an aspect of the Brazilian context.

Dollar, Equity, Net Income, and Volatility were the significant control variables, which aligns with what is proposed in the literature.

In line with Almarayeh et al. (2020), recommendations are for future studies to verify whether the remuneration of executive directors of internal audit firms in the Brazilian market affects the quality of financial statements, and in a second stage, investigate the market reaction to such information. Additionally, future studies should verify the effect of other types of audit reports (unqualified opinion, disclaimer of opinion, and adverse opinion) on the volatility and cost of capital.

References

Akerlof, G. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism, *The Quarterly Journal of Economics*, *84*(3), 488-500. https://doi.org/10.2307/1879431

Al-attar K. A. (2017). The Impact of Auditing on Stock Prices of Amman Stock Market's Listed Companies. *International Journal of Academic Research in Business and Social Sciences, 7*(6). https://doi.org/10.6007/IJARBSS/v7-i6/2958

Almarayeh, T. A., Aibar-Guzmán, B., & Abdullatif, M. (2020). Does audit quality influence earnings management in emerging markets? Evidence from Jordan. *Revista de Contabilidad - Spanish Accounting Review*, *23*(1), 64–74. https://doi.org/10.6018/rcsar.365091

Almeida, J.E & 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 e Finanças, 20*(50), 1–19. https://doi.org/10.1590/S1519-70772009000200005

Alzeban, A. (2021). CAE Remuneration and Financial Reporting Quality. Revista de Contabilidad - *Spanish Accounting Review*, *24*(1), 90–103. https://doi.org/10.6018/rcsar.367981

Ball, R. J. & Brown W. (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, *6*(1), 159-178. https://doi.org/10.2307/2490232

Batista, C. G. (2009). *O impacto dos pareceres de auditoria na variação do preço (retorno) das ações preferenciais das empresas listadas na Bovespa.* (Dissertação de Mestrado) 138 f. FECAP - Faculdade Escola de Comércio Álvares Penteado, São Paulo.

Batista, T. C., Oliveira, J. F. & Macedo, M. A. S. (2017). Relevância da Informação Contábil para o Mercado Brasileiro de Capitais: Uma Análise Comparativa entre Lucro Líquido, Lucro Abrangente e Fluxo de Caixa Operacional. *RACE: Revista de Administração, Contabilidade e Economia*, *16*(1), 381-408. https://doi.org/10.18593/race.v16i1.12052

Beaver, W. H. (1968). The information content of earnings announcements empirical research in accounting. *Journal of Accounting Research*, *6*(1), 67-92. https://doi.org/10.2307/2490070

Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. (2010). The financial reporting environment: Review of the recent literature. *Journal of Accounting and Economics, 50*(2-3), 296–343. https://doi.org/10.1016/j.jacceco.2010.10.003

Brandão, C. V., Ballarini, L. M., Marques, V. A., & Freitag, V. C. (2021). Red Flags de Auditoria e Divulgação das Deficiências De controles Internos nas Empresas do IBRX 100. Revista Contemporânea de Contabilidade, *18*(48), 22-39. https://doi.org/10.5007/2175-8069.2021.e76636

Brasil (2007). *Lei 11.638/07, de 28 de dezembro de 2007*. (2007). Altera e revoga dispositivos da Lei nº 6.404, de 15 de dezembro de 1976, e da Lei nº 6.385, de 7 de dezembro de 1976, e estende às sociedades de grande porte disposições relativas à elaboração e divulgação de demonstrações financeiras. Recuperado em 04 abril, 2019, de http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Lei/L11638.htm.

Brasil (1976). *Lei 6.404/76, de 15 de dezembro de 1976*. (1976). Dispõe sobre as sociedades por ações. Recuperado em 11 março, 2018, de http://www.planalto.gov.br/ccivil_03/leis/L6404compilada.htm.

Camargo, R. V. W., Camargo, R. de C. C. P., Dutra, M. H., & Alberton, L. (2014). Produção Científica em Auditoria: uma Análise dos Estudos Acadêmicos Desenvolvidos no Brasil. *Contabilidade Vista & Revista*, *24*(1), 84-111.

Camargo, R. V. W., Dutra, M. H., Pepinelli, R. de C. C., & Alberton, L. (2011), Parecer dos auditores independentes: uma análise da produção científica nacional desenvolvida entre os anos de 1987 e 2010. *ASAA Journal*, *4*(2), 162–183. https://doi.org/10.14392/ASAA.2011040202

Campbell, J. Y., Lo, A.W., & Mackinlay, A. C. (1997). *The Econometrics of Financial Markets* (2 Ed.). New Jersey: Princeton University Press. https://doi.org/10.1515/9781400830213

Carvalho, D., Carvalho, L., Dantas, J., & Medeiros, O. (2019). Reação do mercado à opinião modificada da auditoria: valor de mercado e percepção de risco. *Revista Universo Contábil*, *15*(2), 97-115.

Chen, C. J., Su, X. & Zhao, R. (1999). Market Reaction to Initial Qualified Audit Opinions in an Emerging Market: Evidence from the Shanghai Stock Exchange. *International Accounting Research Conference.* University of Houston. https://doi.org/10.2139/ssrn.192091

Comitê de Pronunciamentos Contábeis - CPC. (2011). Pronunciamento Conceitual Básico (CPC 00 – R1) – Estrutura Conceitual para Elaboração e Divulgação de Relatório Contábil-Financeiro.

Conselho Federal de Contabilidade - CFC. (1983). Resolução CFC nº 560/1983. Brasília: CFC.

Conselho Federal de Contabilidade - CFC. (2016a). Norma Brasileira de Contabilidade TA 700. Brasília: CFC.

Conselho Federal de Contabilidade - CFC. (2016b). Norma Brasileira de Contabilidade TA 705. Brasília: CFC.

REPeC – Revista de Educação e Pesquisa em Contabilidade, ISSN 1981-8610, Brasília, v.16, n. 4, art. 6, p. 466-483, Oct./Dec. 2022

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Costa, F. M., Reis, D. J. S. D., & Teixeira, A. M. C. (2012). Implicações de crises econômicas na relevância da informação contábil das empresas brasileiras. *Revista de Educação e Pesquisa em Contabilidade*, *6*(2), 141-153. https://doi.org/10.17524/repec.v6i2.632

Fama, E. F., & French, K. R. (2015). Um modelo de precificação de ativos de cinco fatores. *Journal of Financial Economics*, *116*(1), 1-22. https://doi.org/10.1016/j.jfineco.2014.10.010

Fama, E., Fisher, L., Jensen, M., & Roll, R. (1969). The Adjustment of Stock Prices to New Information. *International Economic Review*, *10*(1), 1-21. https://doi.org/10.2307/2525569

Gonçalves, J., Batista, B., Macedo, M., & Marques, J. (2014). Análise do impacto do processo de convergência às normas internacionais de contabilidade no brasil: um estudo com base na relevância da informação contábil. *Revista Universo Contábil*, *10*(3), 25-43. https://doi.org/10.4270/ruc.2014318

Guerra, L., & Ornellas, R. (2014). *Modelo de Previsão de Lucros de Companhias Listadas na BM&FBovespa Baseado em Análise de Balanços, Indicadores Macroeconômicos e Monitoramento de Notícias.*

Hartmann, C. F., & Martinez, A. L. (2020). Tax Aggressiveness and Big4 Audit Firms. *Reunir: Revista de Administração, Contabilidade e Sustentabilidade, 10*(3), 37-46.

Hendriksen, E. S., & Van Breda, M. F. (1999). *Teoria da Contabilidade*. São Paulo: Atlas.

Hoti, A. H., Ismajli, H., Ahmeti, S. & Dermaku, A., (2012). Effects of Audit Opinion on Stock Prices: The case of Croatia and Slovenia. *EuroEconomica, Danubius University of Galati, issue, 2*(31), 75-87, May.

Kipkosgei, T. C. (2010). *The effect of modified audit opinions on share prices for companies quoted at the Nairobi stock exchange* (Dissertação de Mestrado). University of Nairobi.

Leone, R. J. G., & Leone, N. M. C. P. G. (2011). Pequenas e médias empresas: contribuições para a discussão sobre por que e como medir o seu tamanho. *RAUnP - Revista Eletrônica do Mestrado Profissional em Administração da Universidade Potiguar, 4*(1), 67-83.

Macedo, M. A. S., Machado, M. A. V., & Machado, M. R. (2013). Análise da relevância da informação contábil no Brasil num contexto de convergência às normas internacionais de contabilidade. *Revista Universo Contábil*, *9*(1), 65-85. https://doi.org/10.4270/ruc.2013104

Miralles-Quirós, M. D. M., Miralles-Quirós, J. L., & Gonçalves, L. M. (2017) Revisiting the Size Effect in the Bovespa. *Revista de Administração de Empresas*, *57*(4), 317-329. https://doi.org/10.1590/s0034-759020170403

Moreira, K. D. S., Penedo, A. S. T., Pereira, V. S., & Ambrozini, M. A. (2021). Crises e Precificação de Ativos no Mercado de Capitais Brasileiro: Os Cinco Fatores de Fama & French. *Revista Gestão Organizacional*, *14*(2), 95-115. https://doi.org/10.22277/rgo.v14i2.4893

Mota, M. O., Sobreira, M. C., Vale, M. S., & Nogueira, L. C. C. (2017). Relações de Influência de Indicadores Macroeconômicos na Propensão ao Risco de Empreender. *Revista de Gestão*, *24*(2), 159-169. https://doi.org/10.1016/j.rege.2017.03.006

Moura, A. A. F., & Coelho, A. C. (2016). Impacto de Mudanças em Padrões Contábeis em Indicadores de Endividamento de Firmas: Evidências no Brasil. *Brazilian Business Review*, *13*(5), 27-51. https://doi.org/10.15728/bbr.2016.13.5.2

Muslih, M., & Amin, M.N. (2018). The Influence of Audit Opinion to the Company Stock Price. *Proceeding Universitas Pamulang, 1*(1), 112-125. Disponível em http://openjournal.unpam.ac.id/index.php/Proceedings/article/view/1840/1536.

Necula, C. (2014). *The influence of modified audit opinion on the stock market and cost of debt: U.S. evidence* (Dissertação de Mestrado). Amsterdan Business Scholl. Amsterdam, Holanda.

Ohlson, J. A. (1995). Earnings, book values and dividends in equity valuation. *Contemporary Accounting Research*, *11*(2), 661-687. https://doi.org/10.1111/j.1911-3846.1995.tb00461.x

Oliveira, J. C. T., & Frascaroli, B. F. (2014). Impacto dos fatores macroeconômicos na emissão de ações na bolsa de valores. *Revista de Gestão, Finanças e Contabilidade*, *4*(1), 30-51. https://doi.org/10.18028/2238-5320/rgfc.v4n1p30-51

Pakdaman, H. (2018). Auditor's Opinion and Market Reaction of Companies Listed on the Tehran Stock Exchange (TSE). *Revista Publicando*, *5*(14-2), 101–118.

Paredes, B., & Oliveira, M. (2017). O impacto dos fatores macroeconômicos e de risco sobre a mensuração do valor das empresas. *Revista Universo Contábil*, *13*(2), 43-64. https://doi.org/10.4270/ruc.2017208

Parreira, M. T. S., Nascimento, E. M., Puppin, L., & Murcia, F. D. (2021). Rodízio de Auditoria Independente e Gerenciamento de Resultados: Uma Investigação entre Empresas de Capital Aberto no Brasil. *Enfoque Reflexão Contábil*, *40*(1), 67-86. https://doi.org/10.4025/enfoque.v40i1.44318

Porte, M., Saur-Amaral, I., & Pinho, C. (2018). Pesquisa em auditoria: principais temas. *Revista Contabilidade & Finanças*, *29*(76), 41-59. https://doi.org/10.1590/1808-057x201804410

Rezende, A. J. (2005), A relevância da informação contábil no processo de avaliação de empresas da nova e velha economia: uma análise dos investimentos em ativos intangíveis e seus efeitos sobre value-relevance do lucro e patrimônio líquido. *Brazilian Business Review*, *2*(1), 33-52.

Ribeiro, H. C. M. (2015). Análise das pesquisas sobre auditoria publicadas em periódicos brasileiros. *Advances in Scientific and Applied Accounting,* *8*(1), 88-112. https://doi.org/10.14392/asaa.2015080105

Santana, A. G., Teixeira, S. A., Cunha, P. R., & Bezerra, F. A. (2014). Auditoria independente e a qualidade da informação na divulgação das demonstrações contábeis: estudo comparativo entre empresas brasileiras auditadas pelas *Big Four* e não *Big Four*. *Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ, 19*(3), 70-87.

Sena, T. R., Dias Filho, J. M., & Moreira, N. B. (2020). Gerenciamento de Resultados por Decisões Operacionais no Novo Mercado do Brasil: Uma Análise da Influência de Auditorias *Big Four* e não *Big Four*. *Revista de Gestão, Finanças e Contabilidade*, *10*(2), 4-21. https://doi.org/10.18028/rgfc.v10i2.7470

Sharpe, W. F. (1964). Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk. *The Journal of Finance*, *19*(3), 425. https://doi.org/10.2307/2977928

Silva Júnior, C., & Machado, M. (2020). A Comunalidade na Liquidez é um Fator de Risco Precificável? *Revista de Administração Mackenzie*, *21*(2), 1-28. https://doi.org/10.1590/1678-6971/eramf200158

Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, *87*(3), 355–374. https://doi.org/10.2307/1882010

Tahinakis, P., Mylonakis, J., & Daskalopoulou, E. (2010). An Appraisal of the Impact of Audit Qualifications on Firms' Stock Exchange Price Fluctuations. *Enterprise Risk Management, 2*(1), 86-99. DOI: https://doi.org/10.5296/erm.v2i1.335.

Watts, R., & Zimmerman, J. (1990). Positive Accounting Theory: A Ten Year Perspective. *The Accounting Review*, *65*(1), 131-156.

Yokoyama, Karen Yukari, Gomes Baioco, Vitor, Brasil Rodrigues Sobrinho, William, & Sarlo Neto, Alfredo (2015). A Influência do Tamanho da Empresa na Informação Contábil: Evidências em Empresas Large Caps e Small Caps Listadas na BM&FBovespa. *Revista de Educação e Pesquisa em Contabilidade*, *9*(3), 313-330. https://doi.org/10.17524/repec.v9i3.1275