Financial Statement Restatements and Conditional Conservatism in Companies Listed on B3

Paulo Vitor Souza de Souza^{1,2}, Henrique Carvalho Bezerra Morais¹, Silvia Nayara Costa de Leão¹ & Rômulo Bruno da Cunha Campos¹

¹ Institute of Applied Social Sciences, Federal University of Pará, Belém, Brazil

² Postgraduate Program in Accounting, Federal University of Santa Catarina, Florianópolis, Brazil

Correspondence: Paulo Vitor Souza de Souza, Institute of Applied Social Sciences, Federal University of Pará, Belém, PA., Brazil. E-mail: paulovsouza@ufpa.br

Received: April 26, 2023	Accepted: May 15, 2023	Online Published: May 26, 2023
doi:10.5539/ijbm.v18n4p49	URL: https://doi.org/10.5539/ijbm.v18	n4p49

Abstract

This study investigated the association between financial statement restatements and conditional conservatism in Brazilian publicly traded companies listed on B3. A sample of 192 non-financial companies was used from 2012 to 2020. The conditional conservatism was measured using Ball and Shivakumar's (2005) model. The study employed five dimensions of restatement measures, comprising both voluntary and compulsory restatement modalities, and six-panel data regression models was conducted. The results revealed that there is no relationship between voluntary restatement and conservatism. However, there is generally a positive association between compulsory restatement and conservatism. Thus, companies mandated to restatement their reports by the regulator tend to be more conservative, indicating the lower quality of financial reports. These findings provide valuable insights for various external users of accounting information, as restatements can assist companies in understanding negative signals in the market, help investors in better resource allocation, and assist regulators in devising appropriate measures for prevention or punishment.

Keywords: conditional conservatism, restatement reports, earnings quality, timeliness

1. Introduction

In capital markets, several users require information about companies' actual economic and financial situation to make better decisions. In this sense, users of information from financial statements need these reports to be reliable and valuable. That is, they provide high-quality accounting information so that they can make their decisions.

According to the Conceptual Framework for Financial Reporting (IASB, 2018), one of the characteristics that information must have to be more beneficial to its users is called "timeliness." The timeliness of accounting information is understood as a qualitative improvement characteristic, as it is considered that the timelier the disclosure of an entity's financial reports, the more significant influence these reports will have on the judgments and decisions of various users (IASB, 2018).

Ball (2006) lists several events that can influence the quality of financial information. Thus, greater responsibility for what is disclosed becomes necessary because the quality of financial statements can be affected by what is presented (Freire & Albuquerque, 2022). Despite the existence of accounting standards that demonstrate how standardized financial statements should be presented correctly, some companies omit or distort information about their real economic and financial situation, leading to requests for restatement (Murcia & Carvalho, 2007).

In this interim, the financial statement restatements can be mandatory or voluntary. The former is required by the Brazilian Securities and Exchange Commission (CVM) (regulatory body) but also by stakeholders. At the same time, the latter is carried out by the company itself without any contractual or regulatory determination, which aims to achieve its specific interests (Salgado & Souza, 2021). Thus, even though the financial statement restatements aim to improve the quality of previously disclosed information, its occurrence may indicate the existence of internal control failures and governance problems in the company (Ali et al., 2018).

Barniv and Cao (2009) highlight studies that indicate that restatements create uncertainties for the capital market

and, as a result, increase risks for stakeholders and affect decision-making. Also, companies that republish their financial statements tend not to present information clearly and timely, which hinders analysis and minimizes reliability between companies and investors (Gonçalves et al., 2020).

Therefore, as a directly observable measure, it is expected that restatement has substantial relationships with various other factors that denote measures of the informational quality of a company. Measures of earnings quality play a fundamental role in assessing the usefulness of financial statements (Schipper & Vincent, 2003). The literature on the quality of accounting information lists proxies that are analyzed from various perspectives. For example, Dechow et al. (2010) present some measures of earnings quality, including conservatism.

Conditional conservatism, as discussed by Basu (1997) and Ball and Shivakumar (2005), represents a way for managers to be conservative in disclosing financial information about the company, resulting in a lack of neutrality, which is one of the main components highlighted by the Conceptual Framework (IASB, 2018) as necessary for the faithful representation of accounting information.

Conditional conservatism represents a tendency where decision-makers recognize losses more promptly than gains, resulting from a lower requirement level for recognizing losses compared to recognizing gains (Basu, 1997). Additionally, it should be noted that although the literature presents uncertainties regarding the positive or negative effects of conservatism on organizations, studies such as Wendt (2010), Wang (2013), Nakano et al. (2014), Mora and Walker (2015), and Vale and Nakao (2017) indicate that conservatism tends to contradict neutrality, which reflects negatively on earnings quality.

In recent years, restatement has been the subject of many accounting studies. For example, recent studies have analyzed restatement from the following perspectives: determinants for the regulator to request restatement (Dantas et al., 2011); growth rates of companies (Albring et al., 2013); determinants of restatement (Lin et al., 2017); market reaction to restatement (Robu & Robu, 2015; Souza & Nardi, 2018); and the relationship between restatement, quality, and cost of debt (Gonçalves et al., 2020).

There are gaps in the Brazilian literature regarding research that focuses solely on the impact of the restatement on accounting conservatism. Most studies conducted so far focus on analyzing restatement with qualitative characteristics of disclosed information in addition to conservatism, such as persistence, relevance, and timeliness (Gonçalves et al., 2020). Therefore, this study stands out by delving into a single quality measure as it relates conservatism to several restatement characteristics, presenting a broader perspective.

Therefore, this research aims to verify the relationship between financial report restatements and conditional conservatism in Brazilian publicly traded companies. Specifically, the present study will analyze the restatements in contrast to a measure of earnings quality, conditional conservatism, in Brazilian publicly traded companies listed on B3.

For this purpose, information from 192 companies was used between 2012 and 2020 to operationalize the research. Ball and Shivakumar's (2005) conditional conservatism model was used. Restatement was measured through five distinct dimensions, including voluntary and compulsory forms: the existence of restatement, quantity of restatements, delay in restatement, restatement after 03/31, and delay between publication and restatement. Six-panel regression models were adopted for the research.

The results indicate the absence of a relationship between voluntary restatement and conditional conservatism but point to positive relationships between compulsory restatement and conditional conservatism, i.e., conservatism has a positive relationship with the existence of compulsory restatement; the number of compulsory restatements; more significant lag from the first day of publication to the last compulsory restatement; and the existence of restatement after the deadline for publication.

This study is relevant as it identifies patterns in the quality of financial reports based on companies' restatements, both voluntarily and compulsorily. Moreover, the findings of the study can contribute to various users, such as companies, which can better understand how restatement can harm their image in the market; investors and creditors, who can observe companies that republish essential information that assists them in their decisions; regulators, who can evaluate if their preventive and punitive measures are sufficient to better encourage companies in the better preparation of their reports; among other users.

This analysis can also contribute to academia since the increase in financial statement restatements is a current topic regarding the quality of accounting information (Alali & Wang, 2017; Mao, 2018; Marçal & Macedo, 2019; Mortazavi & Salehi, 2017; Rahmanian et al., 2016). Therefore, given the results obtained in this study, users can clearly understand how financial statement restatements relate to information quality. They can also analyze whether they should consider this factor in their judgments and decision-making.

2. Theoretical Framework

2.1 Timeliness and Restatement

Timeliness is a qualitative characteristic of accounting information, which refers to the availability of useful information in time to influence decision-making (CPC, 2019). Therefore, it is seen as an attribute that positively affects the perception of the information provided to accounting users.

According to Van Horne (1995), timeliness can be defined as the time interval between the end of a company's fiscal year and the date when its financial reports are completed and made available to the target audience. Therefore, timely information is a concern, particularly for regulators and accounting authorities worldwide, as transparency and timely financial information are essential to ensure that potential investors receive the relevant information to facilitate appropriate investment decisions (Clatworthy & Peel, 2016).

However, some factors influence the quality of this information, and one of them is the restatement of a company's financial reports. Restatement represents a new issuance of financial reports due to changes related to the initially published reports. This new issuance can represent a consequence of the lack of clarity and transparency in the initial publication of financial reports or the correction of something that went unnoticed by the organization (Albring et al., 2013; Hribar & Jenkins, 2004; Kravet & Shevlin, 2010).

Restatement occurs when a review of financial reports reveals inconsistencies in the information disclosed to the market. As a result, companies must republish their financial statements in voluntary or compulsory restatement (Dantas et al., 2011; Habib & Jiang, 2015).

In the first situation, voluntary, the company observes the need to republish its statements when it finds a flaw or needs to correct some of the information already in the statements disclosed to users (Chiudini et al., 2018). In this sense, it is perceived that even though this type of republishing is not mandatory, it can be seen negatively about the quality of information (Akhigbe et al., 2005).

In the second situation, the Brazilian Securities and Exchange Commission (CVM), which acts as a regulatory body in Brazil, requests correction and re-issuance of disclosed information due to identified errors or frauds, thus requiring, when deemed necessary, that companies reissue their financial reports, which affects the timeliness of accounting information (Dantas et al., 2011; Marques et al., 2017). Therefore, how a company is managed can become a measure of the quality of its information, as restatement as a management act can issue an alert to stakeholders about whether the company needs greater scrutiny or not of its reports (Freire & Albuquerque, 2022).

In light of the previous, restatement is seen as a negative aspect for both the timeliness and quality of accounting information. In addition to what has been mentioned, there is an impact on investors' decision-making (Soares et al., 2018). Moreover, restatement alerts the market about possible issues with the information disclosed, such as earnings manipulation (Dechow et al., 2010; Di Pietra et al., 2014; Marques et al., 2017).

The following table provides some results of past studies on the various effects of restatements on financial attributes of entities.

Purpose of the Study	Main Results	Author(s)
Examine the market's reaction to 542 corporate earnings restatements during the 1991–2001 period.	It is found that the earnings restatements elicit a strong negative market response	Akhigbe et al. (2005)
Verify if accounting restatements hurt contracting relations between the firm and outside parties such as a firm's customers and suppliers, negatively impacting firm cash flows.	The effects of restatement on overall firm growth as well as its components of internally and externally financed growth. The findings suggest that overall firm growth rates decline following a restatement.	Albring et al. (2013)
Examine whether the market perceives financial restatements as na important factor when determines the value of the company.	The findings no significant relationship between financial restatement and firm value.	Ali et al. (2018)
Examine the effect of restatements on investors' and dealers' perceptions of the firm.	It was found a negative market returns for accounting problem announcements, and we find that the negative reaction is most pronounced for firms with revenue recognition issues. It is also	Anderson and Yohn (2002)

Table 1. Previous studies on restatements

	found an increase in spreads surrounding the announcement of revenue recognition problems.	
Examine investor response to analyst	It was found that investors tend to rely more on the information	
forecast revisions using accounting	that analyst characteristics convey about forecast accuracy in	Barniv and Cao (2009)
restatements as a proxy for uncertainty.	restatement firms than in non-restatement firms.	
Investigate a large sample of financial	It was found that market reactions to restatements due to errors are	
statement restatements over the period	generally negative. It is also that these restatements come in	
1986-2001, and compares restatements	periods of declining profits and lower profits than industry peers	Callen et al. (2008)
caused by changes in accounting principles	for the restating firms, consistent with both opportunistic	
to those caused by errors.	managerial behavior and operational problems.	
Examine the effect of accounting	It was found that restatements initiated by auditors are associated	
restatements on a firm's cost of equity	with the largest increase in the cost of capital, and that firms with	Hribar and Jenkins (2004)
capital	greater leverage experience greater increases in their cost of	Tiribar and Jenkins (2004)
capital.	capital.	
Examine the association between accounting	It was found a significant increase in the factor loadings on the	
restatements and the pricing of information	discretionary information risk factor for restatement firms after a	Kravet and Shevlin (2010)
risk.	restatement announcement.	
Investigate the association between	It was found that firms with higher ratios of Level 3 fair value	
accounting restatements and reporting	assets (i.e., financial assets which fair values are determined by	Lin et al. (2017)
different levels of fair value measurements	unobservable, firm-generated inputs) to total assets are more	2 et al. (2017)
as defined by SFAS No. 157.	likely to subsequently restate their financial statements.	
Verify the effect of the timeliness of financial	The findings denote that companies that resubmit their financial	
reporting on earnings management of	statements, either spontaneously or obligatorily, tend towards	Salgado and Souza (2021)
publicly traded Brazilian companies listed	greater earnings management.	5 (*)
on B3.		

Therefore, it is observed that the act of restating can negatively affect the quality of accounting information reported in financial statements. Given this reflection, the following section addresses attributes that represent the quality of accounting information and outlines this research's central hypothesis.

2.2 Information Quality and Conservatism

The earnings reported in an organization's financial reports must provide relevant information about its financial performance. That is, they must be capable of influencing specific judgments and decisions of various users of accounting information (Dechow et al., 2010). According to the Conceptual Framework for Financial Reporting (IASB, 2018), for financial information to have quality, it must have two main characteristics: relevance and faithful representation.

In Dechow et al.'s (2010) study, measures of earnings quality are presented in three categories: properties of earnings, investor response to earnings, and external indicators of earnings distortion. This research analyzes one of the measures listed in the "properties of earnings" group, conservatism, a widely observed characteristic in accounting.

Accounting conservatism occurs when the long-term net asset value is lower than the market value. This is a broad view, which implies that accounting will be characterized as conservative when the equity value of a company is reported in a distorted way on the balance sheet with values lower than their fair values (Feltham & Ohlson, 1995).

Another accounting conservatism concept refers to the equity measurement in the Balance Sheet (Ohlson, 1995). About this definition, it is understood that the untimely recognition of revenues tends to reduce the accounting result and, consequently, the Equity. This form of conservatism can be explained by the benefits of equity valuation, which may result in lower litigation and regulation costs, for example (Watts, 2003).

The existing literature on conservatism is divided into two strands. The first is called conditional and is related to the tendency of decision-makers to recognize losses timelier than gains, related to the future cash flows of a company (Basu, 1997). One motivation for this strand is the need for more reliable contractual metrics to analyze the economic performance of companies, as well as factors that have influenced the degree of use of conservatism in accounting standards by companies (Watts, 2003).

The second perspective, known as unconditional conservatism, is related to adopting the lower value for assets

and revenues and the higher value for liabilities and expenses among the recognition possibilities. This conservatism is an asymmetric response to uncertainty since, with several potential values, the lower value for assets and the higher value for liabilities is chosen regardless of probable expectations of economic losses (Ball & Shivakumar, 2005).

Using the methodology proposed by Basu (1997), Lubberink and Huijgen (2000) found that individual managers' preferences reveal accounting conservatism in the results since risk-averse managers are more conservative than less risk-averse ones. The authors explain that to decrease the exposure of facts that may negatively affect managers' wealth, they increase conservatism in the results, assuming that managers' wealth is linked to their performance.

The conservatism of accounting information is controversial in academia, as two theoretical fronts defend this attribute as desirable or undesirable for organizations (Mora & Walker, 2015). Thus, accounting conservatism can be analyzed through two aspects, positive or negative, about the quality of accounting information.

Lobo and Zhou (2006) and Ahmed et al. (2013) argue that conservatism can represent a measure that increases the quality of reported information, as the decisions made by managers aim to provide a more accurate picture of the company's economic and financial situation. Likewise, Mora and Walker (2015), advocates of the contracting efficiency approach, argue that conservative decisions tend to present more relevant information.

However, studies such as Wendt (2010) and Wang (2013) suggest that conservatism contradicts the neutrality of accounting information and tends to generate more significant informational asymmetry, negatively affecting the quality of reported earnings. In addition, Nakano et al. (2014) also point out that conservatism is contrary to the neutrality of financial statements, which represents harmful effects on organizations. Finally, the study by Vale and Nakao (2017) suggests that conservatism provides circumstances that reduce the quality of earnings.

Thus, it becomes evident that even with the ambiguous position on the effects of conservatism on the quality of accounting information, it conflicts with neutrality as a desirable characteristic. Therefore, it is believed that conservatism is an attribute that negatively affects the quality of accounting information. In this sense, considering restatement as an aspect negatively related to the quality of earnings and conservatism as a measure of lack of quality, the following hypothesis was delineated:

 H_1 : Companies that restate their financial reports have lower-quality earnings, as they tend to be more conservative.

3. Method

3.1 Sample and Data Collection

This study aims to identify how conditional accounting conservatism is related to the restatement of financial reports in Brazilian companies. For this analysis, publicly traded companies listed on B3 were selected for nine years, from 2012 to 2020. The research population during this period consisted of 579 non-financial companies. Exclusion methods were adopted to select a qualified sample, as shown in Table 2:

Specification	Quantity
Non-Financial Companies listed on B3 in the analysis period	579
(-) Companies without asset or net income information	(364)
(-) Companies that do not repeat themselves in all nine years of analysis	(23)
(=) Final Sample	192

Table 2. Exclusion criteria for final sample selection

Table 2 shows that out of the 579 companies, 387 were excluded because information on profit or assets was not found in the Economática database and therefore were unsuitable for analysis using the conservatism model used in this study. Additionally, companies that did not appear in all years analyzed were excluded, as the aim was to use balanced panel data.

It should be noted that the years 2010 and 2011 were also considered, as the conservatism model used requires the calculation of the profit variation from t-1 and t-2. Thus, analyses were carried out for nine years (the maximum possible with data in compliance with the International Financial Reporting Standards - IFRS, as determined by the Brazilian Law No. 11,638 of 2007), which, multiplied by the final sample of 192 companies, generates a total of 1728 observations analyzed.

The information regarding the variables related to the restatement (date of restatement and number of restatements) was manually collected from the Central Systems of the Brazilian Securities and Exchange Commission (CVM). In contrast, the information regarding the conservatism model was obtained from the Economática database.

3.2 Models of Accounting Conservatism

Ball and Shivakumar (2005) developed a model that links the timely recognition (or anticipation) of losses to the presence of negative cash flows. Thus, the practice of conservatism would be conditioned to signs of the poor current economic performance of the company. Therefore, the present study employs the model proposed by the authors, which is described according to Equation 1:

$$\Delta NI_{it} = \beta_0 + \beta_1 \Delta NI_{it-1} + \beta_2 D \Delta NI_{it-1} + \beta_3 Cons. + \varepsilon_{it}$$
(1)

Where:

 ΔNI_{it} = Change in the accounting net income of company i from year t-1 to year t; ΔNI_{it-1} = Change in the accounting net income of company i from year t-2 to year t-1; $D\Delta NI_{it-1}$ = Dummy variable indicating the presence of an adverse change in accounting net income of company i from year t-2 to year t-1, taking a value of 1 if $\Delta NI_{it-1} < 0$ and 0 otherwise; *Cons.* = Variable representing conditional conservatism of the company through the following interaction: $\Delta NI_{it-1} * D\Delta NI_{it-1}$; and ε_{it} = Error term of the regression. The total value of assets weighs all variables related to net income at the beginning of the period.

To pursue the objective of this study, the variable *Cons.*, which represents the proxy for conservatism, was multiplied by the specific measures of restatement to verify whether restatements are related to a higher or lower level of conditional conservatism in the companies.

3.3 Statistical Variables and Models

The research data is in a balanced panel with a cross-section of 192 companies for nine years. Diagnostic tests indicated panel data with fixed effects. Therefore all generated models have this statistical configuration.

The accounting conservatism model adopted in the research was presented in the previous subsection. The measures related to the attribute of restatement were represented by five dimensions (Existence of Restatement; Number of Restatements; Restatement Lag; Restatement after 03/31; and Lag between Publication and Last Restatement) for two distinct restatement configurations: Voluntary Restatement (VR) and Compulsory Restatement (CR).

Therefore, in addition to the model represented by Equation 1, results were provided for five other regressions that vary according to the dimensions of restatement, with two additional variables for each model, according to the two distinct restatement configurations (VR and CR). Table 3 provides explanations of each of the variables analyzed in the conservatism model:

Attributes	Measuring Form
$V_{\rm c}$ least $r_{\rm c}$ $D_{\rm c}$ state $r_{\rm c}$ $r_{\rm c}$ (VD)	Dummy variable receives 1 for companies that voluntarily restated report(s) and 0 otherwise
voluntary Restatement (VR)	in the analysis year.
Commuter and Destatement (CD)	Dummy variable receives 1 for companies that compulsorily restated report(s) and 0
Compulsory Restatement (CR)	otherwise in the analysis year.
Normalism of Malandarian Department (NIMD)	Number of voluntary restatements, on different days, that the company carried out in the
Number of voluntary Restatements (NVR)	referred year of analysis.
Number of Commulating Postatamenta (NCP)	Number of compulsory restatements, on different days, that the company carried out in the
Number of Compulsory Restatements (NCR)	referred year of analysis.
Delay in Valuation, Poststement (DV)	Number of days of delay of the last voluntary restatement in the year of analysis, starting
Delay in voluntary Restatement (DV)	from 01/01.
Delay of Commulatory Postatoment (DC)	Number of days of delay of the last compulsory restatement, in the year of analysis, from
Delay of Compulsory Restatement (DC)	01/01.
Delayed Veluetory Poststement (DVP)	Dummy variable receives 1 for companies that voluntarily restated report(s) after the final
Delayed voluntary Restatement (DVR)	publication deadline (03/31) and 0 otherwise in the year of analysis.
Delayed Commulatory Postotoment (DCP)	Dummy variable receives 1 for companies that compulsorily restated report(s) after the final
Delayed Compulsory Restatement (DCR)	publication deadline (03/31) and 0 otherwise in the year of analysis.

Table 3. Republication measures used

(2)

(3)

(4)

(6)

Delay	from	Publication	to	Voluntary	Number of days of delay from the initial publication of the financial report to the last
Restate	ment (P	VR)			voluntary restatement in the year of analysis.
Delay	from	Publication	to	Compulsory	Number of days of delay from the initial publication of the financial report to the last
Restate	ment (P	CR)			compulsory restatement in the year of analysis

The article aimed to be as comprehensive as possible regarding the measures related to the restatement attributes. Thus, ten different measures were generated, and these attributes were tested in pairs. In other words, in each regression model, attributes with similar construction were tested but differed in voluntary or compulsory restatement. Therefore, the Ball and Shivakumar (2005) conservatism model was additionally tested in five other models according to the adapted equations below:

$$\Delta NI_{it} = \beta_0 + \beta_1 \Delta NI_{it-1} + \beta_2 D \Delta NI_{it-1} + \beta_3 Cons_{it} + \beta_4 VR_{it-1} + \beta_5 CR_{it-1} + \beta_6 Cons_{it} * VR_{it-1} + \beta_7 Cons_{it} \\ * CR_{it-1} + \varepsilon_{it}$$

$$\Delta NI_{it} = \beta_0 + \beta_1 \Delta NI_{it-1} + \beta_2 D \Delta NI_{it-1} + \beta_3 Cons_{\cdot it} + \beta_4 NVR_{it-1} + \beta_5 NCR_{it-1} + \beta_6 Cons_{\cdot it} * NVR_{it-1} + \beta_7 Cons_{\cdot it} * NCR_{it-1} + \varepsilon_{it}$$

$$\Delta NI_{it} = \beta_0 + \beta_1 \Delta NI_{it-1} + \beta_2 D \Delta NI_{it-1} + \beta_3 Cons_{\cdot it} + \beta_4 DV_{it-1} + \beta_5 DC_{it-1} + \beta_6 Cons_{\cdot it} * DV_{it-1} + \beta_7 Cons_{\cdot it} * DC_{it-1} + \varepsilon_{it}$$

$$\Delta NI_{it} = \beta_0 + \beta_1 \Delta NI_{it-1} + \beta_2 D \Delta NI_{it-1} + \beta_3 Cons_{\cdot it} + \beta_4 DVR_{it-1} + \beta_5 DCR_{it-1} + \beta_6 Cons_{\cdot it} * DVR_{it-1} + \beta_7 Cons_{\cdot it} * DCR_{it-1} + \varepsilon_{it}(5)$$

$$\Delta NI_{it} = \beta_0 + \beta_1 \Delta NI_{it-1} + \beta_2 D \Delta NI_{it-1} + \beta_3 Cons_{\cdot it} + \beta_4 PVR_{it-1} + \beta_5 PCR_{it-1} + \beta_6 Cons_{\cdot it} * PVR_{it-1} + \beta_7 Cons_{\cdot it} * PCR_{it-1} + \varepsilon_{it}$$

As presented, a total of six-panel data regression models were used. Model 1 does not include variables related to the restatement attribute, and the other five models have attributes divided into voluntary and compulsory restatement according to their dimensions. It is essential to highlight that, in the results, only the restatement variables that interacted with conservatism were analyzed, while the results of variables that solely measure the restatement attribute were omitted. These variables were omitted as they were not the object of analysis and to avoid tables with excess information, making them more understandable for readers.

The outliers were identified by multiplying the interquartile range by three, which resulted in approximately 3% of outliers about the total number of observations. Therefore, it was decided to "winsorize" 1.5% of the positive and 1.5% of the negative extremes.

4. Results

4.1 Inferential Results

Table 4 below shows the correlations between Ball and Shivakumar's (2005) conservatism model and the variables representing voluntary and compulsory restatements. The correlation matrix helps visualize the direction and strength between variables (if correlated), indicating a preview of the possible significant results in the regression model.

X/	Base Model		Proxies for Restatement Multiplied by Conservatism					
Variables	ΔNI_{t-1}	Cons.	Cons.*VR	Cons.*NVR	Cons.*DV	Cons.*DVR	Cons.*PVR	
ΔNI_t	-0,2321***	-0,2296***	-0,1331***	-0,1057***	-0,0506**	-0,0753***	-0,0163	
ΔNI_{t-1}	1	0,8059	0,3613***	0,3347***	0,2136***	0,2479***	0,1341***	
Cons.		1	0,4520***	0,4179***	0,2759***	0,3111***	0,1751***	
Cons.*VR			1	0,9261***	0,5949***	0,6865***	0,3744***	
Cons.*NVR				1	0,7027***	0,7201***	0,5348***	
Cons.*DV					1	0,6566***	0,9567***	
Cons.*DVR						1	0,5276***	
Cons.*PVR							1	
			Cons.*CR	Cons.*NCR	Cons.*DC	Cons.*DCR	Cons.*PCR	
ΔNI_t			-0,0573**	-0,0496**	-0,0042	-0,0481**	-0,0328	
ΔNI_{t-1}			0,0625***	0,0542**	-0,0278	0,0515**	0,0465*	
Cons.			0,0635***	0,0592**	-0,0274	0,0506**	0,0378	
Cons.*CR			1	0,8673***	0,0073	0,8228***	0,7434***	
Cons.*NCR				1	0,0056	0,4454***	0,5993***	
Cons.*DC					1	0,0066	0,0068	
Cons.*DCR						1	0,6722***	
Cons.*PCR							1	
			Cons.*CR	Cons.*NCR	Cons.*DC	Cons.* DCR	Cons.*PCR	
Cons.*VR			0,093***	0,1063***	0,008	0,052**	0,0633*	
Cons.*NVR			0,0896***	0,0989***	0,0075	0,054**	0,0923***	
Cons.*DV			0,0417*	0,0551**	0,0042	0,0152**	0,049**	
Cons.* DVR			0,069***	0,1191***	0,0054	-0,0064	0,05**	
Cons.*PVR			0,0349	0,0527**	0,0026	0,0051	0,053**	

Table 4. Correlation Matrix

Note. *, **, and *** correspond to statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 4 highlights some points that should be emphasized. Firstly, it can be observed that the variables from the base conservatism model (Δ NIt-1 and Cons.) are negatively correlated with the dependent variable (Δ NIt). Ball and Shivakumar (2005) explain that if these two variables assume negative signs in the regression model, companies promptly recognize gains and losses, indicating a non-conservative situation but a more liberal recognition posture overall.

Another point to highlight is the significance of voluntary and compulsory restatement proxies multiplied by conservatism, which measures possible changes in the conservatism of companies. Four out of five proxies for voluntary and three for compulsory restatement are significantly and negatively correlated with Δ NIt (at the 1% or 5% level). This result indicates, preliminarily and simplistically, that companies with voluntary and compulsory restatements correlate with a higher level of conservatism, meaning that these companies have lower information quality in their disclosed financial information.

Finally, it is relevant to visualize the correlations between the measures of restatement since strong correlations between regressors can generate problems of multicollinearity in regressions (Gujarati & Porter, 2005). For example, Table 4 shows several significant correlations between the regressors, some with a greater than 80% strength. This generates some implications.

The collinearity of the variables was analyzed when inserted in only one regression model. The analysis was carried out using the Variance Inflation Factor (VIF). Gujarati and Porter (2005) explain that a VIF above ten may indicate a collinearity problem. Table 5 below shows the VIF values in a conservatism model with only voluntary repurchasing measures and another with compulsive repurchasing measures.

Among the measures of restatement, only the variables Cons.*DVR, Cons.*DC, and Cons.*PCR had the VIF below the limit of 10. To solve this problem, it was decided to run conservatism models with only one voluntary restatement measure plus one compulsory restatement measure, always aligned in their representations.

This way of using proxies in models generates some limitations, such as being unable to measure which of these proxies is the most significant in explaining the relationship between restatement and conservatism, for example. However, on the other hand, this solution allows the measures to be used with statistical safety, where each one

can have incremental power since the correlations between them did not reach 100%.

Conservatism and Voluntary Rest	atement	Conservatism and Compulsory l	Conservatism and Compulsory Restatement		
Voluntary Restatement	VIF	Compulsory Restatement	VIF		
ΔNI_{t-1}	3,526	ΔNI_{t-1}	3,526		
D	1,843	D	1,848		
Cons.	3,136	Cons.	2,872		
Cons.*VR	14,934	Cons.*CR	100,142		
Cons.*NVR	10,559	Cons.*NCR	40,376		
Cons.*DV	56,165	Cons.*DC	1,001		
Cons.*DVR	2,398	Cons.*DCR	31,175		
Cons.*PVR	43,410	Cons.*PCR	2,304		

Table 5. Variance Inflation Factor - VIF

As highlighted in section 3, six separate regressions were generated. The first one measures only conservatism, based on Ball and Shivakumar's model (2005). The others measure how restatements relate to conservatism through conservatism interactions.

Table 6 shows the coefficients of the regressors, the White test for homoscedasticity of residuals, the x^2 test for the normality of residuals, and the model's explanatory power (R²). The p-values for significance analysis are also shown for all these coefficients.

Initially, the assumptions of the models are analyzed. It can be observed that all p-values of the coefficients of the White and x^2 tests are less than 0.0001, indicating that the residuals are heteroscedastic with a non-normal distribution. The models were run using White's robust standard errors to adjust for the results due to the heteroscedasticity of residuals. The assumption of normality can be relaxed according to the Central Limit Theorem, which indicates that samples with many observations tend toward normality (Gujarati & Porter, 2008).

Table 6 does not show the VIF values of the variables to avoid excessive information, but it should be noted that after correcting the previously highlighted collinearity, none of the models presented new collinearity problems (the highest VIF in all models is 3.52).

	1	2	3	4	5	6
ΔNI_{t-1}	-0,12449	-0,12373	-0,12465	-0,12368	-0,12361	-0,12561
P-value	(0,1481)	(0,1514)	(0,1476)	(0,1518)	(0,1520)	(0,1445)
D	-0,01136	-0,01171	-0,01154	-0,01124	-0,01165	-0,01169
P-value	(0,0033)***	(0,0026)***	(0,0029)***	(0,0037)***	(0,0027)***	(0,0026)***
Cons.	-0,48816	-0,47065	-0,48826	-0,49063	-0,48424	-0,49045
P-value	(0,0026)***	(0,0047)***	(0,0035)***	(0,0025)***	(0,0030)***	(0,0024)***
Cons.*VR		-0,06201				
P-value		(0,6600)				
Cons.*CR		-0,88756				
P-value		(0,0336)**				
Cons.*NVR			0,01280			
P-value			(0,9181)			
Cons.* NCR			-0,37510			
P-value			(0,0785)*			
Cons.*DV				0,000012		
P-value				(0,9656)		
Cons.*DC				-0,000019		
P-value				(0,0001)***		
Cons.*DVR					-0,02728	
P-value					(0,8861)	
Cons.*DCR					-1,05041	
P-value					(0,0631)*	

Table 6. Main Results of Panel Regression Models

Cons.*PVR						0,00021
P-value						(0,5884)
Cons.*PCR						-0,01237
P-value						(0,2228)
Constant	-0,00228	-0,00229	-0,00227	-0,00234	-0,00232	-0,00225
P-value	(0,5071)	(0,5055)	(0,5090)	(0,4984)	(0,5012)	(0,5142)
R ²	0,14056	0,14328	0,14197	0,14093	0,14280	0,14159
P-value F	<0,0001	<0,0001	<0,0001	<0,0001	<0,0001	<0,0001
X^2	153,33	153,845	153,639	151,764	153,287	150,817
P-value	<0,0001	<0,0001	<0,0001	<0,0001	<0,0001	<0,0001
White	337,479	342,580	362,146	355,289	339,156	346,672
P-value	<0,0001	<0,0001	<0,0001	<0,0001	<0,0001	<0,0001

Notes. The constant values outside the parentheses represent the regression coefficients. The values inside parentheses represent the obtained p-values. Values in bold represent interactions where there was statistical significance. *, ** and *** correspond to statistical significance at the levels of 10%, 5% and 1%, respectively.

The assumptions indicate that the models were robust, so it is possible to analyze the other information. It can be observed from Table 6 that conservatism was identified in all six models, as explained by Ball and Shivakumar (2005). All coefficients of the variable Δ LLt-1 were non-significant, indicating that gains were not recognized promptly. In contrast, all coefficients of the variable Cons.t-1 were negative and significant at 1%, indicating that losses were recognized timely.

In models 2 to 6, voluntary and mandatory restatement variables were added. The first point to highlight is the non-significance of the voluntary restatement variables in the models, i.e., there are no differences in the level of conservatism regarding the dimensions of voluntary restatement, such as: whether republished voluntarily or not (Cons.t-1*VR); the amount of voluntary restatement (Cons.t-1*NVR); days since the last voluntary restatement from 01/01 (Cons.t-1*DV); whether the restatement was after 03/31, which is the deadline for publishing financial statements (Cons.t-1*DVR); and the number of days difference between publication and final restatement (Cons.t-1*PVR).

On the other hand, it was found that four out of five measures of mandatory restatement were significant. It was found that: companies that repost compulsorily are more conservative (Cons.t-1*CR, significant at 5%); the more mandatory restatement they perform, the more conservative they are (Cons.t-1*NCR, significant at 10%); the farther away from 01/01 the mandatory restatement is, measured in days, the more conservative the companies are (Cons.t-1*DC, significant at 1%); and companies that republished compulsorily after the deadline of 03/31 are more conservative than companies that did not republish or republished before this date (Cons.t-1*DCR, significant at 10%).

It is essential to highlight that the variable measuring the number of days between the initial publication and mandatory restatement was found to be insignificant in the model. This indicates that there is no impact on the conditional conservatism of companies when considering the delay between the initial publication and the restatement.

4.2 Discussion of Results

Based on the presented results, there is evidence of relationships between different forms of restatement and accounting conservatism in Brazilian publicly traded companies. As previously stated, there are no differences in the level of conservatism regarding voluntary restatement. However, according to the results in Table 6, four out of the five measures are negatively (significantly) related to mandatory restatement. Therefore, it can be concluded that companies that are required to report their financial statements are more conservative than others.

The study by Callen et al. (2006) considers voluntary restatement as a negative phenomenon, exemplified by three factors. The first factor relates to accounting system failures that may result from operational and managerial issues. The second factor refers to a decrease in future cash flow expectations. Finally, the last factor indicates earnings management, where managers try to hide the decline in profits.

Chiudini et al. (2018), on the other hand, argue that voluntary restatement may also suggest lower quality regarding the company's auditing, as it failed to capture errors and/or inconsistencies found in the first publication of the company's statements promptly. Even though voluntary restatement may be associated with accounting irregularities and consume high volumes of financial resources due to risks, they are not limited to

this, as there may be qualitative motivations for correcting data contained, for example, in management reports (Elayan et al., 2008; Helou & Pereira, 2010).

Therefore, the findings related to the measures of voluntary restatement and conservatism do not corroborate what the literature (Akhigbe et al., 2005; Chen et al., 2014; Richardson et al., 2002; Segal et al., 2006) suggests, i.e., companies do not usually adopt a more conservative financial reporting strategy after a voluntary restatement (Moore & Pfeiffer, 2009).

The relationship of mandatory restatement indicates that this determination by the CVM, in an imposed manner, is already related to the quality measure. As expected, and pointed out by the studies of Anderson and Yohn (2002), Dechow et al. (2010), Di Pietra et al. (2014), Freire and Albuquerque (2022), Hribar and Jenkins (2004), and Marques et al. (2017), mandatory restatement represents something negative since it is associated with a way for managers to be conservative in disclosing financial information, resulting in a lack of neutrality.

Compulsory restatement indicates no records were made (errors in estimation, forecasts, etc.). Thus, these situations change the company's financial position. Therefore, mandatory restatement is required by CVM, which oversees the disclosure of these quarterly and annual reports of companies, as well as regulating the actions of agents and punishing acts that go against accounting standards (Dantas et al., 2011).

Therefore, this study indicates that compulsory restatement is directly related to conservatism due to the lack of quality of financial reports. Furthermore, it is observed that this type of restatement directly affects the quality of the disclosed information as well as may affect investors' perception of the company's management since compulsory restatement is required when analyses identify inconsistencies in the company's reality (Dantas et al., 2011; Marques et al., 2017).

5. Final Considerations

This study aimed to verify the relationship between voluntary and compulsory restatements and conditional conservatism in Brazilian publicly traded non-financial companies. For this purpose, a sample of 192 companies was selected between 2012 and 2020, resulting in 1728 observations.

Measures of restatement were selected, representing distinct aspects of this event, and regressed within Ball and Shivakumar's (2005) conservatism model, with certain adjustments to accommodate five dimensions of restatement used for both types (voluntary and compulsory).

The findings suggest that companies that are subject to compulsory financial reports restatement tend to exhibit higher levels of conditional conservatism, as evidenced by a positive relationship between the number of compulsory restatements, the length of time elapsed between the original publication and the last compulsory restatement, the occurrence of restatements beyond the deadline, and the presence of compulsory restatements overall, and the level of conservatism displayed by the companies.

Therefore, the results obtained from this research lead to the conclusion that, during the studied period, companies that presented any form of compulsory restatement tended to be more conservative than those that did not.

The implications of this research are significant for external accounting users as it reduces uncertainty in decision-making. It also benefits market participants, as knowledge of a company's financial performance is essential for informed decision-making, and high-quality reports can lead to more accurate financial market decisions. Additionally, regulators can observe that companies mandated for restatement tend to have lower-quality reports due to conservatism, which violates several accounting norms.

The study has a limitation related to the use of proxies in the models, which may have generated issues such as the inability to determine the most significant measure in explaining conservatism. However, this approach ensures statistical reliability, as each measure can have incremental power in explaining conservatism.

For future research, it is recommended to conduct sector-based analyses to determine whether the relationship between restatements and conservatism varies by sector, capital markets, formal and informal institutional factors, etc. Additionally, it is recommended to identify other measures of information quality associated with restatement measures, to determine whether voluntary and compulsory restatement measures are associated with measures other than conservatism.

References

- Akhigbe, A., Kudla, R. J., & Madura, J. (2005). Why are some corporate earnings restatements more damaging? *Applied Financial Economics*, 15(5), 327-336. https://doi.org/10.1080/0960310042000338722
- Ahmed, A. S., Neel, M., & Wang, D. (2013). Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence. *Contemporary Accounting Research*, 30(4), 1344-1372. https://doi.org/10.1111/j.1911-3846.2012.01193.x
- Alali, F., & Wang, S. (2017). Characteristics of financial restatements and frauds: An analysis of corporate reporting quality from 2000-2014. *The CPA Journal*, 87(11), 32-41.
- Albring, S. M., Huang, S. X., Pereira, R., & Xu, X. (2013). The effects of accounting restatements on firm growth. Journal Accounting Public Policy, 32(5), 357-376. https://doi.org/10.1016/j.jaccpubpol.2013.06.005
- Ali, M. M., Besar, S. S. N. T., & Mastuki, N. A. (2018). Value Relevance of Financial Restatements: Malaysian Perspective. *Journal of Engineering and Applied Sciences*, 13(4), 804-808. https://doi.org/10.36478/jeasci.2018.804.808
- Anderson, K. L., & Yohn, T. L. (2002). The effect of 10K restatements on firm value, information asymmetries, and investors' reliance on earnings. *Information Asymmetries, and Investors' Reliance on Earnings* (September 2002). Papers SSRN. http://dx.doi.org/10.2139/ssrn.332380
- Ball, R. (2006). International Financial Reporting Standards (IFRS): pros and cons for investors. *Accounting and business research*, *36*(sup1), 5-27. https://doi.org/10.1080/00014788.2006.9730040
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83-128. https://doi.org/10.1016/j.jacceco.2004.04.001
- Barniv, R. R., & Cao, J. (2009). Does information uncertainty affect investors' responses to analysts' forecast revisions? An investigation of accounting restatements. *Journal of Accounting Public Policy*, 28(4), 328-248. https://doi.org/10.1016/j.jaccpubpol.2009.06.003
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings1. *Journal of Accounting and Economics*, 24(1), 3-37. https://doi.org/10.1016/S0165-4101(97)00014-1
- Callen, J. L., Livnat, J., & Segal, D. (2006). Accounting restatements: Are they always bad news for investors? *The Journal of Investing*, 15(3), 57-68. https://doi.org/10.3905/joi.2006.650145
- Chiudini, V., Cunha, P. R. da, & Marques, L. (2018). Relação entre a republicação das demonstrações contábeis e o Audit Delay. *Revista Catarinense da Ciência Contábil, 17*(51), 89-107. https://doi.org/10.16930/2237-7662/rccc.v17n51.2617
- Clatworthy, M. A., & Peel, M. J. (2016). The timeliness of UK private company financial reporting: Regulatory and economic influences. *The British Accounting Review*, 48(3), 297-315. https://doi.org/10.1016/j.bar.2016.05.001
- Dantas, J. A., Silva, M. R., Chaves, S. M. T., & Carvalho, R. P. (2011republ Determined by the CVM: The Role Of The Independent Auditors. *Revista Universo Contabil*, 7(2), 45, 2011. http://dx.doi.org/10.4270/ruc.20117
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, 50(2-3), 344-401. https://doi.org/10.1016/j.jacceco.2010.09.001
- Di Pietra, R., Gebhardt, G., McLeay, S., & Ronen, J. (2014). Special issue in governance and accounting regulation. *Journal of Management & Governance, 18*(3), 675-681. https://doi.org/10.1007/s10997-012-9238-1
- Feltham, G. A., & Ohlson, J. A. (1995). Valuation and clean surplus accounting for operating and financial activities. Contemporary Accounting Research, 11(2), 689-731. https://doi.org/10.1111/j.1911-3846.1995.tb00462.x
- Freire, M. M. A., & Albuquerque Filho, A. R. (2022). Influência da responsabilidade social corporativa na qualidade das demonstrações contábeis de empresas brasileiras. *Revista Catarinense da Ciência Contábil*, 21, 1-17. https://doi.org/10.16930/2237-766220223223
- Gujarati, D. N., & Porter, D. C. P. (2008). *Econometria Básica-Quinta Edição*. Porto Alegre: AMGH Editora Ltda.

- Habib, A., & Jiang, H. (2015). Corporate governance and financial reporting quality in China: A survey of recent evidence. *Journal of International Accounting, Auditing and Taxation, 24, 29-45.* https://doi.org/10.1016/j.intaccaudtax.2014.12.002
- Hribar, P., & Jenkins, N. T. (2004). The Effect of Accounting Restatements on Earnings Revisions and the Estimated Cost of Capital (November 2003). http://dx.doi.org/10.2139/ssrn.488003
- IASB. (2018). Conceptual framework for financial reporting. London: IFRS Foundation. Retrieved from https://aasb.gov.au/admin/file/content105/c9/Conceptual_Framework_05-19_COMPmar20_07-21.pdf
- Kravet, T., & Shevlin, T. (2010). Accounting restatements and information risk. *Review of Accounting Studies*, 15(2), 264-294. https://doi.org/10.1007/s11142-009-9103-x
- Lobo, G. J., & Zhou, J. (2006). Did conservatism in financial reporting increase after the Sarbanes Oxley Act? Initial evidence. *Accounting Horizons, 20*(1), 57-73. https://doi.org/10.2308/acch.2006.20.1.57
- Lin, Y. H., Lin, S., Fornaro, J. M., & Huang, H. W. S. (2017). Fair value measurement and accounting restatements. *Advances in Accounting*, *38*, 30-45. https://doi.org/10.1016/j.adiac.2017.07.003
- Lubberink, M., & Huijgen, C. (2000). Liability exposure effects on earnings conservatism: the case of cross-listed firms. Working Paper No. 2001/04; EFMA 2002 London Meetings. http://dx.doi.org/10.2139/ssrn.282412
- Mao, Y. (2018). Financial Restatement Research Literature Review. *Modern Economy*, 9(12), 2092-2103. https://doi.org/10.4236/me.2018.912130
- Marçal, R. R., & Macedo, M. A. da S. (2019). Análise da persistência do lucro diante dos accruals discricionários: Um estudo com base no impacto da adoção das IFRS. *Contextus Revista Contemporânea de Economia e Gestão*, 17(2), 129-159.
- Marques, V., Amaral, H., Souza, A., Santos, K., & Belo, P. (2017). Determinantes das republicações no mercado brasileiro: Uma análise a partir dos incentivos ao gerenciamento de resultados. *Revista de Educação e Pesquisa em Contabilidade (REPeC), 11*(2), 191-213. https://doi.org/10.17524/repec.v11i2.1488
- Moore, E., & Pfeiffer, R. (2009). Do managers change their financial reporting strategies in response to an earnings restatement? *Journal Accounting and Ethics Public Policy*, 9(1), 39–70.
- Mora, A., & Walker, M. (2015). The implications of research on accounting conservatism for accounting standard setting. *Accounting and Business Research*, 45(5), 620-650. https://doi.org/10.1080/00014788.2015.1048770
- Mortazavi, S.A., & Salehi, A. K. (2017). Investigating the Relationship between Earnings Management and Cash Management with the Restated Financial Statements of Companies Listed in Tehran Stock Exchange. *International Journal of Economic Perspectives*, 11(1), 1055-1060.
- Murcia, F. D., & Carvalho, L. N. (2007). Conjecturas acerca do gerenciamento de lucros, republicação das demonstrações contábeis e fraude contábil. *Revista Contabilidade Vista & Revista, 18*(4), 61-82.
- Nakano, M., Otsubo, F., & Takasu, Y. (2014). Effects of accounting conservatism on corporate investment levels, risk taking, and shareholder value (No. 14-E-10). Institute for Monetary and Economic Studies, Bank of Japan. https://ideas.repec.org/p/ime/imedps/14-e-10.html
- Ohlson, J. (1995). Earnings, book values and dividends in equity valuation. *Contemporary Accounting Research*, *11*, 661-687. https://doi.org/10.1111/j.1911-3846.1995.tb00461.x
- Rahmanian, H., Rahmani, H., & Jafari, S. M. (2016). Relationship between restatement of financial statements and information asymmetry. *International Journal of Humanities and Cultural Studies*, 3(1), 1721-1732.
- Robu, M. A., & Robu, I. B. (2015). The influence of the audit report on the relevance of accounting information reported by listed Romanian companies. *Procedia Economics and Finance*, 20, 562-570. https://doi.org/10.1016/S2212-5671(15)00109-4
- Salgado, N. de N. B., & Souza, P. V. S. de. (2021). The Effect of Accounting Timeliness on Earnings Management for Brazilian Companies Listed on B3. Advances in Scientific and Applied Accounting, 14(1), 39-56. https://doi.org/10.14392/asaa.2021140102

Schipper, K., & Vincent, L. (2003). Earnings quality. Accounting Horizons, 17, 97-110.

Soares, C. R., Motoki, F. Y. S., & Monte-Mor, D. S. (2018). IFRS e probabilidade de republicação: Um estudo das empresas brasileiras listadas na Bovespa. *Revista Catarinense da Ciência Contábil, 17*(52).

https://doi.org/10.16930/2237-7662/rccc.v17n52.2694

- Souza, B. F., & Nardi, P. C. C. (2018). Influência da opinião do auditor no retorno das ações das empresas brasileiras de capital aberto. *Contabilidade Gestão e Governança, 21*(2). https://doi.org/10.21714/1984-3925 2018v21n2a6
- Vale, J. P. S. D., & Nakao, S. H. (2017). Unconditional conservatism in Brazilian public companies and tax neutrality. *Revista Contabilidade & Finanças*, 28, 197-212. https://doi.org/10.1590/1808-057x201702450
- Van Horne, J. (1995). Financial Management and Policy: Case Studies in Modern Corp Finance Package. Prentice Hall.
- Wang, J. L. (2013). Accounting conservatism and information asymmetry: Evidence from Taiwan. International Business Research, 6(7), 32. https://doi.org/976473db46299f7b1b54a90a855f3f144db093af
- Watts, R. L. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*, 17(3), 207-221. https://doi.org/10.2308/acch.2003.17.3.207
- Wendt, M. J. H. (2010). The Effect of Accounting Conservatism on Value Relevance of Financial Statements (Doctoral dissertation, Masters Thesis submitted to Erasmus School of Economics, Erasmus University, Rotterdam).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).