Revista de Educação e Pesquisa em Contabilidade
Journal of Education and Research in Accounting

Periódico de Publicação Contínua, digital e gratuito publicado pela Academia Brasileira de Ciências Contábeis | Disponível online em www.repec.org.br

Rev. Educ. Pesq. Contab., Brasília, v. 19, p. 1-23, jan.-dec. 2025. | DOI: http://dx.doi.org/10.17524/repec.v19.e3810 | ISSN 1981-8610

Inflation: How the market react to real and nominal differences in accounting information?

Isabelle Ribeiro Rodrigues
https://orcid.org/0000-0002-5481-5083 | *E-mail: isabelleribeirorodrigues@gmail.com*

Gustavo Antonio Penissato
https://orcid.org/0009-0006-8957-4749 | *E-mail: gustavopessinato@yahoo.com.br*

Rafael Antonio Moutinho
https://orcid.org/0000-0002-1332-291 | *E-mail: rafaelmoutinho@outlook.com*

Ricardo Luiz Menezes da Silva
https://orcid.org/0000-0001-5437-1657 | *E-mail: rlms@fearp.usp.br*

Eliseu Martins
https://orcid.org/0000-0002-7652-7218 | *E-mail: prof.eliseu.martins@gmail.com*

Abstract

Objective: This study investigates how the Brazilian capital market reacts to the difference between disclosed nominal net income and equity and their estimated values, considering an adjustment for publicly available inflation. Because inflation causes reported profits to deviate from companies' actual performance, accounting quality and comparability are affected, as financial statements reflect transactions from different periods with distinct monetary values.

Method: Using a sample of 37 publicly traded companies between 2010 and 2016, investors' reactions to firms more or less exposed to inflation were assessed based on cumulative abnormal returns obtained through an event-study approach. Regression analyses were performed to examine the relevance of accounting figures.

Results: The findings indicate lower cumulative abnormal returns for companies with greater differences between nominal and adjusted values, suggesting that inflation-adjusted accounting figures tend to be more relevant to investors.

Contribution: This study advances the literature on the effects of inflation on accounting information and its implications for capital market investors in Brazil. The results highlight that, even in non-hyperinflationary environments like Brazil, accounting figures are not free from inflationary distortions.

Keywords: inflation, monetary correction, value relevance, abnormal returns, accounting information.

Published in Portuguese and English. Original Version in Portuguese.

Round 1: Received in 7/8/2025. Review requested on 9/6/2025. Round 2: Resubmited on 10/3/2025. Review requested on 10/14/2025. Round 3: Resubmited on 11/10/2025. Accepted on 11/11/2025 by Vinicius Gomes Martins, PhD (Editor assistant) by Gerlando Augusto Sampaio Franco de Lima, PhD (Editor). Published on 12/15/25. Organization responsible for the journal: Abracicon.

1 Introduction

The predominant method for measuring assets and liabilities in financial statements is historical cost, although specific price changes are recognized in certain assets and liabilities (Whittington, 2015), such as financial instruments measured at fair value. Regarding general price variations, monetary restatement is restricted to companies operating in hyperinflationary economies (Comitê de Pronunciamentos Contábeis [CPC], 2018). In this sense, if the economic environment is not considered hyperinflationary, accounting information represents a combination of monetary values from economic transactions occurring on different dates, with values of different purchasing power levels (Konchitchki, 2011, 2013).

Inflation can generate significant consequences, even at low levels. The reduction in the purchasing power of money leads to increased input prices, overestimated profits due to underestimated expenses, a reduction in the quantity of goods purchased by consumers, and a decrease in confidence in the informational content of accounting (Bilgic et al., 2018). There is also underestimation of revenues, overestimation of financial revenues, and overestimation of expenses of this nature, as well as the underestimation of assets and equity. Sometimes real profit is lower than nominal profit, and sometimes the opposite occurs, depending on the company's asset structure. Martins (2000) states that the challenges for accounting professionals include the incorporation of inflationary effects and opportunity cost so that profit reflects the real performance of companies. However, for the former, techniques have already been developed and have been widely debated since the 1970s, mainly in the United States and the United Kingdom (Whittington, 2015).

In Brazil, between 1978 and 1995, companies' financial statements were prepared with a more complete inclusion of inflationary effects (Ambrozini, 2006; Batistella, 2011; Bernardo et al., 2001). Optionally, adjustments using an official price index had been possible since the enactment of Law No. 3,470 (1958). However, this was applied directly to net worth, with a 10% tax on that value, without considering adjustment for tax depreciation purposes. In 1964, Law No. 4,357 (1964) made it mandatory for all companies subject to income tax, also applied to net worth, with a 5% tax or replaced by the purchase of federal government bonds; depreciation was then calculated on the adjusted value. In 1968, Decree-Law No. 401 (1968) was published, which allowed tax deductibility of the Working Capital Maintenance Reserve for profit adjustment, due to the effects of inflation on short- and long-term realizable and payable assets.

It was only with Law No. 6,404 (1976) (Law of Corporations) and Decree-Law No. 1,598 (1977) that the correction model was implemented, mandatorily for corporate and tax purposes, essentially combining the legislation on the correction of fixed assets with the reserve for maintaining equity. Initially, the monetary correction model in effect between 1978 and 1985 determined the monetary updating of fixed assets and equity (non-monetary items), offset against the result of the fiscal year (Sarquis et al., 2020). This monetary updating made it possible to present profit in real terms, demonstrating the company's effective performance (Martins, 2014). After the adoption of the Real Plan in 1994, Law No. 9,249 (1995) prohibited any system of monetary correction. Later, in 2018, the Accounting Pronouncements Committee (CPC) defined the application of monetary restatement procedures with the issuance of CPC 42 – Accounting in Hyperinflationary Economies. According to this standard, a hyperinflationary economic environment depends on certain characteristics, such as, for example, a cumulative inflation rate over three years close to 100% (CPC, 2018).

Some studies address the impacts of inflation on accounting indicators (Gabriel, 2004; Gregorio, 2005; Kirkulak & Balsari, 2009; Melo et al., 2012; Salotti et al., 2006; Sarquis et al., 2020), on the comparability of financial statements (Souza et al., 2018), and on dividend distribution (Ambrozini, 2006). Studies have also investigated whether inflation-adjusted data are relevant to the market in Zimbabwe (Chamisa et al., 2018), Turkey (Kirkulak & Balsari, 2009), Ghana (Appiah & Acheampong, 2019), Mexico (Gordon, 2001), and Brazil (Batistella, 2011). Bilgic et al. (2018) provide evidence that the macroeconomic environment influences the reduced relevance of accounting values when evaluating the hyperinflationary context and the effect of the global financial crisis on Turkish companies. There is also evidence that the differences between nominal and adjusted profits help predict future cash flow, in addition to influencing prices, allowing investors to benefit by observing the impact of inflation on companies (Konchitchki, 2011, 2013).

In general, failure to recognize inflationary effects affects information quality and reduces comparability between companies at a given point in time and over time within each company, with the potential to interfere with the decisions of managers and external users (Sarquis et al., 2020). Over time, inflationary risks are important in evaluating company performance, especially for investors regarding the value of invested capital (Appiah & Acheampong, 2019). Given the materiality of inflationary effects on accounting information, even in periods of "low inflation" (Sarquis et al., 2020), and the informational role of accounting in representing the economic reality of companies, **this study analyzes the reaction of the Brazilian capital market to the difference between disclosed nominal net income and equity and their estimated values, considering an adjustment for publicly available inflation.**

The specific objectives are: i) to investigate whether investors react to unadjusted (nominal) accounting information; ii) to assess whether inflation-adjusted accounting information is relevant to investors in evaluating companies; iii) to investigate whether the differences between inflation-adjusted book values and reported nominal values are relevant to investors in the stock market, assessing whether adjusted information provides additional information content for relevance and decision-making; and iv) to investigate whether investors attribute greater relevance to inflation-adjusted accounting information in companies with greater exposure to inflation, examining whether this perception varies according to the degree of inflationary vulnerability of each company.

Net income and shareholders' equity were used to assess the relevance of accounting information, as per previous studies (Appiah & Acheampong, 2019; Batistella, 2011; Bilgic et al., 2018; Chamisa et al., 2018; Kirkulak & Balsari, 2009). Using cumulative abnormal returns, the aim is to capture investors' perceptions of companies that are more or less exposed to inflationary effects, as investors revise their business expectations (Konchitchki, 2011, 2013), considering known inflation and disclosed accounting figures. Thus, this study contributes to the research on the consequences of disregarding inflationary effects in the financial statements of Brazilian companies (Ambrozini, 2006; Batistella, 2011; Gabriel, 2004; Gregorio, 2005; Melo et al., 2012; Salotti et al., 2006; Sarquis et al., 2020; Souza et al., 2018), by examining market reactions to inflation.

This study makes a specific contribution to the literature by analyzing the reaction of the Brazilian capital market to differences between nominal and inflation-adjusted book values, adopting an empirical approach. Its contribution lies in deepening the understanding of investors' perceptions and use of this information, highlighting the relevance of inflation adjustments for a more accurate assessment of companies' economic performance in the national context.

In practical terms, the results offer support for managers and regulatory bodies, demonstrating that presenting inflation-adjusted financial information can increase transparency and improve data comparability, especially in environments of economic instability. Furthermore, they provide valuable insights for investors and market analysts, potentially influencing the development of more informed strategies.

Finally, the findings of this study reinforce the relevance of debates and potential advancements in the formulation of Brazilian accounting standards related to inflation, thus contributing to the improvement of governance and transparency of accounting information.

2 Literature Review

2.1 Accounting information and monetary correction

In the business context, it is essential that financial statements present relevant and comparable information to ensure their usefulness to users (CPC, 2019). Managers' investment and financing decisions are reflected in financial statements; however, inflation can cause distortions in accounting figures, hindering economic analysis and decision-making (Salotti et al., 2006; Sarquis et al., 2020).

In Brazil, monetary correction was mandatory in the preparation of financial statements, in accordance with Law No. 6,404 (1976). Years later, the Full Monetary Correction (FMC) model was implemented, recognizing inflation in all items of the income statement, in response to an extreme inflationary scenario (Bernardo et al., 2001). FMC allowed for greater clarity by expressing balances in constant currency. However, its adoption became optional after 1995, according to regulatory norms and market guidelines, and was no longer legal required. Currently, the option is expressed in CVM Resolution No. 157 (2022).

In 2018, the Accounting Pronouncements Committee approved CPC 42 (2018), which establishes the procedures applicable to entities operating in hyperinflationary economies. The low adoption of CPC 42 in Brazil is related to the fact that, in the years following its issuance, inflation did not reach the levels considered hyperinflationary according to the criteria established in the standard. Therefore, the non-implementation of the procedures set out in CPC 42 does not necessarily stem from a technical infeasibility or a lack of applicability, but rather from the fact that, in practice, the Brazilian economic scenario has not presented hyperinflationary conditions that require such procedures since the standard's issuance.

This context suggests that the parameters established in CPC 42 (2018) for the adoption of monetary correction could be revised or adapted to allow its application in economies or periods characterized by high inflation, but below the hyperinflation limits. A revision of these criteria, taking into account lower monetary devaluation indicators, would broaden the relevance and applicability of the standard, promoting greater flexibility for its adoption in different economic contexts. Such an adjustment would allow for better adaptation to the inflation conditions of diverse economic realities, facilitating implementation without requiring a hyperinflationary scenario.

2.2 Implications of inflation on accounting information: previous research

In the Brazilian context, Sarquis et al. (2020) identified that the average difference between nominal and adjusted profitability indicators for ROA (Return on Assets) and ROE (Return on Equity) was 59% and 44%, respectively. They observed significant differences in the cost of debt and the degree of leverage, and found that, of the 53 companies studied between 2010 and 2016, 75% distributed dividends and interest on equity higher than they would have distributed if they had adjusted their profits. On average, the difference between nominal and adjusted equity for the financial sector is 7%, while the energy sector has a comparative difference of 183% (Sarquis et al., 2020). This demonstrates that inflationary effects impact companies very differently, depending on their asset structure. Another significant difference shown in the study is for ROA: the difference between nominal and adjusted values averages 229% in the energy sector, while for consumer goods it is 27%. Thus, they show that the differences between adjusted and nominal values are, on average, significant, but depend on the companies investigated.

Following the perspective of the effects of not recognizing inflation, Salotti et al. (2020) conducted a study between 1996 and 2002 and concluded that the economic sector is relevant, while Ambrozini (2006) identified that the sectors with the highest "inflationary gains" were those with the highest dividend distribution, in a study of non-financial publicly traded companies between 1995 and 2004. When specifically analyzing electricity distribution companies, Melo et al. (2012) highlighted that, even before the adoption of ICPC 01 – Concession Contracts, these companies already used replacement cost in determining tariffs. This practice reinforces the discussion about the problem of using the historical values of fixed assets, as pointed out by Andrade (2010).

These studies highlight the incompleteness of historical cost values, resulting in distortions in accounting values and indicators, even though the periods evaluated did not include a three-year period with 100% accumulated inflation (Melo et al., 2012; Sarquis et al., 2020). Furthermore, distortions arising from the non-recognition of inflation also affect the comparability of accounting information (Ambrozini, 2006; Konchitchki, 2011; Souza et al., 2018). Souza et al. (2018) identified this interference in the comparability of steel and metallurgical companies from 1996 to 2016. Finally, banks were also the subject of studies regarding the impact of inflation on indicators and the comparability of profitability with other sectors (Gabriel, 2004; Gregorio, 2005). The asset structure of banks, which have a lower proportion of fixed assets (Gabriel, 2004), leads to "losses" due to monetary assets exceeding monetary liabilities. Therefore, inflation can influence a company's financial decisions, as is the case with the choice of replacement cost for determining electricity distribution tariffs (Melo et al., 2012). There are also challenges for external users due to the availability of unadjusted accounting information.

In the international context, several studies (Appiah & Acheampong, 2019; Bilgic et al., 2018; Chamisa et al., 2018; Gordon, 2001; Kirkulak & Balsari, 2009) have assessed the relevance of inflation-adjusted accounting information, analyzing market reactions in countries with hyperinflationary economies, such as Ghana (2007-2012), Turkey (1997-2012 and 2003), Zimbabwe (2000-2005), and Mexico (1989-1995). These studies showed that, even in these extreme contexts, adjusted information significantly influences investor decisions.

Ball and Brown (1968) conducted a pioneering study on the relevance of accounting information in the formation of market prices, the logic of which reinforces that the usefulness of financial statements is fundamental to capital market efficiency. This study presented evidence that accounting information is useful for investors, since, without informative content, the disclosure of profit would not impact the volume or price changes of shares (Scott, 2015). For Whittington (2015), accounting research has evolved towards understanding the effects of standards and how different measurement methods should be applied to meet the informational needs of users.

Investment decisions can be significantly influenced by the effects of inflation on operating cash flows, a topic addressed by Konchitchki (2011, 2013). Konchitchki (2011) identified a positive and statistically significant relationship between unrecognized inflationary gains and future operating cash flows. These gains, resulting from fixed assets and inventories, translate into higher future cash flows, whether from the use or sale of these assets (Konchitchki, 2011). However, these gains correspond to unrecognized monetary restatement since the acquisition date, as Martins (2004) points out in relation to fixed assets. In this context, the evidence of abnormal returns observed by Konchitchki (2011, p. 1078) indicated that inflation-adjusted information is not yet fully incorporated by the U.S. stock market, even at relatively low inflation levels, which can impact stock performance and prices. Subsequently, Konchitchki (2013) found that investment strategies based on inflation adjustments produced significant abnormal returns between 1984 and 2012 in the U.S. stock market, suggesting that this observation may reflect potential gains for investors who consider the impact of inflation on company valuation.

In the Brazilian context, there is a scarcity of studies investigating how inflationary effects are incorporated by investors in their analyses. Batistella (2011) found that, between 1996 and 2007, the use of full monetary correction in the presentation of accounting information lost relevance compared to historical cost in Brazilian companies. Furthermore, there are costs associated with obtaining and processing the impact of inflation on disclosed nominal financial statements, especially in non-hyperinflationary economic environments (Konchitchki, 2011).

Literature on value relevance provides evidence that the stock market's reaction to financial information is significantly related to stock prices, highlighting the informational content of accounting figures for decision-making (Scott, 2015; Whittington, 2015). In this context, studies adopting a measurement approach indicate that simply updating accounting figures for inflation could produce more useful information for the market by providing stakeholders with greater predictive power through the incorporation of current currency values into financial statements, thereby facilitating the assessment of company performance and value (Scott, 2015).

Therefore, considering the corrosive effects of inflation on accounting figures and indicators used in the analysis of financial statements (Sarquis et al., 2020), this study advances the understanding of how investors react to companies with different exposures to inflation—information that is publicly available but not disclosed in Brazilian financial statements. Given this, **the objective of this study is to investigate the relevance of the difference between nominal book values and inflation-adjusted estimates for capital market valuation.**

2.3 Study hypotheses

The literature on value relevance supports the idea that investors react to nominal accounting information, demonstrating a significant relationship between disclosed accounting figures and stock market prices (Scott, 2015; Whittington, 2015). This line of research dates back to the pioneering study by Ball and Brown (1968), which showed that accounting information has relevant informational content and influences market price formation, reinforcing the hypothesis that investors react to financial information, even in its unadjusted form. Thus, there is solid empirical evidence that the market values and reacts to disclosed financial statements (Barth et al., 2001), regardless of adjustments or specific measurement techniques. In this sense, the following research hypothesis is established:

H_1: Investors react to nominal accounting information

International and national studies indicate that accounting information adjusted for inflation increases the relevance of accounting information, significantly impacting capital market reactions (Appiah & Acheampong, 2019; Bilgic et al., 2018; Chamisa et al., 2018; Sarquis et al., 2020). Konchitchki (2011, 2013) reinforces that accounting information adjusted for inflation—especially unrecognized inflationary gains—has the potential to influence stock prices, demonstrating that investors react positively to information they consider more relevant, such as gains and profits that impact profitability indicators, adjusted for inflationary effects. Given this evidence, the second hypothesis is presented:

H2: Investors react to inflation-adjusted accounting information, adjusting their return expectations in line with the relevance attributed to this information.

The reaction predicted in H2 can manifest itself in different ways, either through increases or decreases in return expectations, depending on whether investors interpret the adjusted numbers as better reflecting the company's actual performance or conveying a different perception of risk. Hypothesis 2, therefore, seeks to investigate this variety of responses without assuming a specific direction.

The literature on value relevance indicates that incorporating inflation-adjusted figures increases the informational content of financial statements, expanding their predictive potential and usefulness for investors (Scott, 2015; Whittington, 2015). In particular, the study by Kirkulak and Balsari (2009) empirically showed that inflation-adjusted accounting figures provide more relevant information than nominal figures, as they reflect a more accurate assessment of economic performance and company value. Thus, comparing these two measures of the same nature, but distinct in their method of measurement, allows us to conjecture that inflation-adjusted figures offer a view more aligned with the financial reality of companies, thereby increasing their usefulness to investors. Empirical studies also indicate that simply updating financial statements for inflation can enhance the predictive capacity of this information (Konchitchki, 2011, 2013), reinforcing the hypothesis that inflation-adjusted figures are more useful for decision-making.

H_3: Inflation-adjusted accounting information is more relevant to investors than nominal accounting information.

In this sense, H3 states that adjusted information has greater value and utility for investors' decision-making compared to nominal information. H2, in turn, suggests that investors adjust their return expectations based on accounting information adjusted for inflation, reacting to changes in these figures. In short, H2 focuses on the market's reaction to adjusted information, while H3 highlights the greater relevance of adjusted information compared to nominal information.

Empirical data indicate that inflationary effects impact companies heterogeneously, influencing their results according to their asset structures, sectors of activity, and management strategies (Melo et al., 2012; Sarquis et al., 2020). As a consequence, investors tend to analyze these differences, assigning greater or lesser weight to inflation-adjusted information based on the degree of inflationary exposure of each company.

This differentiated assessment impacts perceptions of performance, projected risks, and expected returns, highlighting the relevance of considering, individually, each company's vulnerability to inflationary effects. Such differentiation is therefore essential for a more accurate assessment of company value and performance in the current economic context. In this context, the fourth and final hypothesis is presented:

H_4: Investors differentiate companies based on their exposure to inflation, assigning greater or lesser value to adjusted information, according to each company's degree of vulnerability to inflationary effects.

Although H4 suggests that investors differentiate companies based on their exposure to inflation, there are still uncertainties about how these inflationary effects are incorporated into stock market analyses. It is not known with certainty how the market incorporates inflationary effects into its financial assessments of the performance of companies listed on the B3. However, the absence of inflation analysis might result in significant consequences for financial decisions (Salotti et al., 2006; Sarquis et al., 2020).

Furthermore, there are studies on the value relevance of accounting information adjusted for inflation and analyzed through market reactions (Appiah & Acheampong, 2019; Batistella, 2011; Bilgic et al., 2018; Chamisa et al., 2018; Gordon, 2001; Kirkulak & Balsari, 2009). Thus, this study assumes that investors may correct accounting information when analyzing financial statements.

The lack of clarity in defining when an economy becomes inflationary poses practical challenges for companies, as pointed out by the IASB Staff Paper, which brought IAS 29 – Financial Reporting in Hyperinflationary Economies – into greater discussion among stakeholders.

Many countries are currently experiencing hyperinflation, which reinforces the need for studies on the incorporation of inflationary effects into market valuations, especially since there are risks of losses for international investors, even though they are not necessarily focused on assessing the effects of inflation. According to Konchitchki (2011, 2013), even in environments of low or moderate inflation, inflationary effects are not fully considered by investors, which can expose them to the risk of unanticipated losses, particularly in contexts of economic instability or regulatory changes.

3 Methodology

3.1 Sample definition

The sample consists of publicly traded companies available in the Melhores & Maiores, Exame magazine from 2010 to 2016. These data were obtained from Sarquis et al. (2020), in which the authors applied the balance sheet monetary correction (CMB) model to a sample of 53 companies from eight industries. According to the authors, the application of the CMB model stems from its simplified calculation method, and for this application they used the Broad Consumer Price Index (IPCA) for the period, adopting the premise of no inflation between the beginning of 1996 and the beginning of 2010. Thus, the CMB method refers to the monetary updating of fixed assets and equity, with the adjustment recognized in the income statement. For simplification, this model does not consider undervalued depreciation and amortization in the result.

The stock quotes for the companies in the sample were collected from Economatica, with only those stocks that had a liquidity index[1] greater than 0.001 in at least 50% of the period from 2011 to 2017 remaining in the final sample (Almeida, 2010; Silva & Nardi, 2014). For companies with common (ON) and preferred (PN) shares in circulation, the stock with the highest liquidity during the period was selected. The final sample consisted of 37 companies from eight sectors[2], as shown in Table 1.

[1] The stock market liquidity index considers the trading frequency and the volume of money involved in transactions of a given stock within a specific period. Silveira (2002, as cited in Almeida, 2010) argues that low stock liquidity increases the probability that market prices do not represent the company's underlying reality, thereby affecting stock returns as well as the associations between these market variables and accounting variables.

[2] See Table 7 in the appendix.

Table 1

Final sample of companies

Initial sample according to Sarquis et al. (2020)	53
(-) Companies not traded on B3 (Caixa Econômica, Cataguases, and Nadir Figueiredo)	-3
(-) Does not meet the liquidity criteria for the period (Biosev, Bombril, CBD, Cia. de Fiação e Tecidos Cedro e Cachoeira, CSN, Dohler, Fras-Le, Karsten, Metisa, Santander, TAESA, and Via Varejo)	-12
(-) No technical indicator available (Magnesita)	
(=) Final sample	37

Net income, net worth, and the nominal and adjusted indicators were obtained from Sarquis et al. (2020) for the period from 2010 to 2016. The following indicators were calculated: Return on Assets (ROA), Return on Equity (ROE), and Degree of Financial Leverage (DFL).

Next, for each year of the analyzed period, the companies were organized in ascending order according to the percentage differences (Abs. Diff(%), that is, the absolute differences between the nominal and adjusted results for each item analyzed). After ordering by year and by indicator, the companies were separated into quartiles. The first quartile consists of the group of companies with the lowest Diff(%), while the fourth quartile contains the companies[3] with the highest Diff(%). Initially, graphical analyses were used to assess whether the intensity of the inflationary distortion (lower or higher) produces distinct effects on the cumulative abnormal return of the companies. The objective at this stage was to examine the investors' reaction specifically to the magnitude of the impact, regardless of its direction. Subsequently, in the regression analyses, the variables began to capture not only the magnitude but also the direction of the effect, allowing a distinction between cases of underestimation and overestimation of nominal accounting information.

3.2 Event study

The event study was applied in four stages. In the **first stage**, the event of interest was defined, corresponding to the date of disclosure of the financial statements, which allows investors to incorporate inflation into their valuations. This research analyzed the disclosure of the financial statements of the companies in Table 1, from 2011 to 2016. Considering that companies disclose their financial statements between January and March, two event windows were defined: i) a wide window, encompassing the first quarter following the fiscal year under analysis; ii) and a narrow window, covering five days before and five days after the disclosure date, or event day (day zero). The use of narrower windows aims to reduce the impact of company-specific events that affect stock returns beyond the disclosure of accounting information, while wide windows allow for the analysis of the association between returns and the information disclosed (Scott, 2015), recognizing that multiple events can influence stock prices.

[3] Both the first and fourth quartiles were composed of ten companies. Companies for which the percentage difference (Diff%) between nominal and inflation-adjusted values was not calculated by Sarquis et al. (2020) were excluded. This variation in the number of companies can be observed in Table 2.

For this purpose, the publication dates of the Standardized Financial Statements were collected from the website of the Securities and Exchange Commission (CVM). According to Campbell et al. (1997), the economic impact of the event can be measured through stock behavior, a logic that can be extended to the analysis of financial statements in an inflationary context. In this sense, *what would be the investors' reaction to the corrosive effects of inflation on financial statements?*

In the **second stage**, daily stock returns were calculated using the following formula:

$$R_i = Ln\left(\frac{P_t}{P_{t-1}}\right) \quad (1)$$

where P_t is the stock price at time t; P_{t-1} is the price of the same stock at time t-1; and R_i is the return of stock i. This calculation was applied to the companies in the sample, as well as to the theoretical Ibovespa portfolio, which served as a benchmark for market returns.

In the **third stage**, the market model based on Campbell et al. (1997) was applied to estimate the coefficients α and β, based on the association between stock returns and the return on the market portfolio. For a stock i, we have:

$$\begin{aligned} R_{it} &= \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \\ E[\varepsilon_{it}] &= 0 \\ Var[\varepsilon_{it}] &= \sigma^2_{\varepsilon i} \end{aligned} \quad (2)$$

where R_{it} and R_{mt} are, respectively, the returns of stock i and the market portfolio at time t; α_i and β_i are the parameters of the market model (Campbell et al., 1997). The parameters were estimated using the Ordinary Least Squares (OLS) method and, the estimation window was defined to include approximately 1,000 observations preceding the quarterly event window.

Next, in the **fourth step**, the abnormal return was estimated using Equation 3, where AR_{it} is the abnormal return of stock i on day t; R_{it} is the return of stock i on day t; α_i and β_i are the parameters obtained through the market model; and R_{mt} is the market return on day t.

$$AR_i = R_{it} - (\alpha_i + \beta_i R_{mt}) \quad (3)$$

To analyze the data, abnormal returns were aggregated according to Campbell et al. (1997):

$$DAR_i = \frac{1}{N}\sum_{i=1}^{N} AR_{it} \quad (4)$$

where DAR_{it} represents the Daily Abnormal Returns, corresponding to the average abnormal returns in period t. The accumulation of abnormal returns was also computed over time and by stock:

$$CAR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_{it} \quad (5)$$

CAR_i stands for Cumulative Abnormal Returns, which allows the aggregation of abnormal returns over multiple intervals (Campbell et al., 1997; Silva & Nardi, 2014).

The four steps are presented in Figure 1.

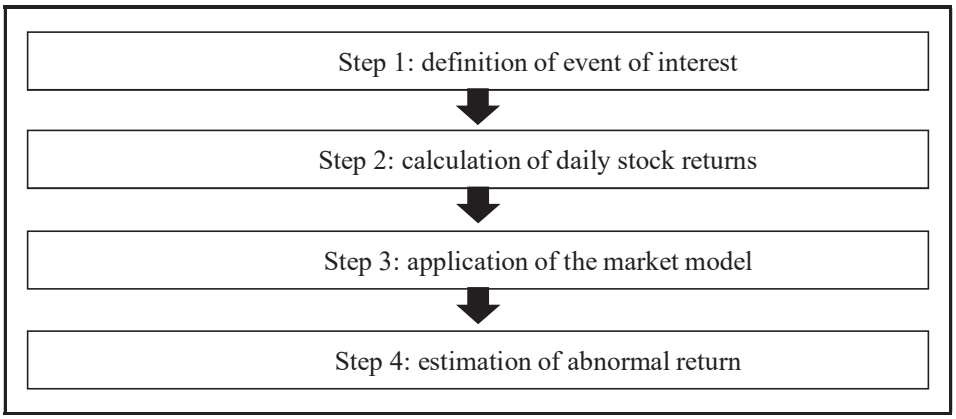

Figure 1. Four steps in conducting an event study (Campbell et al., 1997)

3.3 Regression models

The regression models were based on the relationship between Cumulative Abnormal Returns (CAR) and the variables of interest (Blaufus et al., 2019; Gatzert & Heidinger, 2020; Holland et al., 2022; Horton & Serafeim, 2009). This model investigates whether the variables of interest explain CAR, given that returns may reflect changes in stock price resulting from new information or other events that affect firm value. The variables of interest are described below and correspond to accounting figures adjusted, or not, for inflation. Nominal or inflation-adjusted accounting figures can convey information to investors, and their interpretation may be reflected in the stock's abnormal return.

The models are based on Kirkulak and Balsari (2009) and Chamisa et al. (2018), and are presented in Equations (1) and (2):

$$CAR_{it} = \beta_0 + \beta_1 EPS_{nominal\ it} + \beta_2 EQPS_{nominal\ it} + \beta_3 AGE_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (1)$$

$$CAR_{it} = \beta_0 + \beta_1 EPS_{adjusted\ it} + \beta_2 EQPS_{adjusted\ it} + \beta_3 AGE_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (2)$$

where *CAR* corresponds to the cumulative abnormal return for 90 days after the date of disclosure of the financial statements; alternatively, *CAR* was calculated for an 11-day window, covering 5 days before and 5 days after the disclosure date of company *i*'s financial statements; $EPS_{nominal}$ corresponds to earnings per share in nominal terms; $EQPS_{nominal}$ corresponds to equity per share in nominal terms; $EPS_{adjusted}$ corresponds to adjusted earnings per share; $EQPS_{adjusted}$ corresponds to equity per share adjusted for inflation; AGE is the age of the asset, measured by the ratio of net fixed assets to gross fixed assets, where values closer to 1 indicate newer assets (Chen & Gao, 2012; Jung et al., 2018; Schneider, 2011); SIZE is the natural logarithm of total assets (Appiah & Acheampong, 2019) and LEV corresponds to total debt divided by total assets (Appiah & Acheampong, 2019).

Equation 1 was used to test Hypothesis 1, which examines whether investors react to nominal accounting information, based on the coefficients β_1 and β_2 associated with nominal profit and equity. Equation 2, in turn, was applied to assess Hypothesis 2, which concerns investors' reaction to accounting information adjusted for inflation, considering the coefficients β_1 and β_2 corresponding to the adjusted variables. These coefficients indicate the relative relevance of this information in shaping return expectations.

To test Hypothesis 3—which states that inflation-adjusted accounting information is more relevant than nominal information—the Wald test was applied to statistically compare the coefficients of the models using nominal and inflation-adjusted figures. This procedure verifies whether there are statistically significant differences between the profit and equity coefficients in their nominal and adjusted forms, indicating whether the estimated effects of, for example, nominal profit and real profit differ meaningfully. This analysis makes it possible to determine which version of accounting figures carries greater weight in market valuation.

Next, the differences between the adjusted and nominal figures can be evaluated (Chamisa et al., 2018; Kirkulak & Balsari, 2009), as illustrated in Model 3, where $EPS_{nominal\text{-}adjusted}$ corresponds to the difference between nominal and adjusted earnings per share, and $EQPS_{nominal\text{-}adjusted}$ corresponds to the difference between nominal and adjusted equity per share. The earnings per share and equity per share values were adjusted for the share price at the beginning of the company's fiscal year to mitigate scale effects, following Chamisa et al. (2018).

$$CAR_{it} = \beta_0 + \beta_1 EPS_{nominal-adjusted\ it} + \beta_2 EQPS_{nominal-\ adjusted\ it} + \beta_3 AGE_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (3)$$

To test Hypothesis 4, which proposes that investors differentiate companies based on their exposure to inflation, Regression Model 3 was used, in which the independent variables correspond to the differences between nominal and inflation-adjusted accounting figures. Specifically, the variable $EPS_{nominal\text{-}adjusted}$, which represents the difference between nominal earnings per share and inflation-adjusted earnings per share, and the variable $EQPS_{nominal\text{-}adjusted}$, which represents the difference between nominal equity per share and inflation-adjusted equity per share, were considered.

The analysis consists of regressions of the cumulative abnormal return (CAR) in both the wide window (90 days) and the narrow window (10 days), including these differences as explanatory variables to verify whether exposure to inflation affects market reaction. Thus, it is expected that the greater the differences between nominal and adjusted values, the lower the abnormal return tends to be, indicating that investors distinguish companies according to their inflationary vulnerability.

Based on these models, the assumptions inherent in multiple regression analysis (linearity, homoscedasticity of errors, normality of the error distribution, and multicollinearity) were examined (Fávero & Belfiore, 2017; Hair et al., 2009). The Shapiro-Francia test was applied, and the normality hypothesis was rejected.

Some models[4] presented heteroscedasticity problems in the errors, and in these cases, the Huber-White method with robust standard errors was used for estimation. The average Variance Inflation Factor (VIF) was 2.28 (Model 1) and 4.0 (Model 2), indicating the absence of multicollinearity among the independent variables, except in model 3 (average VIF of 15.60), in which the difference between nominal and adjusted net income and the difference between nominal and adjusted equity had individual VIFs greater than 37. Thus, for model 3, the analyses were conducted using these variables individually, for both the 90-day and 11-day windows, while maintaining the same control variables.

[4] See the notes for the regression model tables in the analysis section.

The specification tests of the Ramsey model and the link test (Fávero & Belfiore, 2017) did not indicate problems related to omitted variables. In Models (1) and (2), however, autocorrelation was detected in the errors. The absence of first-order autocorrelation was rejected at 10% and 5%, respectively, according to the Wooldridge serial correlation test. One viable option for correcting autocorrelation is the application of the Newey-West method; however, this approach is recommended only for large samples (Gujarati & Porter, 2011). Given the small sample of 37 companies in this study, the results obtained using this method were not presented; nevertheless, no significant qualitative changes were observed in the results.

As explained by Fávero and Belfiore (2017), the Breusch-Pagan LM test verifies whether there are significant differences between the companies in the sample—the null hypothesis assumes zero variance, indicating the use of the POLS (Pooled Ordinary Least Squares) method, and the alternative hypothesis indicates the random effects method. Chow's F-test, in turn, examines whether the individual effects of the companies are equal to zero, and rejection of this hypothesis would indicate the use of the fixed effects method. In the analyzed models, both tests rejected the null hypothesis at the 1% level; therefore, the application of the Hausman test was not necessary. Thus, these tests indicated the POLS method for estimating the parameters of the models.

4 Analysis of Results

Figure 2 presents the graphs of cumulative abnormal returns (CAR) for the three-month period from January to March in 2017. Companies in the 4th quartile displayed lower CAR than those in the 1st quartile with respect to equity (in 2011, 2013, 2016, and 2017), profit (in 2017), ROA (in 2012, 2013, and 2015), ROE (in 2011, 2012, 2013, and 2015) and DFL (in 2011, 2015, 2016, and 2017). Overall, the profit graphs resembled graph (e) in Figure 2, while the other indicators and net worth showed behavior more similar to graphs (b) and (d). Thus, both the variation in the composition of the two groups with the largest (4th quartile) and smallest (1st quartile) differences between nominal and adjusted values, as well as the distinct CAR patterns over the analyzed three-month period, were observed.

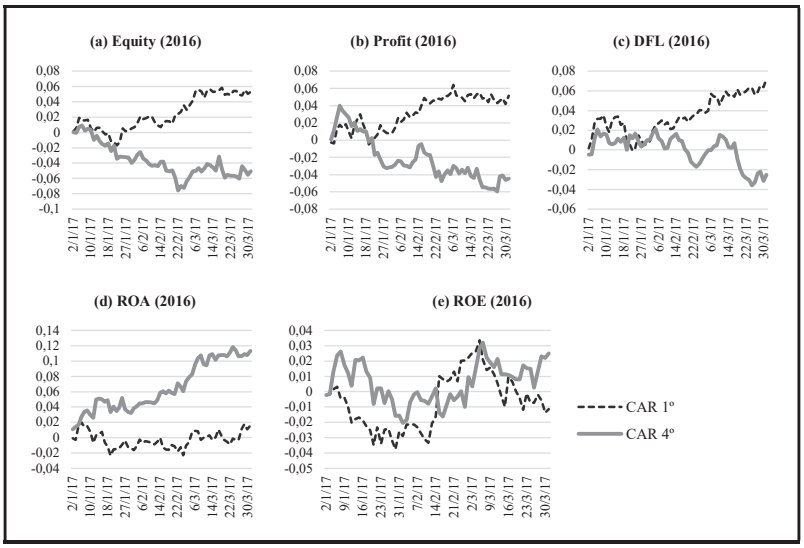

Figure 2. Graphs of CAR for three-month period in 2017 based on 2016 accounting information

Note: the dashed line (·····) corresponds to the CAR (cumulative abnormal return) of companies in the 1st quartile, those with the smallest difference between nominal and adjusted values, whereas the solid line (——) corresponds to the CAR of companies in the 4th quartile (largest difference).

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics of nominal and adjusted values, as well as the percentage difference (Diff%) of net worth and net profit. The adjusted values of net worth increased on average over the analyzed period, as did the fixed assets (results not shown). For example, the average nominal fixed assets (adjusted fixed assets) were 14,555,115 (15,381,757, Δ 5.68%) in 2010, while in 2016 it was 22,425,580 (32,602,939, Δ 45.38%).

It is noteworthy that, on average, profitability indicators (ROA and ROE) are lower when considering inflationary effects from 2010 onwards, according to the simplification adopted by Sarquis et al. (2010). Furthermore, because these values represent the average of eight economic sectors, the results do not reflect the peculiarities of each company, whether related to the type of investment in short-term and long-term assets or the relationship between monetary and non-monetary assets (Gelbcke et al., 2018).

Table 2 – Descriptive statistics of equity and net income

Sample	Year	n	Nominal values		Adjusted values		Absolute difference (%)	
			Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Equity	2010	36	18,111,360	53,344,150	18,883,135	56,224,170	6.4%	11.9%
	2011	36	19,832,654	57,468,069	21,706,253	64,655,604	8.8%	6.0%
	2012	37	19,765,620	56,766,654	22,722,868	68,543,214	13.7%	9.4%
	2013	37	20,704,654	59,796,977	25,013,492	77,398,783	18.6%	12.7%
	2014	37	20,838,223	54,887,242	26,631,311	78,131,196	22.3%	15.0%
	2015	37	19,795,429	47,786,486	28,332,247	81,771,431	36.1%	31.9%
	2016	37	20,749,596	48,815,295	30,919,824	88,403,399	45.5%	46.5%
Net Income	2010	36	2,410,657	6,629,452	2,350,876	7,169,501	25.7%	37.7%
	2011	36	2,425,052	6,362,997	2,346,264	6,953,365	33.8%	58.6%
	2012	37	1,709,020	4,918,695	1,669,635	5,700,222	30.1%	46.6%
	2013	37	1,977,478	5,486,435	2,041,465	6,728,680	47.9%	147.9%
	2014	37	1,041,074	5,903,333	1,158,166	3,742,107	26.2%	27.7%
	2015	37	584,212	8,477,830	993,621	4,714,551	86.3%	204.1%
	2016	37	1,392,849	5,044,365	1,640,827	3,484,446	62.5%	135.2%

Note: Data from Sarquis et al, (2020). These values correspond to the sample of 37 companies in the sample. The absolute difference was calculated from the absolute value between the nominal and adjusted accounting figures.

Table 3 presents the mean and standard deviation of the variables in this study. The mean cumulative abnormal return in the wide 90-day window was negative in 2011 (-2.88%), 2014 (-4.52%), 2015 (-5.21%), and 2016 (-0.38%). In the narrow 10-day window (5 days before and after the date of disclosure of the financial statements), the mean cumulative abnormal return was negative in 2014 (-0.13%) and 2016 (-0.63%). The asset age of 0.6 indicates that approximately 40% of the companies' gross fixed assets have already been depreciated. The leverage variable of 0.265 shows that, on average, the companies in the sample have a total debt-to-total asset ratio of approximately 26%.

Table 3
Mean and standard deviation of the dependent, independent, and control variables.

Variables	Mean (Standard deviation)							
Year of reaction	2011	2012	2013	2014	2015	2016	2017	Total
CAR 90	-0.0288 (0.0996)	0.0618 (0.114)	0.0332 (0.1317)	-0.0452 (0.1905)	-0.0521 (0.1755)	-0.0038 (0.177)	0.0389 (0.1711)	-0.0288 (0.0996)
CAR 10	0.0026 (0.0541)	0.0174 (0.0558)	0.0204 (0.0594)	-0.0013 (0.0727)	0.0056 (0.0654)	-0.0063 (0.1176)	0.0229 (0.0908)	0.0026 (0.0541)
EPS nominal	2.467 (2.48)	2.606 (2.72)	1.904 (2.97)	1.857 (2.84)	1.923 (3.03)	1.173 (4.11)	2.805 (8.21)	2.093 (4.24)
EPS adjusted	2.249 (2.16)	2.357 (2.33)	1.708 (2.79)	1.685 (2.93)	1.745 (2.64)	0.977 (3.8)	2.698 (7.58)	1.906 (3.92)
EQPS nominal	17.147 (19.05)	18.391 (19.15)	18.146 (19.16)	18.492 (19.81)	19.033 (20.25)	19.719 (20.16)	20.752 (24.7)	18.849 (20.24)
EQPS adjusted	17.791 (19.73)	19.836 (20.59)	20.339 (21.22)	21.528 (22.81)	22.94 (24.14)	25.819 (25.89)	27.675 (30.3)	22.397 (23.82)
Diff EPS	0.217 (0.66)	0.25 (0.74)	0.196 (0.8)	0.173 (0.92)	0.178 (0.98)	0.196 (1.88)	0.107 (1.14)	0.187 (1.09)
Diff EQPS	-0.644 (0.86)	-1.444 (1.83)	-2.194 (2.78)	-3.036 (3.99)	-3.906 (5.3)	-6.1 (8.04)	-6.923 (9.36)	-3.548 (5.9)
Age	0.616 (0.16)	0.618 (0.15)	0.613 (0.16)	0.611 (0.15)	0.59 (0.14)	0.591 (0.14)	0.566 (0.15)	0.6 (0.15)
Leverage	0.22 (0.17)	0.241 (0.17)	0.265 (0.17)	0.267 (0.17)	0.268 (0.17)	0.295 (0.19)	0.292 (0.18)	0.265 (0.17)
Size	15.898 (2.05)	16.046 (2.03)	16.04 (2.01)	16.144 (2.01)	16.203 (1.99)	16.34 (1.99)	16.353 (2.0)	16.152 (1.99)

Note: Standard deviations (σ) are shown in parentheses. The number of companies per year was 33 (for 2011 and 2012), 36 (for 2013 and 2014) and 37 (for 2015, 2016, and 2017), totaling 249 observations.

Pearson's correlation matrix was computed for the variables in the regression models but is not reported in this article. Nominal and adjusted earnings per share show positive and statistically significant correlations with cumulative abnormal returns ($p < 0.01$, except for nominal EPS with CAR 90, where $p < 0.05$), with correlations of approximately 35% in the narrow window (CAR 10). Nominal and adjusted equity per share also exhibit positive and statistically significant correlations with abnormal returns, likewise showing higher correlations in the narrow window. The correlation results indicate that the variables representing the differences between nominal and adjusted net income and between nominal and adjusted equity are highly correlated (0.985), evidencing multicollinearity issues for the regression analysis of Model 3. Among the control variables (Age, Leverage, and Size), only the company size—calculated as the natural logarithm of total assets—showed a statistically significant correlation (0.11, $p < 0.10$) with cumulative abnormal returns in the wide window (CAR 90).

4.2 Market reaction to differences between nominal and adjusted net income and equity

Table 4 presents the results of the regressions of Models 1 and 2, applied to the cumulative abnormal returns in the wide (CAR 90) and narrow (CAR 10) windows, respectively.

Nominal earnings per share (nominal EPS) was negative and statistically significant ($p < 0.01$) for Model 1 (-0.012), while nominal equity per share (nominal EQPS) was positive and significant in both models (Model 1: 0.0025 and Model 2: 0.0013, $p < 0.01$). Similar results were observed for the adjusted variables: adjusted EPS was negative and significant (-0.0134, $p < 0.01$) only for Model 1, whereas adjusted EQPS was positive and significant in both models (Model 1: 0.002 and Model 2: 0.0009, $p < 0.01$).

This indicates that investors react to nominal information, except for nominal EPS in Model 2, partially corroborating **Hypothesis 1.** Adjusted accounting information also proved relevant, except for adjusted EPS in Model 2, allowing partial acceptance of **Hypothesis 2**.

Value relevance approaches compare the ability of accounting information at historical cost and at inflation-adjusted cost to explain stock prices and returns, either relatively (comparing the explanatory power of the models) or incrementally (including a variable reflecting the differences between nominal and adjusted earnings). This allows for the analysis of the relevance of accounting information (Appiah & Acheampong, 2019; Batistella, 2011; Chamisa et al., 2018).

In this study, considering the coefficient of determination, the explanatory power of the adjusted EPS and EQPS was slightly higher than that of the nominal accounting figures. R^2 was 10.47% in Model 1, compared with 10.33% for the nominal accounting figures, while in Model 2 the adjusted R^2 was 15.32% compared with 15.26% for the nominal figures. These results are consistent with previous studies on stock returns (Appiah & Acheampong, 2019; Gordon, 2001), which identify greater explanatory power for inflation-adjusted data.

However, the results of Chamisa et al. (2018) show lower explanatory power for inflation-adjusted data in the Zimbabwean context, where historical cost and inflation-adjusted information were allowed to be published simultaneously, contrary to the requirements of IAS 29[5]. From an incremental perspective, the authors identified that the differences between nominal and adjusted values contain relevant informational content, reinforcing the complementary nature of the two measures—a conclusion also found in other studies (Appiah & Acheampong, 2019; Kirkulak & Balsari, 2009).

[5] The IAS 29 standard – Financial Reporting in Hyperinflationary Economies – served as the basis for the development of CPC 42 – Accounting in Hyperinflationary Economies, approved in Brazil on December 7, 2018. Chamisa et al. (2018) emphasize that IAS 29 prohibits the disclosure of financial statements at historical cost in contexts of high inflation.

Table 4
Results of regressions for models 1 and 2

Variables	Model (1)		Model (2)	
	CAR 90		CAR 10	
EPS nominal	**-0.012*** **		-0.0030	
	(0.001)		(0.002)	
EQPS nominal	**0.0025*** **		**0.0013*** **	
	(0.000)		(0.000)	
EPS adjusted		**-0.0134*** **		-0.0031
		(0.001)		(0.003)
EQPS adjusted		**0.002*** **		**0.0009*** **
		(0.000)		(0.000)
Age	0.0180	0.0191	0.0239	0.0239
	(0.06)	(0.06)	(0.033)	(0.033)
Leverage	-0.0720	-0.0730	**-0.0516***	**-0.0528***
	(0.069)	(0.069)	(0.028)	(0.028)
Size	**0.0079***	**0.0078***	-0.0010	-0.0010
	(0.004)	(0.004)	(0.002)	(0.002)
Constant	-0.1270	-0.1259	0.0194	0.0196
	(0.086)	(0.086)	(0.045)	(0.045)
No. observations	249	249	249	249
F(5, 243)	127.77	149.18	9.94	9.98
Prob > F	0.000	0.000	0.000	0.000
R^2	**10.33%**	**10.47%**	**16.97%**	**17.03%**
R^2 adjusted			**15.26%**	**15.32%**
RMSE	0.15279	0.15268	0.07107	0.07104

Notes: *** 1%; ** 5%; * 10%. For model 1, due to heteroscedasticity problems in the errors, robust White standard errors were used in the regression analyses.

Table 5 presents the results of the Wald tests. In Model 1, the difference between the nominal and adjusted earnings per share coefficients was statistically significant at 1% only for the cumulative abnormal returns in the wide 90-day window (CAR 90), indicating that adjusted earnings are important for investors' valuations of the companies in the sample. However, this result does not extend to the narrow 10-day window (CAR 10), nor does it apply to equity per share. Thus, the results do not support **Hypothesis 3**, which states that adjusted accounting information is more relevant. Despite the greater explanatory power of the adjusted models (R^2 of Model 1 was 10.47% and of Model 2 was 17.03%) compared to the nominal models (R^2 of Model 1 was 10.33% and of Model 2 was 16.97%), the coefficients between the two models are not statistically different according to the Wald test, indicating that investors may not incorporate inflation into their valuations of the companies in the sample.

Table 5
Wald test of the net income and equity coefficients

EPS nominal/EPS adjusted	T	Degrees of freedom	p-value
Model 1	12.1831	496	0.00***
	Observation: $H_{alternative\ diff}(\beta_{nominal}-\beta_{adjusted}>0)$		
Model 2	0.3883	496	0.35
	Observation: $H_{alternative\ diff}(\beta_{nominal}-\beta_{adjusted}>0)$		
EQPS nominal/EQPS adjusted	**T**	**Degrees of freedom**	**p-value**
Model 1	42.7919	496	1.00
	Observation: $H_{alternative\ diff}(\beta_{nominal}-\beta_{adjusted}<0)$		
Model 2	16.6809	496	1.00
	Observation: $H_{alternative\ diff}(\beta_{nominal}-\beta_{adjusted}<0)$		

Notes: *** 1%; ** 5%; * 10%. In Model 1, the cumulative abnormal returns correspond to the wide 90-day window (CAR90), whereas in Model 2 they correspond to the narrow 10-day window (CAR10); both were used as dependent variables in the regression analyses presented in Table 4.

Table 6 presents the results of the regression analyses for Model 3, which considers the differences between earnings and shareholders' equity, both nominal and adjusted. The results show that the greater the differences between earnings and shareholders' equity—meaning, for companies more exposed to inflationary effects—the lower the cumulative abnormal returns tend to be. This pattern is observed in both the wide window (CAR 90) and the narrow window (CAR 10), indicating that investors distinguish companies according to their exposure to inflation, which corroborates **Hypothesis 4** of this study.

Table 6
Regression results for Model 3

Variables	Model (3)		Model (3)	
	CAR 90		CAR 10	
Diff EPS	**-0.0284*** **		**-0.0212*** **	
	(0.007)		(0.003)	
Diff EQPS		**-0.002*** **		**-0.0015*** **
		(0)		(0)
Age	0.0113	0.0149	0.0198	0.0226
	(0.07)	(0.071)	(0.032)	(0.033)
Leverage	-0.0769	-0.0683	**-0.0602** **	**-0.0538** *
	(0.061)	(0.061)	(0.028)	(0.028)
Size	**0.0089** *	**0.0085** *	-0.0005	-0.0008
	(0.005)	(0.005)	(0.002)	(0.002)
Constant	-0.1325	-0.1323	0.0184	0.0184
	(0.097)	(0.098)	(0.045)	(0.045)
No. Observations	249	249	249	249
F(5, 243)	5.76	5.45	12.92	12.18
Prob > F	0.0002	0.0003	0	0
R^2	**8.63%**	**8.20%**	**17.48%**	**16.65%**
Adjusted R^2	**7.14%**	**6.69%**	**16.13%**	**15.28%**
RMSE	0.15392	0.15429	0.0707	0.07106

Note: *** 1%; ** 5%; * 10%.

5 Final Considerations

Financial statements in economies considered non-hyperinflationary present a combination of monetary values derived from economic transactions carried out in different periods. As a result, the reported performance does not necessarily reflect companies' actual performance. Previous studies have indicated that the quality and comparability of accounting information are affected (Gabriel, 2004; Gregorio, 2005; Salotti et al., 2006; Sarquis et al., 2020; Souza et al., 2018). Significant distortions in financial indicators, even in periods considered to have low inflation, have the potential to impair the decision-making of managers and users of accounting information (Salotti et al., 2006; Sarquis et al., 2020). In this context, considering the publicly available inflation information and the accounting figures disclosed, this study seeks to examine how the market reacts to the real and nominal differences in the net income and equity of Brazilian companies.

The data obtained from Sarquis et al. (2020) result from the application of the Brazilian Monetary Correction Model (CMB), in effect between 1978 and 1995, which updates fixed assets and net worth for a sample of 53 publicly traded companies available in the Melhores & Maiores database of Exame magazine from 2010 to 2016. The final sample for this study consisted of 37 companies from eight economic sectors. The results indicate that, in terms of the explanatory power of the models, the adjusted accounting information was more relevant than the nominal figures for the cumulative abnormal returns, although the difference in R^2 is of small magnitude. Although the observed variation in explanatory power, measured by the increase in R^2, is small, it still reveals a consistent pattern, indicating that accounting information adjusted for inflation is more relevant in explaining abnormal returns. This finding suggests that, even in environments with relatively low inflationary impact, considering these effects may contribute to a more accurate understanding of market reactions to accounting variables.

In turn, when evaluating the differences between earnings and equity per share, the results indicate that the greater the difference between nominal and adjusted values, the lower the cumulative abnormal return tends to be. This evidence suggests that investors distinguish companies based on their level of exposure to inflation.

The results of this study are expected to be useful for capital market investors, as it analyzes the capital market's reaction to the effects of inflationary adjustment. Specifically, this study shows that, even in a non-hyperinflationary economy, investors are able to distinguish companies that are more exposed to distortions caused by inflation. This study may also be useful for other users of financial statements who are interested in analyzing the effects of inflation on accounting figures.

This study may be of interest to regulators and standard setters who seek to understand the impact of inflation adjustment on users of financial statements, especially in an environment like Brazil's, which is not classified as hyperinflationary but has, due to recent economic instability and crises, experienced periods of relatively high inflation (above double digits). The main limitation of this study is the relatively small number of companies analyzed and the simplifications required for the application of the CMB model, which in its original form, assumes that depreciation and amortization were undervalued during the period. It is recommended that future research apply the CMB model to a larger number of publicly traded companies, in a more comprehensive manner and over a longer time horizon.

For future research, periods of higher inflation—disregarded in the current analysis—could be considered to assess the effects of this factor on the relevance of accounting information in environments with significant inflation. Furthermore, given the scope and limitations of this study, it is recommended that subsequent research examine more recent periods, updating the databases and expanding the analysis to different sectors. Such expansion will allow for verification of the consistency of the conclusions presented and will contribute to a more comprehensive understanding of the effects of inflation on the informational quality and relevance of financial statements. Thus, longitudinal and comparative studies could provide more support for the formulation of recommendations to standard setters, regulators, and other users of accounting information, promoting the improvement of reporting practices in inflationary environments. Moreover, it is suggested that future studies examine, in greater depth, the impact of impairment losses and their reversals, as provided for in CPC 01, evaluating how these effects influence the quality and relevance of accounting information.

References

Almeida, J. E. F. de. (2010). Qualidade da informação contábil em ambientes competitivos [Universidade de São Paulo]. Em *www.teses.usp.br*. https://doi.org/10.11606/T.12.2010.tde-29112010-182706

Ambrozini, M. A. (2006). O impacto do fim da correção monetária no resultado das companhias brasileiras de capital aberto e na distribuição de dividendos: Estudo empírico no período de 1996 a 2004 [Universidade de São Paulo]. Em *www.teses.usp.br*. https://doi.org/10.11606/D.96.2006.tde-05012007-170944

Andrade, M. E. M. C. (2010). *Contabilização dos contratos de concessões* [Mestrado em Controladoria e Contabilidade, Universidade de São Paulo]. https://doi.org/10.11606/D.96.2010.tde-10122010-085124

Appiah, K. O., & Acheampong, O. (2019). Has traditional accounting information lost its relevance? *Journal of Financial Reporting and Accounting*, *17*(3), 554–570. https://doi.org/10.1108/JFRA-05-2016-0037

Ball, R., & Brown, P. (1968). An Empirical Evaluation of Accounting Income Numbers. *Journal of Accounting Research*, *6*(2), 159. https://doi.org/10.2307/2490232

Barth, M. E., Beaver, W. H., & Landsman, W. R. (2001). The relevance of the value relevance literature for financial accounting standard setting: Another view. *Journal of Accounting and Economics*, *31*(1–3), 77–104. https://doi.org/10.1016/S0165-4101(01)00019-2

Batistella, F. D. (2011). Reavaliação de ativos e correção monetária integral no Brasil: Um estudo de value relevance [Universidade de São Paulo]. Em *Www.teses.usp.br*. https://doi.org/10.11606/T.12.2011.tde-01092011-202250

Bernardo, M. S., Tachibana, W. K., & Martin, N. C. (2001). The evolution of monetary correction in Brazil and its effects in the financial statement from 1929 to 2000. *Accounting History International Conference*, 1–23.

Bilgic, F. A., Ho, S., Hodgson, A., & Xiong, Z. (2018). Do Macro-economic Crises Determine Accounting Value Relevance? *Accounting in Europe*, *15*(3), 402–422. https://doi.org/10.1080/17449480.2018.1514123

Blaufus, K., Möhlmann, A., & Schwäbe, A. N. (2019). Stock price reactions to news about corporate tax avoidance and evasion. *Journal of Economic Psychology*, *72*(August 2018), 278–292. https://doi.org/10.1016/j.joep.2019.04.007

Campbell, J. Y., Lo, A. W., & Mackinlay, A. C. (1997). *The Econometrics of Financial Markets*. Princeton University Press.

Chamisa, E., Mangena, M., Pamburai, H. H., & Tauringana, V. (2018). Financial reporting in hyperinflationary economies and the value relevance of accounting amounts: Hard evidence from Zimbabwe. *Review of Accounting Studies*, *23*(4), 1241–1273. https://doi.org/10.1007/s11142-018-9460-4

Chen, L. H., & Gao, L. S. (2012). The Pricing of Climate Risk. *SSRN Electronic Journal*, *12*(2), 115–131. https://doi.org/10.2139/ssrn.1940727

Comitê De Pronunciamentos Contábeis [CPC]. (2018). *CPC 42 Contabilidade Em Economia Hiperinflacionária* (p. 1–7).

Comitê de Pronunciamentos Contábeis [CPC]. (2019). *CPC 00 (R2) Estrutura Conceitual para Relatório Financeiro. Correlação às Normas Internacionais de Contabilidade – Conceptual Framework* (p. 62). http://www.cpc.org.br/CPC/Documentos-Emitidos/Pronunciamentos/Pronunciamento?Id=80

Decreto-Lei nº 1.598, de 26 de dezembro de 1977, Altera a legislação do imposto sobre a renda. (1977). https://www.planalto.gov.br/ccivil_03/decreto-lei/del1598.htm

Decreto-Lei Nº 401, de 30 de Dezembro de 1968: Altera Dispositivos Da Legislação Do Imposto de Renda e Dá Outras Providências. (1968). https://www2.camara.leg.br/legin/fed/declei/1960-1969/decreto-lei-401-30-dezembro-1968-376454-publicacaooriginal-1-pe.html

Fávero, L. P., & Belfiore, P. (2017). *Manual de Análise de Dados -Estatística e Modelagem Multivariada com Excel, SPSS e Stata*. http://dergipark.gov.tr/cumusosbil/issue/4345/59412

Gabriel, F. (2004). O impacto do fim da correção monetária na rentabilidade e adequação de capital dos bancos no Brasil [Universidade de São Paulo]. Em *Www.teses.usp.br* (Vol. 2004). https://doi.org/10.11606/D.12.2004.tde-16032012-193430

Gatzert, N., & Heidinger, D. (2020). An Empirical Analysis of Market Reactions to the First Solvency and Financial Condition Reports in the European Insurance Industry. *Journal of Risk and Insurance*, *87*(2), 407–436. https://doi.org/10.1111/jori.12287

Gelbcke, E. R., Santos, A. dos, Iudícibus, S. de, & Martins, E. (2018). *Manual de Contabilidade aplicável a todas as Sociedades: De acordo com as normas internacionais e do CPC* (Atlas, Org.).

Gordon, E. A. (2001). Accounting for Changing Prices: The Value Relevance of Historical Cost, Price Level, and Replacement Cost Accounting in Mexico. *Journal of Accounting Research*, *39*(1), 177–200. https://doi.org/10.1111/1475-679X.00008

Gregorio, J. (2005). Análise comparativa da rentabilidade do setor bancário privado atuante no Brasil no período de 1997 a 2004 [Universidade de São Paulo]. Em *Www.teses.usp.br*. https://doi.org/10.11606/D.12.2005.tde-13062006-100404

Gujarati, D. N., & Porter, D. C. (2011). *Econometria Básica* (AMGH Editora Ltda, Org.; 5 ed.).

Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). Análise Multivariada de Dados. Em *Bookman*.

Holland, K., Lindop, S., & Abdul Wahab, N. S. (2022). How Do Managers and Shareholders Respond to Taxation? An Analysis of the Introduction of the UK Real Estate Investment Trust Legislation. *Abacus*, *58*(2), 334–364. https://doi.org/10.1111/abac.12239

Horton, J., & Serafeim, G. (2009). Market reaction to and valuation of IFRS reconciliation adjustments: First evidence from the UK. *Review of Accounting Studies*, *15*(4), 725–751. https://doi.org/10.1007/s11142-009-9108-5

Jung, J., Herbohn, K., & Clarkson, P. (2018). Carbon Risk, Carbon Risk Awareness and the Cost of Debt Financing. *Journal of Business Ethics*, *150*(4), 1151–1171. https://doi.org/10.1007/s10551-016-3207-6

Kirkulak, B., & Balsari, C. K. (2009). Value Relevance of Inflation-adjusted Equity and Income. *International Journal of Accounting*, *44*(4), 363–377. https://doi.org/10.1016/j.intacc.2009.09.007

Konchitchki, Y. (2011). Inflation and Nominal Financial Reporting: Implications for Performance and Stock Prices. *The Accounting Review*, *86*(3), 1045–1085. https://doi.org/10.2308/accr.00000044

Konchitchki, Y. (2013). Accounting and the Macroeconomy: The Case of Aggregate Price-Level Effects on Individual Stocks. *Financial Analysts Journal*, *69*(6), 40–54. https://doi.org/10.2469/faj.v69.n6.3

Lei nº 3.470, de 28 de novembro de 1958: Altera a legislação do Impôsto de Renda e dá outras providências., No. 3470 (1958). https://www.planalto.gov.br/ccivil_03/leis/l3470.htm

Lei nº 4.357, de 16 de julho de 1964: Autoriza a emissão de Obrigações do Tesouro Nacional, altera a legislação do impôsto sôbre a renda, e dá outras providências. (1964). https://www.planalto.gov.br/ccivil_03/leis/l4357.htm

Lei nº 6.404, de 15 de dezembro de 1976: Dispõe sobre as Sociedades por Ações. (1976). https://www.planalto.gov.br/ccivil_03/leis/l6404compilada.htm

Lei nº 9.249, de 26 de dezembro de 1995: Altera a legislação do imposto de renda das pessoas jurídicas, bem como da contribuição social sobre o lucro líquido, e dá outras providências. (1995). https://www.planalto.gov.br/ccivil_03/leis/l9249.htm

Martins, E. (2000). Avaliação de empresas: Da mensuração contábil à econômica. *Caderno de Estudos FIPECAFI*, *13*(24), 28–37.

Martins, E. (2004). Um pouco da origem do modelo de correção monetária brasileiro. *IOB – Informações Objetivas*.

Martins, E. (2014). Inflação: Inimigo Mortal da Contabilidade. *Revista FIPECAFI*, 52.

Melo, S. de, Martins, E., Nagai, C., Amaral, J. V., & Salotti, B. M. (2012). Demonstrações Contábeis sem Efeitos Inflacionários: Uma Abordagem Relativa às Empresas Distribuidoras de Energia Elétrica. *Contabilidade, Gestão e Governança*, *15*(2).

Resolução CVM n.º 157, de 23 de junho de 2022: Dispõe sobre os procedimentos a serem observados para a elaboração e divulgação das demonstrações contábeis em moeda de capacidade aquisitiva constante, entre outros. (2022). https://conteudo.cvm.gov.br/legislacao/resolucoes/resol157.html

Salotti, B. M., Lima, G. A. S. F. de, Corrar, L. J., Yamamoto, M. M., & Malacrida, M. J. C. (2006). Um estudo empírico sobre o fim da correção monetária integral e se impacto na analise das.pdf. *UNB Contábil*, *9*(2), 189–221.

Sarquis, R. W., Flores, E. da S., Bittar-Godinho, D. de F., & Martins, E. (2020). *Inflação: Se eu não a vejo na contabilidade, não existe? 1*(30-04–2021), 108–126.

Schneider, T. E. (2011). Is Environmental Performance a Determinant of Bond Pricing? Evidence from the U.S. Pulp and Paper and Chemical Industries*. *Contemporary Accounting Research*, *28*(5), 1537–1561. https://doi.org/10.1111/j.1911-3846.2010.01064.x

Scott, W. R. (2015). *Financial accounting theory* (Seventh edition). Pearson.

Silva, R. L. M. da, & Nardi, P. C. C. (2014). Demonstrações Contábeis No Brasil Após Adoção Do Cpc 13: Reação Do Mercado De Ações. *Advances in Scientific and Applied Accounting*, 362–385. https://doi.org/10.14392/asaa.2014070303

Souza, W. R. S., Peters, M., Silva, A. F. da, & Antunes, M. T. P. (2018). Twenty-one years without monetary correction in Brazil: Impacts on the comparability of the accounting information of siderurgical and metallurgical companies. *Revista Contabilidade & Finanças*, *29*(78), 355–374. https://doi.org/10.1590/1808-057x201805790

Whittington, G. (2015). Measurement in Financial Reporting: Half a Century of Research and Practice. *Abacus*, *51*(4), 549–571. https://doi.org/10.1111/abac.12061

Appendix

Table 7

Final sample: companies and their respective sectors

Sector	Companies
Auto industry	Embraer, Iochpe-Maxion, Mahle Metal Leve, Marcopolo, and Randon
Consumer goods	BRF, Cremer, JBS, M. Dias Branco, and Natura
Energy	Centrais Elétricas Brasileiras, CTEEP, Petróleo Brasileiro, and São Martinho
Financial sector	Banco do Brasil, Bradesco, and Itaú
Services	BM&FBovespa, Cielo, CVC Brasil, Localiza Rent a Car, Multiplan, and Valid Soluções
Steel and Metallurgy	Ferbasa, Paranapanema, Tupy, and Usiminas
Textiles	Alpargatas, Grendene, Guararapes, and Hering
Retail	Arezzo, B2W, Lojas Americanas, Magazine Luiza, Marisa, and Renner

Source: data from Sarquis et al. (2020)