RMC

The Journal of Accounting of Minas Gerais is an Open Access quarterly journal, published by Conselho Regional de Contabilidade de Minas Gerais - ISSN: 2446-9114
Journal of Accounting of Minas Gerais, Volume 26, Number 3, Article 1, Pages 9 - 23, september/december 2025. Available at: https://revista.crcmg.org.br/rmc
DOI: https://doi.org/10.51320/rmc.v26i3.1723

CRCMG
CONSELHO REGIONAL DE CONTABILIDADE DE MINAS GERAIS

THE EFFECT OF COVID-19 ON THE DISTRIBUTION OF DIVIDENDS AND INTEREST ON EQUITY IN THE B3 SUBSECTOR: APPAREL, TEXTILES, AND FOOTWEAR

O EFEITO DA COVID-19 NA DISTRIBUIÇÃO DE DIVIDENDOS E JCP DO SUBSETOR: VESTUÁRIO, TECIDO E CALÇADOS DA B3

ABSTRACT
This research aimed to analyze the effect of the COVID-19 pandemic on the distribution of dividends and interest on equity (IOE) among companies listed on B3 in the textiles, footwear, and apparel subsector. A descriptive research approach was used, covering the period from 2018 to 2022, with 2018 and 2019 considered as the pre-COVID-19 period and 2020 to 2022 as the post-COVID-19 period, given that the World Health Organization officially declared the end of the pandemic only in May 2023. For data analysis, descriptive statistics, Spearman's correlation, and the Mann-Whitney U test were applied. The results indicated a significant reduction in the distribution of dividends and IOE following the onset of COVID-19, suggesting profit retention to maintain working capital, as well as a significant effect on companies' operating profitability and capital structure.

Keywords: Dividend and IOE distribution, accounting-financial indicators, COVID-19.

RESUMO
Esta pesquisa teve como objetivo analisar o efeito da pandemia do Covid-19 com relação a distribuição de dividendos e juros sobre capital próprio (JCP) nas empresas listadas na B3 do subsetor de tecidos, calçados e vestuário. Foi utilizada uma pesquisa descritiva, abrangendo o período de 2018 a 2022, considerando os anos de 2018 e 2019 como anteriores à Covid-19 e os anos de 2020 a 2022 como período pós-Covid 19, tendo em vista que a Organização Mundial da Saúde declarou oficialmente o fim da pandemia somente em maio de 2023. Para análise de dados foram realizados testes como estatística descrita, Correlação de *Spearman e* Teste de Médias *Mann-Whitney. Os resultados* apontaram que houve uma redução significativa na distribuição de dividendos e JCP a partir do surgimento da COVID-19, indicando uma retenção de lucros para manutenção do capital de giro, além de um efeito significativo na lucratividade operacional e na estrutura de capital das empresas.

Palavras-Chave: Distribuição de dividendos e JCP, indicadores contábeis-financeiros, COVID-19.

Pedro Artur Campos do Amaral
Graduando em Controladoria e Finanças, pela Universidade Federal de Minas Gerais (UFMG). E-mail: paca01.2022@gmail.com. Lattes: http://lattes.cnpq.br/2710667846399824 Orcid: https://orcid.org/0009-0001-4739-3003.

Maria Eduarda Maia Vidal Gonçalves
Graduanda em Controladoria e Finanças, pela Universidade Federal de Minas Gerais (UFMG). E-mail: dudamvg@gmail.com. Lattes: http://lattes.cnpq.br/4825180662895776. Orcid: https://orcid.org/0009-0004-7168-9412.

Ana Clara Fonseca do Amaral
Doutoranda em Ciências Contábeis, Linha de Pesquisa: Contabilidade Financeira, pela Universidade Federal de Minas Gerais (UFMG). Mestre em Ciências Contábeis, Linha de Pesquisa: Tributária, pela Fucape Business School. Especialista em Engenharia de Produção pela Faculdade Iguaçu, Administração Pública pela Faculdade Serra Geral e Ensino da Docência Superior, pela Faculdade Serra Geral. Graduação em Ciências Contábeis pela Faculdade de Nova Serrana (FANS) e Graduação em Administração pela Faculdade Pitágoras. E-mail: professor.anaclara@gmail.com. Lattes: https://lattes.cnpq.br/9432357714477696. Orcid: https://orcid.org/0009-0009-4559-3595

Valéria Lobo Archete Boya
Doutoranda em Ciências Contábeis, Linha de Pesquisa: Contabilidade Financeira, pela Universidade Federal de Minas Gerais (UFMG). Mestre em Ciências Contábeis, Linha de Pesquisa: Contabilidade Gerencial, pela Fucape Business School. Docente da Faculdades Sudamérica. E-mail: valeriaboya@uol.com.br. Lattes: http://lattes.cnpq.br/9085122799304276. Orcid: https://orcid.org/0009-0005-1848-8758

José Roberto de Souza Francisco
Professor Associado do Departamento de Ciências Contábeis e Controladoria Finanças da UFMG; Professor Efetivo do Mestrado/Doutorado em Ciências Contábeis do CEPCON/FACE/UFMG; Doutor em Finanças, CEPEAD/UFMG. Mestrado Profissional em Administração pela FEAD-MINAS Centro de Gestão Empreendedora. Especialização em Gestão do Cooperativismo pela Faculdade de Ciências Humanas de Pedro Leopoldo. Aperfeiçoamento em Controladoria e Finanças pela UFMG. Graduação em Ciências Contábeis pelo Centro Universitário Newton Paiva. E-mail: jroberto@face.ufmg.br. Lattes: http://lattes.cnpq.br/9553851503191616. Orcid: https://orcid.org/0000-0002-1880-5304

Journal of Accounting of Minas Gerais - ISSN 2446-9114 – Open Access quarterly journal, published by Conselho Regional de Contabilidade de Minas Gerais (CRCMG). Received: 25th March 2025. Proofread: 20th July 2025. New alterations: 27th August 2025. Accepted: 15th September 2025, by Dr. Ewerton Alex Avelar Leal and Dr. Nálbia de Araújo Santos. Published: 26th December 2025. Published by: CRCMG

1. INTRODUCTION

On February 26, 2020, Brazil confirmed its first case of COVID-19, a disease caused by the virus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Brazilian Ministry of Health, 2020). The patient was a 61-year-old man who had recently returned from a trip to Italy, where there had been a significant outbreak of the disease. This case marked the beginning of the spread of the virus in the country, prompting health authorities to adopt preventive measures to contain its transmission (Brazil, 2020a).

Shortly thereafter, on March 20 of the same year, the Federal Government enacted Decree No. 10,282, which listed the activities classified as essential and that should continue to operate fully, such as social assistance and public security services (Brazil, 2020b).

Among the 2.7 million companies operating in 2020, approximately 70% indicated that the pandemic had an overall adverse impact on their business, while around 16.2% reported minimal or no effect. Conversely, approximately 13.6% highlighted that the pandemic created opportunities and had a positive impact on their firms, according to the Brazilian Institute of Geography and Statistics (IBGE, 2020). (IBGE, 2020).

There were serious concerns about a possible global recession, since such measures directly affect various economic structures: the total or partial interruption of industrial and office activities disrupts the supply of goods, reduces production, and lowers consumer demand in certain sectors (Marcelino et al., 2020).

During the restrictions imposed by the pandemic, societal habits underwent profound transformations, resulting in significant changes in both individual and collective needs. Thus, in the pandemic context, people continued to seek basic goods; however, the need to purchase clothing was reduced (Moreira et al., 2023).

Nevertheless, several firms in cyclical consumer sectors demonstrated a remarkable ability to adapt to the restrictive environment brought about by the pandemic, using e-commerce as a crucial element for maintaining their operations. Tools such as delivery services and drive-in schemes were also emphasized, allowing companies not only to preserve stability but, in many cases, to record increased revenues and solid profitability (Massoquetto et al., 2022).

The COVID-19 pandemic had a significant impact on several industries worldwide, including the apparel industry. The closure of stores, the disruption of global supply chains, and the decline in demand for non-essential products deeply affected the apparel sector (Sen et al., 2020).

According to Futema et al. (2009), business profitability is one of the fundamental aspects influencing profit distribution, making the use of dividends and interest on equity (IOE) an effective way of assessing firms' profitability. The COVID-19 health crisis brought serious challenges to companies' profitability and profit distribution.

In this context, the COVID-19 period was particularly fertile for research, including in the accounting field, especially studies seeking to address the reality faced by firms during the pandemic. Studies that examined the effects of COVID-19 on firms' economic-financial indicators include Alencar et al. (2020), Avelar et al. (2020), Botta and Fonseca (2023), Demirgüç-Kunt et al. (2020), Li et al. (2020), Costa et al. (2021), Massoquetto et al. (2022), Avelar et al. (2022), Silva Junior et al. (2022), and Silva (2022). Research that addressed the impact of the COVID-19 pandemic on companies includes the works of Carletti et al. (2020), Ding et al. (2020), Marcelino, Rezende and Miyaji (2020), Nuno (2020), Padhan and Prabheesh (2021), Sen et al. (2020), Santos and Nassif (2021), Souza and Delgado (2021), and Zaremba et al. (2020). Finally, studies that discuss dividends and/or the distribution of interest on equity in times of crisis include those by Leite et al. (2020), Acharya and Steffen (2020), El Ammari (2021), and Nguyen et al. (2021).

The present study aims to analyze the effect of the COVID-19 pandemic on the distribution of dividends and interest on equity among companies listed on B3 in the textiles, footwear, and apparel subsector. The choice of this subsector is justified by the pronounced impact of the COVID-19 pandemic, which triggered abrupt shifts in consumer preferences and behaviors, leading to substantial changes in the demand for non-essential goods such as clothing and accessories. Moreover, firms in this subsector faced specific challenges, including disruptions in global supply chains and the need to rapidly transition to e-commerce and other digital solutions to sustain their operations (Moreira et al., 2023).

Thus, both governmental measures and shifts in consumer behavior affected these firms' profits. Accordingly, the research question guiding this study is: what is the effect of the pandemic on the distribution of dividends and interest on equity among companies listed on B3 in the textiles, footwear, and apparel subsector?

The contributions of this study to academic and professional spheres are significant and multifaceted. Scholars may use the results to deepen the understanding of the resilience and adaptability of textiles, footwear, and apparel firms during the COVID-19 pandemic, providing a basis for future research on crisis management and financial performance in contexts of uncertainty, including in other sectors.

Although there are studies that examine the impacts of the pandemic on firms across various sectors (Avelar et al., 2020; Costa et al., 2021) and research that addresses the economic effects on apparel, textiles, and footwear companies (Botta & Fonseca, 2023; Setiawan & Septiani, 2024), this study is relevant due to the lack of detailed investigation into the distribution of dividends and interest on equity (JCP) within this subsector during the pandemic period in Brazilian firms.

This research is justified from the perspective of accounting and finance professionals, who may apply its findings to the analysis of dividend distribution and interest on equity (JCP) in a context of uncertainty such as the pandemic, with a view to ensuring corporate sustainability and maximizing results. Furthermore, examining profit retention policies during the pandemic may help managers formulate better governance and financial planning practices, enabling them to adapt

more effectively to market fluctuations and global crises. Focusing on this subsector allows for a detailed analysis of how government measures and changes in consumer behavior influenced the distribution of dividends and interest on equity, as well as financial accounting indicators, thereby contributing to future research on the topic.

2. LITERATURE REVIEW

2.1 COVID-19 Pandemic and Economic-Financial Indicators

In Brazil, government measures were necessary to prevent the spread of the disease. Thus, with the aim of reducing virus transmission and mitigating the impacts of the health crisis, state governments implemented quarantine (or social distancing) for the population, allowing people to leave their homes only for essential activities (Silva et al., 2020). This change in the economic environment affected the market, thereby creating opportunities for the development of studies on the entities operating in this context (Moreira et al., 2020).

At the national level, one may cite the study by Avelar et al. (2020), which used economic-financial indicators and found that the COVID-19 pandemic significantly affected the market value of Brazilian companies in March 2020. In general, firms reported several effects of the pandemic on their operations, the main ones being: uncertainty in forecasts, a decline in demand, and an increase in default. However, this impact was not homogeneous across sectors or across firms.

On the other hand, the findings of Massoquetto et al. (2022) indicate that many companies were able to adapt by shifting their business models to the virtual environment. With e-commerce as a key element, alongside tools such as delivery services and drive-in operations, these cyclical consumer firms demonstrated efficiency even in the face of shutdowns.

Costa et al. (2021) examined the influence of the pandemic on the economic-financial indicators of hygiene and cleaning product companies. Their study found that the firms analyzed were positively affected by increased sales during the pandemic period, driven mainly by the expansion in the production of hand sanitizer and the higher volume of soap and disinfectant output.

Botta and Fonseca (2023) examined the impact of the COVID-19 pandemic on the economic situation of footwear companies between 2019 and 2021, using financial data from the Brazilian stock exchange (B3). Their findings revealed a decline in profitability and liquidity indicators, indicating financial difficulties in covering short-term debt. Some firms showed an increasing need for working capital and long cash conversion cycles, as well as a pattern of financing short-term assets with long-term funds.

Silva (2022) investigated the impacts of the economic crisis caused by the COVID-19 pandemic on loss estimates related to receivables and inventories of textiles, apparel, and footwear companies listed on B3, analyzing data from 2018 to 2021. The study evidenced an increase in estimated credit losses during the pandemic, especially in 2020, which is considered the period in which the pandemic became consolidated.

Alencar et al. (2020) examined companies listed on B3 in special listing segments to verify whether they exhibited superior performance during the pandemic, by comparing their accounting profitability indicators and valuation multiples with those of firms in the basic segment. The authors concluded that listing at the highest levels of corporate governance does not guarantee that companies will be shielded from crises, since, in some cases, firms in the basic segment presented better indicators.

Silva Junior et al. (2022) used a set of economic-financial indicators for four companies in the higher education sector listed on B3. Their study showed that the COVID-19 pandemic led to a decline in profitability due to increased student default, thereby negatively affecting the market value of these firms.

Avelar et al. (2022) analyzed the effects of the COVID-19 pandemic on the economic-financial performance of Brazilian publicly traded companies listed on B3 in 2020. The results revealed a reduction in market value and profitability, as well as an increase in operating cycles and indebtedness in the first two quarters of 2020.

Demirgüç-Kunt et al. (2020) analyzed the impact of financial policy measures adopted during the COVID-19 crisis on bank stocks at a global level. The results indicated that liquidity support measures, borrower assistance, and monetary easing had heterogeneous effects on bank equities, with prudential adjustments leading to negative abnormal returns.

Li, Strahan, and Zhang (2020) examined how banks were able to meet firms' funding demands during the COVID-19 crisis. Their findings suggest that banks were able to supply this demand for liquidity primarily through federal programs and depositor funds, with bank capital not representing a significant constraint during the crisis.

The study by Setiawan and Septiani (2024) investigated firm performance and its determinants in Indonesia's textile and textile products (TPT) industry before and after the COVID-19 pandemic. The results revealed a decline in firm performance and in price–cost margins during the pandemic.

Several studies on dividends and interest on equity have been reported in periods of economic crisis (Leite et al., 2020; Krieger et al., 2021; Pettenuzzo et al., 2021; El Ammari, 2021). Leite et al. (2020) examined the determinants of dividend payments in Brazilian companies during periods of crisis and economic prosperity. Their results showed that, although firms experience performance losses in times of crisis compared with periods of prosperity, there was no reduction in dividend payments in the sample analyzed.

The study by Krieger et al. (2021) investigated the impact of the COVID-19 pandemic on the dividend distribution of publicly traded companies in the United States. The authors found that net income and leverage are key determinants

of dividend reductions, and that this effect was more pronounced during the pandemic, exceeding the dividend cuts observed during the 2008 crisis.

Acharya and Steffen (2020) analyzed the impact of the COVID-19 pandemic on corporate cash management decisions in the United States, focusing on differences in behavior between high-quality firms (with higher credit ratings) and lower-quality firms (rated BBB). The study sought to understand how organizations responded to the increase in credit risk during the crisis, examining whether there was a "dash for cash," particularly among firms at risk of being downgraded to speculative grade.

The results indicated that high-quality firms (with higher ratings) increased their cash holdings during the crisis, whereas lower-quality firms (rated BBB) sought to raise capital through debt and equity issuances. In addition, BBB-rated firms showed a significant increase in the use of revolving credit lines, indicating a search for additional liquidity to cope with financial challenges during the pandemic.

El Ammari (2021) investigated how CEO duality—that is, when the same individual holds both the positions of CEO and chair of the board—and ownership concentration influence dividend policy in firms from emerging markets, especially in periods of crisis. The study aimed to understand the relationship between these variables and how crises may moderate their effects on dividend policy. Specifically, the results show that political crises play an important role in mitigating the positive effect of ownership concentration and CEO duality on dividend distribution.

Nguyen et al. (2021) examined the effects of dividend policies on firms' financial performance, that is, how the dividend payout ratio and the decision to pay dividends impact firm performance. They used ROA (return on assets) and ROE (return on equity) as proxies, analyzing 450 companies listed on the Vietnamese stock market. The authors note that data collection took place during a period of financial difficulties in the country, which may have influenced the results regarding the relationship between dividend policy and firms' financial performance.

2.2 Covid-19 and its Impact on Firms

The COVID-19 pandemic brought about significant transformations in business dynamics, affecting several areas such as management, production, and labor relations. The need for rapid adaptation to a highly uncertain environment underscored the importance of observing and analyzing research on the effects of COVID-19 on firms.

Rezende, Marcelino, and Miyaji (2020) and Souza and Delgado (2021) analyzed the effects of the COVID-19 pandemic on Brazilian micro and small enterprises. Their studies indicate that, despite the limited availability of data on this segment, it is possible to identify the weak performance of these firms during the pandemic.

Moreover, the international literature notes that the COVID-19 pandemic caused severe damage to the global economy, requiring coordinated action across monetary, macroprudential, and fiscal policies to mitigate its effects. Conventional macroeconomic policies must be adjusted and complemented by social measures to confront the health crisis and maintain economic balance (Padhan & Prabheesh, 2021).

Coibion et al. (2020) documented the impact of the COVID-19 pandemic based on restrictions imposed on consumer spending, income and wealth losses, macroeconomic expectations, and evaluations of political institutions. The authors also examined how local lockdowns affected realized and planned expenditures, including the economic losses associated with these measures. Their findings point to a sharp decline in aggregate spending, especially in categories such as travel and apparel.

Santos and Nassif (2021) studied the applicability of strategic actions in a shopping center to cope with the COVID-19 pandemic. The results indicated that, despite an initial decline in vehicle flow, there was a gradual recovery over the subsequent months. Delivery and take-away services were fundamental for increasing sales and reaching the break-even point at the peak of the pandemic. In addition, the reduction in the number of people led to a decrease in operating expenses in the establishments.

In the Italian context, the findings of Carletti et al. (2020) show that the lockdown was expected to cause a significant decline in profits and a substantial erosion of firms' equity, generating financial difficulties for a sizeable share of the institutions analyzed. Not only Italy but the entire world was affected by social distancing restrictions; for instance, a clothing manufacturing hub in Bangladesh was heavily impacted by COVID-19, resulting in the cancellation of billions of dollars in apparel orders by consumers, as these activities were classified as non-essential (Sen et al., 2020).

Nuno (2020) conducted a broader study, analyzing the impact of the COVID-19 health crisis on the global economy, with a focus on GDP growth projections and the economic consequences in different countries. The author examined key economic events that occurred during the pandemic, such as the suspension of production by automobile manufacturers in Europe and the impact on the transport, entertainment, retail, hotel, and restaurant sectors.

Mello Júnior et al. (2023) assessed the impact of the COVID-19 pandemic on Brazil's Gross Domestic Product (GDP). To do so, the study used data from the Value Added Statement (DVA) of several companies listed on B3 (Brasil, Bolsa, Balcão) between the quarters of 2018 and the first quarter of 2021. The main results showed that the pandemic had significant effects in the first quarters of 2020, particularly through an increase in the remuneration of debt capital, due to the contracting of loans and financing, and a reduction in the remuneration of equity capital, caused by the decline in firms' revenues and the suspension or reduction of dividend payments to shareholders.

From the perspective of financial markets, Ding et al. (2020) analyzed how corporate characteristics influenced stock price reactions during the COVID-19 pandemic. Their results revealed that firms with greater ex ante corporate immunity performed better in the stock market during the crisis, and that global supply chains and client location also played an important role in stock price reactions to COVID-19 rates. In addition, Zaremba et al. (2020) found that non-pharmaceutical interventions related to the pandemic increased stock market volatility.

3. METHODOLOGY

3.1 Research Classification

This study is classified as descriptive, since, according to Martins and Theóphilo (2007), it aims to describe the characteristics of a given phenomenon. In this specific case, it presents an analysis of the companies' accounting and financial indicators. It is also characterized as a documentary study, as it examines data extracted from firms' financial statements. With respect to the assessment of results, it is classified as quantitative research, given that statistical tests are employed to obtain empirical results for data analysis.

3.2 Amostra e período da pesquisa, coleta de dados

In line with the objective of this study, the period analyzed was from 2018 to 2022, in order to examine both the pre-pandemic years (2018–2019) and the period in which the pandemic was already underway (2020–2022). Although, by 2022, the population had largely resumed social activities, that is, was no longer under lockdown, it was only in May 2023 that the World Health Organization (WHO) officially declared the end of the COVID-19 pandemic.

The data were obtained from the Economática® database and from the financial statements of companies listed in the textiles, footwear, and apparel subsector, comprising the following firms: Arezzo, C&A, Veste, Grupo Soma, Lojas Marisa, Lojas Renner, Grazziotin, and Guararapes. These companies operate in activities considered sensitive to the global COVID-19 health crisis, as they are classified as non-essential.

The following accounting indicators were extracted: dividends, interest on equity (JCP), working capital, capital employed, liquidity (current, quick, and overall), net total debt, gross total debt, earnings per share, book value per share, sales per share, and EBITDA per share, as detailed in the table below.

Table 1 – Description of Variables

Variable	Acronym	Description	Authors	Expected Sign	Expected Relationship
Dividends and Interest on Equity	DIVJCP	Portion of profits distributed to shareholders as a return on their investment. In Brazil, this includes both cash dividends and interest on equity (JCP), which represent a financial expense paid to shareholders and calculated on the company's own capital.	Futema et al. (2009); Zaremba et al. (2020); El Ammari (2021); Nguyen et al. (2021)	–	During the pandemic period, non-essential goods companies are expected to reduce the distribution of dividends and interest on equity.
General Liquidity	LG	Ratio between total assets and total liabilities (current and non-current).	Botta and Fonseca (2023); Costa et al. (2021); Mello Júnior et al. (2023)	–	Due to lower sales and the need for credit support during the pandemic, non-essential companies tend to experience a reduction in their general liquidity.
Current Liquidity	LC	Current assets divided by current liabilities.	Acharya and Steffen (2020); Botta and Fonseca (2023); Costa et al. (2021); Mello Júnior et al. (2023)	+	Owing to the reduction in sales and the use of credit, non-essential firms may accumulate higher inventory levels during the pandemic, which can translate into higher current liquidity.

Variable	Acronym	Description	Authors	Expected Sign	Expected Relationship
Quick Ratio (Acid Test)	LS	(Current assets – inventories) divided by current liabilities.	Acharya and Steffen (2020); Botta and Fonseca (2023); Costa et al. (2021); Mello Júnior et al. (2023)	–	Given the drop in sales and reliance on credit during the pandemic, non-essential firms are expected to see a reduction in their quick ratio, as part of current assets is tied up in inventories.
Working Capital	ln_CG	Natural logarithm of working capital, measured as current assets minus current liabilities.	Avelar et al. (2020); Botta and Fonseca (2023); Mello Júnior et al. (2023); Silva (2022); Santos and Nassif (2021)	+	With declining sales, firms seek to preserve cash; consequently, short-term obligations may increase relative to current assets, affecting the level and composition of working capital.
Capital Employed	ln_CE	Natural logarithm of capital employed, measured as total assets minus current liabilities (resources invested in the company net of short-term obligations).	Avelar et al. (2020); Botta and Fonseca (2023); Mello Júnior et al. (2023); Silva (2022); Santos and Nassif (2021)	–	Capital employed, representing the total financial resources invested in the firm excluding short-term obligations, tends to be lower in an economic downturn triggered by the pandemic.
Gross Total Debt	ln_DB	Natural logarithm of the sum of short- and long-term financial obligations (gross total debt).	Ding et al. (2020); Li, Strahan and Zhang (2020); Padhan and Prabheesh (2021); Santos and Nassif (2021); Silva Júnior et al. (2022)	+	Due to the expansion of credit during the pandemic, gross total debt is expected to increase.
Net Total Debt	ln_DL	Natural logarithm of total financial obligations net of short-term financial assets (e.g., cash and cash equivalents).	Ding et al. (2020); Li, Strahan and Zhang (2020); Padhan and Prabheesh (2021); Santos and Nassif (2021); Silva Júnior et al. (2022)	+	In the pandemic context, the likely reduction in liquid assets due to weaker operations tends to increase net total debt.
Earnings per Share (EPS)	LPA	Calculated as net income for the period divided by the number of shares outstanding.	Alencar et al. (2023); Marcelino, Rezende and Miyaji (2020); Zaremba et al. (2020)	–	During the pandemic period, non-essential firms are expected to report lower earnings, resulting in reduced earnings per share.

Variable	Acronym	Description	Authors	Expected Sign	Expected Relationship
Book Value per Share	VPA	Shareholders' equity divided by the number of shares outstanding.	Alencar et al. (2023); Marcelino, Rezende and Miyaji (2020); Zaremba et al. (2020)	–	In a pandemic scenario, non-essential firms are not expected to experience growth in shareholders' equity, which may lead to a decline in book value per share.
Sales per Share	V/A	Net sales divided by the number of shares outstanding.	Alencar et al. (2023); Marcelino, Rezende and Miyaji (2020); Zaremba et al. (2020)	–	During the pandemic, non-essential goods companies are expected to experience a decline in sales, implying lower sales per share.
EBITDA per Share	EBITDA/A	EBITDA divided by the number of shares outstanding.	Alencar et al. (2023); Marcelino, Rezende and Miyaji (2020); Zaremba et al. (2020)	–	In the pandemic period, non-essential firms are expected to report lower operating performance, resulting in lower EBITDA per share.

Source: Elaborated by the authors.

3.3 Statistical Tests

To obtain and analyze the results, several statistical procedures were applied. First, descriptive statistics were employed to characterize the data and provide a basis for subsequent inferential techniques through the calculation and interpretation of descriptive measures (Triola, 2021).

Spearman's rank correlation coefficient was also used, given that the indicators present opposite behaviors in relation to the COVID-19 health crisis, that is, monotonic relationships (Moore et al., 2013).

Normality was assessed using the Shapiro–Wilk test (W statistic and p-value) and the Jarque–Bera test (JB statistic and p-value), complemented by the analysis of skewness and excess kurtosis. Although the sample comprises a single subsector of B3, it includes firms that differ in size and characteristics. Therefore, to verify whether there are significant differences among the variables within the sample, the Mann–Whitney test was applied to compare the medians of the companies in the textiles, apparel, and footwear subsector (Mann & Whitney, 1947).

4. RESULTS

In this study, a multifaceted approach was adopted to analyze a set of financial metrics, combining descriptive statistics, Spearman's rank correlation, the Wilcoxon–Mann–Whitney test, and normality tests, namely Shapiro–Wilk (W statistic and p-value) and Jarque–Bera (JB statistic and p-value).

Descriptive statistics were first employed to summarize and describe the basic characteristics of the data, providing an overview of the distributions, means, standard deviations, and minimum and maximum values of the variables analyzed. This preliminary examination is essential for identifying overall patterns and potential anomalies in the dataset. Descriptive statistics were computed separately for the pre-pandemic period, covering the years 2018 to 2019, and for the period in which the pandemic was already under way, spanning 2020 to 2022. For all tests conducted in this section, the data were winsorized at the 1st and 99th percentiles.

4.1 Descriptive Statistics

Table 2 – Descriptive statistics of the variables

Variable	Obs	Mean	Std	Min	25%	50%	75%	Max
Div. + JCP	29	-148.566,6552	143.681,7020	-648.325,000	-234.623,000	-92.170,000	-45.425,000	6.736,000
LG	40	1,2549	0,4188	0,4000	1,0720	1,2000	1,3119	2,6712
LC	40	1,6715	0,5424	0,8000	1,3000	1,6000	1,9000	3,2905

Variable	Obs	Mean	Std	Min	25%	50%	75%	Max
LS	40	1,2924	0,4985	0,5000	0,9963	1,3000	1,5250	2,7009
CG	40	1.271.620.209,82	1.547.555.724,55	-158.726.000	225.560.155,75	630.234.500,00	1.607.177.750,00	6.048.191.000,00
CE	40	4.647.346.704,25	4.074.971.031,96	569.159.945	1.262.287.000	2.898.922.000	7.425.878.000	15.543.859.000
DL	40	420.832.766,65	797.726.246,50	-2.480.400.000	-71.531.769,50	401.538.500,00	935.330.250,00	1.684.675.000
DB	35	1.546.669.800,00	1.136.464.812,34	1.848.000	584.431.500,00	1.462.987.000	2.033.286.000	4.085.296.000
LPA	40	-7.0994	40.1584	-232.9766	-0.0116	0.8014	2.2459	19.8025
VPA	39	29.2727	68.3159	-61.3178	8.4079	10.3954	24.4557	345.0899
V/A	40	35.3905	40.4823	3.2201	13.0682	19.8275	40.2542	192.8870
EBITDA/A	38	5.6134	10.1713	-14.6876	1.8900	2.7454	5.8132	54.3557

Source: research data.

Table 3 – Descriptive statistics after winsorization: pre-pandemic and during the pandemic

Variável	Mean (Antes)	Mean (Durante)	Std (Antes)	Std (Durante)	Min (Antes)	Min (Durante)	Max (Antes)	Max (Durante)
Div. + JCP	-148.566,66	-146.182,05	143.681,70	134.847,72	-648.325,00	-575.399,28	6.736,00	2.963,84
LG	1,2549	1,2512	0,4188	0,4067	0,4000	0,4000	2,6712	2,5264
LC	1,6715	1,6696	0,5424	0,5324	0,8000	0,8390	3,2905	3,1772
LS	1,2924	1,2924	0,4985	0,4941	0,5000	0,5390	2,7009	2,6616
CG	1.271.620.209,8	1.271.505.598,57	1.547.555.724,55	1.546.962.352,20	-158.726.000	-156.481.160	6.048.191.000	6.041.361.710
CE	4.647.346.704,2	4.641.689.199,62	4.074.971.031,96	4.055.375.309,11	569.159.945	614.444.449,85	15.543.859.000	15.272.274.310
DL	420.832.766.65	434.102.750.65	797.726.246.50	750.263.617.13	-2.480.400.000	-1.941.305.730	1.684.675.000	1.676.380.090
DB	1.546.669.800.00	1.547.721.080.00	1.136.464.812.34	1.134.961.713.79	1.848.000	39.101.800	4.085.296.000	4.084.837.000
LPA	-7,0994	-5,7757	40,1584	32,4740	-232,9766	-178,5634	19,8025	18,3353
VPA	29,2727	29,1023	68,3159	63,9401	-61,3178	-37,6007	345,0899	314,7275
Ven	35,3905	34,9384	40,4823	38,7209	3,2201	3,4053	192,8870	174,6183
Ebtida/A	5,6134	5,4929	10,1713	8,6356	-14,6876	-9,2437	54,3557	44,3320

Source: research data.

The results in Tables 2 and 3 show the changes that occurred in the economic-financial performance of companies in the textiles, apparel, and footwear subsector listed on B3 over the course of the COVID-19 pandemic.

Some variables were affected by winsorization and exhibited more visible shifts. The maximum value of Div. + JCP decreased from 6,736 to 2,963, while the minimum increased from –648,325 to –575,399. Although the mean increased during the pandemic period, this change must be interpreted considering the higher minimum value. This evidence is consistent with Nguyen et al. (2021), who argue that financial crises can influence dividend distribution, and with Carletti et al. (2020) and Sen et al. (2020), who document significant declines in profits for firms in the apparel sector, including the cancellation of billions of dollars in orders, as these activities are classified as non-essential. When production or sales of such products decline, revenues fall accordingly, which directly affects the distribution of dividends to shareholders.

The liquidity ratios (general, current, and quick) remained relatively stable, with only minor variations between periods. For the current ratio (LC), the maximum decreased from 3.2905 to 3.1772, while the minimum increased from 0.8000 to 0.8390. For the quick ratio (LS), the maximum declined from 2.7009 to 2.6616 and the minimum rose from 0.5000 to 0.5390.

Only the general liquidity ratio (LG) showed marginal changes. Despite a slight reduction in LG from 1.2549 to 1.2512, the levels of current and quick liquidity remained close, suggesting that firms were able to preserve a certain short-term payment capacity. This result is consistent with Massoquetto et al. (2022), who emphasize the adaptation of cyclical consumer companies through e-commerce and digital solutions, factors that helped sustain liquidity amid the decline in in-store sales.

With respect to capital structure indicators (CG, CE, DB, and DL), it is observed that both working capital (CG) and capital employed (CE) exhibited a reduction in their average levels during the pandemic period. For CG, the maximum de-

creased from 6,048,191,000 to 6,041,361,710, while the minimum increased from –158,726,000 to –156,481,160. For CE, the maximum dropped from 15,543,859,000 to 15,272,274,310 and the minimum rose from 569,159,945 to 614,444,450.

The DB variable showed a decline in its maximum value, from 4,085,296,000 to 4,084,837,000, while the minimum increased from 1,848,000 to 39,101,800. Similarly, the DL variable also exhibited a reduction in its maximum value, from 1,684,675,000 to 1,676,380,090, and an increase in the minimum, from –2,480,400,000 to –1.941.30.730.

These results suggest that firms needed to mobilize additional resources to finance their operations, given the uncertainty surrounding their future, especially in view of their focus on non-essential goods. Avelar et al. (2022), when analyzing the economic-financial performance of companies listed on B3, reported an increase in indebtedness cycles in the first two quarters of 2020. Likewise, Mello Júnior et al. (2023) showed that the COVID-19 pandemic had significant effects in the early quarters of 2020, such as an increase in the remuneration of debt capital due to the strong demand for loans and financing.

Profitability indicators (LPA, VPA, EBITDA/A) displayed marked differences between the two periods. For LPA, the maximum fell from 19.8025 to 18.3353, while the minimum rose from –232.9766 to –178.5634. For VPA, the maximum declined from 68.3159 to 63.9401, and the minimum increased from –61.3178 to –37.6007. For V/A, there was a reduction in the maximum value from 345.0899 to 314.7275 and an increase in the minimum from 3.2201 to 3.4053. Finally, EBITDA/A also registered a decrease in its maximum value, from 54.3557 to 44.3320, and an increase in the minimum, from –14.6876 to –9.2437. These findings are consistent with Carletti et al. (2020), Sen et al. (2020) and Nuno (2020), who report that firms in non-essential sectors, such as apparel and footwear, experienced a sharp reduction in profitability due to mobility restrictions, declining demand, and disruptions in supply chains.

Sales also contracted, confirming the reduction in demand for consumer goods regarded as non-essential. This result reinforces the evidence reported by Moreira et al. (2023), who highlight a significant decline in sales in the sector as a result of changes in consumption patterns during the pandemic.

4.2 Testes de Normalidade

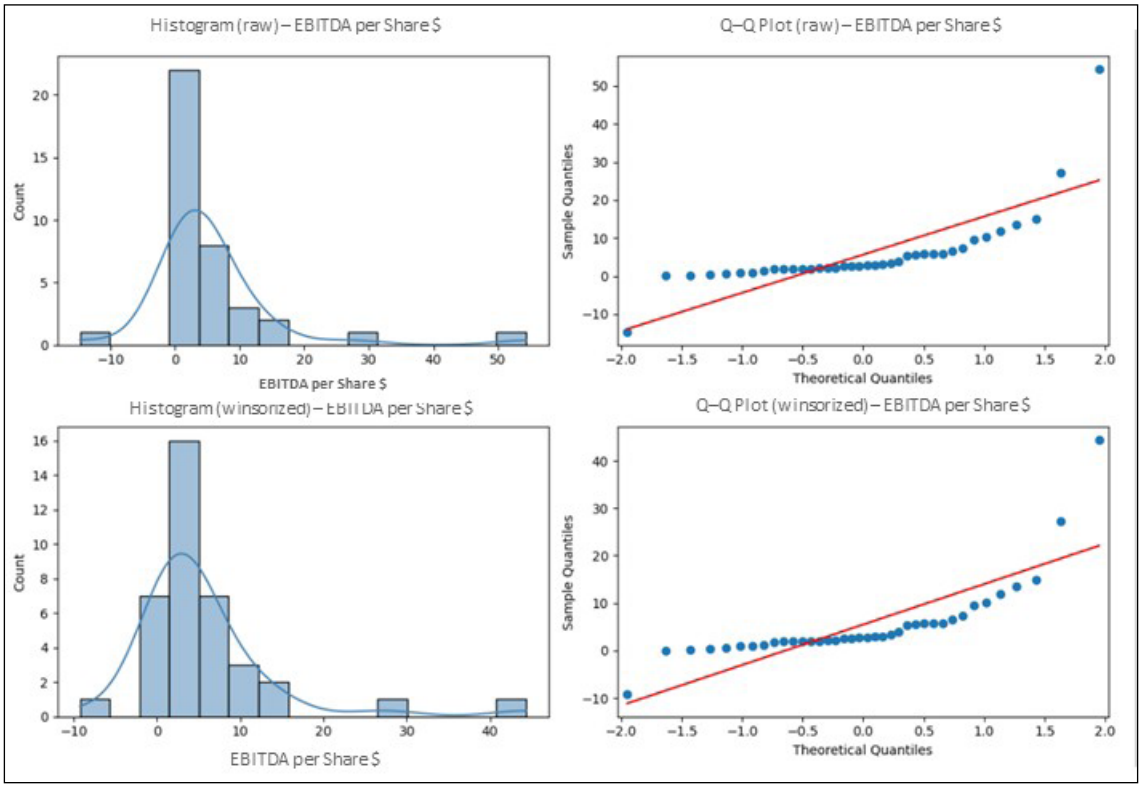
Tabela 4 - Testes de Normalidade (Shapiro-Wilk e Jarque-Bera)

Variable	n	Origem	Shapiro_W	Shapiro_p	JB_stat	JB_p	Skew	Kurtosis_ excess
Capital Employed	40	bruto	0,8583	0,0001	6,7840	0,0336	1,0469	0,2919
Capital Employed	40	winsor_1_99	0,8578	0,0001	6,5411	0,0380	1,0293	0,2161
CG	40	bruto	0,7819	0,0000	28,6823	0,0000	1,7615	2,8866
Capital de Giro	40	winsor_1_99	0,7819	0,0000	28,6200	0,0000	1,7604	2,8810
Div, + JCP	29	bruto	0,8404	0,0005	23,3610	0,0000	-1,6755	3.8789
Div. + JCP	29	winsor_1_99	0,8677	0,0018	11,0480	0,0040	-1,3518	2,1615
Total Debt	35	bruto	0,9173	0,0120	3,3713	0,1853	0,7887	-0,0236
Total Debt	35	winsor_1_99	0,9154	0,0106	3,4173	0,1811	0,7942	-0,0214
Net Debt	40	bruto	0,9216	0,0087	19,8751	0,0000	-1,1183	3,2380
Net Debt	40	winsor_1_99	0,9536	0,1007	4,6562	0,0975	-0,6843	1,3373
EBITDA per Share	38	bruto	0,6284	0,0000	315,0918	0,0000	3,1960	14,7231
EBITDA per Share	38	winsor_1_99	0,6728	0,0000	202,8416	0,0000	2,9332	11,4198
LC	40	bruto	0,9366	0,0265	7,8985	0,0193	1,0185	1,2441
LC	40	winsor_1_99	0,9383	0,0303	6,3726	0,0413	0,9550	0,9267
LPA	40	bruto	0,3364	0,0000	1109,3112	0,0000	-5,0516	27,3445
LPA	40	winsor_1_99	0,3577	0,0000	762,9686	0,0000	-4,4757	22,3444
LS	40	bruto	0,9457	0,0539	5,0920	0,0781	0,8001	1,1106
LS	40	winsor_1_99	0,9438	0,0463	4,7529	0,0929	0,7863	1,0194
General Liquidity	40	bruto	0,8961	0,0015	20,0158	0,0000	1,1041	3,2801
General Liquidity	40	winsor_1_99	0,9086	0,0034	12,7578	0,0017	0,9187	2,5868

Variable	n	Origem	Shapiro_W	Shapiro_p	JB_stat	JB_p	Skew	Kurtosis_ excess
VPA	39	bruto	0,4533	0,0000	373,4193	0,0000	3,8087	15,3185
VPA	39	winsor_1_99	0,4448	0,0000	355,1842	0,0000	3,8267	14,8057
Sales per Share	40	bruto	0,7014	0,0000	80,2249	0,0000	2,3881	6,0780
Sales per Share	40	winsor_1_99	0,7169	0,0000	57,8923	0,0000	2,2046	4,8195

Sourch: research data

Figure 1 – Research Charts



Fonte: dados da pesquisa

After applying the normality tests, the results revealed the following patterns: for the variables Working Capital (CG) and Capital Employed (CE), both tests indicated rejection of normality ($p < 0.05$) in the raw and winsorized data. Winsorization slightly reduced the Jarque–Bera statistic, but the adjustment was not sufficient to normalize the distribution. Skewness values remained close to 1, indicating moderate asymmetry.

For the variable Dividends + Interest on Equity (JCP), there was a significant improvement after winsorization. The JB p-value increased from 0.0000 (raw) to 0.0040 (winsor), reflecting a reduction in negative skewness. However, the distribution still does not fully meet the normality criteria.

The variables Total Net Debt (DL) and Total Gross Debt (DB) showed improvements after winsorization, especially Total Net Debt, whose Shapiro–Wilk p-value increased to 0.1007 and JB p-value to 0.0975. These values are close to non-rejection of the null hypothesis of normality. Despite this, normality still cannot be affirmed at the 5% significance level.

The variable Earnings per Share (LPA) remained highly non-normal, with $p < 0.001$ in both tests even after winsorization. The extremely high kurtosis (> 20) indicates heavy tails, suggesting the need for additional transformation or the use of robust statistical methods. Similarly, VPA, Sales per Share, and EBITDA per Share continued to exhibit non-normality even after winsorization, although the kurtosis and JB statistic were reduced. For example, EBITDA per Share showed a decrease in JB from 315.9 (raw) to 202.8 (winsor), but the p-value remained below 0.01.

The liquidity indicators (General, Current, and Quick Ratios) were the variables that came closest to normality after winsorization. General Liquidity, for instance, improved from $p = 0.0015$ (raw) to $p = 0.0340$ (winsor), becoming marginally non-significant at the 5% level but acceptable at the 10% level. This suggests that winsorization was particularly effective for liquidity indicators.

Overall, winsorization reduced skewness and kurtosis in several variables—especially those related to liquidity and debt—bringing the distributions closer to normality. However, variables such as LPA, VPA, Sales per Share, and EBITDA per Share remain strongly non-normal. Given these results, the use of methods robust to normality violations (such as regressions with robust standard errors, FGLS, or non-parametric estimators) will be necessary in the subsequent econometric analyses.

4.3 Tests of Differences Between Periods

Table 5 presents the results of the Wilcoxon–Mann–Whitney test, which evaluates the differences between the periods 2018–2019 (pre–COVID-19) and 2020–2022 (during the COVID-19 pandemic). The table reports the variables that were affected by the emergence and development of the COVID-19 pandemic.

Table 5 - Mann-Whitney Difference Test

Variable	n_pre	Mediana_Pre	n_post	Mediana_Post	U	p
Div. + JCP	14	-92,280,5000	15	-92,170,0000	124	0,4194
LG	16	1,2500	24	1,2000	214	0,5500
LC	16	1,4500	24	1,6000	166,5	0,4893
LS	16	1,2500	24	1,3000	184,5	0,8464
CG	16	551,059,000,0000	24	882,817,500,0000	148	0,2298
CE	16	2,655,980,500,00	24	3,030,261,500,00	131	0,0949*
DL	16	437,147,500,0000	24	396,290,500,0000	191	0,9890
DB	14	1,296,763,500,00	21	1,462,987,000,00	105	0,1623
LPA	16	1,2523	24	0,5251	251	0,1063
VPA	15	10,4659	24	10,2331	185	0,8966
V/A	16	19,8275	24	18,7355	210	0,6290
Ebitda/A	14	4,4766	24	1,9266	255	0,0089***

Source: research data.
Note: * represents 10% significance, ** represents 5% significance, and *** represents 1% significance.

The analysis of the results indicates that the COVID-19 pandemic had a significant impact on specific aspects of the financial performance of firms in the apparel, textiles, and footwear subsector of B3, particularly in operational profitability and the structure of employed capital. These findings are consistent with the existing literature, which documents the challenges and adjustments faced by companies during the pandemic period.

When comparing the pre-COVID years (2018–2019) with the pandemic period (2020–2022), the difference-in-means test showed that the only statistically significant variable—that is, the only one demonstrably affected by the health crisis—was EBITDA per Share, significant at the 1% level. This suggests a substantial impact of the pandemic on firms' operational profitability, corroborating previous studies that highlight the sharp decline in operational earnings during this period. Carletti et al. (2020), Coibion et al. (2020), Sen et al. (2020), and Nuno (2020) reported that the restrictions imposed during the pandemic led to a pronounced reduction in aggregate expenditure, particularly in categories such as apparel, directly affecting profitability in this segment.

The variable Capital Employed (CE) was significant at the 10% level, reflecting factors such as changes in fixed assets, working capital, debt structure, and operational strategies, all of which may have contributed to the observed variation.

These results are aligned with the findings of Mello Júnior et al. (2023), who indicate that variations in fixed assets, working capital, and debt structure played an important role in firms' financial dynamics during the pandemic. Coibion et al. (2020) similarly emphasize the marked decline in operational profitability faced by firms as a consequence of the economic disruptions caused by COVID-19.

Mello Júnior et al. (2023) assessed the impact of the COVID-19 pandemic on Brazil's Gross Domestic Product (GDP). Using data from the Value Added Statement (DVA) of several companies listed on B3 between 2018 and the first quarter of 2021, their study shows that the pandemic had substantial effects in the early quarters of 2020. These effects included increases in the Remuneration of Third-Party Capital, due to higher borrowing and financing, and a reduction in the Remuneration of Equity Capital, resulting from declines in revenues and the suspension or reduction of dividends distributed to shareholders.

4.4 Spearman's Correlation

Below is Table 6 with the correlation analysis of the data, using Spearman's statistical test.

Table 6 – Spearman Correlation

	divjcp	lg	Lc	ls	lncg	lnce	lndl	lndb	lpa	vpa	va	ebitdaa
divjcp	1,0000											
lg	-0,0332	1,0000										
lc	0,0326	0,3215	1,0000									
ls	-0,0713	0,2008	0,7377	1,0000								
ln_cg	-0,5429	-0,0774	0,2138	0,4092	1,0000							
ln_ce	-0,4357	-0,0055	0,2754	0,3051	0,9179	1,0000						
ln_dl	-0,1786	0,3335	0,337	0,3946	0,5571	0,5429	1,0000					
ln_db	-0,5286	0,0442	0,029	0,325	0,8036	0,5571	0,5571	1,0000				
lpa	-0,6488	-0,1955	-0,2421	-0,2231	-0,1144	-0,1841	-0,0608	-0,0822	1,0000			
vpa	0,3821	0,2764	-0,0688	-0,0384	-0,2293	-0,4036	0,0786	-0,231	-0,1269	1,0000		
v/a	0,2429	0,0147	-0,3026	-0,0311	-0,375	-0,5964	0,0071	-0,2036	0,2002	0,8036	1,0000	
Ebitda/a	-0,0608	0,0609	-0,5255	-0,2379	-0,347	-0,5742	0,0197	-0,1556	0,4718	0,4991	0,8426	1,0000

Fonte: dados da pesquisa

The correlation of the variable ln_CG at –0.5429 suggests that firms that pay higher amounts of dividends and interest on equity tend to have lower working capital. This may indicate that these firms are returning a significant portion of their operational capital to shareholders. Similarly, the correlation between ln_CE and DivJCP was also negative (–0.437), which may result from aggressive dividend policies that reduce the funds available for reinvestment. This finding is consistent with the studies of Futema et al. (2009) and El Ammari (2021), who highlight that high dividend distributions reduce the resources available for reinvestment and operational capital.

The debt variables, both net and gross, also showed negative correlations with dividends and interest on equity. Gross debt (ln_DB) presented a stronger correlation of –0.5286, suggesting that firms distributing more dividends may be avoiding the accumulation of gross debt, possibly due to the economic instability caused by the COVID-19 pandemic. Ding et al. (2020) and Li et al. (2020) observed that firms tend to avoid increasing leverage during periods of instability, preserving cash by reducing dividend payments.

The correlation of 0.0442 indicates a very weak relationship between gross debt and general liquidity, suggesting that the amount of gross debt a firm holds does not significantly affect its ability to cover total liabilities with total assets. Likewise, the correlation between current liquidity and gross debt (0.0290) was also very weak, indicating that gross debt has little or no relationship with a firm's ability to meet short-term obligations using current assets.

However, the correlation of 0.3325 is more meaningful, indicating a moderate relationship between gross debt and the quick ratio. This may suggest that firms with higher gross debt depend slightly more on liquid current assets (excluding inventories) to cover their long-term obligations. During the COVID-19 pandemic, many companies faced inventory build-ups due to declining sales—particularly of non-essential consumer goods such as footwear and apparel—as documented by Nuno (2020), Coibion et al. (2020), and Sen et al. (2020).

These results are consistent with the study of Botta and Fonseca (2023), which found a reduction in liquidity indicators among Brazilian footwear companies listed on B3 between 2019 and 2021, due to the impacts of COVID-19. Regarding net debt, there was a moderate correlation with all liquidity measures, being stronger with the quick ratio. This indicates that firms with higher net debt tend to maintain good coverage of total liabilities and short-term obligations, particularly through liquid assets.

The analysis of the multiples shows a negative correlation between LPA (Earnings per Share) and DivJCP (–0.6488), indicating that firms that pay higher dividends tend to have lower earnings per share. This may occur because profits are being distributed to shareholders instead of being reinvested in the company. Meanwhile, the positive correlation of 0.3821 suggests that firms with higher book value per share tend to pay more dividends.

The correlation of –0.0608 indicates a very weak relationship between EBITDA per share and dividend payments, meaning that operational profitability (measured by EBITDA) is not a significant determinant of dividend distribution. Kriger et al. (2021) note that lower profits led to dividend cuts during the pandemic.

Overall, the correlation analysis reveals that dividend and interest-on-equity payments (DivJCP) have a complex relationship with other financial metrics. In particular, the negative relationships with working capital, capital employed, and earnings per share suggest that aggressive dividend policies—or even economic recession, as in the case of the COVID-19 sanitary crisis—can reduce reinvestment capacity and retained earnings.

On the other hand, the positive correlation with book value per share indicates that financially stronger firms are better positioned to distribute dividends. Acharya and Steffen (2020), who examined the impact of COVID-19 on corporate cash management decisions in the United States, found that high-quality firms increased their cash reserves during the crisis, reinforcing the idea that stronger firms were more capable of maintaining or adjusting dividend policies even under adverse conditions.

5. CONCLUSION

This study aimed to analyze the impact of the COVID-19 pandemic on dividend and interest on equity (JCP) distributions among companies listed on B3 in the textiles, footwear, and apparel subsector. The COVID-19 pandemic affected the world profoundly, causing changes even in consumer preferences and behaviors, especially regarding the demand for non-essential products such as clothing and accessories. Overall, companies reported several effects of the pandemic on their operations, particularly increased uncertainty in forecasts, declining demand, and rising default rates (Avelar et al., 2020; Moreira et al., 2020).

Several studies have documented reduced profitability, liquidity pressures, financial difficulties in covering debt obligations, inventory losses, and increased third-party capital costs resulting from suspended production activities—effects that strongly impacted the textiles, footwear, and apparel sectors (Carletti et al., 2020; Demirgüç-Kunt et al., 2020; Li et al., 2020; Nuno, 2020; Sen et al., 2020).

This study sought to evaluate the effect of the COVID-19 pandemic on accounting-financial indicators and on the distribution of dividends and JCP among companies in this subsector listed on B3. Through the application of statistical tests, it was possible to identify the main changes and adaptations undertaken by these firms during the pandemic period.

The results indicated that the pandemic had a substantial impact on firms' operational profitability, reflected in the significant decline in EBITDA per share. A reduction in dividend and JCP distributions was also observed, suggesting a profit-retention strategy employed to preserve working capital and ensure operational continuity during the crisis. Liquidity variables exhibited relative stability, suggesting that firms managed to maintain financial balance—possibly through emergency credit lines and adaptations to e-commerce.

The correlation analysis revealed significant negative relationships between dividend distributions and working capital, capital employed, and earnings per share, indicating that aggressive dividend policies reduced the resources available for reinvestment. On the other hand, strategic adaptation—particularly the shift to e-commerce and delivery solutions—appears to have been crucial for maintaining liquidity and operational stability, as highlighted in the literature by Santos and Nassif (2021).

This study contributes to the literature by providing empirical evidence on how the pandemic specifically affected the textiles, footwear, and apparel subsector, emphasizing the importance of prudent financial management and strategic adaptation in times of crisis. For accounting and financial practice, the findings underscore the relevance of maintaining liquidity and investing in innovation and operational flexibility to withstand adverse economic conditions.

The study has limitations, such as the restriction of the analysis to a single subsector and to companies listed on B3, which may limit the generalizability of the results to other sectors and markets. Future research may expand the scope to include different industries and countries, as well as explore the effects of specific government policies and financial support initiatives adopted during the pandemic.

The COVID-19 pandemic presented significant challenges to companies in the textiles, footwear, and apparel subsector, but it also highlighted the importance of resilience and strategic adaptation. The lessons learned during this period will be valuable for strengthening financial and operational management in future crises, promoting greater sustainability and competitiveness in times of uncertainty.

Thus, this study not only contributes to the understanding of the economic effects of the pandemic but also provides a solid basis for the development of corporate policies and strategies aimed at resilience and continuous adaptation in an increasingly dynamic and unpredictable environment.

REFERENCES

Acharya, V. V., & Steffen, S. (2020). The risk of being a fallen angel and the corporate dash for cash in the midst of COVID. *The Review of Corporate Finance Studies, 9*(3), 430–471. https://doi.org/10.1093/rcfs/cfaa013

Alencar, M. R. X., da Cruz Feitosa, M. I., Leite, A. C. R., Leal, P. H., de Oliveira, A. R. V., & Chagas, M. J. R. (2023). Corporate Governance and the COVID-19 Crisis: Market Performance Dynamics Before. *International Journal of Scientific Management and Tourism, 9(2), 1349–1368*.

Avelar, E. A., Ferreira, P. O., Silva, B. N. E. R. da, & Ferreira, C. O. (2022). Effects of the COVID-19 Pandemic on the Economic and Financial Sustainability of Brazilian Companies. *Revista Administração - UFSM, 15*(3). https://doi.org/10.5902/1983465967372

Botta, L. O., & Fonseca, M. N. (2023). Financial Health of Footwear Sector Companies During the COVID-19 Pandemic. *Revista de Gestão e Secretariado, 14*(11), 20480–20503. https://doi.org/10.7769/gesec.v14i11.1664

Brazil. (2020a, 26 de fevereiro). Coronavirus: Brazil Confirms the First Case of the Disease. Ministry of Health. https://www.unasus.gov.br/noticia/coronavirus-brasil-confirma-primeiro-caso-da-doenca

Brazil. (2020b, 20 de abril). Combating the Coronavirus: Essential Services That Cannot Stop During the Pandemic. Office of the Chief of Staff. https://www.gov.br/casacivil/pt-br/assuntos/noticias/2020/abril/enfrentamento-ao-coronavirus-os-servicos-essenciais-que-nao-podem-parar-durante-a-pandemia

Brazilian Institute of Geography and Statistics. (2020c, 16 de outubro). The pandemic was responsible for the closure of 4 out of every 10 companies that ceased operations. https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/28295-pandemia-foi-responsavel-pelo-fechamento-de-4-em-cada-10-empresas-com-atividades-encerradas

Carletti, E., Oliviero, T., Pagano, M., Pelizzon, L., & Subrahmanyam, M. G. (2020). The COVID-19 shock and equity shortfall: Firm-level evidence from Italy. *The Review of Corporate Finance Studies, 9*(3), 534–568. https://doi.org/10.1093/rcfs/cfaa014

Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). *The cost of the covid-19 crisis: Lockdowns, macroeconomic expectations, and consumer spending* (No. w27141). National Bureau of Economic Research. https://www.nber.org/papers/w27141

Costa, L. B., Pereira, I. F., & de Lima, J. A. (2021). Reflexos da pandemia da COVID-19 nos indicadores econômico-financeiros de empresas do setor de produtos de higiene e limpeza listadas na B3. *Revista Mineira de Contabilidade, 22*(2), 10–22. https://doi.org/10.21714/2446-9114RMC2021v22n2a2

Demirgüç-Kunt, A., Pedraza, A., & Ruiz-Ortega, C. (2020). Banking sector performance during the COVID-19 crisis (Policy Research Working Paper No. 9363). World Bank. https://doi.org/10.1596/1813-9450-9363

Ding, W., Levine, R., Lin, C., & Xie, W. (2020). Corporate immunity to the COVID-19 pandemic. *National Bureau of Economic Research Working Paper Series*, 27055. https://doi.org/10.3386/w27055

El Ammari, A. (2021). Do CEO duality and ownership concentration impact dividend policy in emerging markets? The moderating effect of crises period. *International Journal of Financial Studies, 9*(62), 1–21. https://doi.org/10.3390/ijfs9040062

Futema, M. S., Basso, L. F. C., & Kayo, E. K. (2009). Capital Structure, Dividends, and Interest on Equity: Evidence from Brazil. *Revista Contabilidade & Finanças, 20*(49), 44–62. https://doi.org/10.1590/S1519-70772009000200004

Krieger, K., Mauck, N., & Pruitt, S. W. (2021). The impact of the COVID-19 pandemic on dividends. *Finance Research Letters*, *42*, 101910.

Li, L., Strahan, P. E., & Zhang, S. (2020). Banks as lenders of first resort: Evidence from the COVID-19 crisis. *The Review of Corporate Finance Studies, 9*(3), 472–500. https://doi.org/10.1093/rcfs/cfaa009

Leite, M., et al. (2015). Determinants of Dividend Payments During Periods of Prosperity and Economic Crisis in Brazilian Companies. *Desafio Online, 8*(1), 68–90.

Mann, H. B., & Whitney, D. R. (1947). On a test of whether one of two random variables is stochastically larger than the other. *The Annals of Mathematical Statistics, 18*(1), 50–60. https://doi.org/10.1214/aoms/1177730491

Marcelino, J. A., Rezende, A. A. de, & Miyaji, M. (2020). Initial Impacts of COVID-19 on Micro and Small Enterprises in the State of Paraná, Brazil. *Boletim de Conjuntura, 2*(5), 101–112. https://doi.org/10.5281/zenodo.3779308

Martins, G. A., & Theóphilo, C. R. (2017). Research Methodology for Applied Social Sciences. (3ª ed.). Atlas.

Massoquetto, K., de Souza, L. P. D., Garcia, B. E. S., & dos Santos, D. C. D. (2022). What impacts did COVID-19 bring (or not bring) to the economic and financial indicators of cyclical consumer companies listed on B3? *Congresso USP de Iniciação Científica em Contabilidade*.

Mello Júnior, C. S., Vale, P. B. R. A., Bonfim, M. P., Soares, J. M. M. V., & Silva, C. A. T. (2023). COVID-19 and DVA: Impacts of the Pandemic on the Distribution of Wealth in Brazilian Companies. *Revista UNEMAT de Contabilidade, 12*(23), 68–82.

Moore, D. S., McCabe, G. P., & Craig, B. A. (2013). *Introduction to the practice of statistics* (8th ed.). W.H. Freeman and Company.

Moreira, E., et al. (2023). The Impact of the Pandemic on the Apparel Segment and the Textile Industry. *Revista GeTeC, 12*(40).

Nguyen, A. H., et al. (2021). The effect of dividend payment on firm's financial performance: An empirical study of Vietnam. *Journal of Risk and Financial Management, 14*(8), 1–11. https://doi.org/10.3390/jrfm14080368

Nuno, G. (2020). The macroeconomic impact of COVID-19: Evidence from a cross-country analysis. *IMF Working Paper*. https://doi.org/10.5089/9781513551092.001

Padhan, R., & Prabheesh, K. P. (2021). The economics of COVID-19 pandemic: A survey. *Economic Analysis and Policy, 70*, 220–237. https://doi.org/10.1016/j.eap.2021.02.012

Pettenuzzo, D., Sabbatucci, R., & Timmermann, A. (2021). Outlasting the pandemic: Corporate payout and financing decisions during Covid-19.

Setiawan, M., & Septiani, B. A. (2025). Firm performance and the determinants in the textile and textile product industry of Indonesia pre-and post-COVID-19 pandemic. *Journal of Risk and Financial Management*, *18*(1), 35.

Santos, G. G., & Nassif, V. M. J. (2021). Competitive Strategy in Retail in the Face of the COVID-19 Pandemic. *Revista de Tecnologia Aplicada, 10*(1).

Sen, S., Antara, N., Sen, S., & Chowdhury, S. (2020). The apparel industry in the post-COVID-19 world: Challenges and opportunities for garment exporters in Bangladesh. *Textile Research Journal, 90*(17–18), 1960–1974. https://doi.org/10.1177/0040517520935876

Silva, M. F. (2022). Possible Impacts of COVID-19 on Loss Allowance Estimates for Receivables and Inventory of Textile, Apparel, and Footwear Companies Listed on B3. *Congresso USP de Iniciação Científica em Contabilidade.*

Silva Junior, A., Silva, V. C. D., & Martins-Silva, P. D. O. (2022). Competitive Retail Strategy in the Context of the COVID-19 Pandemic. *Contabilidade Vista & Revista, 33*(1), 144–169.

Silva, L. L. S. D., Lima, A. F. R., Polli, D. A., Razia, P. F. S., Pavão, L. F. A., Cavalcanti, M. A. F. D. H., & Toscano, C. M. (2020). Social distancing measures in the fight against COVID-19 in Brazil: description and epidemiological analysis by state. *Cadernos de saude publica*, *36*, e00185020.

Triola, M. F. (2021). *Elementary statistics* (13th ed.). Pearson.

Zaremba, A., Kizys, R., Aharon, D. Y., & Demir, E. (2020). Infected markets: Novel coronavirus, government interventions, and stock return volatility around the globe. *Finance Research Letters, 35*, 101597. https://doi.org/10.1016/j.frl.2020.101597