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Evaluating impacts of COVID-19 on the financial performance of food and beverages industry in the UK: Case study of Nestle Plc

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#### **Abstract**

It has been established that COVID-19 affected the world economy with negative impacts on the profitability and financial performance of many businesses. This study evaluated the financial performance of Nestle Plc pre-, during, and post-COVID-19 epidemic and subsequent lockdown. The study used secondary data from the company's audited annual financial reports (2017 - 2022). Financial data was collected and analysed using a mix of analytical methods such as descriptive analysis, correlation analysis, and single ANOVA in Excel 2010. The financial ratios analysed include financial performance, profitability ratios, liquidity ratios, gearing ratios, and investors ratios. The results indicated that Nestle's financial performance was affected during the period of the COVID-19 lockdown between 2019 to 2021. However, based on the result for investor ratios (p-value = 0.708), the study states that there is not enough evidence to conclude. The study also identified limitations such as only Nestle used is not representative of the food and beverages industry as well as the number of ratios analysed. It recommended that further studies should include more players in the industry as well as the number of ratios with more companies in the food and beverages industry in the UK and perhaps outside of the UK.

Keywords: Nestle; Food and Beverages Industry; COVID-19; Pandemic; Financial Performance

# 1 Introduction

The global COVID-19 pandemic caused by the coronavirus had profound impacts on various sectors worldwide, encompassing social, economic, political, and religious systems (Verma et al., 2021). Originating in Wuhan, China, in early 2019, the virus quickly escalated to alarming proportions, leading the World Health Organization (WHO) to declare it a global public health emergency in December 2019 (Pappas, 2021).

The repercussions of the virus and subsequent lockdowns reverberated across the global business landscape in 2020. This included a significant decline in oil prices, the collapse or near-collapse of many healthcare systems, financial performance downturns, and widespread job losses, plunging societies into uncertainty (Assous and Al-Najjar, 2021).

The declaration of the pandemic prompted widespread lockdowns globally, restricting commerce and the movement of people, goods, and services (Pappas, 2021). These restrictions impacted various macroeconomic indicators, including energy prices, unemployment rates, asset and commodity prices, inflation rates, and supply chain disruptions.

Consequently, the financial performance of global organizations suffered, with many experiencing declines in profitability and significant workforce reductions. One notable trend that emerged during the lockdowns was the rapid adoption of remote work and work-from-home arrangements (Pappas, 2021). According to data from the International Monetary Fund (IMF), global Gross Domestic Product (GDP) contracted by 3.2 percent in 2020 (Syed et al., 2022). This

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contraction varied across different markets, with developed economies experiencing a 4.6 percent decline, emerging economies a 2.1 percent decrease, and developing economies a 2.0 percent downturn (Syed et al., 2022).

Various methods exist for assessing a company's financial performance, including profitability, liquidity, solvency, and activity indicators (Hung, 2020). These methods can be elucidated through models such as the Capital Adequacy, Asset Quality, Management, Earnings Quality, and Liquidity (CAMEL) model, the VAIC Model, TOPSIS Model, MCDM Model, DEA Model, and Financial Ratios Analysis Method (Sidharta and Affandi, 2016).

The significant disruption to the global economic climate has necessitated research into assessing the financial performance of the food and beverages industry in the UK, with Nestle Plc serving as a case study. The COVID-19 pandemic impacted all sectors of the UK economy, including food and beverages.

Nestle Plc stands as the leader in the food and beverages industry in the UK and globally. The sector holds a pivotal position in the UK economy, contributing 9 percent to the UK's non-financial gross value addition in 2019 (UK.Gov). However, in 2020, there was a noticeable decline of approximately 1.5 percent in productivity within the food and beverages sector and a 1.1 percent decline in productivity within the broader UK economy. This contrasted with a decade earlier, which recorded average growth rates of 0.1 percent and 0.2 percent for the food and beverages sectors and the wider economy, respectively (ONS, 2022).

According to a report by the UK Food and Drink Federation (FDD) and Santander, the food and drink sector is the largest in the country, employing over four million people and boasting a value of £100 billion, with an annual turnover of around £121 billion (Food and Drink Industry Report, 2020). Given the significance of this sector and Nestle Plc's leadership position, assessing Nestle Plc's valuation during the pandemic is imperative.

#### 1.1 Research Rationale

This study aims to evaluate the impacts of the COVID-19 pandemic on the financial performance of the Food and Beverages industry in the UK, using Nestle Plc as a case study. It also seeks to explore the strategies adopted by the company to mitigate the consequences of the pandemic while maintaining its market leadership position. This will be achieved by analyzing Nestle Plc's financial statements from 2017 to 2022, concluding, and making recommendations based on the data.

## 1.2 Research Aims

The study aims to evaluate the financial performance of Nestle before, during, and after the COVID-19 pandemic and ascertain the strategies employed to survive the pandemic while maintaining a leadership position in the industry.

# 1.3 Research Questions

To achieve the research aims, the following questions are developed:

- How did the COVID-19 pandemic affect the financial performance of Nestle Plc?
- How did the COVID-19 pandemic impact the financial ratios of Nestle Plc?
- How did Nestle Plc manage the impacts of the COVID-19 pandemic?

# Research Objectives

The research objectives are as follows:

- To evaluate the financial performance of Nestle Plc before, during, and after the COVID-19 pandemic.
- To analyse the financial ratios of Nestle Plc before, during, and after the COVID-19 pandemic.
- To ascertain the strategies adopted by Nestle Plc to manage the pandemic.

#### 1.4 Research Justification

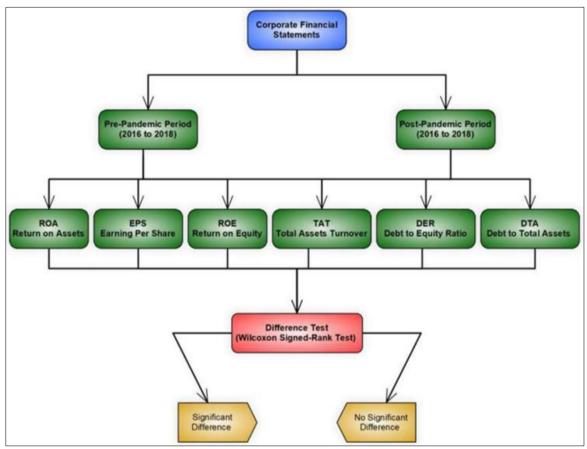
There is limited documented evidence regarding the impacts of the COVID-19 pandemic on the financial performance and profitability of the food and beverages sector in the UK. Most literature focuses on the social dimensions and job losses rather than on the financial performance of businesses. This study aims to contribute to existing literature by addressing these gaps and providing insights into managing similar challenges in the future.

## 2 Literature Reviews

This chapter delves into related literature concerning financial ratios, the impacts of COVID-19 on businesses, and the food and beverages industry in the UK. It aims to identify research gaps and formulate research hypotheses.

## 2.1 Financial Performance and Ratios Analysis

Financial performance analysis serves as a pivotal tool for stakeholders such as investors, shareholders, managers, and owners to gauge a company's success (Alviana and Megawati, 2021). Ratio analysis, on the other hand, is a critical method for assessing a company's financial health (Ross et al., 2009). Financial ratios are typically categorized into four main categories: Profitability, Liquidity, Solvency, and Activity (Savitri and Hidayati, 2022). Below is a summary of key financial ratios:



Source: Qadri et al, 2023

Figure 1 Financial Ratios

# 2.2 Profitability Ratios

**Return on Assets (ROA):** Measures a company's earnings and profitability relative to its assets. A higher ratio indicates better performance.

ROA = Net profit/Total Assets

**Earnings Per Share (EPS):** Evaluate a company's profitability per outstanding share. Higher EPS values indicate higher shareholder wealth and company returns.

EPS = Net income/Number of shares in circulation

#### 2.3 Performance Measures

**Return on Equity (ROE):** Evaluates a company's performance and measures an investor's ability to maximize investments

ROE = Company's net income/Total equity

**Total Assets Turnover Ratios**: Assess the revenue generation capability of assets.

Total Sales (or Revenue)/Total Assets

# 2.4 Leverage Measures

**Debt to Equity Ratio (DE):** Indicates an organization's ability to meet short- and long-term obligations with stock or debt. Higher ratios may signal financial risk.

DE = Total Liabilities/Total Equity

**Debt to Total Assets Ratios (DTAR):** Reveals the proportion of debt relative to total assets, highlighting leverage levels.

DTAR = Total Debt/Total assets

# 2.5 The Global Economy and COVID-19

The COVID-19 pandemic has had profound global impacts on businesses globally (Madeira et al., 2021). Shifts towards online retailers were observed during the lockdowns in various nations, including the UK, with changes in consumer behavior affecting the type and manner of food purchases (Dannenberg et al., 2020).

Nestle, as a leader in the global food and beverages industry, commands a significant market share both globally and in the UK (PWC, 2022). With a vast product portfolio and extensive workforce, Nestle plays a critical role in the industry.

According to Zou and Li (2020), almost every sector of the global economy was impacted by the pandemic. The authors investigated a few businesses in India's Guangdong Province to assess how the pandemic affected their operations and to offer practical mitigating strategies for the adverse effects. Businesses in the Guangdong Province reportedly faced significant difficulties because of the pandemic outbreak with negative impacts on operations and production. Regulations were enacted in an effort to lessen the effects, which allowed businesses to get through the challenging time before gradually returning to normal production activities.

Dannenberg et al. (2020).investigated how the COVID-19 pandemic affected the financial results of a few selected Indian companies in consumer goods, hospitality, tourism, and construction sectors listed on the Bombay Stock Exchange. In this study, descriptive statistics, trend analysis, and Wilcoxon Signed Ranks tests were used to collect and analyse secondary data. The findings revealed a significant pre- and post-pandemic difference in all the studied sectors for the parameters analysed, including total income, net sales, net profit, earnings per share, and diluted earnings per share. The tourism, hospitality, and consumer sectors saw a greater difference, but the pandemic had no impact on the food industry.

The effect of COVID-19 on corporate performance was examined by Shen et al. (2020) using financial information from publicly traded Chinese companies. They claimed that COVID-19 had a detrimental effect on corporate performance and that this effect was more pronounced when a company's investment size or sales revenue was smaller. Shen (2020) confirmed that the pandemic had a significant impact on the performance of firms in the sector in a related study on the effects of COVID 19 on the energy sector.

Xu, et al (2021) discovered in other studies that the pandemic has a significant impact on firm attributes like performance, governance structure, liquidity, and leverage. Ahmed (2020) investigated how COVID 19 affected Pakistan's stock market's performance. The pandemic's impact on market performance was found to be positively correlated with the findings. The ability of small businesses to adapt to the changes brought about by the COVID-19 pandemic was evaluated by Kubiczek and Derej (2021) through business model transformation in conjunction with dynamic capabilities related to digital technology adaptation and digital skills. The outcome demonstrated that companies were able to quickly adapt by creating strategies and mitigating actions using digital technologies.

Buczkowska (2022) investigated government assistance to 42,401 SMEs in the UK during the COVID 19 pandemic. The authors concluded that government intervention helped UK businesses survive the pandemic because 59% of UK small businesses reported losing money during the pandemic. Based on the foregoing discussion, it is determined that this is the first study using secondary data on COVID-19 and its effect on firm performance in the food and beverages sector. Additionally, this study adds to the body of knowledge about how important sectors affect the UK economy.

# 2.6 Research Hypotheses

Based on the literature review and the observed impacts of COVID-19, the following research hypotheses are formulated:

- H1: COVID-19 had a detrimental effect on Nestle revenues.
- H2: COVID-19 had a detrimental effect on Nestle's balance sheet.
- H3: COVID-19 had a detrimental effect on Nestle's profitability ratios.
- H4: COVID-19 had a detrimental effect on Nestle's liquidity ratios.
- H5: COVID-19 had a detrimental effect on Nestle's gearing ratios.
- H6: COVID-19 had a detrimental effect on Nestle's investor ratios.

# 3 Research Methodology

This chapter adopted the positivist philosophical stance and a deductive approach to explore the potential link between the COVID-19 pandemic and Nestle's financial performance.

#### 3.1 Data Collection Methods

Secondary data sourced from Nestle's audited financial statements spanning six years (2017–2022) were utilised. The stratification sampling method was employed, dividing the data into three periods: pre-pandemic (2017–2018), pandemic (2019–2020), and post-pandemic (2021–2022). Key financial metrics such as revenues, inventories, cost of sales, assets, liabilities, equities, and profitability indicators including return on equity, returns on capital employed, gearing, earnings per share, and earnings per cash were collected.

## 3.1.1 Data Analysis Methods

The collected data was analysed using a combination of financial statistics, single ANOVA, descriptive statistics, and correlation analysis.

# 4 Results

The outcomes are structured based on the designated analytical methods as delineated below:

# 4.1 Financial Reports

The findings from financial performance analyses are illustrated through tables and charts.

## 4.2 Financial Performance

# 4.2.1 Revenues, Profits After Tax, and Retained Earnings

From figure 2, revenues fluctuated in value reaching a low of £84,343 in 2020 and a high of £94,242 in 2022. A notable decline was observed from £92,568 in 2019 to £84,343 in 2020, representing an 8.89% decrease. Profits after tax ranged from £5,558 in 2018 to £11,709 in 2022, with a decline from £9,550 in 2019 to £10,945 in 2020 and further to £10,012 in 2021, indicating a 6.37% decrease in 2021. Retained earnings fluctuated, recording a low of £1,755 in 2018 and a high of £9,190 in 2017. While an increase from £1,857 in 2019 to £2,977 in 2020 was noted, a decrease to £2,029 in 2021, reflecting a 31.84% decline, was observed. Overall, the financial performance ratios depicted a decrease in revenue in 2020, along with declines in profits after tax and retained earnings in 2021.

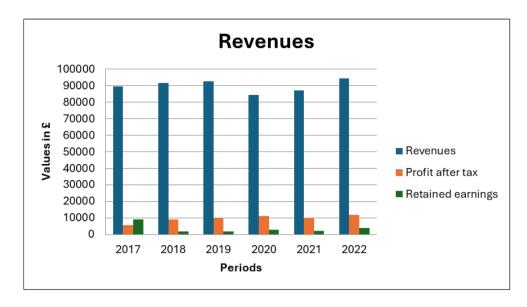


Figure 2 Graph of Revenues, profits, and retained earnings for Nestle (2017-2022)

# 4.3 Balance Sheet

Figure 3 shows the total assets for Nestle were highest in 2021 at £89825 and lowest at £80056 in 2020. There was a decrease in value of £82249 in 2019 to £80056 in 2020 which represents 4.88% in total assets. The lowest total liabilities were recorded at £52022 in 2017 and the highest value of total liabilities was seen in 2022 at £71867. Total liabilities increased from £56275 in 2019 to £58999 in 2020, representing an increase of 4.84%. The lowest total equities were £77402 in 2022 and the highest value was £87817. There was a decrease of 6.99% from 2019 to 2020 and a further decline in total equities of 8.07%. While there was a decrease in total assets and total equities, total liabilities increased in 2020, the crucial year for the pandemic.

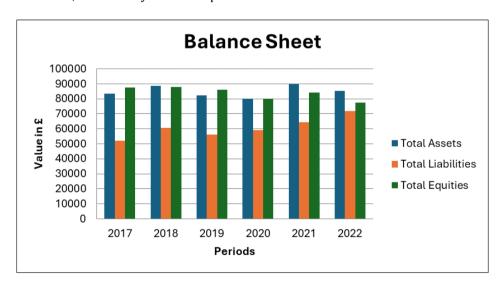


Figure 3 Balance Sheet for Nestle (2017-2022)

# 4.4 Profitability Ratios

Figure 4 shows the lowest return on equity (ROE) at 6.34% in 2017 and the highest value at 15.13% in 2022. There was a decrease in the value of return on equity from 13.68% in 2020 to 11.89% in 2021 and a further jump to 15.13% in 2022. These represent a decrease of 13.95% and an increase of 27.21% respectively. The return on capital employed (ROCE) was smallest in 2017 at 4.61% and highest in 2020 at 9.29%. There was observed a consistent increase yearly until 2020 when there was a decrease from 9.29% to 7.73% which is equivalent to a decrease of 16.83%. The operating cash profits (OCP) were lowest in 2022 at 12.61% and highest at 17.12% in 2019. Figure 4 also shows a consistent decrease in the values of OCP from 2019 through 2022. While return on equity increased in 2020, and the ratios from 2020 to 2021 all declined which could be attributed to restrictions in 2020 due to the pandemic.



Figure 4 Profitability Ratios for Nestle (2017-2022)

## 4.5 Liquidity Ratios

Figure 5 shows current ratios having the smallest value of 1.56% in 2019 and the highest value of 2.05% in 2021. There was an increase in current ratios from 2019 (1.51%) to 1.61% in 2020 and a further increase to 2.05% in 2021. This represents an increase of 2.76% and 27.86% respectively. This value declined to 1.8% in 2022 representing a decrease of 12.24%. The acid test ratio recorded its lowest value in 2022 at 1.03% and the highest value at 1.60 in 2017. There was a consistent decline in the value of acid test ratios over the years except in 2020 which recorded an increase from 1.13% to 1.43%, representing a decrease of 27.79%. While there is an increase in current ratios to 2021, acid test ratios decreased in 2020 and increased in 2021.

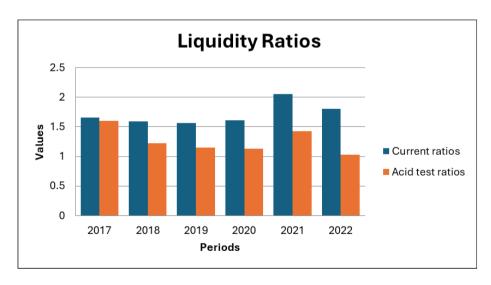


Figure 5 Liquidity Ratios for Nestle (2017-2022)

# 4.6 Gearing Ratios

From figure 6, capital gearing ratios had the smallest value of 27.21% in 2018 and the highest value of 209.15% in 2017. There was a decrease from 28.83% in 2019 to 28.00% in 2020, representing a decrease of 2.89%). An outlier was noticed in 201 in the gearing ratios at 209.15%. From Table 4.5a and Figure 4.5a, the lowest value for the interest cover ratio for Nestle was observed in 2017 at -0.01% and the highest value was 2.24% in 2020. There was a decrease in interest cover ratios of 21.04% from 2020 to 2021. The ratios show no remarkable difference in the capital gearing ratios and interest cover ratios from 2019 to 2020.

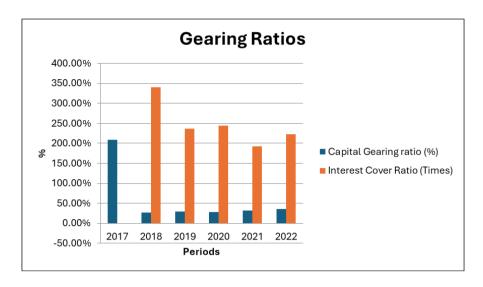


Figure 6 Gearing Ratios for Nestle (2017-2022)

#### 4.7 Investor Ratios

Figure 7 shows the lowest value of earnings per share (EPS) of Nestle was 2.31 before the COVID 19 pandemic in 2017 and the highest value was recorded as 6.06 in 2021, a year after the COVID 19 restrictions were relaxed. However, there was a fall from 6.06 in 2021 to 3.42 in 2022 which represents a decrease of 43.56%. It could be observed that earnings per cash profits were least in 2018 at 1.78 during the pandemic and greatest at 5.41 in 2020 and fell to 5.05 in 2021 and further down to 4.97 in 2022, presenting a decrease of 6.62% and 1.60% respectively. While earnings per share remained the same from 2019-2020 but increased in 2021, earnings per cash profit slightly increased in the period and both decreased in 2022.



Figure 7 Investor ratios for Nestle (2017-2022)

# 4.8 Descriptive Statistics

## 4.8.1 Revenues, Profits, and Retained Earnings

From table 1 shows that both revenues and profits after tax have platykurtic curves (kurtosis less than 3) and with a slack distribution and negatively skewed, long-left tailed. However, the retained earnings are positively skewed and leptoturtic curves (kurtosis is greater than 3).

Table 1 Revenues, profits, and retained earnings for Nestle (2017-2022

	Revenues	Profits After Tax	Retained Earnings
Mean	89878.33	9495.333	3607.5
Standard Error	1496.892	872.9793	1163.36
Median	90514.5	9781	2503
Mode	#N/A	#N/A	#N/A
Standard Deviation	3666.622	2138.354	2849.638
Sample Variance	13444117	4572557	8120435
Kurtosis	-0.74942	2.750613	4.352203
Skewness	-0.51731	-1.44306	2.049435

Table 2 shows that total assets, total liabilities, and total equities are all platyurkic with values less than 3. However, while total assets and total liabilities are positively skewed, the total equities are negatively skewed and left-tailed.

Table 2 Balance Sheet for Nestle (2017-2022)

	Total Assets	Total Liabilities	Total Equities
Mean	84907	60747.17	83865
Standard Error	1541.838	2810.597	1748.775
Median	84359.5	59905.5	85117.5
Mode	#N/A	#N/A	#N/A
Standard Deviation	3776.717	6884.528	4283.607
Sample Variance	14263588	47396732	18349291
Kurtosis	-1.50042	0.510049	-1.16301
Skewness	0.17772	0.615205	-0.75442

Table 3 shows that both current ratios and acrid test ratios have platyturtic curves and are positively skewed.

Table 3 Liquidity Ratios for Nestle (2017-2022)

	Current Ratios	Acid Test Ratios
Mean	1.711667	1.26
Standard Error	0.075957	0.087178
Median	1.635	1.185
Mode	#N/A	#N/A
Standard Deviation	0.186056	0.213542
Sample Variance	0.034617	0.0456
Kurtosis	1.943551	-0.3818
Skewness	1.534303	0.876755

From Table 4, capital gearing ratios have leptokurtic curves (greater than 3) and are positively skewed and long-right tailed while the interest cover ratio is a mesokurtic (normal)curve with a value of 1 but negatively skewed.

Table 4 Gearing Ratios for Nestle (2017-2022)

	Capital Gearing Ratios	Interest Cover Ratio
Mean	0.6005	2.056667
Standard Error	0.298438	0.460555
Median	0.30455	2.295
Mode	#N/A	#N/A
Standard Deviation	0.73102	1.128125
Sample Variance	0.53439	1.272667
Kurtosis	5.966402	3.054957
Skewness	2.440783	-1.31974

From Table 5, both earnings per share and earnings per cash profits have platykurtic curves (less than 3) but while earnings per share are positively skewed, the earnings per cash profits are negatively skewed.

Table 5 Investor Ratios for Nestle (2017-2022)

	Earnings Per Share	Earnings Per Cash Profits
Mean	3.958333	4.26
Standard Error	0.516891	0.587764
Median	3.86	5.01
Mode	4.3	#N/A
Standard Deviation	1.266119	1.439722
Sample Variance	1.603057	2.0728
Kurtosis	1.140484	0.564183
Skewness	0.667219	-1.33986

# 4.8.2 Correlation Analysis

The correlation results are interpreted according to Renato et al. (2021). Revenues and profits after tax are negligibly positively correlated while revenues and retained earnings are negligibly negatively correlated. Furthermore, profits after tax and retained earnings are negligibly negatively correlated.

Total assets and total liabilities are lowly positively correlated while total assets and total equities are very lowly correlated positively. Total liabilities and total equities are moderately negatively correlated.

Returns on equity and returns on capital employed are very highly positively correlated while returns on equities and operating capital profits are lowly negatively correlated. Returns on capital employed and operating capital profits are very lowly negatively correlated. Current ratios and acid test ratios are very lowly positively correlated. Capital gear ratios and interest cover ratios are highly negatively correlated. Earnings per share and earnings per cash profits are moderately positively correlated.

With a degree of freedom of 2, we can conclude that there is a low probability of extreme values among the groups and because the p-value is less than 0.05, we can also conclude that there is a statistically significant difference between the means of the groups. With the degree of freedom of 2, we can conclude that there is a low probability of extreme values among the groups and because the p-value is less than 0.05, we can also conclude that there is a statistically significant difference between the means of the groups. With the degree of freedom of 2, we can conclude that there is a low

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With the degree of freedom of 1, we can conclude that there is a low probability of extreme values among the groups and because the p-value is less than 0.05, we can also conclude that there is statistically significant difference between the means of the groups.

## 4.8.3 Investor Ratios for Nestle (2017-2022)

With the degree of freedom of 1, we can conclude that there is a low probability of extreme values among the groups, and because the p-value is greater than 0.05, we can conclude that we don't have enough evidence there is statistically significant difference between the means of the groups.

# 5 Discussions

Revenues increased in pre-COVID 19 years (2017-2019) and decreased in 2020, the crucial year of the lockdown and this could be attributed to decreased economic activities following the restrictions towards to end of 2019. The effects are also observable in decreased values of profits after tax and retained earnings in 2020.

While total assets decreased, total liabilities decreased due to increased current income tax liabilities and increased employee benefits liabilities in the period (Nestle, 2020). Probability ratios decreased from 2020 to 2021 and that means that a higher proportion of total assets was funded by debts, and this decreased the return on equity, return in capital employed, and operating cash profits.

The current ratio of Nestle in 2020 was £1.61 and this is bad because Nestle would have problem paying off its debts. Generally, a current ratio of 2 or higher is considered good (HBR, 2021). The acid test ratio is an indicator that the company has enough to pay off its short-term liabilities and a value greater than 1 is considered healthy for the company (Dong, 2021) The acid test ratio of Nestle in the period shows that it had enough liquidity to pay off its short-term liabilities despite the restrictions.

With a value of capital gearing ratio of 28%, Nestle could be considered low risk for both investors and lenders because its debts would make up only 28% of its equity capital. The interest cover ratio for the period shows that Nestle had a reasonable ability to meet its interest expenses out of its operating earnings. Generally, an interest cover ratio of 1.5 may be considered a minimum acceptable level (Buczkowska,2022). The earnings per share was stable which means that Nestle reduced expenses to the minimum during the period.

To respond to the challenges of the COVID-19 lockdown, Nestle remained committed to their long-term strategy by investing in research and development, brands and sustainability initiatives, and embracing digital transformation (Nestle 2022). To stay on course required constant rebalancing between growth, affordability, and meeting their commitments to shareholders and stakeholders. The company's 5-zone structure allowed them to be close to their customers and respond to shifts in their needs, while their global balanced and diversified portfolio helped them weather inflation and supply chain challenges (Nestle 2022).

Furthermore, the company stayed focused on bringing fast-paced innovations to the market and managing their portfolios. They adjusted their prices to reflect growing costs due to inflation by responsibly seeking internal efficiencies and cost-saving measures to try to limit price increases (Nestle 2022).

## 6 Conclusions

This research evaluated the financial performance of Nestle before, during, and after the COVID 19 pandemic lockdown to ascertain if the pandemic negatively impacted the performance of the company. The research extracted secondary data from the company's annual financial reports for the analysis. The analytical methods used included financial performance, descriptive analysis, correlation analysis, and single ANOVA.

The financial performance analysis showed that the various financial ratios such as revenues, profits after tax, and retained earnings were affected from 2019 to 2021, the periods of the pandemic lockdown. Therefore, hypotheses 1 and 2 could not be rejected.

The correlation analysis showed that there was a negative correlation between profits after tax and revenues, as well as the return on capital employed and profits. This results in a low return on capital employed as low as 9.29% in the period. Consequently, hypotheses 3 and 4 cannot be rejected because COVID-19 showed a decline in the profitability and liquidity ratios of Nestle.

Furthermore, the ANOVA analysis shows that the p-value for gearing ratios is positive (0.024) but less than 0.05 and statistically significant. However, the p-value for investor ratios is 0.708 which is greater than 0.05, and therefore, we can conclude that there is not enough evidence to draw our conclusions.

Following the results and the discussions above, it could be observed that during the year 2019 to 2021, the overall financial performance trend decreased. Pre- COVID 19 (2017-2018) years saw increasing trends in the financial performance and other financial ratios analysed; the COVID-19 period (2019-2020) saw a decreasing trend while there is an increasing trend after the COVID-19 era (2021-2022). Conclusively, COVID 19 negatively impacted the profitability and other financial ratios of Nestle, especially between 2020 and 2021 which were the critical years of the pandemic.

The results show that the various financial ratios have responded differently to the pandemic COVID -19, especially in 2020. Moreover, financial performance has deteriorated significantly, as evidenced by a significant increase in the value of the standard deviation in 2020 compared to 2019.

## Recommendations

Crises, by definition, have a negative impact on businesses. On one hand, companies that survive crises are better prepared for the next, and their experience and acquired skills enable them to deal with similar situations more efficiently. Therefore, how quickly the company can learn and how this knowledge is used is also crucial. On the other hand, the results of the analysis of the impact of the crisis caused by the pandemic on companies and the economy allow the stakeholders to better prepare different protective measures to prevent the impact.

Consequently, having a unit that will identify future risks and developing mitigants by all stakeholders including the government and business community is recommended. With the financial and technical resources of Nestle, the company invested in technology such as artificial intelligence, robotics, and e-commerce that tremendously helped them survive the pandemic because human involvement in the operations was limited.

# Compliance with ethical standards

Disclosure of conflict of interest

The authors have not declared any conflict of interests

#### References

- [1] Ahmed, S. Y. (2020) Impact of COVID-19 on the performance of the Pakistan stock exchange. MPRA Paper No. 101540. https://mpra.ub.uni-muenchen.de/101540
- [2] Almajali AY, Alamro SA, Al-Soub YZ. Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *J Manag Res.* (2012) 4:266. 10.5296/jmr.v4i2.1482 [CrossRef] [Google Scholar]
- [3] Alviana T, Megawati M. Comparative analysis of company financial performance before and during the COVID-19 pandemic on LQ45 index. *Finan Manag Stud.* (2021) 1:60–73. [Google Scholar]
- [4] Amalia S, Fadjriah EN, Nugraha MN. The influence of the financial ratio to the prevention of bankruptcy in cigarette manufacturing companies sub sector. *Solid State Technol.* (2020) 63:4173–82. [Google Scholar]
- [5] Assous H.F, Al-Najjar D. (2021) Consequences of COVID-19 on banking sector index: artificial neural network model. *Int J Fin Stud.* 9:67. doi: 10.3390/ijfs904 0067
- [6] Balasundaram N. A comparative study of financial performance of banking sector in Bangladesh-an application of CAMELS rating system. *Ann Univ Bucharest Econ Admin Series.* (2008). [Google Scholar]
- [7] Buczkowska, K. (2022). Local food and beverage products as important tourist souvenirs. Turystyka Kulturowa, 1(2014), 47-58

- [8] Dannenberg, P., Fuchs, M., Riedler, T. and Wiedemann, C., (2020). Digital Transition by COVID-19 Pandemic? The German Food Online Retail. *Tijdschrift Voor Economische En Sociale Geografie*, 111(3), 543–560.
- [9] Derej W and Kubiczek J (2021). Financial Performance of Businesses in the COVID-19 Pandemic Conditions Comparitive Study
- [10] Dong, Y (2021). The Impact of the COVID-19 Pandemic on the Banking Sector: evidence from China and the US. An MBA Project submitted to Jankoping International Business School, Jankoping University.
- [11] Hung, N, T (2020). Dynamic spillover effects between oil prices and stock markets: new evidence from pre and during COVID-19 outbreak. *Aims Energy*. 8:819–34. doi: 10.3934/energy.2020.5.819
- [12] Kubiczek J. and Derej W. (2021) Financial Performance of Businesses in the COVID-19 Pandemic Conditions Comparative Study. Polish Journal of Management Studies. 24(1). available from https://www.researchgate.net/publication/357539032
- [13] Kuc-Czarnecka, M., (2020). COVID-19 and digital deprivation in Poland. *Oeconomia Copernicana*, 11(3), 415–431.
- [14] Loske, D., (2020). The impact of COVID-19 on transport volume and freight capacity dynamics: An empirical analysis in German food retail logistics. *Transportation Research Interdisciplinary Perspectives*, 6, 100165.
- [15] Madeira, A., Palrão, T. and Mendes, A. S., (2021). The Impact of Pandemic Crisis on the Restaurant Business. *Sustainability* 13(1), 40.
- [16] Office for National Statistics. (2021). GDP Monthly Estimate, UK
- [17] Orazio, P., and Dirks, M. (2020). COVID-19 and Financial Markets: Assessing the Impacts of the Coronavirus on the Eurozone, Ruhr Economic Papers, No. 859, RWI- Leibniz-Institut für Wirtschaftsforschung, Essen, https://doi.org/10.4419/86788995.
- [18] Pappas N, (2021). Covid-19: Holiday Intentions during a Pandemic. Tour Manag. 84: 104287.
- [19] Renato, L. C, Rui, A.H.G, Á.L. D and Leandro, F.P (2021). The food and beverage industry in pandemic context. International Journal of Services Economics and Management. DOI: 10.1504/IJSEM.2021.10042347
- [20] Ross S.A, Westerfield RW, Jordan BD. *Pengantar Keuangan Perusahaan*. Jakarta: Salemba Empat; (2009). [Google Scholar]
- [21] Sidharta I, and Affandi A. (2016. The empirical study on intellectual capital approach toward financial performance on rural banking sectors in Indonesia. *Int J Econ Finan Issues*. 6:1247–53.
- [22] Savitri N, Hidayati S. Financial Performance Analysis of Companies in the Primary Consumer Goods Sector Before and During COVID-19. *Int J Bus Eco Strategy.* (2022) 4:49–56. 10.36096/ijbes.v4i1.307 [CrossRef] [Google Scholar]
- [23] Sharma, P., Leung, T. Y., Kingshott, R. P. J., Davcik, N. S. and Cardinali, S., (2020). Managing Uncertainty During a Global Pandemic: An International Business Perspective. *Journal of Business Research*, *116*, 188–192.
- [24] Shen, H., Fu, M., Pan, H., Yu, Z., and Chen, Y. (2020). The Impact of The COVID-19 Pandemic on Firm Performance. *Emerging Markets Finance and Trade*, *56*(10), 2213–2230. https://doi.org/10.1080/1540496X.2020.1785863
- [25] Syed U, Q, Zhiqiang, M¹, Mohsin, R, Mingxing L., Safwan, Q, Chengang, Y. and Haoyang, X (2023). COVID-19 and financial performance: Pre and post effect of COVID-19 on organization performance; A study based on South Asian economy. Frontier in Public Health
- [26] Verma P, Dumka A, Bhardwaj A, Ashok A, Kestwal MC, Kumar P. A (2021). Statistical analysis of impact of COVID19 on the global economy and stock index returns. SN Comput Sci. 2:1–13. doi: 10.1007/s42979-020-00410-w
- [27] Xu, L., Yang, S., Chen, J., and Shi, J. (2021). The Effect of COVID-19 Pandemic on Port Performance: Evidence from China. *Ocean and Coastal Management*, 209 (2021), 105660. https://doi.org/10.1016/j.ocecoaman. 2021.105660
- [28] Zou and li. (2020). The Impact of The COVID-19 Pandemic on Firms: a Survey in Guangdong Province, China. Global Health Research and Policy, 5(1), 1–10. https://doi.org/10.1186/s41256-020-00166-z