ASIAN JOURNAL OF ECONOMICS AND BUSINESS MANAGEMENT
2022, VOL. 1, NO. 2, 51 – 57
https://doi.org/10.53402/ajebm.v1i2.84

OPEN ACCESS

Comparisonal analysis of profitability and leverage of hotel, restaurant and tourism sub sector companies before and during covid-19 pandemic

Nurul Rizki Yanti*
Agrianti Komalasari
Kiagus Andi

Economic and Business Faculty, Lampung University, Lampung, Indonesia

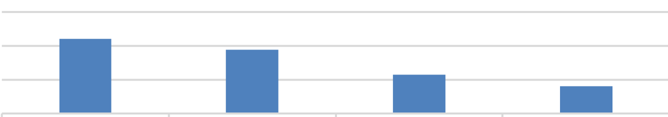
ABSTRACT
The worldwide economy, particularly Indonesia's, has been negatively impacted by the COVID-19 pandemic. Some of the industries most impacted by the COVID-19 epidemic are those in the hotel, restaurant, and tourism industries. This study uses profitability and leverage to examine whether there are differences in the profitability and leverage situations before and after the COVID-19 epidemic. There are discrepancies between the findings of earlier studies, notably those by Darmawan et al., (2021), who found no differences between profitability before and during the COVID-19 epidemic. In this research, a comparative descriptive methodology and a quantitative technique were applied. From 2018 through 2022, financial statistics are used in this analysis. Purposive sampling was used to collect samples, and 25 companies that match the criteria were found. When data were not normally distributed, the non-parametric Wilcoxon signed rank test was employed instead of the paired sample t-test as the normality test. The study's conclusion demonstrates the leverage and profitability of businesses in the travel, dining, and hospitality sectors both before and after the COVID-19 epidemic. In the 25 organizations that were analyzed, the results revealed a significant value (α) of 5% and a decline in the value of profitability and leverage. This indicates that the Indonesian hotel, restaurant, and tourism sub-sector businesses have suffered as a result of the COVID-19 outbreak. This study's findings are anticipated to be used to investment decision-making. Additionally, this research can be used as information by businesses facing profitability and leverage issues before and during the pandemic so that they can take immediate action to maintain their operations going forward.

KEYWORDS
Profitability; Leverage; Pandemic; Covid-19; sub sectors hotel, restaurant, and tourism

Received: 28 July 2022
Accepted: 5 August 2022
Published: 13 August 2022

Introduction

The current Covid-19 pandemic has made the hotel, restaurant, and tourism sub-sector lax and declined so significantly that it even had an impact on the company's stock price, which fell. This is because different governments have implemented limits on some corporate operations, travel, and aviation operations. In terms of the company's value, this sub-sector is perhaps the most severely impacted by Covid-19's negative consequences. This year is the year of recovery from the covid-19 epidemic, as can be seen in the graph below, which displays the PBV level of the companies the hospitality, dining, and travel industries from 2018 to 2021. The PBV level has reduced, with the lowest PBV rate occurring in 2021.



	2018	2019	2020	2021
PBV	4.41	3.78	2.31	1.61

Figure 1. PBV Level in the hospitality, dining, and travel industries on the IDX

Financial ratios, which in this context refer to comparing the figures in financial statements or between financial statements, are important for effective financial statement analysis (Kasmir, 2016). In this study, a return on assets is needed to compare the revenues of several companies. The profit ratio is a measure that gauges a business' ability to turn a profit over a certain time frame and provides an overview of how effective the management is at running its operations. The degree of profitability reveals the company's strategy for calculating profit (Kasmir, 2016).

CONTACT Nurul Rizki Yanti nurulrizkiyanti7@gmail.com

The ratio serves as an estimator of the risk that the firm faces; therefore, when the leverage is high, the company's investment risk is increasing. Conversely, when leverage is minimal, so is the investment risk for the company. The high leverage number is a sign that the company is insolvable when its entire debt exceeds its total assets. Investors should therefore think twice before investing in unsolvable enterprises because it will be assumed that the company's assets are derived from debt, making it unlikely that the company would be able to pay down its debts. The capital structure ratio contrasts long-term debt with equity. Retained earnings, share capital, and reserves are all examples of possible capital sources. Companies must look for efficient funding when obtaining outside financing. If the capital structure is in good shape, this may occur (Harjito & Martono, 2013). The proportion of a mix of preferred stock, debt, and common equity that maximizes a stock's intrinsic value is the optimal capital structure, according Brigham & Houston 2019.

The COVID-19 epidemic has primarily affected hospitality, dining, and tourism businesses. Implementing the Large-Scale Social Restriction (PSBB) strategy is one of the government's attempts to stop the coronavirus epidemic. Due to people spending more time at home, there has been a major decrease in the number of people visiting restaurants and hotels. More than 2,000 hotels and 8,000 eateries have closed as a result of the pandemic. The possible loss of revenue as a result of the closure from January to April 2020 is IDR 70 trillion, of which IDR 30 trillion will go to the hotel industry and IDR 40 trillion to the restaurant industry. This industry had a fall in revenue, which was also correlated with a decrease in the number of foreign tourists visiting Indonesia. The Central Statistics Agency predicts that Indonesia will have much fewer foreign visitors in 2020 than it did in 2019. In February 2020, there were 30.55 percent fewer foreign visitors to Indonesia than there were at the same period last year. (Rahmah & Novianty, 2021)

(1) Is there a difference between profitability during and before the COVID-19 epidemic, according to the study's problem statement? and (2) Based on the description provided above, is there a difference in leverage following the initial COVID-19 pandemic. The factors used in this study's development of Lovei (2021) research on liquidity (CR), profitability (ROA), and solvency (DER). The first area where this study differs is in the measurement of the leverage variable using the debt to asset ratio (DAR). The second is found in the sub-sector of hotels, restaurants, and tourism that makes up the research sample. The third is found in the observational data used in this analysis, which were derived from the financial report data for 2018–2021. In this study, we looked at how profitability and leverage changed following the initial COVID-19 virus.

Literature review

Signal Theory

A signal, according to Brigham & Houston (2019), is a decision made by management of a firm to inform prospective investors of how management sees the company's prospects. The announcements linked to accounting information, which often refer to the company's financial results, serve as a hint about the future. Investors will use this information as a signal to decide what to invest in. When the announcement is made, it is anticipated that the market would respond positively if it contains a positive value (Jogiyanto, 2017)

According to signaling theory, businesses are willing to share financial statement information with third parties. This is done as a result of misinformation being shared between the business and outside stakeholders, specifically creditors and investors. The availability of information is directly tied to signaling theory. The most crucial aspect of evaluating a firm for investors to make decisions is its financial statements.

The business's strong prospects are demonstrated by its excellent profitability. Investors react favorably to these signals because they assume that businesses with strong profitability and growth will pay out substantial dividends, which raises the value of the business. A corporation may receive a favorable signal when it comes to the utilization of debt. Companies with high intrinsic value are those who dare to finance these ventures with outside funding.

Profitability

Profitability is the capacity of a company to make a gain in terms of sales revenue, net assets, and own equity. (R Agus Sartono, 2010). By comparing the profit made during that time period with the total assets of the organization, profitability is used to gauge how well a company uses equity. A profitability ratio used to determine a company's profits in relation to all resources or all assets is called return on assets. This ratio evaluates how well a business manages its assets. Profitability shows the quality of the company's management performance. With the effective use of equity, the budget provided by the company will be reduced, therefore the company can save money and have sufficient funds to carry out its business (Wulandari et al., 2022).

$$\text{Return on Asset Ratio} = (\text{Net Profit} : \text{Total Assets}) \times 100\%$$

Leverage

The ratio of debt to equity used to fund a company's assets is known as leverage. (Weston & Copeland, 1992) Leverage or purported solvency Solvency is a measure of the company's risk, and when leverage is high, it indicates that the company's investment risk is increasing. Conversely, when leverage is minimal, so is the investment risk for the company. The corporation is deemed to be insolvable when its total debt exceeds its total assets, as shown by the high leverage value. Investors should therefore think twice before investing in unsolvable enterprises because it will be assumed that the company's assets are derived from debt, making it unlikely that the company would be able to pay down its debts.

Methods

The population of this study consists of up to 25 companies from the hotel, restaurant, and tourism subsector that will be listed on the Indonesia Stock Exchange between 2018 and 2021. Purposive sampling is the method of sampling that is employed. The following list of sample criteria was employed in this study: (1) The company is a member of the hotel, restaurant, and tourism sub-sector companies listed on the Indonesia Stock Exchange in 2018–2021; (2) The company publishes financial statements in Rupiah currency to eliminate from the sample companies that issue financial statements in Dollars; and (3) The company fully discloses the research-related data during the period of 2018–2021.

The sort of data employed in this study is quantitative data, namely secondary data in the form of numerical data that will be statistically processed and then analyzed. With the data collection method with the documentation method, namely by gathering and reviewing secondary data for the hotel, restaurant, and tourism sub-sector companies published by the Indonesia Stock Exchange in 2018-2021, the annual financial statements of the hotel, restaurant, and tourism sub-sector companies listed on the Indonesia Stock Exchange for the years 2018–2021 are the secondary data source used.

Table 1. Research sample details

Description	Total
Hotels, restaurants and tourism sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2018-2021	49
(-) Companies that do not issue complete financial statements during 2018-2021	(24)
Total companies that can be used as reserch samples	25
Sample period	4
Total sample	100

Source: Processed Data, 2022

If the data are regularly distributed, the paired sample t-test is used for hypothesis testing; otherwise, a non-parametric Wilcoxon signed rank test is utilized. In this investigation, the following operational definitions and measures were used:

Profitability

Profitability, according to Wulandari (2013), is the ability of the business to make the most money possible from sales, total assets, and investment income. The calculation of profitability can be done using ROA:

$$\mathrm{ROA} = \frac{\text{Net Profit } (t)}{\text{Total Assets } (t)}$$

t=year under study

Leverage

As according Weston & Copeland (1992), solvency (leverage) is a measure of what kind of a firm's profits are funded with debt as opposed to own capital. the ratio used to assess the relationship between total debt and total assets. The debt-to-asset ratio is one of many metrics used to assess leverage (DAR). The debt to asset ratio is a measure of how well the financial profits can fund its mid- and lengthy liabilities. As leverage value rises, the company's assets are better able to meet its medium- and long-term obligations; this signals that the company's level of investment risk is rising. Leverage indicates a company's ability to pay off all of its debts in the case of a single liquidation. A company's leverage reveals its capacity to settle all of its debts in the event of a single liquidation. According to Weston & Copeland (1992), the debt ratio is calculated as follows:

$$DAR = \frac{\text{Total Debt } (t)}{\text{Total Assets } (t)}$$

t = year under study

Results

Descriptive Statisics

The highest values, lowest values, mean values (mean), and variance numbers from Profitability and Leverage are utilized to describe a data set using descriptive statistical analysis. Following are the findings from the data collected:

Table 2. Descriptive statistics

Ratio	Time	N	Min	Max	Mean	Std. deviasi
ROA	Before pandemic	50	-0.1748	0.2605	0.025444	0.0595489
	During pandemic	50	-0.2575	0.0936	-0.049586	0.0597006
DAR	Before pandemic	50	0.0003	0.7770	0.351705	0.1705029
	During pandemic	50	0.0427	0.8847	0.405760	0.2061953

Source: Processed Data, 2022

In 2019, the profitability variable had a minimum value at PT. Anugerah Kagum Karya Utama Tbk of -0.1748 and a maximum value at PT. Indonesian Paradise Property Tbk of 0.2605 before the pandemic. The standard deviation for this variable is bigger than the average value, with an average value of 0.025444 and a standard deviation of 0.0595489 respectively (mean). This shows that the mean value cannot be regarded as a comprehensive representation of the facts. The profitability variable during the pandemic has a minimal value at PT. Tirta Nusantara Tbk Destinations in 2020 and a maximum value at PT. Construction of Graha Lestari Indah Tbk in 2021. The minimum value is -0.2575, and the highest value is 0.0936. This variable's average value is -0.049586 and its standard deviation is 0.0597066, meaning that the standard deviation value is higher than the average value (mean). As a result, the mean value cannot be regarded as a representative of the entire set of data.

The minimum leverage value prior to the pandemic was 0.0003 at PT. Intikeramik Alamasri Industri Tbk in 2019, and the greatest leverage value prior to the pandemic was 0.7770 at PT. This variable's average value is 0.351705 and its standard deviation is 0.1705029, meaning that the standard deviation is less than the average value (mean). This suggests that the mean value can be used to represent the data as a whole. While the maximum leverage value prior to the pandemic was 0.8847 at PT. Tirta Nusantara Tbk Destinations in 2021, the leverage variable during the epidemic had a minimal value of 0.0427 at PT. Sanurhasta Mitra Tbk in 2020. This variable's average value is 0.405760 and its standard deviation is 0.2061953, which indicates that the standard deviation is less than the average value (mean). This suggests that the mean value can be used to represent the data as a whole.

Paired Sample t-test

The paired sample t-test findings on the profitability, leverage, and capital structure variables are as follows:

Table 3. Paired Sample t-test

Ratio	Time	Mean	Sig. (2-tailed)	Conclusion	Desc
DAR	Before pandemic	0.3517	0,001	There is a difference	Supported
	During pandemic	0.4057			

Source: Processed Data, 2022

The paired sample t-test is used because this study analyzes profitability and leverage ratios before and during the Covid-19 epidemic. The paired sample t-test was used to see whether various treatments or environmental factors would produce inconsistent outcomes on average statistically. When only one set of people needs to have their data collected on two separate occasions, the paired sample t-test can be used. If the sig (2 tailed) value is smaller than 0.5, then there is a significant difference between the two scores. (Julie, 2011)

Table 3 shows that the average leverage ratio increased both before and during the COVID-19 pandemic, which means that 25 enterprises saw an increase in leverage from the time before to the time of the epidemic. -19, which indicates a difference between the leverage value before and during the COVID-

19 pandemic, with a significance value of 0.001. This indicates that, in contrast to before the epidemic, businesses now tend to use debt as a source of capital.

Wilcoxon Signed Rank Test

The results of the Wilcoxon signed rank test are as follows:

Table 4. Wilcoxon Signed Rank test

Rasio	Time	Sig. (2-tailed)	Conclusion	Desc
ROA	Before pandemic During pandemic	0,000	Terdapat pebedaan	Terdukung

Source: Processed Data, 2022

Wilcoxon signed rank test carried out if the research data is not normally distributed. As well as paired sample t-test, this test is also for know the difference in a study different treatments or conditions. According to Rahmah & Novianty (2021) if asymp. Sig. (2-tailed) < 5% have means there is a different between before and during covid-19, if asymp. Sig. (2-tailed) > 5% have means there is no different between before and during covid-19.

Based on table 4, it can be seen that there was asymp. Sig. (2-tailed) < 5% in the profitability ratio before and during the COVID-19 pandemic, with a significance value of 0.000 which means there is a difference in the value of profitability before and during the covid-19 pandemic. This means that during the Covid-19 pandemic, company profits tend to change from before the Covid-19 pandemic.

Discussion

Differences in Profitability Before and During the Covid-19 Pandemic

The Wilcoxon signed rank test findings are presented in Table 3 and have a significance value of 0.000, which is less than 0.05. According to the test results, there was a difference in profitability (ROA) between the hotel, restaurant, and tourism subsector in 2018–2021 before the covid–19 pandemic and during it.

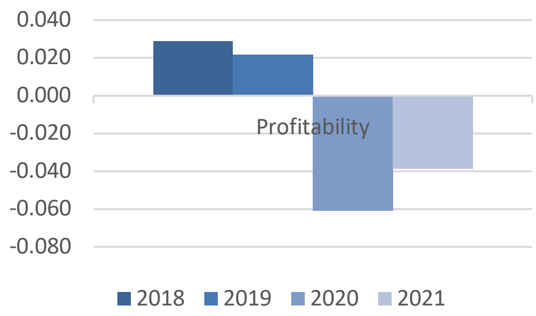


Figure 2. The development of average profitability and leverage

According to the graph in Figure 2, profitability in the hotel, restaurant, and tourism subsectors was included in poor criteria based on assets ratio prior to and during the COVID-19 virus because the average rate of return prior to and during the COVID-19 pandemic has fallen. This is due to the company's struggles during the pandemic, when the introduction of a lockdown policy caused businesses in the hospitality, dining, and travel industries to cease operations, causing the company to incur losses that led to a drop in company profits in the years that followed. The post-covid-19 recovery's drop in what asset turnover is worth shows that the businesses in the hotel, restaurant, and tourism subsectors are struggling. the results of this study are supported by previous research conducted by Giovani et al., (2022) which states that there are differences in profitability before and during the covid-19 pandemic.

Differences in Leverage Before and During the Covid-19 Pandemic

Table 2 paired sample t-test findings display a significant value of 0.001, which is less than 0.05. The test results reveal a difference in leverage (DAR) between the hotel, restaurant, and tourism sub-sector in 2018–2021 before and after the covid–19 epidemic. The hotel, restaurant, and tourism subsectors' leverage ratio, as determined by the debt to asset ratio, is shown in the following graph before and after the covid-19 pandemic.

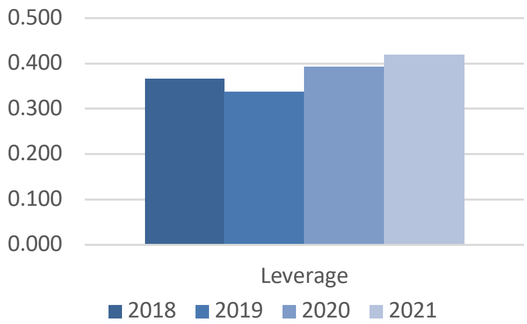


Figure 3. The development of average profitability and leverage

The graph in Figure 3 shows that leverage in the hotel, restaurant, and tourism industry is included in the Good Criteria by comparing the ratio of liabilities during and before the Covid-19 epidemic because the average debt used by the company before until the time of the covid-19 pandemic has increased. This is the impact of policy easing during the post-COVID-19 recovery period, which allows the economy to begin to recover and allows companies to manage their assets optimally, so that these assets make a strong contribution to guaranteeing their debts. Therefore, since the period before the COVID-19 pandemic until the time of the pandemic, there has been an increase in the debt-to-asset ratio. The debt-to-asset ratio increased during the post-covid-19 recovery, suggesting that businesses in the hospitality, dining and travel industries are becoming healthier. the results of this study are supported by previous research conducted by Ibrahim et al., (2021) which states that there are differences in leverage before and during the covid-19 pandemic.

Conclusion

Based on the results of the research that has been done, it can be concluded that there is a significant difference between profitability before and during the pandemic, with a significance level of 0.000 or <0.05 for companies in the hospitality, dining, and tourism industries listed on the Indonesia Stock Exchange in 2018– 2021. There is a significant difference between leverage before and during the covid-19 pandemic, with a significance level of 0.001 or <0.05 for companies in the hospitality, dining, and tourism industries listed on the Indonesia Stock Exchange in 2018–2021.

this means that there are different levels of business profits before the COVID-19 virus based on the results of tests and discussions that have been carried out regarding comparative analysis of profitability and leverage on companies in the hospitality, dining, and tourism industries listed on the Indonesia Stock Exchange in 2018– 2021. This shows that the company's capacity to generate profits experienced differences between before and during the covid-19 pandemic, which was caused by the policies imposed by the government when the COVID-19 pandemic first broke out, which caused companies to experience restrictions in managing the company, which resulted in a decrease in the level of profits earned by the company. The difference in the Leverage of the hotel, restaurant and tourism sub-sector companies means that there is a difference between the debt-to-asset ratio before and during the COVID-19 epidemic. This is the impact of policy easing during the post-COVID-19 recovery period, which allows the economy to begin to recover and allows companies to manage their assets optimally, so that these assets make a strong contribution to guaranteeing their debts. which makes companies tend to use debt as a source of corporate funding.

The limitations in this study are that this study only uses profitability and leverage with ROA and DAR measuring instruments, besides that the research sample used in this study is limited, only hotel, restaurant, and tourism sub-sector companies listed on the Indonesian stock exchange. and also the research period used is still quite short, namely 2018 to 2021.

References

Brigham, E. F., & Houston, J. F. (2019). *Dasar-Dasar Manajemen Keuangan Buku 1* (14th ed.). Salemba Empat.

Darmawan, A., Jasuni, A. Y., Putra, B. R., & Lestari, F. (2021). Comparative Analysis of Company Profitability in The Pandemic Time With 2 Years of Pre-Pandemic. *International Conference on Economics, Management, and Accounting*, *2021*(June 2020), 425–441. https://doi.org/10.11594/nstp.2021.1047

Giovani, R., Aminuddin, R. H., Alfaridzky, M., Putri, F. L., Aquilera, L., & Bayunitri, B. I. (2022). COMPARATIVE ANALYSIS OF PROFITABILITY COVID-19 IN THE COMPANY SECTOR FOOD AND BEVERAGES ARE LISTED IN INDONESIA STOCK. *Central Asia and The Caucasus*, *23*(1), 3874–3879.

Harjito, A., & Martono. (2013). *Manajemen Keuangan Edisi 2* (2nd ed.). Ekonisia.

Ibrahim, I. H., Maslichah, & Sudaryanti, D. (2021). ANALISIS PERBANDINGAN KINERJA KEUANGAN PERUSAHAAN SUB SEKTOR ROKOK YANG TERDAFTAR DI BURSA EFEK INDONESIA SEBELUM DAN SAAT PANDEMI COVID-19. *E-Jra*, *10*(09), 42–54.

Jogiyanto, H. (2017). Teori portofolio dan analisis investasi (edisi Kesebelas). In *Yogyakarta: BPFE* (8th ed.). BPF.

Julie, P. (2011). *SPSS survival manual: A step by step guide to data analysis using the SPSS program* (Allen & Unwin (eds.); 4th ed.).

Kasmir. (2016). *Analisis Laporan Keuangan*. RajaGrafindo Persada.

Lovei, C. (2021). *Analisis Perbedaan Likuiditas, Profitabilitas, dan Solvabilitas Sebelum dan Saat Pandemi Covid-19 PT. Asia Sejahtera MINA Tbk Tahun 2018-2019.*

R Agus Sartono. (2010). *Manajemen keuangan Teori dan Aplikasi* (Keempat). BPFE.
Rahmah, I., & Novianty, I. (2021). Comparative Analysis of Financial Distress Before and During the Covid-19 Pandemic: Empirical Ev. *International Journal of Business, Economics and Law*, *24*(5), 216–222. https://www.ijbel.com/wp-content/uploads/2021/11/IJBEL24.ISU-5-847.pdf
Weston, J. F., & Copeland, T. E. (1992). *Managerial finance* (9th ed.). Dryden Press.
Wulandari, D. R. (2013). Pengaruh Profitabilitas, Operating Leverage, Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Intervening. *Accounting Analysis Journal*, *2*(4), 455–463. https://doi.org/10.15294/aaj.v2i4.4172
Wulandari, A. C., Oktavia, R., Widiyanti, A., & Indra, A. Z. (2022). Analisis Pengaruh Leverage, Average Collection Period, Sales Growth dan Profitabilitas Terhadap Financial Distress. *E-journal Field of Economics, Business and Entrepreneurship (EFEBE)*, *1*(1), 47-58.