**Global Journal of Accounting and Economy Research**
*ISSN: 2319-443X • Vol. 3, No. 1, 2022, pp. 83-105*

*https://doi.org/10.46791/gjaer.2022.v03i01.05*

ARF INDIA
Academic Open Access Publishing
*www.arfjournals.com*

# THE SALES VOLUME AND OPERATING COSTS AS KEY INFLUENCING FACTORS IN COVID-19 PANDEMIC ERA

**Lesi Hertati[1*], Lilis Puspitawati[2], Rilla Gantino[3] and Meifida Ilyas[4]**

[1]Lecturer in Accounting, Indo Global Mandiri University -Indonesia
[2]Lecturer of Accounting University Computer-Indonesia
[3]Esa Unggul University Accounting Lecturer -Indonesia
[4]Accounting Lecturer at Satya Negara University, Indonesia
[*]Corresponding author, Email: lesihertati@uigm.ac.id

Received: 20 November 2021; Revised 1 & 8 January 2022;
Accepted: 15 January 2022; Published: 20 April, 2022

**Abstract**

The importance of financial statements to find out various cash flows during the company's operational activities which are made systematically and analyzed by various methods that describe and show the financial position of the company itself in a certain period. The results of the study confirm that all sales volume variables and in assessing a company's financial performance can be used to determine how much the company's profits are by comparing profits in a certain year with profits before or after. Furthermore, the results of the study show that the resilience of the food and beverage industry can also be seen from its still high utilization during the pandemic. The utilization of the food and beverage industry is around 89%. High utilization indicates that the productivity of the food and beverage industry is still running well. The demand is increasing, both in the domestic and foreign markets. However, the food and beverage industry faces a number of challenges to boost its performance during the pandemic. In addition, the government can adopt companies that can work effectively and efficiently, of course, it requires a very good work plan. The public can measure the success of a company by assessing its financial performance, this can help the company to evaluate and see its strengths and weaknesses in order to make corporate financial decisions.

***Keywords:*** Sales Volume, Operating Expenses, Net Profit , Covid-19.

## 1. INTRODUCTION

Covid-19 has made threats not only to the health sector of every all humans on earth but all sectors in the world are affected. The Covid-19 pandemic has threatened human life, so it is hoped that all humans will keep their distance to minimize the spread of the virus that is deadly to humans. As a result of the

Covid-19 pandemic, the weakening level of trade in all sectors, so that the level of state income fell and weakened sales of goods that were not too important. In addition, the Covid-19 pandemic is also a problem for companies because it will cause business plans to not run effectively which will affect the company's performance. Companies must compete to improve company performance in order to compete with other companies that aim to maintain their existence, especially since the massive spread of the Covid-19 outbreak has forced the alertness of all countries to increase. In a Covid-19 pandemic like this, of course, company management must be able to make the right decisions and must be able to minimize risks that are likely to occur, one way is by analyzing financial performance in order to find out the condition of a company through financial reports (Amelya *et al.*, 2021).

The company's ability can be seen from the sales results so that the financial statements increase (Irham, 2018). The financial performance of a company is reflected in the financial statements that continue to increase. Reports that show the company's current financial condition or within a certain period are called reports (Kasmir, 2018). By knowing the company's financial performance if its finances are in difficult conditions, the company can make decisions to improve the company's performance in order to increase future profits (Rohmat & Suhono, 2021). Statements from Hikmah *et al.* (2020), Risyana and Suzan (2018), and Awunyo and Badu (2012) reveal that the goals of one company with another company will be different, but in genera, the goal of a company is to obtain a higher profit. As much as possible in maintaining the survival of the company so that activities within the company run well, the company must work well together in order to achieve the agreed goals.

The company runs a business with the aim of achieving long-term profit, the benchmark for the company's success is the creation of profit from operational activities from trading in order to gain profits so that the company is able to compete fairly.

The health crisis and the economic slowdown during the Covid-19 pandemic caused many business sectors to slump. However, some industries, such as the food and beverage industry, still have resilience in the midst of sluggish public purchasing power. Due to the Covid-19 pandemic, companies with small capital automatically went bankrupt. The health crisis and economic slowdown have caused a number of industries to slump. One that still survives is the food and beverage industry (Sri Mulyani, 2021). This condition can be seen from its performance which is still growing positively in the last year. Throughout 2021, the community's need for the food and beverage industry was 2.45%, due to the world being grieving due to the emergence of the Covid-19 pandemic. The food and beverage industry is not the only one that has experienced growth in the past year. The chemical industry, mining as well as traditional medicine, and the base metal industry also recorded positive performance during the corona pandemic. Both sectors were also able to record high growth over the past year. However, only the food and beverage industry has consistently increased growth since the second quarter of 2020 (Yudhisthira, 2021).

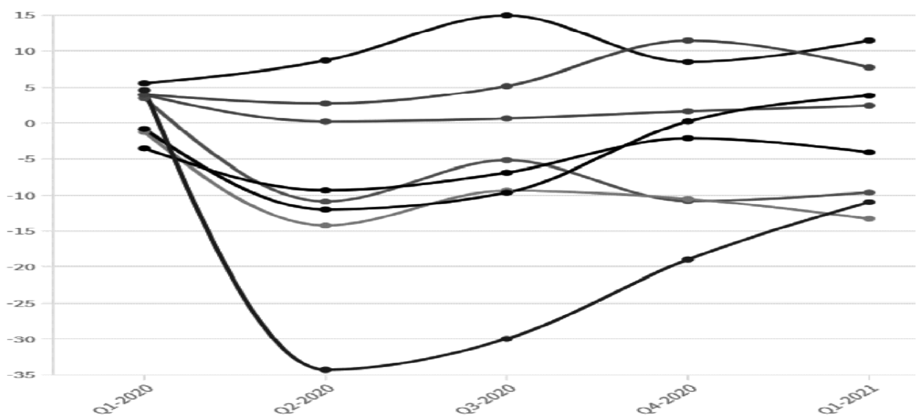


**Figure 1: Growth of the Manufacturing Industry Sector in Indonesia Quarter 2020 – 2021**

*Source:* Central Bureau of Statistics in (Yudhisthira, 2021)

Household consumption began to improve until the first quarter of 2021, but the figure still fell by 2.23%. The performance of the food and beverage industry is still positive in the midst of weak people's purchasing power because their products are still a priority during the corona pandemic. The report by the consumer survey agency NielsenIQ shows that the contribution of Indonesian consumer spending on food spending reached 22% in the first quarter of 2021 (Yudhisthira, 2021). Every company is definitely required to maintain the quality of the products they sell in order to attract the attention of consumers by calculating all operating costs and sales volumes obtained to achieve optimal net profit as well as manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange. Manufacturing companies in the food and beverage sub-sector are the most developed companies compared to other manufacturing companies because they have a fairly high growth rate and can survive in the long term.

The consumptive lifestyle of the Indonesian people and the very high population also support industrial growth in the food and beverage sub-sector. Food and beverage companies are companies that produce food and beverage products which are then traded and create a profit. Various kinds of companies in the food and beverage industry sector are increasingly competing in increasing sales volume to increase company profits. If the activity of selling products (goods or services) is not managed properly, it can harm the company because the expected sales targets are not achieved and revenue will decrease. Sales are also a source of company income, the greater the sales, the greater the income earned by a company. In addition, companies also sometimes have to reduce operating costs to get a more optimal profit. Cost is one of the sources of information for the company's strategic analysis. Basically, the problem that often arises is that the cost planning is not in accordance with what actually happened. High operating costs will make profits decrease, and vice versa if costs are low, it will increase even more. So to obtain maximum profit the company needs to pay attention to the costs incurred and control them effectively so that the company can achieve profits in accordance with what the company wants to achieve.

In achieving the company's profit will not be separated from sales and costs, including operational costs. Net income comes from transactions of income, expenses, gains and losses. These transactions are summarized in the income statement (Susilawati & Mulyana, 2018). Net income is the difference between all income and gains total expenses and losses. According to Caballero and Solano (2012), net income is profit derived from transactions of income, expenses, surplus, and losses. Net income can be measured by the difference between profit before tax and tax. It can be concluded that net income is a component used by company management to assess the company's performance for one year by looking at the difference in profit before tax minus income tax during the accounting period. According to Rohmat and Suhono (2021), there are three factors that can affect net income, namely, costs, selling prices, and sales or production volumes. From these several factors, this research only limits two factors, namely sales volume and operational costs. Sales and costs are very influential on net income. Increased sales and efficient costs should have an effect on increasing profits earned by the company and vice versa.

This complex relationship shows that increased sales volume, efficient costs, and increased net income will bring huge profits for the company (Susilawati & Mulyana, 2018). There are many ways that can be taken to obtain maximum net profit, one of which is to increase the company's sales volume. Munawir (2018) argues that in order to achieve maximum net profit in planning and realization, management can take various steps, one of which is by increasing sales volume as much as possible. According to Aliminsyah and Padji (2017), the company can achieve total sales in one period is called sales volume.There is a close relationship between sales volume and the increase in the company's net profit because profits will arise if product sales are greater than the costs incurred. The main factor that affects the size of the profit is income, while income can be obtained from the sale of the company's products (Risyana & Suzan, 2018). This is also in accordance with Horngren's opinion in (Dewi, 2018) that the relationship is said to have a perfect relationship when sales volume increases, net income will also increase, and vice versa if sales volume decreases, net income will also decrease.

Operational costs are costs generated by a company, therefore, the higher the level of company activity, the higher the operating costs. This is because operating costs are direct financing of company activities, so managing operating costs can be done separately by providing the company's activities (Jusuf, 2017). The increase in the company's operational activities, the higher the activities that will be carried out by a company so that it has an impact on the high absorption of costs that will be incurred in supporting its operational activities. If the company can reduce operating costs as low as possible, a company will be able to increase net income, and vice versa if the increase in sales numbers will result in an increase in profit income by emphasizing the costs as low as possible. All of the company's operational activities are centered on operational costs because this is very achievable for the company (Yuliani & Muniarty, 2021). The bigger the company, the more the company's activities will increase. If the company's activities or activities are increasing as a result, it will increase the costs incurred for the company's operations. So in order to avoid unwanted things such as waste and fraud, the costs incurred must be used efficiently and effectively to reduce costs. Operational costs are costs that affect the success of the company to achieve its goals. Because the products produced by the company go through a process and the product must arrive at the consumer through a series of interrelated processes. Without directed operational activities, the resulting product will not have any benefits for the company (Hidayanti *et al.*, 2019).

The difference lies in the research period, wherein in this study, the research period is starting from 2016-2020. The reason why researchers want to reexamine the impact that affects company profits is that there are several studies conducted by previous researchers that have different research results. The results of previous studies related to the effect of sales volume on the company's net income have different results or there is a research gap in previous studies. Research conducted by Hikmah *et al.* (2020) found that there was a positive effect of sales volume on net income. The results of the study are supported by the results of previous studies confirm (Caballero & Solano,2012, Hidayanti *et al.*, 2019; Susilawati & Mulyana, 2018; Risyana & Suzan, 2018; Dewi, 2018; Asriyanti & Syafruddin, 2017). However, this is different from the research of Diana *et al.* (2020) which found that sales volume had no significant effect on the company's net income.

The results of previous studies related to the effect of operating costs on the company's net income have different results or there is a research gap in previous studies. Research conducted by Yuliani and Muniarty (2021) found that operating costs have a significant effect on the company's net income. The findings of the present study are supported by various previous studies (e.g., Rohmat & Suhono, 2021; Diana *et al.*, 2020; Hidayanti *et al.*, 2019; Susilawati & Mulyana, 2018; Risyana & Suzan, 2018; Dewi, 2018; Asriyanti & Syafruddin, 2017). However, in contrast to the research by Hikmah *et al.* (2020) found that operating costs have no significant effect on net income. The results of this study are supported by Bernardin and Baeti (2018) which states that operating costs have no significant effect on net income, (Awunyo-Vitor & Badu, 2012).

## 1.2. THEORETICAL FRAMEWORK AND HYPOTHESIS

The development of a signaling theory in this study is a grand theory. Explaining that companies should provide signals to users of financial statements to obtain good or bad information so that asymmetric information does not occur (differences in information obtained between one party and another in economic activities). The signal given by the company should be able to be captured properly so that it can be interpreted correctly. The influence of information on the behavior of information users is central to this theory. In signal theory, financial statement information submitted to users of financial statements is presented by management who acts as an agent (Suwardjono, 2017). Profit is the most important indicator of a financial report that has various uses. Profit is generally used as a basis for making investment conclusions and to predict profits that will be achieved in the future. As market participants, they must first interpret and analyze the information as a good signal (good news) or a bad signal (bad news). The relationship between a signal theory and this study shows that high profits indicate good company prospects, so investors will react positively to these signals and other information stating that the company is better than other companies.

## 2.1. SALES VOLUME

According to Mulyadi (2019), sales are activities carried out by sellers in selling goods or services in the hope of making a profit from these transactions. Sale is a process of exchanging goods or services between sellers and buyers. So it can be concluded that sales are an effort made by humans to convey the goods needed that have been produced to those in need which have been determined on a common goal. The realization of this goal is through sales volume. According to Mendra (2021), sales volume is an achievement expressed quantitatively in terms of physical or volume or units of a product. In marketing activities, the increase in sales volume is a measure of efficiency, although not every increase in sales volume is followed by an increase in profit. So it can be interpreted that sales volume is the number of sales activities of a product or service produced by the company in a certain time measure.

It is to be noted that there may be various factors may influence sales activities as follows: (1) Sales ability, (2) Market conditions, (3) Capital, (4) (Kotler, 2017). Other factors such as advertising, demonstrations, gift-giving often affect the level of purchases made by consumers. Sales volume is goods sold in the form of money for a certain period of time in which has a good service strategy. Where according to Kotler (2017), to find sales volume, the formula is as follows:

Sales Volume = Selling Price Per Unit x Total Units Sold

Sales volume is the result of sales activities carried out by the company in an effort to achieve the goal of maximizing profit.

## 2.2. OPERATING COST

According to Jumingan (2017), business or operational costs appear in connection with the sale or marketing of goods or services and the administration of the general and administrative functions of the company concerned. Operational costs are costs that are directly related to the company's needs every day outside the production process. Supriyono (2017), states that operational costs are costs that are directly related to the implementation of working capital. The definition of operational costs itself is all costs that support the implementation of services or all costs that can be defined as having a direct relationship with the provision of services. Meanwhile, according to Rudianto (2017), operational costs are a component of company costs outside of production costs. According to Ningtyas (2018), operational costs are expressed by the following formula:

**Operational Cost = Selling Cost + General and Administration Cost**

According to Ningtyas (2018) and Mulyadi (2019, operational costs have the following characteristics:

(1) Marketing/sales costs are costs incurred to carry out product marketing/sales activities. Examples are advertising costs, promotion costs, transportation costs from the company's warehouse to the buyer's warehouse, salaries of employees of parts that carry out marketing activities, or sample costs;

(2) general and administrative costs are costs for coordinating product action and product marketing. Examples of these costs are the salaries of employees in the finance, accounting, group, and public relations departments, the costs of accounting checks and the cost of photocopying;

(3) coordinate and control the flow of inputs (inputs) and outputs (outputs), as well as process the use of available resources so that operational activities and functions can be more effective;

(4) to make decisions, cost accounting provides information on future costs (future costs) because decision making is related to the future. The information on future costs is clearly not obtained from records because winnings are not recorded but are obtained from the results of forecasting (forecast). This particular decision-making process is largely the task of company management by utilizing this cost informatio, and

(5) used as a guide or guide for a manager in carrying out company activities that have been planned by the company. In operating expenses, it is expected that the company can use appropriately so that the company can achieve optimal profit. However, the problem that often occurs in companies, whether manufacturing, trading, or services, is the sum of costs incurred to fulfill the company's operational activities that are not accompanied by an increase in the company's net profit (Bernardin & Baeti, 2018).

## 2.3. NET PROFIT

According to Kasmir (2019), net profit is profit that has been deducted by costs that are burdened by the company in a certain period including taxes. In line with Kasmir's opinion, according to Hery (2018), net profit is the profit earned by the company after deducting income tax. Net income is calculated as the result of deduction between profit before tax and income tax expense. Furthermore, according to Harrison *et al.* (2018), net income is obtained when total revenue exceeds total expenses. In accounting, the word "net" refers to the amount after the deduction. So, net income is the remaining profit after subtracting expenses and losses from revenues and profits. Net profit can be calculated by the following formula:

**Net Profit = Profit Before Tax – Income Tax**

So it can be concluded that net income is the value of profit or excess income from trading activities in a certain period, where the value has been reduced by income tax expense. The concept of profit in the structure of accounting theory can be identified by using a syntactic, semantic, and pragmatic approach. The concept of profit is adjektiva i.e. through the rules that define it, semantically i.e. through its relationship to the underlying economic reality and pragmatically that is through its use by investors regardless of how it is measured and knowing what it means. The amount of profit in a company must be known, this is considered very important because profit is important information in a financial report. According to Baridwan (2019), the elements of profit are as follows: (1) Revenue, is an inflow or increase in the assets of a company or a decrease in liabilities that occur in an accounting period, originating from operating activities.Iin this case, the sale of goods (credit) which is the company's main business unit. (2) Burden, is something that must be issued or what someone must be responsible for to get a result that will be expected. These burdens will be very important to be fulfilled so that you will get an advantage or profit to be sought. (3) Current assets incurred for the benefit of goods and services are called expenses. (4) Profit and Loss, is an increase in equity or net assets originating from incidental transactions that occur in the company and all transactions or events that affect the company in an accounting period. In addition to those derived from the owner's investment income. (5) Acquisition Price, is the amount of money issued or debt incurred for the acquisition of goods or services. This amount at the time of the transaction will be recorded as activation. For example purchases and rental advances.

According to Mulyadi (2019), the factors that affect profit are as follows: (a) Costs, costs arising from acquiring or processing a product or service will affect the selling price of the product in question. (b) Selling price, the selling price of the product or service will affect the volume of sales of the product or service concerned. There are two factors that affect profit are income and expenses. The company earns a profit if the revenue earned is greater than the costs. Efforts to generate and increase surplus can be pursued by trying to generate income that exceeds costs. The main factor that affects the size of the profit is income. Every company is not only based on the company's ability to generate high income, but also must focus on controlling expenses. For this reason, the company is required to make efficient in its operational expenses. The company is considered good if the income is high, the company also streamlines the expenses incurred so that the profit obtained will be more optimal as well. Hypothesis:

H1: How does Sales Volume affect Net Profit.

H2: How does Operating Cost affect Net Profit

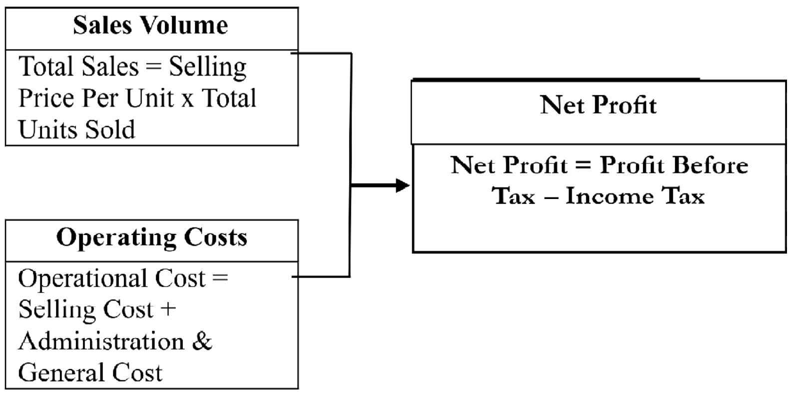


**Figure 2: Research Conceptual Framework, 2021**

## 3.1. RESERCH METHODS

## 3.2. DATA COLLECTION

The research method is basically a scientific way to obtain data with a specific purpose and use. namely the associative approach (Sugiyono, 2018). The associative research approach is used in this study . The associative approach aims to analyze the problem of the relationship between a variable and other variables, namely related variables and independent variables (Juliandi, 2019). This study uses a quantitative approach, this is because the data used are in the form of numbers. Then, the dependent variable (dependent variable) is net income, while the independent variables (independent variables) in this study are sales volume and operating costs. The data for this study uses annual reports from manufacturing companies in the food and beverage sub-sector listed on the IDX which publish financial reports during the research period, 2016-2020. research sample. The following is a table of the process of selecting the samples contained in this study:

**Table 1**
**Research Sample Selection Process**

| *No* | *Criteria* | *Number of Companies* |
|---|---|---|
| 1 | Food and Beverage Sub-Sector Manufacturing Companies listed on the IDX in 2016-2020 | 32 |
| 3 | The Food and Beverage Sub-Sector Manufacturing Company did not completely publish financial reports during the observation period, namely 2016-2020 | (4) |
| 4 | Food and Beverage Sub-Sector Manufacturing Companies that do not publish data related to research variables during the 2016-2020 observation period | (3) |
| Sample companies | | 25 |
| Amount of data used (25 x 5) | | 125 |

Sumber: Data Sekunder 2021 (Data Diolah)

The period under study is 5 years, from 2016-2020 so that the amount of internal data used in this study is 125 observational data. To analyze the research, the researcher used the multiple linear regression method in order to perform better calculations in this study which was confirmed by the data. The analysis obtained in this study will use the help of computer technology, namely the SPSS For Windows 23 application program for processing research data.

## 3.3. DATA MEASUREMENT

The statistical tool is used to analyze data by describing or providing an overview of the data that has been collected as it is without intending to make valid conclusions to generalize the results of the study. Presentation of statistical data can be through tables, graphs, pie charts, calculation of mode, median, mean (measurement of central tendency), calculation of deciles, percentiles, calculation of data spread through calculation of the average and standard deviation, variance, maximum, minimum, sum, range (Sugiyono, 2018:

Indriantoro & Supomo, 2019). The multicollinearity test aims at testing whether the regression model finds a correlation between the independent variables (independent). The regression model that is considered good should not produce a multicollinearity issue. Ghozali (2018) suggests that to detect the presence or absence of multicollinearity in the regression model, one should analyze the correlation matrix of the independent variables.

If there is a fairly high correlation between independent variables (generally above 0.90), then this indicates the existence of multicollinearity. Furthermore, multicollinearity can be seen from the tolerance value and its opponent as well as the Variance Inflation Factor (VIF). A low tolerance value is the same as a high VIF value (because VIF = 1/tolerance). The cut off value commonly used to indicate the presence of multicollinearity is the tolerance value. Regression is free from multicollinearity problems if the tolerance value > 0.10 or equal to the VIF value < 10. The autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in period t and the confounding error in period t-1 (previous). According to Ghozali (2018), if autocorrelation appears, it usually arises because consecutive observations all the time are related to each other and also because the emergence of residuals (interference errors) is not independent of one observation to another. One way that can be used to detect the presence or absence of autocorrelation is the Durbin-Watson test. Ghozali (2018) explains that the Durbin-Watson test is only used for level one autocorrelation and requires an intercept (constant) in the regression model and there is no variable lag between independent variables.

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. According to Ghozali (2016), one way to detect it is by looking at the graph plot between the prediction of the dependent variable (dependent) and the residual. In addition, it can also be calculated by the Glejser test, which regresses the absolute value of the residual on the independent variable. The glejser test describes that if in absolute regression the residual shows the independent variable significantly affects the dependent variable, then it indicates the existence of heteroscedasticity. If the residual variance from one observation to another observation remains, it is called homoscedasticity and if it is different it is called heteroscedasticity. If a regression shows homoscedasticity then it is a good regression model.

The normality test aims to test whether, in the regression model, the confounding or residual variables have a normal distribution. One of the easiest ways to see the normality of the residuals is to look at the histogram graph that compares the observed data with the distribution that detects a normal distribution. In addition to testing using a histogram graph, the residual normality test was calculated using the Kolmogorov-Smirnov non-parametric statistical test. According to Ghozali (2018), if the Kolmogorov-Smirnov test shows significant results, it means that the residual data is not normally distributed. Regression analysis is an analysis used to measure the influence of the independent variable on the dependent variable and predict the dependent variable using the independent variable (Priyatno, 2017). The results of the regression analysis are in the form of coefficients of the independent variables. This coefficient is obtained by predicting the value of the dependent variable with an equation. The multiple regression equation in this study is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

**Information**

Y : Net Profit :

α : Constant

β1 : Sales Volume Regression Coefficient

β2 : Operational Cost Regression Coefficient

X1 : Sales Volume

X2 : Operational Cost

e : error term, which is the error rate of the estimation in the research.

The t-test is a type of statistical test regarding the significance of the influence of independent variables separately on the dependent variable with a certain level of confidence (Rosul & Tukirin, 2018). The t-test was carried out with a 95% confidence level and an analytical error rate (α) of 5%. The degree of freedom was df1 = n-k.

Hypothesis formulation:

a) H1: Sales volume has no effect on net income of Manufacturing Companies in the Food and Beverage Sub-Sector listed on the Indonesia Stock Exchange.

b) H2: Operational costs have no effect on net income at the Food and Beverage Sub

—Sector Manufacturing Companies listed on the Indonesia Stock Exchange.

The basis for making t-count decisions is as follows:

a) If tcount < ttable, then Ho is accepted and Ha is rejected.

b) If tcount > ttable, then Ho is rejected and Ha is accepted.

The basis for significant decision making is:

a) If the probability > 0.05 then Ho is accepted and Ha is rejected.

b) If probability < 0.05 then Ho is rejected and Ha is accepted.

This test basically shows whether all the independent variables included in the model have a simultaneous (simultaneous) effect on the dependent variable (Ghozali, 2018). The F test was carried out with a 95% confidence level and an analytical error rate ($\alpha$) of 5% degree of freedom. Hypothesis formulation:

a) H1: Sales volume and operating costs together have no effect on the net income of Manufacturing Companies in the Food and Beverage Sub-Sector listed on the Indonesia Stock Exchange.

b) H2: Sales volume and operating costs together affect the net profit of Manufacturing Companies in the Food and Beverage Sub-Sector listed on the Indonesia Stock Exchange.

The basis for decision making F is calculated as follows:

1) If Fcount < Ftable, then Ho is accepted and Ha is rejected.

2) If Fcount > Ftable, then Ho is rejected and Ha is accepted.

The basis for significant decision making is:

1) If probability > 0.05 then Ho is accepted and Ha is rejected.

2) If probability < 0.05 then Ho is rejected and Ha is accepted.

## 4.1. RESULTS AND DISCUSSION

## 4.2. DESCRIPTIVE TEST RESULT

The extent to which the model's ability to measure the dependent variable is called the coefficient of determination (R2) (Ghozali, 2018). How big the independent variable is the test can find out how big the dependent variable is the independent variable, while the rest is explained by other reasons that are not examined, called R2. The variable is the value of the coefficient of determination (R2) which is between zero to one. A small value of R2 indicates the ability of the independent variable in explaining the dependent variable is very small or limited. The independent variables in this study are sales volume and operating costs, while the dependent variable in this study is net income.

**Table 2**
**Operational Definition**

| *Variable* | *Definision* | *Indicator* | *Scale* |
|---|---|---|---|
| **Sales Volume (X1)** | Sales volume is the number of sales activities of a product or service produced by the company in a certain time measure | Sales Volume = Total Sales<br>Total Sales = Selling Price Per Unit x Total Units Sold | Rasio |
| **Operating Costs (X2)** | Operational costs are all costs that support the provision of services or all costs that can be defined as having a direct relationship with the company's operations | Operational Cost = Selling Fee + General & Administration Fee | Rasio |
| **Net Profit (Y)** | Net profit is profit that has been deducted by costs that are the company's burden in a certain period including taxes. | Net Profit = Profit Before Tax – Income Tax | Rasio |

*Source:* Data Processed by Author, 2021

**Table 3**
**Descriptive Statistical Test Results**

| | *SV* | *OC* | *NP* |
|---|---|---|---|
| Mean | 28.06379 | 30.21053 | 1.345006 |
| Median | 27.82000 | 28.00000 | 0.880788 |
| Maximum | 32.19000 | 52.00000 | 10.24619 |
| Minimum | 24.16000 | 5.000000 | 0.130576 |
| Std. Dev. | 1.869053 | 13.41870 | 1.730777 |
| Skewness | 0.301800 | 0.165760 | 3.385563 |
| Kurtosis | 2.754833 | 1.803483 | 15.37342 |
| Jarque-Bera | 1.680070 | 6.102007 | 787.5094 |
| Probability | 0.431695 | 0.047311 | 0.000000 |
| Sum | 2666.060 | 2870.000 | 127.7755 |
| Sum Sq. Dev. | 328.3756 | 16925.79 | 281.5852 |
| Observations | 95 | 95 | 95 |
| Cross sections | 19 | 19 | 19 |

*Source:* Data Processed Using Eviews10

Sales Volume: Based on table 2, the minimum Debt to Equity Ratio value is 0.010000 and the maximum value is 86.77000. The mean/mean value is 13,21347 and the standard deviation is 17,28505. The company that has the lowest Debt to Equity Ratio is Campani Ice Cream Industri Tbk (CAMP) in 2020, which is 0.13. Meanwhile, the company that has the highest Debt to Equity Ratio value is Sentra Food Indonesia Tbk (FOOD) in 2016 of 10.25. Operating Costs: based on table 3, it can be seen that the sales volume is 24.16000 and the maximum value is 32.19000. The mean value is 28.06379, and the standard deviation is 1.869053. The company that has the lowest sales volume is the company Prima Cakrawala Abadi Tbk in 2015 amounting to 24.16. Meanwhile, the company with the highest sales volume was Indofood Sukses Makmur Tbk (INDF) in 2016 of 31,989. Net Profit: based on table 4 it can be seen that the minimum value of PER is 0.130576 and the maximum value is 10.24619.

The mean/mean value is 1.345006 and the standard deviation is 1.730777. The company that has the lowest Per value is Wahana Interfood Nusantara Tbk (COCO) in 2020 of 56.35. Meanwhile, the company that has the highest sales volume is Ultra Milk Industry and Trading Company Tbk (ULTJ) in 2020 at 0.01. The model selection test must be carried out before entering the panel data regression analysis stage to determine the model that best fits the data to be processed. The results of the panel data regression model selection test are as follows: The Chow test is used to determine the best panel data regression estimation model between the common effect model and the fixed effect model. If the p value or probability is less than 0.05 then Ho is rejected and H1 is accepted. The following are the results of the chow test as follows:

**Table 4**
**Test Results Chow Model Fixed Effect**

| *Effects Test* | *Statistic* | *d.f.* | *Prob.* |
|---|---|---|---|
| Cross-section F | 5.275147 | (18,73) | 0.0000 |
| Cross-section Chi-square | 79.156147 | 18 | 0.0000 |

*Source:* Data Processed Using Eviews10

**Table 5**
**Test Results Hausman Test Random Effect**

| *Test Summary* | *Chi-Sq. Statistic* | *Chi-Sq. d.f.* | *Prob.* |
|---|---|---|---|
| Cross-section random | 5.868190 | 3 | 0.1182 |

*Source:* Data Processed Using Eviews10

From table 5 above, it can be concluded that the probability value of the Hausman test for the Random Effect model is 0.1182, then Ho is accepted and H1 is rejected. This is because the probability value in the Chow test and the Hausman test above can be seen that the results of the Chow test for the Random Effect model are 5.868190, the value is greater than the standard significant 0.05. So from the Chow test and the Hausman test above, it can be seen that the Chow test results of the Fixed Effect model can be used, because the probability value of the Fixed Effect model meets the significant standard. This study analyzes the effect of sales volume, operating costs on company profits. This research model will be estimated using 5 years of observation, from 2016 to 2020. The estimation model used is based on the results of the Chow test, which is panel data using the Fixed Effect method as follows:

**Table 6**
**Test Results Regresi Fixed Effect Model**

| *Variable* | *Coefficient* | *Std. Error* | *t-Statistic* | *Prob.* |
|---|---|---|---|---|
| C | 6.981594 | 1.754466 | 3.979327 | 0.0002 |
| SIZE? | -0.026739 | 0.073382 | -0.364380 | 0.7166 |
| UMP? | -0.158875 | 0.023356 | -6.802178 | 0.0000 |
| DER? | -0.006547 | 0.002332 | -2.807654 | 0.0064 |
| | Fixed Effects (Cross) | | | |
| AISA—C | -0.824893 | | | |
| ALTO—C | -0.732504 | | | |
| CAMP—C | 2.143917 | | | |
| CLEO—C | 0.126984 | | | |
| COCO—C | 0.304873 | | | |
| FOOD—C | 2.171744 | | | |
| GOOD—C | -0.579419 | | | |
| HOKI—C | -2.813196 | | | |
| ICBP—C | -0.508124 | | | |
| INDF—C | -0.426271 | | | |
| KEJU—C | -3.364932 | | | |
| MYOR—C | 1.560902 | | | |
| PANI—C | -1.225049 | | | |
| PCAR—C | -3.688610 | | | |
| ROTI—C | -1.286147 | | | |
| SKBM—C | 2.676783 | | | |
| SKLT—C | 2.115290 | | | |
| STIP—C | 2.291412 | | | |
| ULTJ—C | 2.057239 | | | |
| | Effects Specification | | | |
| Cross-section fixed (dummy variables) | | | | |

*Source:* Data Processed Using Eviews10

This study uses multiple linear regression analysis. Multiple linear analysis is used to test the effect of independent variables on the dependent variable which will be tested empirically to find a functional relationship between two or more independent variables and the dependent variable, or to predict two or more independent variables on the dependent variable.

$$\mathbf{Y = 6.981594 - (0.026739 * SV) - (0.158875 * OC)}$$

From the regression equation above, it can be explained that the intercept is 6.981594, meaning that when the independent variables are zero, the net profit is 6.9%. If there is an increase in SV of 1%, it will decrease the NP by 0.02%: if the value of the other independent variables is considered constant. If there is an increase in OC of 1%, it will decrease NP by 0.15%: if the value of other independent variables is considered constant. Hypothesis testing in this study was carried out with adjusted R2, F test, and t test. This hypothesis test was carried out using Eviews and the results of the data processing were as follows.

**Table 7**
**Test Results Koefisien Determinasi R2**

| | | | |
|---|---|---|---|
| R-squared | 0.761319 | Mean dependent var | 2.820645 |
| Adjusted R-squared | 0.692658 | S.D. dependent var | 1.957703 |
| S.E. of regression | 1.026734 | Sum squared resid | 76.95533 |
| F-statistic | 11.08799 | Durbin-Watson stat | 1.869356 |
| Prob (F-statistic) | 0.000000 | | |

*Source:* Data Processed Using Eviews10

As seen from Table 7, the amount of Adjusted R Square (R2) is 0.692658 or 69.26%. The results of this statistical calculation mean that the ability of the independent variable to explain the variation of the changes in the dependent variable is 69.26%, while the remaining 0.30% (100% - 69.26%) is influenced by other factors outside the research variables. The f test aims for all independent or independent variables included in the model to have a joint effect on the dependent or dependent variable. Hypothesis formula:

HO: sales volume, operating costs, together have no effect on net income

Ha : sales volume, operating costs, together have no effect on net income

Test criteria:

a. If F count < F table, then HO is accepted.

b. If F count > F table, then HO is rejected.

**Table 8**
**Test Results Uji-F**

Dependent Variable: PER?
Method: Panel Least Squares
Date: 01/12/21 Time: 10:22
Sample: 2015 2019
Included observations: 5
Cross-sections included: 19
Total pool (balanced) observations: 95

| | | | |
|---|---|---|---|
| R-squared | 0.628084 | Mean dependent var | 1.345006 |
| Adjusted R-squared | 0.521095 | S.D. dependent var | 1.730777 |
| S.E. of regression | 1.197749 | Akaike info criterion | 3.398505 |
| Sum squared resid | 104.7260 | Schwarz criterion | 3.989929 |
| Log likelihood | -139.4290 | Hannan-Quinn criter. | 3.637485 |
| F-statistic | 5.870526 | Durbin-Watson stat | 1.346103 |
| Prob(F-statistic) | 0.000000 | | |

*Source:* Data Processed Using Eviews10

**Table 9**
**Test Results t**

| *Variable* | *Coefficient* | *Std. Error* | *t-Statistic* | *Prob.* |
|---|---|---|---|---|
| C | 6.981594 | 1.754466 | 3.979327 | 0.0002 |
| Sales volume | -0.026739 | 0.073382 | -0.364380 | 0.7166 |
| Opretaing cost | -0.158875 | 0.023356 | -6.802178 | 0.0000 |
| Ne Profit | -0.006547 | 0.002332 | -2.807654 | 0.0064 |

*Source:* Data Processed Using Eviews10

Based on Table 9 above, it can be concluded that:

1. The SV variable has a significant negative effect on net profit. This is because the probability value is smaller than 0.05 where the probability value is 0.0064 less than 0.05.
2. Variable OC has no significant negative effect on Net Profit. This is because the probability value is greater than 0.05 where the probability value is 0.7166 which is greater than 0.05.

## 5.1. DISCUSSION

Asriyanti and Syafruddin's research (2017) shows that (1) the selling price partially has a positive and significant effect on profitability; (2) Sales Volume partially has a positive and significant effect on Profitability; (3) Operational costs partially have a positive and significant effect on profitability; (4) Selling Price, Sales Volume, and Operating Costs simultaneously affect Profitability (Diansari, & Arum, 2018). Then research by Bernardin and Baeti (2018), Adekunle and Sunday (2010), simultaneously operating costs, sales volume, and net profit are the sources of the net profit margin. Dewi (2018) researched the results of sales volume being the source of net income, room sales volume and operating costs influenced by other factors not included in this study( Hertati & Safkaur, 2020).

Risyana and Suzan (2018), and Yuliani and Muniarty (2021) provide evidence that net income is simultaneously affected by sales volume and operating costs. The findings of this study are in line with the findings of prior studies. Sales volume has a relationship with net income, then operating costs reduce net profit simultaneously, the effect of sales volume and operating costs on net income with a coefficient of determination (adjusted R2) obtained at 0.842 (Hidayanti *et al.,* 2019: Rohmat & Suhono, 2021).

## 6.1. CONCLUSIONS

This study provides an empirical answer that the company's net profit in the Covid-19 pandemic era is influenced by sales volume and operating cost. If sales volume increases, company's profit also increases. It means that operating costs will be more controlled and net profits will increase in the era of the Covid-19 pandemic. This study uses variable 1 test equipment, namely Sales Volume = Total Sales, Total Sales = Selling Price Per Unit x Total Units Sold, then the two variables are Operational Costs = Selling Costs + General & Administration Costs and the third variable uses the formula Net Profit = Profit Before Tax – Income Tax. Sales volume can be said to be good in the Covid-19 pandemic if (i) ability to make sales, (ii) understand market conditions, (iii) have capital, (iv) understand other factors such as advertising, demonstrations, gift-giving often affect the level of purchase required. done by consumers. Then be able to control operational costs well such as (i) marketing/sales costs, (ii) administrative and general costs, (iii) coordinate and control the flow of input (input) and output (output), (iv) to make decisions, and (v) used as a guide or guide for a manager in carrying out company activities that have been planned by the company. Furthermore, it can create increased net income such as (i) revenue, from the company's main business, (ii) the burden can be met so you will get a profit, (iii) cost is expected to bring current and future benefits, (iv) Profit and Loss, all transactions or events that affect the company in an accounting period, and (v) acquisition price at the time of the transaction will be recorded as activation. Hopefully, this research can be re-examined with different methods with different test equipment to enrich knowledge in the future. During the Covid-19 pandemic, the company's profits declined due to low sales volume so that inventory in warehouses became obsolete due to the Covid-19 turmoil that hit the world, resulting in decreased sales volume which had an impact on the company's net profit, and operational costs could be controlled due to sluggish sales activities.

## Acknowledgement

Thank you to friends who have given a lot of help and feedback. Thanks are due to the anonymous reviewers for providing their useful comments on this article. We hope this article may be useful to researchers who may be interested to conduct research in this area in the future.

There is no conflict of interest involved in the publication of this research article.

## References

Adekunle, A.O., & Sunday, O.K. (2010). Capital structure and firm performance: Evidence from Nigeria. *European Journal of Economics, Finance and Administrative Sciences,* 25, 70-82.

Amelya, B., Nugraha, S. J., & Puspita, V. A. (2021). Analisis perbandingan kinerja keuangan PT Indofood Cbp Sukses Makmur Tbk Sebelum dan Setelah Adanya Pandemi Covid-19. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi,* 5(3), 268-274.

Arikunto, S. (2018). Prosedur Penelitian: Suatu Pendekatan Praktik. *Jakarta: Rineka Cipta.*

Asriyanti, E., & Syafruddin. (2017). Pengaruh harga jual, volume penjualan dan biaya operasional terhadap profitabilitas perusahaan pada PT. Prisma Danta Abadi (Tahun 2014-2016). *Measurement,* 11(1).33-50.

Awunyo-Vitor., & Badu, J. (2012). Capital structure and performance of listed banks in Ghana. *Global Journal of Human Social Science,* 12(5), 56- 62.

Baridwan, Z. (2019). Intermediate Accounting. *Yogyakarta: BPFE.*

Bernardin, D. E. Y., & Baeti, E. N. (2018). Laba bersih sebagai variabel intervening antara pengaruhbBiaya operasional dan volume penjualan terhadap net profit margin (Studi Kasus pada PT Aero Globe Indonesia Tahun 2007-2014). *Ekspansi, 10*(1), 43 – 58.

Caballero, B. S., Teruel, G. P., & Solano, M. (2012). How does working capital management affect the profitability of Spanish SMEs? *Small Business Economics,* 39(2), 517-529.

Diansari, Rani Eka, & Arum Tri Wijaya. (2018). Diamond fraud analysis in detecting financial statement fraud. *Journal of Business and Information Systems*, 1.(2) 63–76.

Dewi, K. M. (2018). Pengaruh volume penjualan kamar dan biaya operasional terhadap Laba Bersih Pada Hotel Grand Wijaya Singaraja Tahun 2014-2016. *Jurnal Pendidikan Ekonomi Undiksha,* 10(2), 626–635.

Diana, Novia, Sagala, D., Steven, & Djokri, A. M. (2020). Pengaruh biaya operasional, biaya produksi dan penjualan terhadap laba bersih pada perusahaan manufaktur sektor Dasar Industri Dan Kimia Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2019. *Jurnal Ilmu Manajemen METHONOMIX*, 3(2), 71-80.

Ghozali, I. (2018). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 (Edisi 9). *Semarang: Badan Penerbit Universitas Diponegoro.*

Harrison, J. W. T., Horngren, C. W. T., & Suwardy, T. (2018). Akuntansi Keuangan-Edisi IFRS. *Jakarta: Erlangga.*

Hertati. L., Iriadi2 , Safkaur.O., Fery.I., Antasari.R., Nazarudin., & Antasari, R. (2020). Peran akuntansi aktiva tetap, standar akuntansi keuangan terhadap laporan keuangan akibat Covid-19. *Jurnal Revenue : Jurnal Ilmiah Akuntan*si 1 (2), 182-200.

Hertati.L.Safkaur.(2020). Dampak revolusi Industri 4.0 era Covid-19 pada sistem informasi akuntansi terhadap struktur modal perusahaan.*eJurnal Riset Akuntansi Dan keuangan*, 8 (3), 503-518.

Hidayanti, F., Yahdi, M., & Wiayanti, R. (2019). Pengaruh volume penjualan dan biaya operasional terhadap laba bersih perusahaan (Studi empiris pada perusahaan manufaktur sub sektor makanan dan minuman yang terdaftar di bursa efek Indonesia Tahun 2012-2016). *Jurnal Riset Akuntansi*, 1(3), 88-99.

Hikmah, R. N., Aulia, I., Nopianti, R., & Sari, R. K. (2020). Pengaruh volume penjualan dan biaya operasional terhadap laba bersih pada produk makanan dan minuman Yang Berlabel Halal Di Indonesia periode 2014-2018 (Studi empiris pada perusahaan manufaktur sektor makanan dan minuman Yang Terdaftar Di Bursa efek *Indon. Jurnal Ilmiah Pena*, 12(1), 21-27.

Indriantoro, N., & Supomo, B. (2019). Metodologi Penelitian Bisnis Untuk Akuntansi dan Manajemen. *Yogyakarta: BPFE.*

Irham, F. (2018). Pengantar Manajemen Keuangan. *Bandung: Alfabeta.*

Jumingan. (2017). Analisis Laporan Keuangan. *Jakarta: Bumi Aksar*a.

Jusuf, J. (2017). Analisis Kredit Untuk Credit (Account Officer) (Cetakan Ke). *Jakarta: Gramedia Pustaka Utama.*

Kotler, P. (2017). Manajemen Pemasaran. *Jakarta: Erlangga.*

Mendra, A. (2021). Pengaruh total hutang, volume penjualan dan biaya operasional terhadap laba bersih (Studi empiris pada perusahaan pertambangan sub sektor batubara yang Di Bursa efek Indonesia Periode 2017-2020). *Universitas Islam Negeri Sultan Syarif Kasim Pekanbaru.*

Mulyadi. (2019). Akuntansi Biaya. Yogyakarta: *Gajah Mada University Press.*

Sri Mulyani, I. (2021). Merekam Pandemi Covid-19 dan Memahami Kerja Keras Pengawal APBN. *Menteri Keuangan Republik Indonesia.*

Munawir, S. (2018). Analisa Laporan Keuangan. *Yogyakarta: Liberty.*

Ningtyas, E. R. (2018). Akuntansi Biaya (Pertama). *Yogyakarta/ : Graha Ilmu.*

Priyatno, D. (2017). Cara Kiat Belajar Analisis Data dengan SPSS 20. *Yogyakarta: Andi Offset.*

Risyana, R., & Suzan, L. (2018). Pengaruh Volume Penjualan dan Biaya Operasional Terhadap Laba Bersih (Studi Pada Perusahaan Manufaktur Subsektor Makanan dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Periode 2014-2016). *E-Proceeding of Management*, 5(2), 2449–2459.

Rohmat, R., & Suhono. (2021). Pengaruh biaya produksi dan biaya operasional terhadap laba bersih. *Akuntabel,* 18(2), 247-254.

Rosul, A. A. & Tukirin. (2018). Statistika Ekonomi & Bisnis. *Jakarta: In Media.*

Rudianto. (2017). Pengantar Akuntansi Konsep dan Teknik Penyusunan Laporan Keuangan. J*akarta: Gelora Aksara Pratama.*

Sugiyono, S. (2018). Metode Penelitian Kuantitatif, Kualitatif dan R&D. *Bandung: Alfabeta.*

Supriyono, R. A. (2017). Akuntansi Biaya Perencanaan dan Pengendalian Biaya serta Pembuatan Keputusan. *Yogyakarta: BPFE.*

Supriyono, R. A. (2018). Akuntansi Keperilakuan. Yogyakarta: G*ajah Mada University Press.*

Susilawati, E., & Mulyana, A. (2018). Pengaruh penjualan dan biaya operasional terhadap laba bersih PT Indocement Tunggal Prakarsa (Persero) Tbk Periode 2010-2017. *Organum: Jurnal Saintifik Manajemen Dan Akuntansi*, 1(2), 74–87.

Suwardjono. (2017). Teori Akuntansi: Perekayasaan Pelaporan Keuangan. *Yogyakarta: BPFE.*

Tandiontong, M. (2018). Kualitas Audit dan Pengukurannya. *Bandung: Alfabet*a.

Yudhistira, A. W. (2021). Daya tahan industri makanan dan minuman di masa pandemi Covid-19. Katadata.Co.Id. Available: https://katadata.co.id/ariayudhistira/analisisdata/6108e72a 74512/daya-tahan-industri-makanan-dan-minuman-di-masa-pandemi-covid-19

Yuliani, A. P., & Muniarty, P. (2021). Pengaruh biaya operasional terhadap laba bersih PT. Ultrajaya Milk Industry & Trading Company, Tbk. *Jurnal Pamator,* 14(1), 22-26.

**To cite this article:**

Lesi Hertati, Lilis Puspitawati, Rilla Gantino & Meifida Ilyas (2022). The Sales Volume and Operating Costs as Key Influencing Factors in Covid-19 Pandemic Era. *Global Journal of Accounting and Economy Research*, Vol. 3, No. 1, 2022, pp. 83-105.