

## **Working Capital and Sales Growth, as Determinants of Return on Asset, Firm Size as Moderation, in Indonesian Food and Beverage Companies**

Wastam Wahyu Hidayat, Sugeng Suroso, Tri Widyastuti

Faculty of Economics and Business, Universitas Bhayangkara Jakarta Raya, Indonesia

*Wastam.wahyu@dsn.ubharajaya.ac.id, Sugeng.suroso@dsn.ubharajaya.ac.id,  
Tri.widyastuti@dsn.ubharajaya.ac.id*

**Abstract.** This research aims to find out whether working capital and sales growth are determinants of return on assets, with firm size as a moderator in food and beverage companies. The sample selection in this study used a purposive sampling method, with criteria particular to the research objectives. The research samples were obtained from 19 food and beverage companies listed on the Indonesian Stock Exchange for the period 2018-2022. The data analysis used was Moderated Regression Analysis (MRA- 26). The variables in this research are Working Capital, Sales Growth, Return on Assets, and Firm Size. This research shows that working capital partially affects the return on assets, and sales growth has no impact on the return on investments, while working capital and sales growth simultaneously have no effect. Influence on Return on Assets. Company size mediates the impact of operating capital on Return on Assets. However, company size cannot judge the impact of sales growth on Return on Assets.

**Keywords:** working capital, sales growth, return on asset, firm size

## **1. Introduction**

In general, the activities carried out by a company are to obtain the maximum possible profit according to the use of its resources. According to (Kurnia & Hartini, 2021), profitability can be measured by looking at the company's success and ability to use its assets productively. The return on Assets (ROA) of a company is influenced by working capital (Paramita, 2016) and (Wau & Natong, 2020) and (Yani & Martha, 2019). It allows companies to operate as economically as possible so that they do not experience difficulties dealing with the dangers that may arise due to financial problems (Abidin & Setiadi, 2018). Working capital is measured by the difference between current assets and liabilities (Paramita et al., 2020). A company's return on Assets (ROA), namely sales growth (Nainggolan et al., 2022). According to. (Sukadana and Triaryati, 2018) Said that sales are one of the company's sources of income. According to (Pradnyaswari Dana, 2022), firm size is one of the essential characteristics of a company in explaining Return on Assets (ROA). Firm size also affects the structure of a company's funding; the greater the value of company size, the greater the predictability of an increase in Return on Assets (ROA), so larger companies will be relatively stable and able to generate profits (Nainggolan et al., 2022). (Halim et al., 2021) Moreover, (Paramita et al., 2020) said that the size of the firm can be seen from the total assets/amount of company assets by calculating the logarithmic value of total assets. Based on idx. Co. Id-data shows that the average return on assets (ROA) in food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022 experienced fluctuations. In 2020, the food and beverage sub-sector had the lowest average ROA, 8.35%. The average ROA with the highest value occurred in 2019 at 9.95%. In 2018, the average ROA in the food and beverage sub-sector decreased to 8.38%. Then it increased again in 2021 to 9.66%; in 2022, it rose to 9.75%. Based on the description above, the problem in this research is: What is the influence of working capital and sales growth as determinants of Return on Assets, with Firm Size as a moderator in food and beverage companies listed on the Indonesian Stock Exchange? This research aims to determine whether working capital and sales growth are proven to be determinants of return on assets, with firm size as a moderator for companies listed on the Indonesian stock exchange.

## **2. Literature Review**

### **2.1. Return on Assets (ROA)**

According to (Hernawati and Karyadi, 2020), Return on Assets (ROA) is a ratio that is considered the essential benchmark in profitability ratios. Return on Assets (ROA) is a profitability ratio that measures a company's ability to generate profits using all its resources or assets. Return on Assets (ROA) is vital in obtaining the maximum profit or profit and measuring a company's health level. A company's profitability is measured by its success and ability to use its assets productively. A company's return on Assets (ROA) can be determined by comparing the profits earned in a certain period with the total assets or the amount of the company's capital (Arifin et al., 2017). A company's management effectiveness level can be assessed through the profitability ratio, which can be seen from the level of profit obtained from sales and investment income (Kasmir, 2019). Companies with high Return On Assets (ROA) can earn high profits, and vice versa. If the Return On Assets (ROA) is low, companies are considered incapable of generating profits (Sari & Purwohandoko, 2019). According to (Hernawati Karyadi, 2020), Return On Assets (ROA) is considered the most essential benchmark in the profitability ratio. Return On Assets (ROA) is a ratio for measuring net profit after tax with total assets owned (Sams, 2021). Return On Assets measures how much profit can be obtained from all the assets (assets) owned by a company, and a high company shows the company's ability to generate profits in the future (Abidin & Setiadi, 2018). (Sari and Purwohandoko, 2019) revealed that Return On Assets (ROA) is used to measure the efficiency and effectiveness of managing company assets or all of the assets owned by the company. The greater the Return on Assets (ROA) of a company, the better the financial performance because the rate of return (return) is more significant (Paramita et al., 2020).

## **2.2. Working Capital**

According to (Wau and Nantong, 2020), working capital is an integral part of a company's finances because its ability to operate depends on policies in managing its working capital. According (Nugroho, 2018). (Yani & Martha, 2019) Moreover, (Gonçalves et al., 2018), working capital is a short-term investment invested in current assets or short-term assets, such as cash, banks, securities, receivables, inventories, and other current assets. According to (Hastuti et al., 2022) and (Ananda & Takarini, 2021). the factor that affects working capital is debt financing because companies use it to show the amount of short-term debt for all loans owned by the company. According to the Pecking Order Theory (Kuswontoro & Artati, 2018) (Zuhroh & Utiyati, 2018) (Dini et al., 2021), and (Simatupang & Sari, 2021) revealed that with sufficient working capital, the company can operate as economically as possible so that the company will not experience difficulties and be able to face the dangers that might arise due to a crisis. However, suppose the working capital in the company is excessive. In that case, it will cause losses to the company because there are unproductive funds, so the opportunity to gain profits or profits has been wasted. Conversely, if the working capital is insufficient, the company will fail and run its business due to mismanagement. --- According to ((Y.P.Hutomo, D.D.Lestari 2019), Working Capital Turnover has a positive and significant effect on Profitability; in this research, Sector Companies in the Consumer Goods Industry have a stable average working capital turnover; this can happen because of adequate working capital management so that companies can generate high profits. Research result by (Pitri et al., 2022) shows that the value of the influence of turnover is significant working capital on Profitability; high working capital turnover will please short-term creditors, so obtain certainty that working capital is circulating according to the company's wishes at high speed and debts will be paid immediately, thereby increasing Profitability. Research results from (Gonçalves et al., 2018) suggest that Profitability can be increased if companies manage their work capital more efficiently, meaning the company can create value for its shareholders through efficient Working Capital Management. According to (Sekar et al., 2021), working capital has a positive and significant influence on Profitability. Long loan terms can encourage customers to shop more, increasing sales and Profitability.

## **2.3. Sales Growth**

Sales have a strategic influence on a company because assets or assets must support sales. When sales are increased, assets must also be added; by knowing sales from the previous year, companies can optimize existing resources (Miswanto et al., 2017) and (Sams., 2021). The role of growth for companies is that companies that are efficient in growing can survive because they reflect a high level of business activity (Brastibian et al., 2020). Using the sales value from the previous year, the company can estimate the optimal use of resources; this is where the critical role of sales growth emerges in working capital management (Nugraha et al., 2019). Sales growth within the company has an attractive relationship for the company; this is due to an increase in market share, which results in an increase in sales that has an impact on increasing profitability for the company (Anggarsari & Aji, 2018) and (Miswanto et al., 2017) and (Hernawati & Karyadi, 2020). According to (Febrianti and Basri, 2022), Sales growth has a positive and significant effect on profitability. Sales are an essential criterion for assessing a company's profitability and are the leading indicator of company activity, so sales growth influences increasing company profitability. According to (TC.J.Andriandra Edisan, 2021), Sales growth positively affects return on assets; the higher sales growth will push the profit-to-assets ratio higher, so sales growth affects return on assets. Based on (Mahayana et al., 2023), Based on the research results, the profitability variable is directly impacted by sales growth. Based on research findings, profitability will increase if the variable measuring sales growth increases, and vice versa.

## **2.4. Firm Size**

According to (Kuswontoro & Artati, 2018), firm size is a scale in which the size of the company can be

classified in various ways, including the size of income, total assets, and total capital. Firm size reflects the company's total assets for operations (Santini & Baskara, 2018). The larger the income, total assets, and total capital, the stronger the company's condition. Companies with significant assets will use existing resources to the fullest extent possible to generate business profits. Companies with small assets, of course, also generate profits following their relatively small assets (Brastibian et al., 2020). According to (Paramitha Tirtanata, 2021), the firm size variable influences profitability. According to (Atiningsih & Izzaty, 2021), This supports the theory that the size of the company shows the size of the company is an essential factor in the formation of profits. Large companies that are considered to have reached the maturity stage illustrate that these companies are relatively more stable and more able to generate profits than small companies. The larger the assets, the more capital invested, the more significant the money turnover, and the larger the market capitalization will increase the company's profitability. Based on research results (Santoso & Hersugondo, 2023), firm size was found to have an insignificant negative influence on the overall profitability of the five countries. The research results (Rahmiyati et al., 2023) show that the company size variable negatively and significantly affects profitability. According to (Simbolon et al., 2022), It can be concluded that company size has a negative influence on profitability because negative values occur. After all, the increase in company size is more significant than the increase in net profit, so the return on assets decreases as the company size increases. Based on research (Sari & Mislinawati, 2023), firm size has a positive effect on profitability; for every 1% increase in company size, this will have an impact towards increasing profitability by 103.66%.

Table 1. Operasiaonal Variable

Variable	Definition	Measurement	Skala
Working Capital (Nugroho, 2018)	All the money already issued and used by company and is expected to be able to back	$WC = \text{Current Assers} - \text{Current Liability}$	Nominal
Sales Growth (Brastibian et al.,2020)	Sales growth shows how far the company can improve sales compared to total sales over all	$SG = \frac{\text{Sales ( t}_1 - t_0 \text{)}}{\text{Sales t}_0}$	Ratio
Return On Assets (Hernawati and Karyadi,2020)	The ratio shows how muchlarge contribution of assets in creating net profit	$ROA = \frac{\text{Net Profit}}{\text{Total Assets}}$	Ratio
Firm Size (Santini & Baskara, 2018)	A scale which can be classified as the size of a company entity in various ways, one of which is the total assets of the company	$Ln = \text{Logaritma natural}$	Nominal

## Hypothesis

### Effect of Working Capital on Return on Assets

According to (Kuswontoro & Artati, 2018), working capital is the funding companies use to carry out their operations by showing a large amount of short-term and long-term debt for all obligations owned by the company. Therefore, the company needs financing or funds to increase sales. So, with an increase in sales, the company's Return on Assets (ROA) will also increase (Simatupang & Sari, 2021) (Nugroho, 2018). Working capital is an element that plays a role in generating income. Inaccuracy in the amount of working capital needed will disrupt company activities, and if this continues, it will affect the

continuity of company activities (Yani & Martha, 2019) and (Kurnia & Hartini, 2021). This is to the results of research conducted by (Nugroho, 2018) and (Yani Martha, 2019), which state that working capital has a positive and significant influence on Return on Assets (ROA). Based on the results of these studies, that can be formulated as follows:

**H1: Working Capital has a positive and significant effect on Return on Assets.**

#### **Effect of Sales Growth on Return on Assets**

Higher sales growth causes greater profits. Internal and external parties of the company expect this sales growth because the growth indicates the company's development (Brastibian et al., 2020). According to (Miswanto et al., 2017) (2018), a company that increases sales growth by using company assets efficiently and leads to optimal use of resources means that the company can maintain its economic position, and its survival has a positive impact on Return on Assets (ROA). This is to the results of research conducted by (Brastibian et al., 2020) and (Nainggolan et al., 2022), which state that sales growth has a positive and significant effect on Return on Assets (ROA). Based on the results of these studies, they can be formulated as follows:

**H2: Sales growth has a positive and significant effect on Return on Assets**

#### **The Effect of Working Capital and Sales Growth on Return on Assets**

Working capital and sales growth influence increasing Return on Assets (ROA). Sufficient company working capital can increase Return on Assets (ROA) because it can use existing working money to support smooth operations (Dini et al., 2021), (Nugroho, 2018) and (Dini et al., 2021). Likewise with sales growth, the higher the sales growth achieved, the higher the profit to be received, so there is a positive effect of sales growth on Return on Assets (ROA) (Hutomo et al., 2019) and (Brastibian et al., 2020). The higher the sales growth, the more the company will rely on capital (Simatupang & Sari, 2021) and (Nugraha et al., 2019).

**H3: Working capital and sales growth have a positive and significant effect on Return on Assets.**

#### **Effect of Working Capital on Return on Assets (ROA) with Firm Size As Moderating Variable**

Working capital is the company's entire fund to finance daily operating activities. The working capital component often used is working capital turnover (Felany & Worokinasih, 2018) and (Hutomo et al., 2019). If the effect of low profitability on working capital is low, this indicates a low sales volume compared to the costs used. There is an increase in the company's assets; the more significant the capital, the greater the sales, and the faster the working capital turnover. This resulted in the company's capitalization also increasing and impacting the company's being known (Anggarsari & Aji, 2018) (Brastibian et al., 2020).

**H4: Firm size can moderate the positive influence of working capital on Return on Assets.**

#### **The Effect of Sales Growth on Return on Assets (ROA) with Firm Size as a Moderating Variable**

Sales growth is an increase in company sales from time to time. Companies with positive sales growth will increase profitability because sales growth will increase company profits (Wulandari & Gultom, 2018). And (Hm, 2022). The greater the sales growth, the greater the company's Return on Assets (ROA). Companies can strengthen the relationship between sales growth and Return on Assets (ROA) and vice versa.

**H5: Firm Size can moderate the effect of sales growth on Return on Assets**

### **3.Methodology**

#### **Population and Sample**

The research method used is quantitative because the data used is numerical. Population is the entire

research object consisting of events as data sources with specific characteristics in a study (Hardani et al., 2020). In this study, the population used is the food and beverage industry sector companies listed on the Indonesia Stock Exchange in the 2018-2022 period, attached. The sample is a portion of the population taken using a sampling technique (Hardani et al., 2020) and (Bahri, 2018). The results of sample selection using the purposive sampling method during the 2018-2022 research period resulted in a total of 19 Companies and 95 samples with the following criteria:

Table 2. Sample Criteria

No	Criteria	Amount
1	Companies listed on the Indonesian Stock Exchange (BEI) in 2018-2022	30
2	Companies that are not listed on the Stock Exchange Indonesia (BEI) in 2018-2022	10
3	Companies that do not present data completely based on the variables used in this research in 2016-2020	1
4	Companies that meet criteria	19
5	Sampel (19 x 5 periode) = N	95

Source: Processed data (2022)

## Results

### Descriptive Statistics

Based on the data collection carried out by the author, the descriptive statistical data obtained for this study are as follows:

Table 3. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std.Deviation
Net Working Capital (IDR)	95	- 4.0.Trillion	11.Trillion	1.6 Trillion	3.2 Trillion
Sales Growth (%)	95	-7.46	32.30	6.67	38.01
Firm Size ( Log)/IDR	95	26.42(2.0,Billion)	32.73(2.3 Billion)	28.79 (2.1 Biliion)	1.46 (0,1 Billion)
Return on Asset (%)	95	-2,64	6.07	1.58	3.10
Valid N (listwise)	95				

Source: SPSS-26 data processing results

Based on Table 3.0 above, it can be seen that the objects studied (N) in 2018-2022 were 95 samples. Descriptive statistical analysis showed the following results: Working Capital has a minimum value of IDR. -4.0 trillion. And a maximum value of IDR. 11. trillion, with an average value of IDR. 1.6 trillion and a standard deviation value of IDR. 3,2 trillion. The table shows that the average value of Working Capital is quite good, around IDR.1.69 billion. Sales growth has a minimum value of -7.46 % and a maximum value of 32.30 %, with an average value of 6.67% and a standard deviation of 38.01%. The table shows that the standard deviation value is greater than the mean, which means that the data is expressed far from the average value. The table shows that the average value of sales growth is minimal, around 6.67%. Return on Assets (ROA) has a minimum value of -2.64% and a maximum value of 6.67%, with an average value of 1.58 % and a standard deviation of 38.01%. The table shows that the standard deviation value is greater than the mean, which means that the data is expressed far from the average or mean value. The table shows that the average Return On Assets (ROA) value is inferior, only around 1.58%. Firm size has a minimum value of Log.26.42(IDR.2.0 billion), and a maximum value of Log.32.72(IDR.2.3 billion) with an average value of Log. 28.79.(IDR.2.1,billion), and a standard deviation value of Log.1,46(IDR.0.1,billion). The table shows that the standard deviation value is smaller than the mean, which means that the data is expressed close to the average or mean value. The table shows that the average Firm Size value is excellent, around Log.28.79(IDR.2.1 billion).

Table 4. Normality Test

Normality Test	One-Sample Kolmogorov-Smirnov Test	Asymp. Sig. (2-tailed) ; 0.156 <sup>c</sup>	
Multikolinearity Test Coefficient	Variable	<u>Tolerance</u>	<u>VIF</u>
	Net Working Capital	0,854	2,882
	Sales Growth	0,955	1,005
	Firm Size	0,898	2,827
Heteroskedastisity Test	Correlation is significant at : 0.01 level (2-tailed).	0.01 level (2-tailed) : 0.089	
Uji Outocorellation Test	Durbin Watson	2,233	

Source: SPSS-26 data processing results

Based on Table 4.0. Normality test results above with the One-Sample Kolmogorov-Smirnov Test, it is known that the value of Asymp. Sig. (2-tailed) is more significant than 0.05. namely: 0.156, it can be concluded that the data is usually distributed. Based on Table 2.0. The multicollinearity test above shows that all independent variables have a tolerance value greater than 0.01. There were no multicollinearity symptoms in this study. Based on Table 4.0. the heteroscedasticity test above shows that the independent variable has a significance above 0.089. of 0.058. In this study, there were no symptoms of heteroscedasticity. Based on Table 2.0. the results of the autocorrelation test above show that the DW value is 2.233. So, it can be concluded that this study does not occur autocorrelation because  $DU < DW < 4-DU$  ( $1.6739 < 1.712 < 2.326$ ).

Table 5. Multiple Linear Regression Analysis

	B	Std.dev	t	Sig.
(Constant)	-0,760	0.240	-0,315	0,753
Net Working Capital	0,300	0,006	4,639	0.000
Sales Growth	0,195	0,635	0,307	0.760
Firm Size	0,004	0,009	0.469	0,640
Net Working Capital * Firm Size	0,001	0,000	-4,501	0,000
Sales Growth * Firm Size	0,008	0,024	-0,335	0,738
R	0,538			
Adj. R Square	0,246			
F-Statistics	0.07 <sup>b</sup>			

Source: SPSS-26 data processing results.

## 4. Discussion

### Effect of Working Capital on Return on Assets

Based on Table 5.0, the test results show the significant value of the effect of working capital on Return on Assets (ROA) because the value of Sig = 0.000 < 0.05. This means that operating capital is relatively stable due to effective working capital management so that companies can generate high profits. The company earns this profit on the sales made; the capital generated from the sale will increase profitability for the benefit of the company, so the Return on Assets (ROA) increases so that the more working money used by the company, the company's operational activities will increase and with an

increase the company's operating activities, the more products produced so that the opportunity to get profits will be even more fantastic. States that the working capital of food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022 is quite large, namely an average of IDR 1.6 trillion, due to ineffective working capital management, so these companies have a positive impact on profitability (return on assets). ) although it is still unsatisfactory, namely 1.56%, the more working capital the company uses effectively, the company's operational activities, especially food and beverage production, will increase, so that the average sales growth is 6.67% (quite good), but The positive impact on Profitability (Return on Assets) is not good, seen from the average value of 1.56%. The results of this study are in line with research conducted by (Yani & Martha, 2019), (Kurnia & Hartini, 2021), and (Gonçalves et al., 2018), which states that working capital affects Return on Assets (ROA). Working capital affects Return on Assets (ROA) if the company allocates working capital effectively. However, the research is not in line with research that has been conducted by (2021), which states that working capital affects Return on Assets (ROA) because companies are less effective in using working capital, so working capital does not affect Return on Assets (ROA).

#### **Effect of Sales Growth on Return on Assets**

Based on Table 5.0 test results, This is explained based on the results of the t-test which shows that sales growth does not affect Return on Assets (ROA). Because the Sig value =  $0.760 > 0.05$ . This is due to the very small growth so that sales growth cannot optimize the use of its assets, which ultimately cannot affect Return on Assets (ROA). States that the sales growth of food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022 shows quite good conditions with an average sales growth of 6.7%, but does not have an impact on profitability (Return on Assets) because the average is 1.56%, even though the average number of assets is IDR 2.1 billion, this shows that food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022, are not able to use assets as optimally as possible to increase profitability (return on assets). According to (Ulfa and Wahyu, 2020) an increase in sales can occur but instead reduces Return on Assets (ROA). sales that are not so significant but are used to cover operational costs and the addition of higher assets. So that the value of the company's profitability cannot increase, because sales growth cannot cover the costs incurred by the company. However, this research is in line with research that has been conducted by (Brastibian et al., 2020), (Arifin et al., 2017), and (Nugraha et al. (2019), sales growth has no effect on Return On Assets which is due to growth poor sales and inefficient operational costs. The results of this study are not in line with research conducted by (Anggarsari and Aji, 2018), (Ulfa & Wahyu, 2020), (Miswanto et al., 2017), and (Rahmawati et al., 2016) which states that sales growth affects Return on Assets (ROA).

#### **The Effect of Working Capital and Sales Growth on Return on Assets**

Based on Table 5.0, the results show F-statistics. Working capital and sales growth significantly affect Return on Assets (ROA). Because Sig =  $0.007 < 0.05$ . This means that the higher the effectiveness of working capital, the higher the production process to generate sales growth so that a balance between available Working Capital can increase sales growth, followed by operational cost efficiency to increase Return On Assets (ROA). The working capital of food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022 is large. Namely, an average of IDR 1.6 trillion, and conditions are quite good, with an average sales growth of 6.7%, followed by effectiveness. With higher working capital, the production process results in higher sales growth so that the balance between available Working Capital can increase sales growth, followed by operational cost efficiency so that it will influence Return On Assets. However, the average is low at 1.56%.

#### **The Effect of Working Capital on Return on Assets (ROA) with Firm Size as a Moderating Variable**

Based on Table 5.0, the results of hypothesis testing state that working capital significantly affects Return on Assets (ROA), which is moderated by firm size because Sig =  $0.000 < 0.05$ . The size of a



company can be a factor that accelerates working capital turnover to optimize the use of available assets to produce the expected Return on Assets and good profitability. States that the size of the company (assets) in food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022, the average amount of assets is IDR 2.1 billion, able to strengthen the influence of working capital, which is quite large, namely on average IDR. 1.6 trillion in return on assets, although the average is not that high at 1.56%. The size of a company can be a factor that accelerates working capital turnover to optimize the use of available assets to produce returns on expected assets and quite good profitability. According to (Brastibian et al., 2020), the larger the company size, the greater the opportunities to benefit from the results of its operations will be more significant. This indicates that the company is experiencing good development and growth.

#### **The Effect of Sales Growth on Return on Assets (ROA) with Firm Size as a Moderating Variable**

Based on Table 5.0, the test results show that sales growth has no significant effect on Return on Assets (ROA), which is moderated by firm size because  $\text{Sig} = 0.738 > 0.05$ . This is because sales growth could be better, so it cannot optimize existing company assets and does not affect Return on Assets (ROA). States that the size of the company (assets) in food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022, the average amount of assets is IDR 2.1 billion, is not able to strengthen the influence of sales growth, which is quite good on average sales growth of 6.7%, this was due to not optimizing the use of available assets to produce the expected Return on Assets and fairly good profitability, namely an average of only 1.56%. This was due to pretty good sales growth but needing to sufficiently optimize the company's assets. Significant, so it does not affect Return on Assets (ROA). The research that has been conducted (Hm, 2022) states that firm size can moderate sales growth on profitability as measured by Return on Assets (ROA) because the increase in total sales is more significant than the total cost, profits will be obtained, then the more significant the total sales, the bigger the Firm size.

### **5. Conclusion and Recommendation**

Based on the results of data processing and analysis, it is concluded that Working capital has a significant effect on Return on Assets (ROA) because, with a large enough working capital, which averages IDR 1.69 trillion, the assets owned by the company can be used optimally in the framework of the production process to produce optimal company profits. Sales growth does not affect Return on Assets (ROA). This is because this company has an average sales growth of 6.67%, so it cannot generate optimal profits. With poor sales growth, more is needed to finance operational costs, so it does not impact Profitability. Working capital and sales growth affect Return on Assets (ROA) because the company's working capital is quite good and contributes a lot to Profitability. Working capital significantly affects Return on Assets (ROA), which is moderated by firm size because the average working capital is relatively high and followed by Firm Size, which is relatively high on average IDR.2.1 billion. Hence, production activities are ongoing well and profitably. Sales growth does not affect Return on Assets (ROA), which is moderated by firm size in food and beverage companies listed on the Indonesia Stock Exchange (IDX) in 2018-2022. Even though the firm size is high, sales growth is low, so it cannot optimize existing assets in the company, so it does not impact Profitability. Based on research results, it has been recommended that top management of food and beverage companies be required to do this by maintaining a balance between working capital, sales growth, and company size in such a way that it is possible to increase profitability/return on assets. The balance between liquidity and financial solvency allows manufacturing companies to repay short-term or long-term loans at maturity or due date. In addition, the balance between working capital, sales growth, and company size allows companies to carry out their operations more efficiently and effectively, and their financial performance will increase. Problems with working capital, sales growth, and company size can occur in all countries, mainly due to the coronavirus pandemic crisis that has occurred, affecting all food and

beverage companies and the survival of the company. The research also recommends further studies regarding the relationship between four important problem variables, working capital, sales growth, company size, and return on assets, to be carried out for industries other than the food and beverage sector and adding other variables to consider.

**Limitations:** This research uses secondary data from annual reports of companies listed on the Indonesia Stock Exchange. The sample in this research does not use the entire sector companies in Indonesia but only uses one food and beverage sector with an observation period of 2018-2022.

**Practical Implications:** This research provides insights to help business management food and beverage companies identify and increase the persistence of return on assets in registered food and beverage companies in the Indonesia stock exchange. Management should be able to manage efficient working capital so that working capital conditions sufficiently influence the company's operational activities. If the company's operations run smoothly, the products produced will increase, so the opportunity to gain profits will be even more incredible, and sales growth and company Profitability can increase.

## References

Abidin, Z., & Setiadi, D. (2018). The Effect of Working Capital on Return On Assets (ROA) Through Sales. 4(1), 77–89.

Ananda, F.A.T., & Takarini, N. (2021). Profitability Analysis of Companies Included in the LQ45 Index on the Indonesian Stock Exchange. 11(2), 130–145.

Angarsari, L., & Aji, T.S. (2018). The Effect of Company Size, Leverage, Liquidity, Working Capital Turnover and Sales Growth on Profitability (Goods and Consumption Industry Sector Listed on the Indonesia Stock Exchange Period 2013-2016). 6, 542–549.

Arifin, D.S., Sarita, B., & Madi, R.A. (2017). The Effect of Liquidity, Company Size and Sales Growth on Profitability (Study of Property and Real Estate Companies Listed on the Indonesia Stock Exchange in 2013-2017).

Atiningsih, Suci, and Khairina Nur Izzaty. 2021. “The Effect Firm Size on Company Value with Profitability as Intervening Variable and Dividend Policy as Moderating Variable

Bahri, S. (2018). Complete Business Research Methodology with SPSS Data Processing Techniques (E. Risanto (ed.)). AND I.

Brastibian, I., Mujino, & Rinofah, R. (2020). The Effect of Capital Structure, Sales Growth and Company Size on the Profitability of Pharmaceutical Companies Listed on the Indonesian Stock Exchange. 10(1), 81–88.

Dewi, R.S., & Idayati, F. (2020). The Effect of Leverage, Liquidity, Working Capital Turnover and Sales Growth on Company Profitability. *Journal of Accounting Science and Research*, 9(12).

Dini, S., Felica, Marsella, & Laurencia, J. (2021). The Effect of Working Capital, Sales, Debt and Company Size on the Profitability of Property and Real Estate Companies. *Scientific Journal of Management, Economics, and Accounting*, 5(1), 643–659.

Febrianti, R, and H Basri. 2022. “The Effect of Cash Turnover, Sales Growth and Leverage on Profitability.” *Jurnal.Ekonomi*.<http://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/871%0Ahttps://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/download/871/703.1160-60>

Felany, I.A., & Worokinasih, S. (2018). Effect of Working Capital Turnover, Leverage and Liquidity on Profitability (Study of Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2012-2016). *Journal of Business Administration*

Fiana, E., & Meliza, J. (2022). The Effect of capital structure, sales growth and firm size to the profitability of three Indonesian retail companies listed on the Indonesia Stock Exchange. 4(1), 7–16.

Gonçalves, Tiago Cruz, Cristina Gaio, and Frederico Robles. 2018. “The Impact of Working Capital Management on Firm Profitability in Different...” *Economics and Business Letters* 7(2): 70–75. <http://ec.europa.eu/eurostat>.

Halim, S., Lius, V., Veronica, T., & Wulandari, B. (2021). Sales Growth, Company Size, Leverage, Working Capital, Liquidity, Cash Turnover and Its Impact on Profitability in the Food and Beverage Industry Listed on the Indonesia Stock Exchange (IDX).(September), 545–550. <https://doi.org/10.33087/economics.v5i2.412>

Hardani, Auliya, N. H., Andriani, H., Fardani, R. A., Ustiawaty, J., Utami, E. F., Sukmana, D. J., & Istiqomah, R. R. (2020). *Qualitative & Quantitative Research Methods* (H. Abadi (ed.); March Number). Science Library CV.

Hastuti, W., Wagini, & Rahman, A. (2022). The Effect of Working Capital Turnover and Receivable Turnover on the Profitability Level of PT Uniliver Indonesia Tbk in 2016-2020. 10, 299–310.

Hernawati, E., & Karyadi. (2020). Effect of Sales Growth and Working Capital Turnover on Return On Assets (ROA). *Business Economics*, 8, 36–44.

Harry. (2016). *Analysis of Financial Statements* (Adipramono (ed.)). PT Grasindo. Hm, T.A. (2022). Effect of Growth on Profitability with Company Size as a Moderating Variable in Automotive Companies Listed on the Indonesia Stock Exchange for the 2015-2019 Period. 11(01), 255–269.

Hutabarat, M.I. (2022). The Influence of ROA, Sales Growth, Liquidity and Company Size on the Capital Structure of Manufacturing Companies in the Food and Beverage Sector on the IDX. 6, 348–358.

Hutomo, Y. P., Lestari, D. D., & Mukmin, M. N. (2019a). Working Capital Turnover, Sales Growth, Leverage and Profitability: Study For Companies in the Consumer Goods Industry SectorRegistered on the Indonesian Stock Exchange. 5, 1–14.

Kashmere. (2019). *Financial Statement Analysis*. PT Raja Grafindo Persada.

Kurnia, D. R., & Hartini, E. F. (2021). Profitability Prediction Through Working Capital and Size of Food and Beverage Companies. 18(01), 39–46.

Kuswontoro, & Artati, D. (2018). Effect of Working Capital, Leverage, Liquidity, and Company Size on Profitability. 1–10.

Mahayana, Made Nikko, Ni Kadek Sinarwati, and Putu Indah Rahmawati. 2023. “Effect of Receivable Turn over, Sales Growth,Leverage and Company Size on Company Profitability(Study at PT Pos Indonesia).” *Jurnal Ekonomi* 12(01): 2023. <http://ejournal.seaninstitute.or.id/index.php/Ekonomi>.

Miswanto, Abdullah, Y. R., & Suparti, S. (2017). Effect of Working Capital Efficiency, Sales Growth and Company Size on Company Profitability. *Journal of Business and Economics* ISSN: 1412-3126, 24(2), 119–135.

Nainggolan, M. N., Sirait, A., Nasution, O. N., & Astuty, F. (2022). Effect of company size, sales growth, and leverage on profitability through the ROA ratio in the Food & Beverage sector on the IDX for the 2015-2019 period. *Owners*, 6(1), 948–963. <https://doi.org/10.33395/owner.v6i1.440>

Nugraha, J. A., Halim, R., & Christiawan, Y. J. (2019). The Effect of Working Capital Efficiency, Solvability and Sales Growth on the Profitability of Manufacturing Companies Listed on the IDX in 2015-2019. 1–10.

- Nugroho, D. W. (2018). Effects of Working Capital, Institutional Ownership and Receivable Turnover Against Profitability. *Journal of Management Science and Research* e-ISSN: 2461-0593
- Paramita, D. A., Sochib, & Mudhofar, M. (2020). The Effect of Working Capital, Company Size and Growth Opportunity on the Profitability of Banking Companies Listed on the Indonesia Stock Exchange. *Journal of Accounting* (E- ISSN: 2715-8586), 3(1), 1–6.
- Paramita, P.D. (2016). The Influence of Working Capital Turnover, Receivable Turnover and Firm Size on Profitability Moderated Liquidity at PT "LK" Semarang Period 2013-2016.
- Paramitha Tirtanata, Lia Dama Yanti. 2021. "The Influence of Company Size, Working Capital Turnover and Leverage on Profitability in Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesian Stock Exchange for the 2017-2019 Period." *eCo-Fin-Journa* 3(1): 21–30.
- Pradnyaswari, N. M. A. D., & Dana, I. M. (2022). The Effect of Liquidity, Capital Structure, Company Size and Leverage on Profitability in Automotive Sub Sector Companies. 11(3), 505–525.
- Pitri Afriani, Liza Novieta, Azwansyah Habibie. 2022. "The Influence of Leverage, Liquidity, Working Capital Turnover, and Total Asset Turnover on Profitability with Company Size as a Moderating Variable (Empirical Study of Mining Companies on the BEI in 2016)." *Jurnal Akuntansi, Manajemen dan Ekonomi Digital* 2(3): 1–13.
- Rahmiyati, Nekky et al. 2023. "The Effect of Firm Size and Sales Growth on Profitability Mediated by Capital Structure." *Kontigensi : Jurnal Ilmiah Manajemen* 11(1): 105–14.
- Rahmawati, S., Salim, M. A., & ABS, M. K. (2016). The Effect of Liquidity, Sales Growth, Working Capital Turnover, Company Size and Leverage on Company Profitability (Study of Manufacturing Companies Listed on the IDX in 2014-2016). 93–107.
- Sams, D. I. A. (2021). The Effect of Liquidity and Inventory Turnover on Return on Assets (ROA) with Sales Growth as a Moderating Variable in Food and Beverage Companies in the 2015-2-18 Period. IX(1), 1–15.
- Santoso, David, and Hersugondo Hersugondo. 2023. "Company Size and Growth on Profitability: A Comparative Study in 5 ASEAN Countries." *Journal of Accounting Research, Organization and Economics* 6(2): 213–28.
- Santini, N. L. K. A., & Baskara, I. G. K. (2018). The Effect of Working Capital Turnover, Company Size and Liquidity on the Profitability of Textile and Garment Companies. 7(12), 6502–6531.
- Sari, Dewi Maya, and Mislinawati. 2023. "Does Liquidity and Firm Size Affect Profitability? A Panel Data Analysis on Firm of Consumer Non-Cyclical Sector." *International Journal of Educational Review, Law And Social Sciences* ; 875–83. <http://radjapublika.com/index.php/IJERLAS/article/view/868>.
- Sari, N.Y., & Purwohandoko. (2019). The Influence of Working Capital, Leverage, Liquidity, and Firm Size on the Profitability of the Goods and Consumption Industry Sector. 7.
- Sekar Ayuningtyas, Gearin, and Prasentiono. 2021. "The Influence of Working Capital Management on Profitability with Firm Size as Moderation and Leverage Variables, Current Ratio and Sales Growth as Control Variables." *Diponegoro Journal of Management* 10(3): 1–14. <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Simatupang, J., & Sari, E. P. (2021). Effect of Working Capital, Asset Turnover and Sales Growth Limited Return on Assets in Food and Beverage Industry. *International Journal of Business Economics (IJBE)*, 2(2), 143–154. <https://doi.org/10.30596/ijbe.v2i2.6655>

- Simbolon, Kristania Victoria, Jeanet Kathlen Salindeho, and Aldo Franco Karinda. 2022. "Working Capital, Firm Size, Solvability, and Liquidity Towards Profitability of the Consumer Goods Industry." *Klabat Journal of Management* 3(1): 34.
- Sukadana, I. K. A., & Triaryati, N. (2018). Sales Growth Influence, Company Size and Leverage on Profitability in Food and Beverage Companies BEI. 7(11), 6239–6268.
- TC.J.Andriandra Edisan, Acep Edison. 2021. "The Influence of Debt to Equity Ratio and Sales Growth on Return on Assets and Its Impact on the Dividend Payout Ratio." *BISMA (Bisnis dan Manajemen)* 15(1): 1–13.
- Ulfa, T. U., & Wahyu, L. (2020). Working Capital Turnover, Growth Sales, Company Size and Liquidity Effect on Profitability. 4955(1), 59–68.
- Wau, R., & Natong, A. (2020). Moderation of Company Growth Among the Effects of Working Capital Management on Profitability. 5(November).
- Wulandari, P., & Gultom, R. (2018). The Influence of Liquidity, Activity, and Sales Growth on Profitability in Food and Beverage Industry Companies Listed on the Indonesia Stock Exchange in 2014-2017. *Journal of Scientific Methodology*, 4(2), 101–110.
- Yani, Y. A., & Martha, L. (2019). The Effect of Working Capital on Profitability in Cosmetic Companies Listed on the Indonesian Stock Exchange. *Indonesian Journal of Economics and Management*. Vol. 1, No. 1, November 2020, pp. 205 – 220
- Y.P.Hutomo, D.D.Lestari, M.N.Mukmin. 2019. "Working Capital Rotary, Sales Growth, Leverage and Profitability: A Study toward Consumption Goods Industrial Sector Company Registered in Indonesian Stock Exchange." *Jurnal Akunida* 5(2): 1–13. <http://www.nber.org/papers/w16019>.
- Zuhroh, A. F., & Utiyati, S. (2018). The Influence of Working Capital, Liquidity and Sales Growth on the Profitability of Food and Beverages Companies on the IDX.