

The operational process efficiency and profitability on food and beverage companies in Indonesia

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Abstract

High profitability can attract investors and also offer opportunities for company expansion. Improving profitability can be achieved through efforts to enhance operational efficiency and optimize the allocation of company resources. This research aims to investigate the impact of Receivable Turnover (RTO) and Inventory Turnover (ITR) on Profitability (ROA) in the food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2018-2022. Data collection methods involve documentation, utilizing financial reports from six companies with the highest sales turnover. Using multiple linear regression analysis, the research findings reveal that Receivable Turnover (RTO) significantly influences Profitability (ROA) positively. This indicates that increased efficiency in receivables management can contribute positively to a company's profitability. Meanwhile, Inventory Turnover (ITR) does not have a significant impact on ROA. This finding suggests that efficiency in inventory management does not directly affect the level of profitability. The implications of this research underscore the importance for management to maintain efficiency in receivables management and continually improve operational efficiency in inventory management. Thus, companies can more quickly convert inventory into sales, avoid excess idle inventory, and overall improve profitability performance.

Keywords: Efficiency, Inventory Turnover, Profitability, Receivable Turnover

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1. Introduction

Profitability serves as a critical measure of success in a company's business endeavors. The generated profits should suffice to cover the company's operational expenses, settle debts, and distribute dividends to the shareholders (investors).

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Profitability serves as a crucial benchmark for a company's success. The profits generated should be sufficient to cover operational expenses, debt obligations, and dividends for the company's shareholders (investors).

A favorable level of profitability not only attracts investors but also provides greater opportunities for sustainability. Moreover, profitability enables companies to expand their business with the capital generated from earnings. In the long term, significant profits can strengthen a company's market position and enhance its competitiveness, opening avenues for expansion or acquisition. High profitability also benefits employees, business partners, and the surrounding community. Financially successful companies can provide more support for beneficial social and environmental programs. Thus, enhancing company profitability is essential not only for business success but also for creating favorable effects for the company and considering the overall environmental well-being.

To ensure long-term success, companies must ensure adequate levels of profitability. Enhancing profitability can be achieved by improving operational efficiency, optimizing resource allocation, developing more effective marketing strategies, and expanding market share. Additionally, measuring and analyzing profitability, influenced by factors such as Receivable Turnover (RTO) and Inventory Turnover Ratio (ITR), can assist companies in improving financial performance (Syakhiya, 2020; Setiani & Andini, 2023).

According to Suraya (2018), effective inventory and receivables management can enhance a company's Return on Assets (ROA). ITR and RTO are crucial indicators for measuring inventory and receivables management efficiency. The higher the ITR and RTO, the more effective the company is in managing inventory and receivables, and the likelihood of the company's ROA increasing. ITR can be enhanced by accelerating inventory turnover through optimal inventory level management and reducing unproductive inventory. Meanwhile, RTO can be improved by shortening the billing cycle through increased receivables management efficiency and expediting the billing process. By implementing effective inventory and receivables management strategies, companies can enhance operational efficiency and financial performance reflected in better ROA. Hasanudin et al. (2022) and Rajagukguk & Siagian (2021) found a significant positive relationship between RTO and ITR with profitability. The research findings indicate that as the turnover rates of receivables and inventory increase, the company's profitability also increases. It is concluded that efficient receivables and inventory management can contribute to the overall profitability of manufacturing companies. These findings also add to the existing literature on the impact of RTO and ITR on company financial performance, highlighting the importance of these ratios in evaluating the health and growth potential of companies.

However, Hartati (2018) found no significant influence of RTO on profitability, while a significant positive influence on profitability was found in ITR. These findings suggest that both company profitability and inventory turnover increase at an increasing rate. This study emphasizes the differences in previous research results and expands our understanding of how RTO and ITR contribute to enhancing profitability. Similarly, according to Wulandari & Lubis (2021) manufacturing companies listed on the Indonesia Stock Exchange receive positive feedback from ITR regarding profitability, but RTO does not have significant feedback regarding profitability. The current study shows that higher productivity and profitability per person are closely related, with results consistent with previous research. This article provides insights from literature on factors influencing business profitability and underscores the importance of inventory usage to enhance business productivity.

Based on theory and empirical research, indications suggest an influence of RTO and ITR on company profitability in general. However, there is variation and differences in previous research results. Therefore, further research is needed to test the influence of RTO and ITR on profitability, especially in the food and beverage subsector of manufacturing

companies listed on the Indonesia Stock Exchange. This research aims to provide a more comprehensive understanding of the importance of receivables and inventory management in achieving optimal profitability levels for companies.

2. Hypotheses Development

Receivable turnover and profitability

Accounts receivable represent the claims held by a company against other parties for money, goods, or services that have not yet been paid or settled as a result of sales transactions or credit extensions. Accounts receivable are debts that are not accompanied by written promises (Rudianto, 2012). On the other hand, Receivable Turnover (RTO) refers to the ability of funds invested in accounts receivable to turn over how many times in a specific period. A high turnover of accounts receivable allows the company to convert receivables into cash more quickly. This can enhance the company's cash flow, provide better liquidity, and enable the company to manage its financial needs more effectively. With an increase in RTO, the risk of uncollectible accounts receivable may decrease. Rapid turnover of accounts receivable means reduced chances of payment default, helping the company avoid losses due to uncollectible receivables. A high turnover of accounts receivable reflects efficiency in accounts receivable management. An effective accounts receivable collection process can reduce administrative costs and the time required to chase payments, thus enhancing overall operational efficiency. By managing accounts receivable efficiently, the company can improve cash flow and increase return on investment, which in turn can contribute to enhancing profitability (Maisa et al., 2020; Wijaya & Tjun, 2017). Based on theoretical and empirical studies, the first hypothesis is as follows:

H₁: Receivable turnover has a positive effect on profitability

Inventory turnover ratio and profitability

Inventory consists of a collection of goods, including finished goods, raw materials, and work-in-progress items owned by a company for the purpose of sale or further processing (Rudianto, 2012). Efficient inventory turnover enables companies to manage working capital more effectively. By reducing the level of inventory held, companies can allocate their capital to other areas that can provide higher investment returns, such as investments in more profitable projects. Rapid inventory turnover can accelerate the operational cash flow cycle (Nuraini, 2021). By selling inventory quickly, companies can convert inventory into cash more efficiently, which can enhance liquidity and support operational needs. Additionally, controlled inventory can also help companies cope with market demand fluctuations and avoid stock shortages or excess inventory. Good inventory management can also minimize the risk of product damage or expiration, thereby reducing company losses. High inventory turnover helps companies avoid the risk of expired or obsolete goods. By always having fresh and up-to-date inventory, companies can maintain customer reputation and trust, which in turn can affect sales growth and profitability (Werdiningtyas, 2019; Migang & Irawan (2019). Based on theoretical and empirical studies, the second hypothesis is as follows:

H₂: Inventory turnover ratio has a positive effect on profitability

3. Methods, Data, and Analysis

In this study, a quantitative research method with a descriptive approach was employed. The focus of this research is on companies operating in the food and beverage sector and listed on the Indonesia Stock Exchange (IDX). The research sample consists of 6

companies in the food and beverage sector that meet the sampling criteria. Sample data were obtained from annual reports for five consecutive years, from 2018 to 2022.

Sample selection was conducted using purposive sampling method, where samples were chosen based on predetermined criteria. The purpose of selecting these criteria was to obtain samples that have specific relevance to the research topic and can represent the desired characteristics. Thus, the selected samples would have characteristics that align with the research needs and provide relevant information about the phenomenon under investigation. The sampling criteria include: manufacturing companies operating in the food and beverage subsector that have reported their financial statements during the period of 2018-2022, and manufacturing companies operating in the food and beverage subsector with sales revenue exceeding 1 trillion. Based on the sampling criteria, 6 manufacturing companies in the food and beverage subsector listed on the IDX were obtained.

This research utilizes documentation technique. Documentation technique is a method of obtaining information quickly and accurately using documents related to the subject of analysis. The documents used from the IDX official website include Balance Sheet and Income Statement.

The dependent variable is profitability, proxied by return on assets (ROA). ROA is one of the financial ratios used to measure how efficiently a company utilizes its assets to generate profit. For manufacturing companies, ROA provides an overview of how well the company can generate net income from its total assets. The net income of the company after deducting all expenses and taxes from revenue. Total assets encompass all assets owned by the company, such as property, plants, equipment, inventory, and other assets. The higher the ROA value, the more efficient the company is in using its assets to generate profit. On the other hand, a low ROA may indicate that the company may face efficiency issues in asset management. The general formula for ROA is in Equation 1 (Eq. 1).

$$ROA = \frac{Net\ profit}{Total\ assets} \times 100\% \quad (Eq. 1)$$

The independent variables consist of receivable turnover (RTO) and inventory turnover ratio (ITR). RTO is a financial ratio that measures how quickly a company can collect its receivables from customers. It provides an insight into the company's efficiency in managing its accounts receivable. RTO reflects how fast the company can convert sales into cash through receivable collection. In the context of manufacturing, where there may be longer production and sales cycles, it is important to ensure that the receivable collection period remains within a reasonable timeframe. The interpretation of receivable turnover is how many times the company can collect its receivables within a given period. The higher this ratio, the faster the company collects its receivables.

A high ratio is usually considered good because it shows efficiency in receivables management. The general formulation of RTO is in Equation 2 (Eq. 2).

$$RTO = \frac{Net\ credit\ sales}{Average\ receivable} \times 100\% \quad (Eq. 2)$$

Inventory Turnover Ratio (ITR) is a financial ratio that measures how quickly a company can convert its inventory into sales during a certain period of time. For manufacturing companies, ITR is critical as it pertains to production cycles, inventory management, and operational efficiency. A high ITR indicates that the company can manage production and sales cycles efficiently, which can help reduce production costs and increase profitability. The calculation of ITR includes the cost of goods sold, which is the total cost incurred by the company to produce goods sold during a specific period; and average inventories, which is the average net inventory value of the company during the

same period. The average net inventory is calculated by adding the initial and ending inventory values for the period and dividing by two. The general formulation for the inventory turnover ratio is Equation 3 (Eq. 3).

$$ITR = \frac{\text{Cost of goods sold}}{\text{Average inventories}} \quad (\text{Eq. 3})$$

The study used multiple regression analysis, which includes more than one independent variable. This analysis is carried out to ascertain the direction and magnitude of the impact that independent variables have on the dependent variable. The process of multiple regression analysis involves several steps: (1) Establishing the model summary; (2) Conducting the simultaneous test; (3) Generating output for coefficients and significance; (4) Executing classical assumption tests such as linearity, normality, heteroskedasticity, autocorrelation, and multicollinearity. The equation for the regression model is Equation 4 (Eq. 4).

$$ROA_{i,t} = \alpha + \beta_1 RTO_{i,t} + \beta_2 ITR_{i,t} + \varepsilon \quad (\text{Eq. 4})$$

Hypothesis testing is carried out using the t-test and F-test. The t-test is used to determine the partial influence of RTO and ITR on ROA. If the significance level $\alpha < 0.05$, then RTO and ITR significantly affect ROA. If the significance level $\alpha > 5\%$, then RTO and ITR do not affect ROA. The F-test is used to determine if there is a significant difference between the means of different groups being compared. The primary purpose of the F-test is to determine if the variation between groups is greater than the variation within groups. The F-test is a type of statistical test used in analysis of variance (ANOVA). Using the F-test, it can be determined if RTO and ITR have a simultaneous influence on ROA.

Hypothesis testing involves the utilization of the t-test and F-test. The t-test is employed to assess the partial impact of RTO and ITR on ROA. If the significance level (α) is less than 0.05, it indicates a significant effect of both RTO and ITR on ROA. Conversely, if the significance level (α) exceeds 5%, it implies that RTO and ITR do not exert an influence on ROA. The F-test, utilized in analysis of variance (ANOVA), is employed to determine whether there exists a significant distinction between the means of various compared groups. The primary objective of the F-test is to ascertain whether the variation among groups surpasses the variation within groups. Through the application of the F-test, it can be determined whether RTO and ITR collectively exert an influence on ROA.

4. Results

Return on Assets of manufacturing companies in the food and beverage sub-sector that are publicly listed in BEI

This research was conducted on 6 manufacturing companies in the food and beverage sub-sector that are publicly listed. Return on Assets (ROA) is a financial ratio that measures the extent to which a company can generate profit from its assets. This ratio measures the percentage of net income generated by the company against its total assets. It is used to evaluate the efficiency and profitability of the company. [Table 1](#) presents the ROA percentages calculated for manufacturing companies in the food and beverage sub-sector during the 5-year period from 2018 to 2022.

Based on [Table 1](#), the Return on Assets (ROA) of the six manufacturing companies in the food and beverage sub-sector during the period of 2018-2022 fluctuated. The highest ROA value, reaching 17.3%, was recorded for PT Wilmar Cahaya Indonesia Tbk, while the lowest ROA value, at 0.1%, was observed for Sekar Bumi Tbk. Using the mean value, it can

be concluded that manufacturing companies in the food and beverage sub-sector have an average ROA of 7.9%. This indicates differences in performance among companies resulting in variations in profit management.

Nippon Indonesia Corpindo Tbk (ROTI) experienced an increase in ROA from 2018 to 2019 but decreased to 3.8% in 2020. This decline could be attributed to various factors, including operational efficiency, asset management, market competition, and economic conditions. However, in the last year of this study, the average company recorded the highest ROA of 9.6%, showing an increase compared to previous years.

Table 1.

Illustration of the average ROA of food and beverage sub-sector manufacturing companies for the 2018-2022 period

Stock code	Return on Asset (%)					Average
	2018	2019	2020	2021	2022	
GOOD	10.1	8.6	3.7	7.3	7.1	7.4
ROTI	2.9	5.1	3.8	6.8	10.5	5.8
CEKA	11.1	17.3	13.9	11.0	12.8	13.2
CLEO	7.6	15.5	11.6	13.4	11.5	11.9
CAMP	6.2	7.3	4.1	8.7	11.3	7.5
SKBM	0.9	0.1	0.3	1.5	4.2	1.4
Mean	6.5	9.0	6.2	8.1	9.6	7.9
Maximum	11.1	17.3	13.9	13.4	12.8	13.2
Minimum	0.9	0.1	0.3	1.5	4.2	1.4

Receivable turnover food and beverage sub-sector manufacturing companies listed on the IDX

Receivable turnover is a financial ratio that evaluates the speed at which a company collects its accounts receivable from customers. This ratio depicts the efficiency of the company in managing receivables and converting them into cash. If RTO is low, the company needs to improve its accounts receivable management policies to enhance liquidity and reduce the risk of uncollectible accounts. Table 2 shows the calculation of Receivable Turnover (RTO) as a percentage over five years (2018-2022) for manufacturing companies in the food and beverage sub-sector.

Table 2.

Receivable turnover of food and beverage sub-sector manufacturing companies for the 2018-2022 period

Stock code	Receivable turnover					Average
	2018	2019	2020	2021	2022	
GOOD	14.99	14.75	12.68	14.29	14.16	14.17
ROTI	6.99	6.82	6.87	8.25	8.95	7.58
CEKA	16.72	12.40	9.36	10.91	8.70	11.62
CLEO	10.61	29.13	29.88	8.98	8.61	17.44
CAMP	5.23	5.41	6.14	8.53	9.41	6.94
SKBM	8.07	7.74	9.62	9.29	8.30	8.60
Mean	10.43	12.71	12.43	10.04	9.69	11.06
Maximum	16.72	29.13	29.88	14.29	14.16	17.44
Minimum	5.23	5.41	6.14	8.25	8.30	6.94

Source: IDX Annual Financial Report (2023)

Each company shows a different level of accounts receivable turnover. PT Campina Ice Cream Industry Tbk (CAMP) experienced the highest increase in RTO, from 5.23 times to 9.41 times, indicating that the company can collect receivables faster than other

companies. Additionally, PT Nippon Indosari Corpindo Tbk (ROTI) and PT Sekar Bumi Tbk (SKBM) also experienced both increases and decreases in RTO, but in 2022, these companies showed an increase, indicating improvement in receivables management. Meanwhile, PT Garudafood Putra Putri Jaya Tbk (GOOD), Wilmar Cahaya Indonesia Tbk (CEKA), and Sariguna Primatirta Tbk experienced a decrease in RTO over the years, indicating delays in the accounts receivable collection process, thus requiring evaluation of credit policies and collection processes. However, despite this, PT Garudafood Putra Putri Jaya Tbk has the highest RTO at 14.16 times.

On average, companies listed on the Indonesia Stock Exchange (BEI) in the manufacturing industry sub-sector of food and beverage have an average accounts receivable turnover of 11.6 times. With this, companies are considered good or optimal because the typical accounts receivable turnover is around 8-12 times per year.

Inventory turnover of food and beverage sub-sector manufacturing companies listed on the IDX

Inventory turnover is a measure used to assess a company's efficiency in managing its inventory or stock of goods. It refers to how often a company depletes or sells its inventory during a specific period, typically within a year. Table 3 shows the calculation of Inventory Turnover (RTO) as a percentage over five years (2018-2022) for manufacturing companies in the food and beverage sub-sector.

Table 3.

Inventory turnover of manufacturing companies in the food and beverage sub-sector for the 2018-2022 period

Stock code	Inventory turnover					Average
	2018	2019	2020	2021	2022	
GOOD	7.15	7.32	6.68	6.83	6.89	6.98
ROTI	22.09	20.00	15.06	13.44	13.89	16.90
CEKA	1.50	2.33	1.91	13.47	14.61	6.76
CLEO	7.07	28.24	32.67	5.75	5.58	15.86
CAMP	2.39	2.52	2.84	3.58	4.06	3.08
SKBM	5.81	5.16	7.14	8.02	7.12	6.65
Mean	7.67	10.93	11.05	8.51	8.69	9.37
Maximum	22.09	28.24	32.67	13.47	14.61	16.90
Minimum	1.50	2.33	1.91	3.58	4.06	3.08

Source: IDX Annual Financial Report (2023)

Inventory turnover rates can vary among companies. Wilmar Cahaya Indonesia Tbk has the highest turnover rate, increasing from 1.50 times to 14.61 times. This indicates better efficiency in managing its inventory, with inventory turning over more quickly and sales being more optimal. Additionally, PT Campina Ice Cream Industry Tbk and PT Sekar Bumi Tbk also experienced an increase in inventory turnover. On the other hand, Garudafood Putra Putri Jaya Tbk, Nippon Indosari Corpindo Tbk, and Sariguna Primatirta Tbk experienced a decrease in inventory turnover. This could be due to factors such as limited market demand or ineffective inventory management strategies, requiring an evaluation of inventory policies to enhance efficiency and avoid excess inventory accumulation.

On average, companies listed on the Indonesia Stock Exchange (IDX) in the food and beverage manufacturing sub-sector have an inventory turnover value of 9.37 times. This figure reflects the average inventory turnover rate in the industry, considered good as the typical inventory turnover rate ranges between 8-12 times per year. However, this cannot be considered as a benchmark since each company has a target inventory turnover rate that aligns with its specific needs and business objectives.

Statistical test results description

Variable descriptive statistics in this study for bank lending, NPL, and CAR are shown in the statistical test results in [Table 4](#).

Table 4.
Descriptive statistical test results

	N	Minimum	Maximum	Mean	Std. Deviation
Receivable Turnover	30	3.95	14.99	9.1958	3.48717
Inventory Turnover	30	2.39	22.09	7.2285	4.82577
Return On Asset	30	0.03	0.17	0.0832	0.03599
Valid N (listwise)	30				

[Table 4](#) presents the analysis results of three parameters: RTO, ITR, and ROA, in terms of the average values of the three processed data sets. The analysis results indicate that Receivable Turnover (RTO) has the highest average value of 9.1958, indicating that companies can collect their receivables more quickly. Additionally, the high turnover of receivables can also indicate that the company has strict and effective credit policies, thus reducing credit risk and increasing customer trust. Inventory Turnover (ITR) has an average value of 7.2285, indicating that companies sell inventory quickly. This can be interpreted as the company selling goods quickly and efficiently, thereby accelerating capital turnover and generating higher profits. Meanwhile, Return on Assets (ROA) has an average value of 0.0832, indicating that the ROA is in good condition, as the standard ROA value is 0.0598. The significant increase in ITR and RTO can have a positive impact on ROA, as companies can generate higher profits from their assets in a shorter period of time.

Classical assumptions test results

Based on the Normality Test results using Histogram, it is observed that the data points are randomly scattered following the diagonal direction of the line. This indicates that the use of the regression model satisfies the assumption of normality, suggesting that the data used in the analysis has a distribution that aligns with this assumption. Therefore, this regression model is considered valid and can be used to test the effects of the research variables.

The Heteroskedasticity Test results indicate that no clear pattern is evident in terms of waves, expansion, or contraction, around the value of 0. Thus, it is known that the residual values of the independent variables in the linear regression model do not exhibit heteroskedasticity.

The Multicollinearity Test results reveal that the tolerance value of the independent variables (RTO and ITR) at 0.686 exceeds the set limit of 0.1. Additionally, the Variance Inflation Factor (VIF) of the independent variables (RTO and ITR) at 1.458 is below the set limit of 10. Therefore, it can be concluded that there are no significant multicollinearity issues among the independent variables tested in this study.

Multiple regression test results

Simultaneous testing (F-test) aims to evaluate the joint influence of the RTO and ITR variables on the ROA variable in the regression model. The results can be seen in [Table 5](#).

Based on [Table 5](#), it can be observed that the F-test value is 4.061, with a significance value of 0.029, which is lower than the predetermined significance level of 0.05. Therefore, the hypothesis can be accepted. This result indicates that this multiple linear regression model is suitable for use, and there is a significant simultaneous effect between RTO and ITR on ROA. Thus, these independent variables collectively contribute significantly to the dependent variable.

Table 5.
Multiple regression test results

Model	Beta Coefficients	Std. Error	t	Sig.
(Constant)	0.040	0.017	2.410	0.023
Receivable Turnover	0.005	0.002	2.784	0.010
Inventory Turnover	-0.001	0.001	-1.056	0.300
F-test	4.061			
Sig. (F-test)	0.029 ^b			
R ²	0.231			
Adj. R ²	0.174			

Dependent variable: ROA

Table 5 also shows that the coefficient of determination (Adjusted R-squared) is 0.174. This indicates that the ability of the independent variables (X) to explain the variation in the dependent variable (Y) is 17.4%. In other words, approximately 82.6% of the variation in the dependent variable cannot be explained by the independent variables in the regression model.

Based on the t-test results, the beta coefficient value is 0.005 with a significance level of 0.010, meaning that RTO has a positive effect on ROA. Thus, it can be concluded that the RTO variable partially and significantly influences ROA in food and beverage manufacturing companies. This suggests that improvements in receivables management and utilization can positively contribute to the financial performance of companies in achieving better return rates.

Based on the t-test results, the beta coefficient value is -1.056 with a significance level of 0.300. The significance value of ITR is greater than the predetermined significance level ($\alpha > 0.05$). This indicates that ITR does not influence ROA. It suggests that inventory turnover does not have a significant impact on the financial performance of companies in achieving better return rates. The multiple linear regression equation for analyzing the research model is in Equation 5 (Eq. 5).

$$Y = 0,040 + 0.005 RTO - 0.001 ITR \quad (\text{Eq. 5})$$

5. Discussion

The effect of receivable turnover on return on assets

The data analysis results indicate that receivable turnover has a significant influence on return on assets (ROA) in this study. Receivable turnover itself is an important indicator in measuring a company's efficiency in collecting its receivables. This research shows that receivable turnover has a significant impact on ROA, meaning that a company's ability to manage and collect receivables can directly affect its financial performance as reflected in ROA.

The positive relationship between receivable turnover and ROA can also be logically explained. When a company is able to collect receivables quickly, it means the company has better liquidity and smoother cash flow. This enables the company to utilize resources more efficiently, improve operational effectiveness, and ultimately enhance ROA. Thus, this study indicates that in the context of the food and beverage manufacturing sector, receivable turnover plays a significant role in influencing profitability levels (ROA). This finding differs from previous research conducted by [Wulandari & Lubis \(2021\)](#) and [Keegan & Dewi \(2023\)](#), which concluded that although there is a positive effect, receivable turnover does not have a significant impact on ROA.

These findings emphasize the importance of considering differences in context and specific industries when analyzing the relationship between financial variables and company performance. This research provides valuable insights for food and beverage manufacturing companies to better understand the factors contributing to ROA, including the importance of effectively managing receivable turnover to enhance profitability.

The effect of inventory turnover on return on assets

The data analysis results indicate that inventory turnover does not influence ROA. This may be due to various factors, such as variations in the company's business model affecting financial performance, the presence of other dominant operational efficiency factors including operational cost control, optimal resource utilization, effective inventory management, efficient production processes, and increased labor productivity influencing ROA, and external factors that can affect overall financial performance including market conditions, industry competition, government policies, exchange rate fluctuations, regulatory changes, and overall economic conditions.

Therefore, although inventory turnover is an important indicator for measuring inventory management efficiency, in the context of this study, there is not enough evidence to conclude that inventory turnover has a significant influence on profitability levels (ROA) in the food and beverage manufacturing companies examined. This finding is consistent with previous research conducted by [Wulandari & Lubis \(2021\)](#) and [Wahyuningsih et al. \(2023\)](#) which also concluded that inventory turnover does not have a significant impact on profitability (ROA).

6. Conclusion

Receivable turnover has a positive and significant impact on the profitability of companies measured by ROA. By increasing accounts receivable turnover, food and beverage companies can enhance their profitability. However, inventory turnover does not have a significant influence on ROA. This may be due to low inventory turnover, which can lead to stockpiling and increased operational burdens. Variations in the company's business model, external factors, and operational efficiency factors can also affect the relationship between inventory turnover and ROA. Therefore, companies need to focus on improving accounts receivable turnover to enhance profitability and operational efficiency.

References

- Hartati, N. (2018). Pengaruh perputaran kas, piutang, dan persediaan terhadap profitabilitas perusahaan makanan dan minuman di Bursa Efek Indonesia. *Jurnal Pengembangan Wiraswasta*, 19(1), 1-12. <http://dx.doi.org/10.33370/jpw.v19i1.120>
- Hasanudin, H., Awaloedin, D. T., & Arviary, D. D. (2022). The impact of cash turnover, accounts receivable turnover, and inventory turnover on return on assets (ROA) for agribusiness companies listed on the Indonesia stock exchange (IDX) during the period 2016-2020. *Jurnal Info Sains: Informatika dan Sains*, 12(02), 37-44.
- Keegan, K. K., & Dewi, S. P. (2023). Faktor-faktor yang memengaruhi return on asset. *Jurnal Paradigma Akuntansi*, 5(1), 67-77. <https://doi.org/10.24912/jpa.v5i1.22169>
- Maisa, S., Triuspitorini, F. A., & Sarusu, A. M. (2020). Pengaruh receivable turnover dan working capital turnover terhadap profitability pada perusahaan farmasi yang terdaftar di BEI periode 2014-2018. *Indonesian Journal of Economics and Management*, 1(1), 35-48. <https://doi.org/10.35313/ijem.v1i1.2416>

- Migang, S., & Irawan, A. (2019). Pengaruh cash turnover, working capitalturnover, receivable turnover, dan inventory turnover terhadap return on asset pada perusahaan keramik yang terdaftar di Bursa Efek Indonesia. *Jurnal GeoEkonomi*, 10(2), 219–238. <https://doi.org/10.36277/geoekonomi.v10i2.60>
- Nuraini, A. I. (2021). The effect of cash turnover and inventory turnover on return on assets (ROA). *Almana : Jurnal Manajemen Dan Bisnis*, 5(2), 259–270. <https://doi.org/10.36555/almana.v5i2.1659>
- Rajagukguk, A., & Siagian, H. (2021). Inventory turnover and accounts receivable turnover on profitability: an evidence of chemical companies listed in IDX. *Jurnal Bisnis Dan Kajian Strategi Manajemen*, 5(2). <https://doi.org/10.35308/jbkan.v5i2.4058>
- Rudianto, R. (2012). *Pengantar akuntansi konsep dan teknik penyusunan laporan keuangan*. Adaptasi IFRS Penerbit Erlangga.
- Setiani, T., & Andini, R. A. Q. (2023). Pengaruh rasio solvabilitas dan rasio aktivitas perusahaan terhadap rasio profitabilitas perusahaan pada subsektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia periode 2020-2023. *Jurnal Akuntansi*, 18(02), 68–81. <https://doi.org/10.58457/akuntansi.v18i02.3448>
- Suraya, A. (2018). The influence of accounts receivable turnover and inventory turnover on profitability at PT Sumber Alfaria Trijaya Tbk. *PINISI Discretion Review*, 2(1), 77-84. <https://doi.org/10.26858/pdr.v2i1.13246>
- Syakhiya, N. (2020). Pengaruh rasio aktivitas terhadap kinerja keuangan pada perusahaan food and beverages yang terdaftar di Bursa Efek Indonesia (BEI). *Jurnal Ilmiah Manajemen dan Bisnis (Jimbi)*, 1(2), 106-111. <https://doi.org/10.31289/jimbi.v1i2.384>
- Wahyuningsih, S., Widodo, U., Indriyatni, L., & Yuliaty, Y. (2023). The effect of cash turnover, receivable turnover and total asset turnover to profitability in food and beverage companies listed on the IDX during the 2018-2020 period. *Fokus Ekonomi : Jurnal Ilmiah Ekonomi*, 18(2), 202–208. <https://doi.org/10.34152/fe.18.2.202-208>
- Werdiningtyas, R. (2019). Analisis pengaruh Receivable Turnover (RTO), Inventory Turnover (ITO), Working Capital Turnover (WCTO), dan Total Asset Turnover (TATO) terhadap profitabilitas pada perusahaan yang terdaftar di Jakarta Islamic Index (JII) periode 2011-2017. *Jurnal Sains Ekonomi dan Perbankan Syariah: Journal Science of Economic and Shariah Banking*, 8(1), 19-29.
- Wijaya, L. V., & Tjun, L. T. (2017). Pengaruh cash turnover, receivable turnover, dan inventory turnover terhadap return on asset perusahaan sektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia periode 2013-2015. *Jurnal Akuntansi*, 9(1), 74-82. <https://doi.org/10.28932/jam.v9i1.492>
- Wulandari, N., & Lubis, I. (2021). Influence of receivables turnover and inventory turnover to profitability PT Kimia Farma (Persero) Tbk. *Indonesian Financial Review*, 1(2), 114-132. <https://doi.org/10.55538/ifr.v1i2.9>