

## THE INFLUENCE OF CASH TURNOVER, RECEIVABLES TURNOVER AND INVENTORY TURNOVER ON THE ECONOMIC PROFITABILITY OF REGISTERED PHARMACEUTICAL COMPANIES ON THE INDONESIAN STOCK EXCHANGE PERIOD 2017-2021

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### Abstract

*This study examines the effect of cash turnover, receivable turnover, and inventory turnover on the economic rentability of pharmaceutical companies listed on the Indonesia Stock Exchange during 2017-2021. This study uses secondary data, and the samples are 8 pharmaceutical companies listed on the Indonesia Stock Exchange during 2017-2021. The sampling technique used purposive sampling technique. The data analysis method used is the panel data regression analysis method. The results indicate that cash turnover negative and no significantly affects economic rentability, receivable turnover negative and significantly affect economic rentability, and inventory turnover positively and significantly affect economic rentability of pharmaceutical companies listed on the Indonesia Stock Exchange for 2017-2021.*

**Keywords:** *economic rentability, Cash turnover, receivable turnover, and inventory turnover.*

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### INTRODUCTION

In the business world, the profitability ratio is very closely related to company problems, namely profitability is used as a measure of success by obtaining net profits by companies, because companies are competing to get large profits, namely by increasing profit targets every year. Profitability describes the company's ability to earn profits with all the company's capabilities and resources, namely sales activities, cash, capital, number of employees, and so on.

Economic profitability is a comparison between business profits with own capital and foreign capital used to generate these profits and is expressed as a percentage (Alie 2018). Economic profitability has a very important role in a company because with the existence of economic profitability the company can find out whether the management has obtained appropriate results or not with the users of their activities, with which the company's management can make decisions for the continuity of the company's operational activities in the future. the future (Chikmawati and Yuniningsih 2021).

There are several factors that affect the value of the company, including cash turnover, accounts receivable turnover, and inventory turnover. Cash turnover is a comparison between sales and the average amount of cash, the cash turnover rate is a measure of the efficiency of the company's use of cash, because the cash turnover rate describes the speed of cash flow returning cash that has been invested in working capital (Indrastuti 2019). According to (Dwi 2019) Cash turnover is the ability of cash to generate income so you can see how many times cash is circulating in one period. Cash turnover shows the company's speed with the return of current assets through sales, the higher the cash turnover rate, the higher the volume of sales. If the sales volume is high, the profits generated will be even greater, the company's ability to generate profits is what is called economic profitability, thus cash turnover will affect economic profitability.

Receivables are bills to creditors or consumers as a result of selling merchandise on credit, the turnover of these receivables can determine the size of the profit that the company gets, high levels of receivables and inventory turnover can minimize the costs used so that the net profit earned is more in number then it will increase the level of profitability (Rofiani 2020). Accounts receivable turnover is net sales divided by average accounts receivable. This ratio describes the quality of the company's receivables and the company's success in collecting its receivables. The higher the turnover of a company's receivables, the better the management of its receivables. Receivables turnover can be increased by tightening payment terms, but this policy is quite difficult to implement, because with tighter credit sales policies it is likely that sales volume will decrease, so that this does not bring good for the company, on the contrary (Aini 2020).

Another factor that affects the value of the company is inventory turnover. Inventory according to Inventory is the main element of working capital in the form of an asset that is always in a state of rotation, which is constantly changing. Merchandise inventory is goods owned by the company for resale (Nuraini, 2013). Inventory turnover is the ratio used to measure how many times the funds invested in this inventory rotate in a period. The higher the inventory turnover ratio indicates that the working capital required in inventory is lower, to achieve a high turnover rate, regular planning and monitoring must be carried out (Ratnasari 2021).

The capital that is taken into account to calculate economic profitability is only working capital within the company (operating capital assets). Thus, the capital invested in securities is not taken into account to calculate economic profitability, only profits originating from the company's operations, namely operating profit (net rating income or profit margin). Profitability is an indicator that describes the extent to which a company can generate profits by using capital, sales, and investment properly. -competition to get a large profit by increasing the profit target every year. Profitability describes the company's ability to earn profits with all the company's capabilities and resources, namely sales activities, cash, capital, number of employees, and so on (Ariesta, 2021).

In this study, the object of research is pharmaceutical companies listed on the Indonesia Stock Exchange for the 2017-2021 period. Pharmaceutical companies were chosen as samples in this study because this sector is one of the main sectors supporting national manufacturing and economic growth in 2021. Pharmaceutical companies reflect national economic and business growth/development, besides that pharmaceutical companies are a sector that has high business complexity. Pharmaceuticals is an industry that has very good prospects in the future and is an industry that is able to develop until now pharmaceutical companies have an important role in reform in the health sector.

The pharmaceutical industry is one of the economic sectors that has been able to record positive growth even though in general the Indonesian economy experienced an economic contraction in the second quarter of 2020, experiencing negative growth of 5.32% on an annual basis or year on year (yoy). The Ministry of Industry noted the performance of several manufacturing industry sectors which were still growing positively. This sector includes the chemical, pharmaceutical and traditional medicine industries with a growth of around 8.65%, higher than the first quarter of 2020 which grew 5.59%. According to the Minister of Industry, Agus Gumiwang Karta, the growth of the chemical, pharmaceutical and traditional medicine industry was inseparable from the increasing demand for medicines and health supplements during the pandemic (IDXchannel.com).

Basically, the higher the economic profitability, the better the company's performance and will influence investors' decisions to invest in the company. The following table shows the average value of pharmaceutical companies during the 2017-2021 period.

**Table 1 Average Economic Profitability of Pharmaceutical Companies  
During the 2017-2021 period**

Year (Period)	Average Economic Profitability
2017	0,07
2018	0,07
2019	0,08
2020	0,08
2021	0,09

Sumber: Bursa Efek Indonesia, 2022 (Data Diolah)

Based on Table 1. The average economic profitability of pharmaceutical companies for the 2017-2018 period, it can be seen that there has been an increase in economic profitability of pharmaceutical companies in 2017-2021. It can be seen that from 2017 to 2018 pharmaceutical companies have experienced an average increase in their economic profitability, which means that there has been an increase in the good health of the pharmaceutical company's economy.

## RESEARCH METHODS

The data analysis method used in this study is a quantitative method using panel data regression analysis. According to Sugiyono (2019) panel data is a combination of time series data and cross section

data. The data analysis used to solve the problems in this study is panel data regression analysis with the help of Eviews 9. The research data used is in the form of Secondary data, namely annual reports published by pharmaceutical sub-sector companies on the IDX in the 2017-2021 period of 8 companies using the purposive sampling method.

The panel data regression method is used through three approaches, namely, the common effect least squares approach, the second fixed effect approach and the third the random effect approach. Furthermore, the data is also tested classical assumptions. The panel data regression analysis equation model is as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Information:

- Y =Economic Profitability
- A =Constant Number
- X1 =Cash Turnover
- X2 =Accounts Receivable Turnover
- X3 =Inventory Turnover
- $\beta_1 \beta_2 \beta_3$  =Regression Coefficient
- $\varepsilon$  =Standard Error

The variables used in the research are:

- a. Economic profitability is the ability to generate profits from the total capital, both foreign and own capital, which is used to generate profits.

$$\text{Rentabilitas} = \frac{\text{Laba bersih (sesudah pajak)}}{\text{Jumlah aktivita usaha}}$$

- b. Cash turnover is the cash period that rotates from when cash is used until it returns to cash to pay off costs incurred in connection with sales. The cash turnover rate is a company benchmark in converting its current assets into cash back through sales (Pratama, 2019). Cash turnover can be measured using the cash turnover formula.

$$\text{Perputaran kas} = \frac{\text{Penjualan}}{\text{Rata - rata kas}}$$

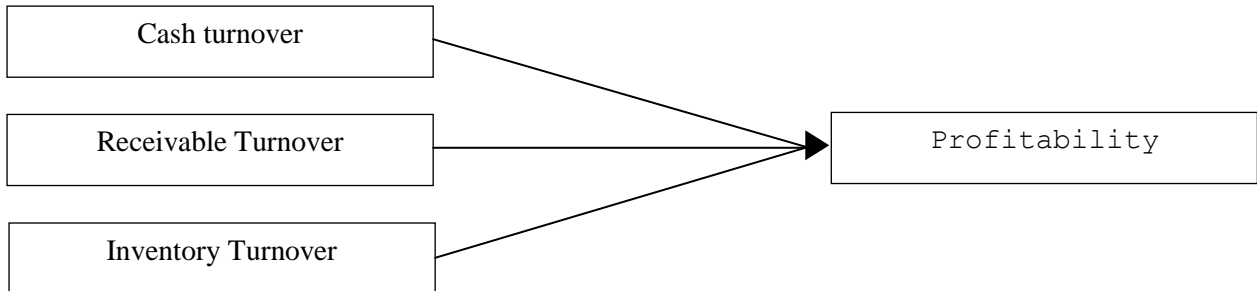
- c. Receivables turnover is the company's bills to other parties arising from the sale of products or services on credit that have not been paid in full. Trade receivables in normal assets will be paid off in less than one year, so they are classified as current assets.

$$\text{Perputaran Piutang} = \frac{\text{Penjualan Kredit}}{\text{Rata - rata piutang usaha}}$$

- d. Inventory turnover is a measure of the number of times inventory is sold in a period of time such as a year and is calculated to see if a business has excess inventory in comparison to its sales level.

$$\text{perputaran Persediaan} = \frac{\text{Harga pokok penjualan}}{\text{rata - rata pokok persediaan}}$$

The framework and hypotheses in the research are as follows:



**Figure 1. conceptual framework**

Description of the conceptual framework and supported by existing theory, the research hypothesis is as follows:

- H1 : Cash turnover (cash turnover) affects economic profitability (Agustini, Bagia, Yudi atmaja, 2018)  
 H2 : Accounts receivable turnover (vable turnover) affects economic profitability (Alie, 2018)  
 H3 : Inventory turnover ((inventory turnover) affects economic profitability (Ariesta, 2021)

## RESULTS AND DISCUSSION

### Determination of Panel Data Estimation Techniques

In the panel data, there are three estimation models, namely Common Effect or Pooled Least Square, Fixed Effect and Random Effect which will be tested which is the best model to use in this study. The test was carried out by testing the Chow Test, and the Hausman Test.

The Chow test was conducted to test which model was selected between the Common Effect and the Fixed Effect. To see which model is the best of the two models, it can be seen from the Probability Cross-Section F value.

**Table 2. Chow test results**

EffectsTest	Statistic	d.f.	Prob.
EffectsTest	Statistic	d.f.	Prob.
Cross-sectionF	9.272361	(7,26)	0.0000

Based on Table 2 above, it is known that the probability value is 0.000. Because the probability value is  $0.0000 < 0.05$ , the estimation model used is the Fixed Effect Model (FEM).

**Table 3. Haustman test results**

TestSummary	ChiSq.Statistic	Chi-Sq.d.f.	Prob.
Cross-sectionrandom	4.606197	3	0.2030

Based on table 3 above, it can be seen that the profitability value is 0.2030, which is above the error value, which is 0.05. So it can be concluded that based on the Hausman test the best model in this study is the Random Effect Model (REM).

## Panel Data Regression Estimation Results

**Table 4. Panel Data Regression Estimation Results with Random Effect Models**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1795.517	1118.080	-1.605893	0.1178
X1	-0.280353	0.586601	-0.477929	0.6359
X2	-0.253946	0.101800	-2.494555	0.0178
X3	0.105270	0.041025	2.566014	0.0150

Based on Table 4 above, the regression equation results can be obtained as follows:

$$R.E = -1795.517 - 0.280353X1 - 0.253946X2 + 0.105270 + \epsilon$$

From the above equation, it can be seen that the value of the constant profitability is (-1795,517), which means that if cash turnover, accounts receivable turnover, and inventory turnover have a value (value of 0), then the profitability value remains at (-1795,517).

## discussion

### Hypothesis test

#### Test Parsial (Uji t)

##### Effect of cash turnover on economic profitability

The results of the hypothesis show that the tcount of cash turnover is -0.477929 and the significance value is 0.6359, while the significant level ttable value used is 5% with degrees of freedom  $df1 = 50 - 4$  is 1.68830. So it can be concluded that  $tcount (-0.477929) < ttable (1.68830)$  and a significant value  $(0.6359) > 0.05$ , then  $H_1$  is rejected, which means that cash turnover has a negative and insignificant effect on economic profitability of pharmaceutical companies listed on the Indonesia Stock Exchange.

This finding is in line with research conducted (Eko, 2021) which says that cash turnover is not significant for economic profitability. But these findings contradict the results of research by (Agustini, Bagia, Yudiaatmaja, 2018) which says that cash turnover has a positive and significant effect on economic profitability.

This finding identifies that the size of a cash turnover does not affect and predict the size of a company's economic profitability. Cash turnover shows how far the ability or level of efficiency achieved by the company in managing available cash to achieve company goals. The results show that there is no influence between the level of cash turnover on economic profitability due to the inefficient use of cash in pharmaceutical companies.

##### Effect of accounts receivable turnover on economic profitability

The results of the hypothesis show that the tcount of cash turnover is -2.494555 and the significance value is 0.0178, while the significant level ttable value used is 5% with degrees of freedom  $df1 = 50 - 4$  is 1.68830. So it can be concluded that  $tcount (-2.494555) < ttable (1.68830)$  and a significance value  $(0.0178) < 0.05$ , then  $H_1$  is accepted, which means that receivables turnover has a negative and significant effect on economic profitability of pharmaceutical companies listed on the Indonesia Stock Exchange.

This finding is in line with research conducted (Agustini, Bagia, and Yudiaatmaja, 2018) which says that receivables turnover has a negative and significant effect on economic profitability, but these findings contradict

the results of research by (Suriani, 2021) which says that receivables turnover has a positive effect and significant to economic profitability.

Receivables turnover plays a role in reducing economic profitability of pharmaceutical companies listed on the IDX, receivables turnover affects economic profitability because the lower the receivables turnover rate, the lower the profitability turnover rate of a company, so if receivables turnover decreases in a pharmaceutical company it is due to bills slowing down so that it makes the old company to convert accounts receivable into cash back so that it can reduce the company's economic profitability.

### **Effect of inventory turnover on economic profitability**

The results of the hypothesis show that the tcount of inventory turnover is 2.566014 and the significant value is 0.0150 while the ttable value of significance level used is 5% with degrees of freedom  $df1 = 50-4$  is 1.68830. So it can be concluded that  $tcount (2.566014) > ttable (1.68830)$  and a significance value  $(0.0150) < 0.05$ , then  $H_1$  is accepted, which means that inventory turnover has a positive and significant effect on economic profitability of pharmaceutical companies listed on the Indonesia Stock Exchange.

This finding is in line with research conducted by (Aldi Nur Eza, 2019) which says that inventory turnover has a positive and significant effect on economic profitability, but these findings contradict the results of research by (Halimatus, 2020) which says that inventory turnover has a negative effect and does not significantly to economic profitability. This finding identifies that if inventory turnover increases, economic profitability will also increase. The economic profitability obtained by the company due to weak sales and excessive inventories resulting in a risk of losses which will result in an accumulated inventory investment balance, increased risks due to reduced prices and quality and increased other costs such as storage costs and security costs. But if the amount of inventory is small, it will cause sales to fall so that it can hinder the company's operational activities in obtaining economic profitability.

### **Test Simultan (Uji F)**

Based on table 4.7 Panel Data Regression Estimation with the Random Effect Model, it shows that the calculated F value is  $(4.217475) >$  the F table value of 2.87 and the significance probability value of F calculated is  $0.012473 < 0.05$ , then the hypothesis is accepted. So it can be concluded that jointly the independent variables, namely cash turnover, accounts receivable turnover, inventory turnover have a positive and significant effect on the dependent variable, namely the economic profitability of pharmaceutical companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

### **CONCLUSION**

Cash turnover has a negative but not significant effect on economic profitability of pharmaceutical companies listed on the IDX, Receivables turnover has a negative and significant effect on economic profitability of pharmaceutical companies listed on the IDX, Inventory turnover has a positive and significant effect on economic profitability of pharmaceutical companies listed on the IDX.

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