
THE INFLUENCE OF RUBBER PRICES ON THE INCOME OF RUBBER FARMERS IN PAYARAMAN WEST DISTRICT OGAN ILIR DISTRICT

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ABSTRACT

This research aims to investigate the influence of rubber prices on economic activity and community welfare in Payaraman Barat Village, Ogan Ilir Regency. The study utilizes a data collection method through a Likert Scale questionnaire. The population in this research includes all rubber farmers, totaling 320 households. The sample is determined using Purposive Sampling technique with the Slovin formula, resulting in a sample size of 77 individuals for this study. Data analysis is conducted using classical assumption tests and simple linear regression analysis. From the research results, it was found that the t-value (2.310) is greater than the t-table value (0.2242), with a significance level of 0.024. Since the significance value of t (0.024) is less than 0.05, it can be concluded that rubber prices have a significant influence on the income of rubber farmers in Payaraman Barat Village, Ogan Ilir Regency.

Keywords : Price, Income ,

Introduction

Indonesia is a country that produces and exports various agricultural products, including natural rubber. Natural rubber is one of the significant agricultural commodities in supporting the country's economy, and the foreign exchange contribution from the rubber industry is quite high. Indonesia was previously ranked first as the largest rubber producer in the world, but was later displaced by two neighboring countries, namely Malaysia and Thailand. Currently, Thailand is the largest rubber producer in the world, followed by Indonesia in second place, and Malaysia in third place (Purwono et al., 2019) .

Currently, Indonesia has not yet achieved a position as one of the leading rubber producers in the world because the majority of rubber plantation areas are still controlled by communal rubber plantations (Angrasari & Saputro, 2021) . This is characterized by low productivity due to old, dilapidated and unproductive land

conditions, as well as the use of seeds that do not come from superior clones. In addition, the construction of rubber plantations has not been fully completed, and many plantations still look like forests. Nevertheless, it is a country with the largest rubber plantation area in the world. Indonesia has great potential to become a large rubber producer in the future (Laila et al., 2017) .

Each farmer has a different sales system, some sell their products three times a week, once a week, or even once a month. In addition, the price of rubber itself can increase or decrease depending on its quality. Of course, there is a gap between the income and needs of rubber producers. Even though they live in the same area , there is a big difference in the level of income earned by these rubber producers. This will have an impact on family needs, where basic needs such as clothing (clothing), food (food and drink), housing, health services, education become expensive. Therefore, income will have a significant impact on their lives, because their main income comes from selling rubber (Zuhdi & Anggraini, 2020) .

Islamic economics is an economic system that regulates all aspects related to choice behavior and decision making in every business entity or economic activity, based on Islamic moral and ethical principles. As a guide in implementing productive and development activities, Islamic Economics aims to guide both qualitatively and quantitatively. In this context, Islamic Economics emphasizes the importance of using goods and human labor responsibly. Islam emphasizes that all resources must be utilized as best as possible in the production process, so that people's needs can be met optimally.

As a society in a country where the majority of the population is Muslim, Indonesian people have a responsibility to protect themselves from an environment that encourages excessive consumerism. (Yanti & Reflianto, 2019) . Indonesia needs to encourage its citizens to behave in accordance with sharia principles. With a large Muslim population , it is hoped that the application and practice of Islamic values can be done more easily. An environment based on Islamic values can help protect individuals from behavior or actions that are contrary to Islamic teachings (Joni Indra Wandu, Syamsurizal, Andrianto, Edriagus Saputra, 2023) .

Apart from oil palm plantations, rubber plantations are also a mainstay commodity in South Sumatra Province. In South Sumatra Province, the area of rubber plantations reaches 662,686 hectares, including community plantations covering 614,021 hectares, private plantations covering 24,007 hectares, and state plantations covering 21,741 hectares. The selling price of rubber in Sumatra Province always ranges from IDR 11,000 per kg to IDR 7,000 per kg, even dropping to IDR 5,000 per kg during the Covid-19 pandemic. (Prasada et al., 2021) .

Income Which originate from plantation rubber is income majority In Ward Payaraman West Regency Ogan Ilir. There is problem Which faced farmer rubber in Ward Payaraman West that is income farmer rubber Which low. Matter This caused by price rubber cheap And No uncertain. When price rubber go on so income farmer rubber increase likewise on the contrary, if price rubber down so The income of rubber farmers in Payaraman Barat Subdistrict has also decreased. Matter This happen Because income majority public there is rubber farming and rarely anyone has other income which comes from rubber farming, hence the price rubber doesn't It is very influential if farmers have income from natural resources eye livelihood Which other. Problem on cause farmer rubber in Ward Payaraman West difficulty For fulfill their daily needs which is income from rubber is income majority in Ward Payaraman West Regency Ogan ilir (Yazid & Mulyana, 2016) .

Theoretical basis

Agency Theory

Agency Theory is a theory that studies the relationship between capital owners or principals and agents who act on their behalf . Relationship between *Agencies The theory* with this research is that *Agency Theory* can be used to analyze the relationship between rubber farmers as principals and rubber buyers as agents (Shapiro, 2005) .

Price

According to Macroeconomic Theory proposed by Sadono Sukirno, price is the value of an item which is calculated based on payments to the production factors used to create the item. On the other hand, Sadono Sukirno explained that market price is the value of an item which is determined by the payment made by consumers to obtain the item. (Yanti & Fitriani, 2017) and (Meidona, Syofria, Novi Yanti, Asri

Nurizky, Syamsurizal, 2016) .

Income

Christopher, as quoted by (Yanti & Meirinaldi, 2021) , defines income as money received by someone in the form of salary, wages, rent, interest, profits, and so on. Income, according to Soekanto, refers to the amount of production of goods or services produced each month, and if it is in the form of money, it is often referred to as monthly income. (Rahim et al., 2023) (Zakia & Marifatullah, 2023) .

Research methods

The type of research used is a quantitative approach. The location of this research was carried out in West Payaraman Village, Ogan Ilir Regency. The population in this study were rubber farmers who were heads of families totaling 320 families. The sampling method used is *purposive sampling* and uses the Slovin formula. The data collection technique is carried out by distributing questionnaires or questionnaires directly to respondents. The instrument tests used are validity and reliability tests, the data analysis techniques used are normality tests, heteroscedasticity tests and autocorrelation tests and the hypothesis tests used are simple linear regression analysis, coefficient of determination and t test.

Results and Discussion

Classic assumption test

1. Normality test

The normality test in this study used the *Kolmogorov-Smirnov test method* which is explained in the table as follows:

One-Sample Kolmogorov-Smirnov Test

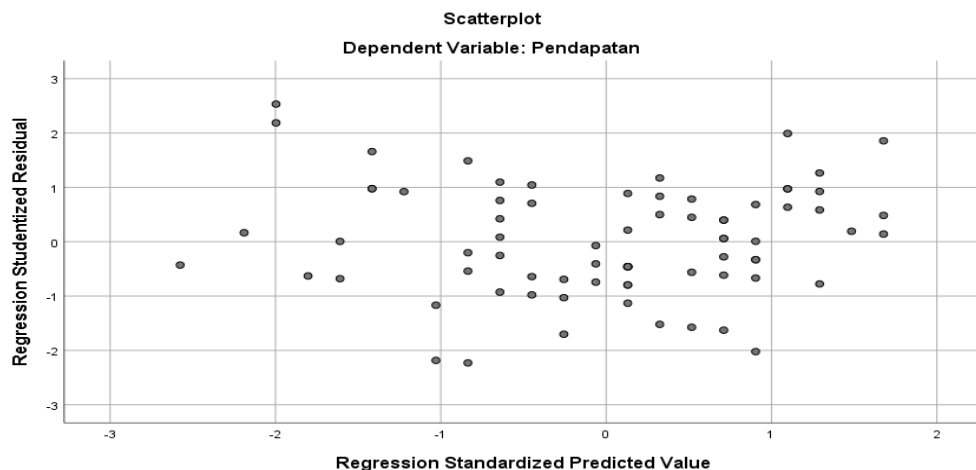
		Unstandardized Residuals
N		77
Normal Parameters ^{a, b}	Mean	.0000000
	Std. Deviation	2.97151356
Most Extreme Differences	Absolute	,074
	Positive	,074
	Negative	-.057
Statistical Tests		,074
Asymp. Sig. (2-tailed)		,200 ^{c, d}

a. Test distribution is Normal.

- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

From the data results above, it is known that *the Asymp.Sig.(2-tailed) value* is 0.200, which is greater than 0.05, so it can be concluded that the residual data is normally distributed.

2. Heteroscedasticity Test



Based on the image above, it can be seen that the data is spread randomly and does not stack to form a clear pattern, but is scattered above and below 0, so that heteroscedasticity does not occur.

3. Autocorrelation Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.258 ^a	.066	.054	2,991	1,985

a. Predictors: (Constant), Price

b. Dependent Variable: Income

Based on table 4.5 above, it can be assessed that DW is 1.985 and the dU value obtained from the Durbin Watson table is 1.6036. If you use the condition that there is no autocorrelation ($dU < DW < 4 - dU$) then it is equal to ($1.6036 < 1.985 < 4 - 1.6036$). The result of $4 - 1.6036$ is 2.3964. So in the end $dU < DW < 4 - dU$ is $1.6036 < 1.985 < 2.3964$. Thus, the results of this autocorrelation test are $dU < DW < 4 - dU$, so that H_0 is accepted and no autocorrelation occurs.

Hypothesis testing

1. Simple Linear Regression Analysis

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14,992	1,455		10,302	,000
	Price	,153	,066	,258	2,310	,024

a. Dependent Variable: Income

From the simple linear regression equation that has been presented, it can be concluded that there is a positive relationship between price and income variables. The price coefficient has a positive value of 0.153, indicating that every one unit increase in price will be followed by an increase in income of 0.153, with a constant value of 14.992. This indicates that there is a positive relationship between price and income, where an increase in price has an impact on an increase in income.

2. Coefficient of Determination (R^2)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,258 ^a	,066	,054	2,991	1,985

a. Predictors: (Constant), Price

b. Dependent Variable: Income

Based on table 4.7 above, there is information that the correlation value (R) is 0.258 and it explains the percentage of influence of the independent variable on the dependent variable. The R square obtained was 0.066, which means that the influence of the independent variable on the dependent variable was 6.6 % , while the remaining 93.4 was influenced by other variables.

3. Partial Test (t)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14,992	1,455		10,302	,000

Price	.153	.066	.258	2,3	.024
e				10	

a. Dependent Variable: Income

Based on the partial test results (t test) the $t_{\text{calculated}}$ value is 2.310 while the t_{table} value is 0.2242, indicating that the $t_{\text{calculated}}$ value > t_{table} value with a significance of 0.024 because the t_{table} significance is smaller than 5% ($0.024 < 0.05$) then it can be concluded that partially price (X) has a significant effect on income (Y).

Discussion of Research Results

Based on the test results, it is known that the $t_{\text{calculated}}$ value is 2.310, while the t_{table} value is 0.2242, indicating that the $t_{\text{calculated}}$ value > the t_{table} value with a significance of 0.024 because the t value is smaller by 5% ($0.024 < 0.05$) so it can be concluded that partial price (X) has a significant effect on income (Y). The results of this research are in accordance with the results of research conducted by Enny Puji Lestari (2020) who also stated that the price of rubber has a positive and significant effect on the income of rubber farmers.

Based on the results of research conducted and empirical evidence in the form of previous research, it is proven that rubber prices have a positive and significant effect on income. However, the *R square test result* in this study was only 0.066, which means that the influence of rubber prices on rubber farmers' income is not very large, only 6.6% of the influence and 93.4% is influenced by other variables that are not in this study. This is because the price of rubber in Payaraman Barat Subdistrict, Ogan Ilir Regency is always fluctuating (uncertain) and is also always relatively cheap and rubber production results are small due to several factors such as weather factors and low rubber quality factors. Sometimes when the rubber harvest obtained by farmers is large but the price of rubber is cheap, conversely, sometimes the price of rubber increases but the rubber yield obtained by farmers decreases. This phenomenon can cause farmer incomes to not increase and be relatively low. However, if a farmer's rubber income is large and many family members have their needs met, then the income from rubber farming is not enough to meet all the family's needs. Therefore, quite a few farmers are looking for other jobs to meet the lack of income obtained from rubber farming. In the questionnaire question indicators that were distributed to

77 respondents in Payaraman Barat Subdistrict, respondents answered almost all of the question indicators with various answers except for the question indicator on the essence of justice in the price variable. In this indicator question, all respondents stated that they did not hide defects in rubber scales and the majority of respondents did not agree with the statement "rubber scales do not harm rubber farmers".

The results of research conducted in Payaraman Barat Village, Ogan Ilir Regency show that the price of rubber is relatively low and there are quite a lot of family members who have their needs met so that the income earned by farmers is not always enough to meet the family's needs. However, to keep prices stable, this can be done by maintaining and improving the quality of rubber and farmers must be willing to spend slightly more capital than before to buy and plant high quality rubber seeds. With the methods above, it is believed that it will have a positive impact on rubber prices in the future, especially on the income of rubber farmers themselves.

Conclusion

Based on the results of the research and discussion described above, it can be concluded that the price of rubber has a positive and significant effect on the income of rubber farmers in Payaraman Barat Village, Ogan Ilir Regency. From this description it can also be concluded that if the price of rubber increases, the income of rubber farmers will also increase. On the other hand, if the price of rubber falls, the income of rubber farmers will also fall.

Suggestion

Based on the results of this research, the author provides several suggestions, including the following:

1. The government of the Coordinating Ministry for Economic Affairs, which is responsible for the stability of rubber prices, is expected to be able to make policies that stabilize rubber prices and are relatively more expensive than the current rubber price so that in the future rubber farmers will get a better income. On the other hand, the government is also expected to be able to provide education to rubber farmers about how to garden rubber and care

for rubber plantations properly and correctly, because so far rubber farmers have only used methods that have been used since ancient times.

2. Farmers are expected to improve the quality of rubber even though the current price of rubber is not so good. However, if farmers always maintain the quality of rubber, this will also have an impact on rubber prices increasing further in the future.
3. It is hoped that future researchers will be able to add new research objects not only in Payaraman Barat Village, Ogan Ilir Regency but also in other objects . Furthermore, researchers are also expected to be able to add new variables that influence income and can be used for further research. The addition of new variables aims to develop research that has been carried out previously so that it will add new information and new knowledge for both writers and readers.

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