

# Conference Proceeding

**2nd International Conference on Islamic  
Economics, Islamic Finance, and Islamic Law  
(2nd ICIEIFIL)**

**30 June 2022**

## The Effect Of Population and Economic Factors On Open Unemployment

Nasythaa Putri Ramadhanty<sup>1</sup>, Maulidyah Indira Hasmarini<sup>2</sup>

<sup>1,2</sup>Economic Development, Faculty Economic and Business, Muhammadiyah University of Surakarta

email: [b300160120@student.ums.ac.id](mailto:b300160120@student.ums.ac.id)

**ABSTRACT** - This study aims to analyze the influence of human development index, regional minimum wage, gross regional domestic product, population growth rate on open unemployment in districts/cities in Central Java. This study used a panel data analysis method by taking data at the Central Statistics Agency of Central Java with the scope of research of 35 regencies/cities in Central Java during 2017 to 2021. The results of this study show that the selected model used in this study is the Random Effect Model (REM) by going through testing on the hausman test. In addition, the findings in this study are that HDI has a negative and insignificant relationship with open unemployment. GRDP has a significant negative influence on the open unemployment rate, the minimum wage and the number of inhabitants have a significant positive effect on the open unemployment rate, while the rate of population growth has a positive and significant relationship with the open unemployment rate on regencies/cities in Central Java in 2017-2021.

**Keywords:** Open Unemployment, HDI, Regional minimum wage, GRDP, Population Growth

**ABSTRAK** - Penelitian ini bertujuan untuk menganalisis pengaruh indeks pembangunan manusia, upah minimum regional, produk domestik regional bruto, laju pertumbuhan penduduk terhadap pengangguran terbuka pada kabupaten/kota di Jawa Tengah. Penelitian ini menggunakan metode analisis data panel dengan mengambil data di Badan Pusat Statistik Jawa Tengah dengan ruang lingkup penelitian 35 kabupaten/kota di Jawa Tengah selama periode 2017 sampai 2021. Hasil penelitian ini menunjukkan bahwa model terpilih yang digunakan dalam penelitian ini adalah Random Effect Model (REM) dengan melalui pengujian pada uji hausman. Selain itu, temuan pada penelitian ini adalah IPM memiliki hubungan negative dan tidak signifikan terhadap pengangguran terbuka. PDRB memiliki pengaruh negatif signifikan terhadap tingkat pengangguran terbuka, upah minimum dan jumlah penduduk berpengaruh positif signifikan terhadap tingkat pengangguran terbuka, sedangkan laju pertumbuhan penduduk memiliki hubungan positif dan signifikan terhadap tingkat pengangguran terbuka pada kabupaten/kota di Jawa Tengah tahun 2017-2021.

**Kata Kunci:** Pengangguran Terbuka, IPM, Upah Minimum Regional, PDRB, Laju Pertumbuhan Penduduk

## INTRODUCTION

Economic development is defined as a process of increasing the per capita income of people in a country that lasts in the long term. Development is defined as an increase in national products (GDP, GNP) caused not only by an increase in the quantity of production factors used in the process but also the use of new systems and technologies (Muslim, 2014). According to Todaro (2005) development is something that can improve the quality of life and welfare of a country, especially for people living in that country (Todaro, 2005). Development is carried out in various sectors of life and involves production activities. Meanwhile, economic builders are a process that causes the per capita income of the population to increase in the long run. In

addition, regional economic development is a process of managing resources available by the government and the community, as well as partnerships between the private sector and local governments in creating new jobs and spurring the economic development of a region (Panjawa & Daryono Soebagiyo, 2014). Increasing the number of jobs and types of employment opportunities for people in the regions is the main goal in economic development. whereas, employment not proportional to the labor force will lead to unemployment. The high unemployment rate will be an economic problem because it does not maximize valuable resources and does not take advantage of the production of goods and services that are actually biased towards unemployment (Jones, 2005). The rate of economic growth that increases, the production of goods and services will also increase, thereby increasing the standard of living. A high rate of economic growth will usually expand employment opportunities and lower the unemployment rate. Meanwhile, the wage rate is one of the factors that affect the unemployment rate. Wages are compensation received by one work unit in the form of the amount of money paid. Labor wages are very important for both parties. For producers, wages are production costs that must be reduced as efficiently as possible. For the worker, wages are a source of income for himself, his family and become a source of community spending. High and low wages are an important factor that determines people's living standards.

Currently, education is positioned as a means to improve welfare through the use of existing opportunities and reflects the level of intelligence or achievement of formal education from the population because the higher one's education graduation, the higher one's work making or productivity at work. The ultimate goal of the educational program is the achievement of the expected work. According to the results of research conducted by Mihaela (2020) regarding the relationship of the human development index has a significant and negative influence on the unemployment rate. This explains that the higher the human development index in an area, the more it will cause the unemployment rate to decrease and vice versa if the human development index is low, it will have an impact on the high unemployment rate in the area (Mihaela, 2020).

**Table 1. Open Unemployment Rate By Province in Java Island in 2017-2022**

Province	2017	2018	2019	2020	2021
DKI Jakarta	7.14	6.65	6.54	10.95	8.5
West Java	8.22	8.23	8.04	10.46	9.82
Central Java	4.57	4.47	4.44	6.48	5.95
D.I. Yogyakarta	3.02	3.37	3.18	4.57	4.56
East Java	4.00	3.91	3.82	5.84	5.74
Banten	9.28	8.47	8.11	10.64	8.98

Source: BPS (processed)

Table 1 shows the unemployment rate in Central Java Province in 2021 of 5.98 percent, an increase from 2020. In 2021, the unemployment rate in Central Java Province was low after the Provinces of D.I. Yogyakarta and East Java had open unemployment rates of 4.56 percent and 5.74 percent, respectively. Based on the description above, it aims to see the effect of the Human Development Index, regional minimum wage, population growth rate, and GRDP on open unemployment of regencies/cities in Central Java in 2017-2021, namely: (1) to analyze the effect of the Human Development Index on the open unemployment rate; (2) to analyze the effect of the regional minimum wage on the open unemployment rate; (3) to analyze the effect

of population growth rate on open unemployment rate; (4) to analyze the effect of GRDP on the open unemployment rate.

The study conducted by Mahroji (2019) states that through education investment, it is hoped that it will be able to improve the quality of human resources shown by increasing a person's knowledge and skills. The higher the quality of human beings, the knowledge and expertise will also increase so that it will encourage an increase in work productivity. So that companies will get more results by hiring workers with high productivity with high employment, causing a reduction in the unemployment rate (Mahroji & Madania, 2019). The study of Sirait and Marhaeni (2013) found that economic growth, regional minimum wage and education level had a significant effect on the number of unemployed districts/cities in Bali Province. The results of the study obtained that economic growth has a real positive effect, the regional minimum wage has a real negative effect on the number of unemployed districts/cities in Bali Province, while the level of negative education is not real, and economic growth has the most dominant influence on the number of unemployed districts/cities in Bali Province (Novlin Sirait & A A I N Marhaeni, 2013). Based on the description from the background above, the author is interested in conducting a study with the title "The effect of population and economic factors on open unemployment"

## **LITERATURE REVIEW**

### ***Unemployment***

Unemployment is a state in which a person belonging to the labor force wants to get a job but has not been able to get it. A person who does not work, but does not actively seek work is not classified as unemployed. Unemployment can occur due to imbalances in the labor market. This shows that the amount of labor offered exceeds the amount of labor requested (Todaro, 2005). According to the Central Statistics Agency (BPS) in the employment indicator, unemployment is a resident who is not working but is looking for a job or is preparing for a new business or a resident who is not looking for a job because he has been accepted to work but has not yet started working. This unemployment is a workforce that is truly jobless. This type of unemployment is quite a lot because it has not yet gotten a job even though it has tried its best and as a result of the increase in job vacancies that are lower than the increase in labor. The effect of this situation in a fairly long period of time they do not do a job. So they are unemployed for real and half the time, and therefore called open unemployment. Open unemployment can also exist as a result of declining economic activity, from technological advances that reduce the use of labor, or as a result of the decline in the development of an industry (Mihaela, 2020).

### ***Human Development Index***

According to the *United Nations Development Programme*, human development is the process of enlarging choices for humans "*a process of enlarging people's choices*". The concept of human development explains that development should be analyzed and understood from a human point of view, not just from the point of view of its economic growth. Development is defined as an activity in an effort to improve the welfare of the community in various aspects of life which is carried out in a planned and sustainable manner by utilizing and taking into account the ability of resources, information, and advances in science and technology, as well as paying attention to social development.

According to *the United Nations Development Programme* (UNDP), in the Human Development Index (HDI) there are three indicators used to measure a country's average achievement in human development, namely through the measurement of life expectancy, education which is measured based on the average length of schooling and the literacy rate of the population aged 15 years and over, then the standard of living is measured through the measurement of per capita expenditure which has been adjusted to purchasing power parity. *The Human Development Index* or HDI is one of the approaches to measure the success rate of human development. The Human Development Index can be used as a tool to measure the status of *basic capabilities* but cannot measure all aspects of human development. The Human Development Index is calculated based on four components, namely the life expectancy that represents the health sector, the literacy rate and the average length of schooling for education, and the purchasing power parity of the community towards the amount of basic needs measured from the average per capita expenditure as an income approach that represents the area of decent living standards.

### ***Regional Minimum Wage***

Wages are the price paid to the worker for his services in the production of wealth like any other factor of production, labor is rewarded for his services referred to as wages. The minimum wage is a minimum standard used by employers or industry actors to provide wages to workers in their business environment (Mankiw, 2003). In addition, wages are a very influential factor in labor issues. This is because the desire of people to work is to get a decent wage to meet the needs of life (Agénor & Lim, 2018). If the level of wages offered by the employer is judged insufficient by the worker, then the worker will not accept the job offered. On the contrary, there are also workers who work at any level of wages. Wages are repayment for labor production factors. According to classical economics, wages are the price for labor production factors. The price must be able to meet the needs of life and guarantee a decent life (Sisnita & Prawoto, 2017).

### ***Gross Regional Domestic Product***

Economic growth shows the extent to which economic activity will generate additional income for people in a given period. Increasing the production of goods and services from a region, macro can be seen from the increasing value of Gross Regional Domestic Product (GRDP) every year and micro-based on gross regional domestic product per capita (Doni Mahardiki & Rokhedi Priyo Santoso, 2013). Gross Regional Domestic Product is the net value of final goods and services produced by various economic activities in a region in a given period (Giovanni, 2018). Gross Regional Domestic Product in the statistics presents two assessments, namely the GRDP on the prevailing price, namely the GRDP which includes inflation factors and the GRDP on constant prices, namely the GRDP which does not include inflation factors in it. Gross Regional Domestic Product can describe the ability of a region to manage and develop the potential of natural resources. Therefore, the amount of GRDP of each region has a different value depending on natural resources and production factors (Panjawa & Daryono Soebagiyo, 2014).

### ***Population Growth Rate***

A resident is a person who occupies a geographical area of a country for approximately six months and or is domiciled for approximately six months but aims to settle down (Sisnita & Prawoto, 2017). The 1945 Constitution Article 26 Paragraph 2 states that residents are

Indonesian citizens and foreigners residing in Indonesia. The existence of the population in a country has a very important role. The population plays the main role in economic, governmental, social activities and so on. If a country has no inhabitants then it will be destroyed and lost (Safuridar & Putri, 2019). In general, the development of the population in developing countries is very high and large in number. The problem of population growth is not just a matter of numbers. The problem of the population also concerns the interests of development as well as the welfare of mankind as a whole. In the context of development, the view of the population is divided into two, namely some consider it as an obstacle to development and some consider it as a spur of development with a large number of workers (Abreu & Messiah, 2020).

## METHODS

The population in this study was all regencies/cities in Java Tengah Province, namely as many as 30 regencies and 5 cities. The research time used is 2017-2021. The type of data used is secondary data from the Central Statistics Agency. Research variables include independent variables and dependent variables. Independent variables consist of HDI, regional minimum wage of GRDP, and population growth rate. The dependent variable is open unemployment. This study used a panel data regression analysis tool. In accordance with the objectives of research and development of the theory, the econometric model in this study is as follows:

$$UEMP_{it} = \alpha + \beta_1 HDI_{it} + \beta_2 UMR_{it} + \beta_3 GRDP_{it} + \beta_4 POP_{it} + e_{it}$$

Where:

UEMP : Open Unemployment

HDI : Human Development Index

UMR : Regional Minimum Wage

GRDP : Regional Domestic Product

POP : Population Growth Rate

E : Error Term

### *Statistical Testing*

#### *R<sup>2</sup> test*

The function of the R<sup>2</sup> test is to show whether an independent variable can explain the variance of the dependent variable well. The value of R<sup>2</sup> reaches the numbers 0 to 1. A *time series* model when R<sup>2</sup> reaches the number 0 means that the independent variable in the model is weak in explaining the dependent variable.

### *F Test (Simultaneous)*

The model exists if all free variables simultaneously have an influence on bound variables. The model existence test is the F test. In this study, the temporary conjecture is  $H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ , free variables simultaneously have no effect on bound variables;  $H_A: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$ , the free variable simultaneously affects the bound variable. The null hypothesis is not rejected if the statistical probability value of  $F > \alpha$ ; the null hypothesis is not accepted if the probability value of  $F \leq \alpha$ .

### *Effect Validity Test*

Partial Test to analyze the level of validity of unbound variables individually or individually. A partial test is a t test. The nul hypothesis on the partial test is  $\beta_i = 0$ , the free variable on the ith order has no significant effect on the influence; and the Alternative Hypothesis  $\beta_i \neq 0$ , the free variable on the ith order has a significant influence. The nul hypothesis is said to be accepted if the probability value  $t > \alpha$ ; The null hypothesis is not accepted if the magnitude of the probability  $t \leq \alpha$ .

### *Model Selection Test*

There are two tests used to determine the most appropriate model to estimate the panel data regression parameters, namely:

#### **Chow Test**

The Chow test is a test used to find out whether the FEM model is better than the PLS model.

- a) Hypothesis formulation
  - $H_0$  : Pls (*Pooled Least Square*) model is better than *Fixed Effect Model*
  - $H_A$  : FEM (*Fixed Effect Model*) model is better than *Pooled Least Square*
- b) Determining the degree of significance ( $\alpha$ ) = 5%
- c) Define test criteria
  - $H_0$  is accepted when the p-value is  $> \alpha$
  - $H_A$  is accepted when the p-value is  $\leq \alpha$

#### **Hausman Test**

The Hausman test is a test to find out whether *the fixed effect* (FEM) model is better than *the random effect* (REM) model.

- a) Hypothesis formulation
  - $H_0$  : REM model (Random Effect Model) is better than FEM (*Fixed Effect Model*)
  - $H_A$  : FEM (Fixed Effect Model) model is better than REM (*Random Effect Model*)
- b) Determining the degree of significance ( $\alpha$ ) = 5%
- c) Determine test criteria
  - $H_0$  is accepted when the p-value is  $> \alpha$
  - $H_A$  is accepted when the p-value is  $\leq \alpha$

## **RESULTS**

### ***Model Selection Test***

#### *Chow Test (Likelihood Test Ratio)*

The Chow test is a test to determine the best model between the Fixed Effect Model and the *Common Effect Model/Pooled Least Square*. If the results state accept the null hypothesis then the best model used is the Fixed Effect Model, with the test going ongoing to the Hausman Test. The results of the chow test are as follows:

Table 1 Chow Test Panel Data Estimation Results

Effects Test	Statistics	d.f.	Prob.
Cross-section F	19,013	(34,136)	0,000
Cross-section Chi-square	306.213	34 4	0,000

Source : Ouput results regression of panel data using Eviews10

- a) Hypothesis Formulation  
 $H_0$  : *Common Effect Model* Is Better than *Fixed Effect Model*.  
 $H_A$  : *Fixed Effect Model* Is Better than *Common Effect Model*.
- b) Determining the degree of significance  
Significance ( $\alpha$ ) = 0.05
- c) Testing Criteria  
 $H_0$  is accepted if the p-value > 0.05  
 $H_0$  is rejected if the p-value  $\leq$  0.05
- d) Conclusion

The p-value or probability of F is  $0.0000 < 0.05$  and *Chi Square* is  $0.0000 < 0.05$ . Then  $H_0$  is rejected so that the model used is the *Fixed Effect Model* (FEM).

#### *Hausman Test*

The Hausman test is a test to determine the right *Fixed Effect Model* or *Random Effect Model* to use in estimating panel data. The results of the hausman test are:

Table 2 Hausman Test Panel Data Estimation Results

Test Summary	Chi-Sq. Statistics	Chi-Sq. d.f.	Prob.
Cross-section random	2,389	4	0.665

Source: Processed data from the evIEWS10

- a) Hypothesis formula  
 $H_0$  : *Random Effect Model* Is Better than *Fixed Effect Model*  
 $H_A$  : *Fixed Effect Model* is better than *Random Effect Model*
- b) Determining the degree of significance ( $\alpha$ )  
Significance ( $\alpha$ ) = 0.05
- c) Testing Criteria  
 $H_0$  is accepted if the p-value > 0.05  
 $H_0$  is rejected if the p-value  $\leq$  0.05
- d) Conclusion



The p-value or probability value of Chi-Square or Cross Section Random is  $0.665 > 0.05$ , then  $H_0$  diterima, so the *Random Effect Model* becomes the selected model, so the model used is the *Random Effect Model* (REM). Based on the results of the panel data estimation to choose the best model using the chow test and hausman test, the best model was chosen, namely the *Random Effect Model*, the estimation results are presented in Table 3.

### **REM Estimation**

Table 3. Panel Data Regression Estimation Results with REM Method

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	-57.360	11.380	-5.040	0.000
HDI	-0.031	0.066	-0.474	0.636
LOG(UMR)	4.448	0.900	4.943	0.000
GRDP	-0.132	0.029	-4.556	0.000
LOG(POP)	0.094	0.024	3.871	0.000

Based on Table 3 , the results of the estimation of the panel data regression equation obtained in this study are:

$$BD_{it} = -57,360 - 0.031IPM_{it} + 4.448\log UMR_{it} - 0.132PDRB_{it} + 0.094\log POP_{it}$$

### **Coefficient of Determination**

The result of data processing obtained a coefficient of determination (R<sup>2</sup>) value of 52.6%. These results show that the variation in open unemployment as a dependent variable in this research model can be explained by variations in other variables outside the studied model of 47.4% human development index, regional minimum wage, gross regional domestic product, population growth rate

### **Test F**

In the estimation results, the p-value, probability, or static empirical significance of F in the model estimate has a value of 0.0000, which means that the  $< 0.01$ ; so  $H_0$  is rejected, the conclusion of the model used in the study exists.

***T Test***

Table 4. T Test Panel Data Regression Results

Variable	Sig. t	Criterion	Conclusion
HDI	0.636	$> 0.05$	Insignificant
LOG(UMR)	0.000	$\leq 0.05$ pm	Significant at $\alpha = 0.05$
GRDP	0.000	$\leq 0.05$ pm	Significant at $\alpha = 0.05$
LOG(POP)	0.000	$\leq 0.05$ pm	Significant at $\alpha = 0.05$

From Table 4, it can be seen that the value of p (p value), probability, or statistical empirical signification t variable HDI of 0.630 ( $> 0.05$ ); logumr variable 0.000 ( $\leq 0.05$ ); variable PDRB 0.000 ( $> 0.05$ ); and logPOP variable has a value of p (p value), probability, or statistical empirical signification of t of 0.000 ( $\leq 0.05$ ). From these results, it can be concluded that the variables logUMR, GRDP, and logPOP individually have a significant influence. While the HDI variable does not have a significant influence.

***Interpretation of Selected Models***

The logUMR variable has a regression coefficient of 4.448. The pattern of the relationship of logUMR independent variables to open unemployment is linear logarithm so that if MSEs increase by one percent, unemployment will increase by 0.04 percent. The GRDP variable has a regression coefficient of -0.132. The pattern of the relationship of the independent variable of GRDP to open unemployment is linear so that if the GRDP rises by one percent, open unemployment will decrease by 0.132 percent. The population growth rate variable has a regression coefficient of 0.094. The pattern of the independent variable relationship of the population rate to open unemployment is linear so that if the population growth rate rises by one percent, open unemployment will increase by 0.001 percent.

**DISCUSSION**

This is in accordance with the theory explained by (Todaro, 2005) that through increasing human capital development and development to increase human productivity. Through education investment, it is hoped that it will be able to improve the quality of Human Resources (HR) which is shown by increasing a person's knowledge and skills so that it will encourage an increase in work productivity. The increase in productivity can affect job opportunities, namely by increasing productivity, there is a decrease in production costs per unit of goods. A decrease in the cost of production per unit of goods will lower the price per unit of goods. If the price of goods falls, the demand for goods rises which will encourage employers to increase the demand for labor, so that with the absorption of more and more labor can reduce the high unemployment rate.

The minimum wage has a significant positive influence on the open unemployment rate according to districts/cities in Central Java in 2017-2021. Where the increase in the minimum wage will lead to an increase in unemployment in the object of study. The cause of unemployment due to wage rigidity is the inability of wages to make adjustments to the point of equilibrium, where the supply of labor is equal to the demand for labor. Unemployment caused by wage rigidity due to adjustments between the number of workers who want work and the number of jobs available. However, the increasing level of wages makes the supply of labor increase, thus making the demand for labor decrease. As a result there is a labor surplus or unemployment. Causes of wage rigidity include: minimum wage regulations, trade unions and wage efficiency (Panjawa & Daryono Soebagiyo, 2014).

Economic growth as measured by nominal GRDP has a negative and significant influence on open unemployment of districts/cities in Central Java. That is, the increase in the unemployment rate is due to declining economic growth. The existence of this flexibility, an economy has unlimited freedom in determining the combination of capital and labor used to produce a certain level of output (Mihaela, 2020).

The population has a positive and significant effect on the open unemployment rate of regencies/cities in Central Java. That is, the growing population will cause unemployment to continue to increase. The number of inhabitants is constantly increasing, causing many residents to fall into the category of labor force. It is different if the labor force increases, it will cause job opportunities to also increase. If this is not accompanied by the creation of new jobs, there will be many residents who do not get jobs (unemployment) (Tour-Prats, 2021).

## **CONCLUSION**

The results of the calculation with panel data to explain the determinants of open unemployment in districts/cities in Central Java can be concluded as follows: First, model testing using the Chow test shows that the FEM model is more appropriate to use than the PLS model. Meanwhile, the Hausman test showed that the FEM model was more appropriate to use compared to the REM model. Therefore, this study decided to use the FEM model because the FEM model is more precise than the PLS and REM models; Second, HDI has a negative and insignificant relationship to open unemployment. GRDP has a significant negative influence on the open unemployment rate, the minimum wage and the population have a significant positive effect on the open unemployment rate, while the population growth rate has a positive and significant relationship with the open unemployment rate in the district /city in Central Java in 2017-2021.

## REFERENCES

- Abreu, I., & Mesias, F. J. (2020). The assessment of rural development: Identification of an applicable set of indicators through a Delphi approach. *Journal of Rural Studies*, 80, 578–585. <https://doi.org/10.1016/j.jrurstud.2020.10.045>
- Agénor, P. R., & Lim, K. Y. (2018). Unemployment, growth and welfare effects of labor market reforms. *Journal of Macroeconomics*, 58, 19–38. <https://doi.org/10.1016/J.JMACRO.2018.08.009>
- Doni Mahardiki, & Rokhedi Priyo Santoso. (2013). Analisis Perubahan Ketimpangan Pendapatan Dan Pertumbuhan Ekonomi Antar Propinsi Di Indonesia 2006-2011. *JEJAK*, 6(2), 103–213. <https://doi.org/10.15294/JEJAK.V6I2.3888>
- Giovanni, R. (2018). Analisis Pengaruh PDRB, Pengangguran dan Pendidikan Terhadap Tingkat Kemiskinan di Pulau Jawa Tahun 2009-2016. *Economics Development Analysis Journal*, 7(1), 23–31. <https://doi.org/10.15294/EDAJ.V7I1.21922>
- Jones, C. (2005). Applied Welfare Economics. *Applied Welfare Economics*, 1–320. <https://doi.org/10.1093/0199281971.001.0001>
- Mahroji, D., & Madania, P. (2019). Pengaruh Indeks Pembangunan Manusia Terhadap Tingkat Pengangguran Di Provinsi Banten. *Jurnal Ekonomi-Qu*, 9(1). <https://doi.org/10.35448/JEQU.V9I1.5436>
- Mankiw, N. G. (2003). *Teori Makro Ekonomi Terjemahan*. PT. Gramedia Pustaka Utama.
- Mihaela, S. (2020). Improving unemployment rate forecasts at regional level in Romania using Google Trends. *Technological Forecasting and Social Change*, 155. <https://doi.org/10.1016/J.TECHFORE.2020.120026>
- Muslim, M. R. (2014). Pengangguran Terbuka dan Determinannya. *Jurnal Ekonomi Dan Studi Pembangunan*, 15(2).
- Novlin Sirait, & A A I N Marhaeni. (2013). Analisis Beberapa Faktor Yang Berpengaruh Terhadap Jumlah Pengangguran Kabupaten/Kota Di Provinsi Bali | E-Jurnal Ekonomi Pembangunan Universitas Udayana. *E-Jurnal Ekonomi Pembangunan*. <https://ojs.unud.ac.id/index.php/eep/article/view/4299>
- Panjawa, J. L., & Daryono Soebagiyo. (2014). Efek peningkatan upah minimum terhadap tingkat pengangguran. *Jurnal Ekonomi Dan Studi Pembangunan*, 15(1), 48–54. <http://journal.umy.ac.id/index.php/esp/article/view/1283>
- Safuridar, & Putri, N. I. (2019). Pengaruh Indeks Pembangunan, Pengangguran dan Jumlah Penduduk Terhadap Tingkat Kemiskinan di Aceh Bagian Timur. *Jurnal Samudra*

*Ekonomika*, 3.

- Sisnita, A., & Prawoto, N. (2017). Analisis Faktor-Faktor yang Mempengaruhi Tingkat Pengangguran Terbuka di Provinsi Lampung (Periode 2009-2015). *Journal of Economics Research and Social Sciences*, 1(1), 1–7. <https://doi.org/10.18196/JERSS.V1I1.9057>
- Todaro, M. (2005). *Economic Development* (12th ed.). Pearson.
- Tur-Prats, A. (2021). Unemployment and intimate partner violence: A Cultural approach. *Journal of Economic Behavior and Organization*, 185, 27–49. <https://doi.org/10.1016/J.JEBO.2021.02.0060>

# ANALYSIS OF THE EFFECT OF PHYSICAL INFRASTRUCTURE DEVELOPMENT ON THE GRDP LEVEL OF CENTRAL JAVA PROVINCE 2016-2020

**Dina Kristinawati<sup>1</sup>, Maulidyah Indira Hasmarini<sup>2</sup>**

<sup>1</sup>Economic and Bussiness, Universitas Muhammadiyah Surakarta  
email: [dinakristina49@gmail.com](mailto:dinakristina49@gmail.com)

<sup>2</sup>Economic and Bussiness, Universitas Muhammadiyah Surakarta  
email: [mmaulidyah@ums.ac.id](mailto:mmaulidyah@ums.ac.id)

**ABSTRACT-** *This study aims to analyze the effect of physical infrastructure development on the level of Gross Regional Domestic Product (GRDP) in Central Java Province in 2016-2020. The data used in this study is data on the provision of clean water and health facilities in Central Java Province in 2016-2020 which were obtained from the Central Statistics Agency (BPS) of Central Java Province. The data analysis used in this research is panel data regression. Based on the results of the Panel Data Regression estimation and hypothesis testing, it was found that clean water and health had a positive and significant impact on GRDP in Central Java in 2016-2020.*

**Keywords:** *Gross Regional Domestic Product (GRDP), Clean Water Supply, Health Facilities*

**ABSTRAK -** Penelitian ini bertujuan untuk menganalisis pengaruh pembangunan infrastruktur fisik terhadap tingkat Produk Domestik Regional Bruto (PDRB) di Provinsi Jawa Tengah pada Tahun 2016-2020. Adapun data yang digunakan dalam penelitian ini adalah data pengadaan air bersih, dan fasilitas kesehatan di Provinsi Jawa Tengah tahun 2016-2020 yang diperoleh dari Badan Pusat Statistik (BPS) Provinsi Jawa Tengah. Analisis data yang digunakan dalam penelitian ini adalah regresi data panel. Berdasarkan hasil estimasi Regresi Data Panel dan uji hipotesis, ditemukan bahwa air bersih, dan kesehatan berpengaruh positif dan signifikan terhadap PDRB di Jawa Tengah tahun 2016-2020.

**Kata Kunci :** Produk Domestik Regional Bruto (PDRB), Pengadaan Air Bersih, Fasilitas Kesehatan

## INTRODUCTION-

The process of trade between regions can run smoothly due to the development of advanced infrastructure. Economic development can increase due to increased productivity, factors of production, increased population movement, and goods and services. To increase prosperity, and achieve social justice for local communities, regional economic development is needed, which is commonly referred to as infrastructure development, while at the same time increasing the rate of economic growth of a region.

According to (David Ray. 2016) in (Sumadiasa, Ni Made, and I.G.A.P Wirathi.2016) claim Long-term problems that are often a challenge in infrastructure development in Indonesia, one

of which is the planning and construction of roads that are not appropriate and need to be redesigned thoroughly in order to maintain economic growth in Indonesia. No action has been taken to resolve this issue. However, efforts to enforce regulations appear to have emerged a new influx of private investment. This new flow of private investment plays a role in the drinking water sector which has real and economic risk allocation in public private partnerships.

Water is one of the categories of resources controlled by the State as mandated in the 1945 Constitution, Article 33, Paragraph 3, stating that water is controlled by the state, and is fully utilized for the prosperity of the people. In carrying out the conservation of water resources, the Regional Government must be able to improve clean water infrastructure and ensure its wise use, and ensure the continuity of its supply, maintain the unavoidable quality and value of every business activity by anyone involved, including business actors and the community. World Health Organization explain about describes the meaning of health which is a state of physical, mental and social well-being without stress. Health infrastructure is an important aspect because almost all aspects of people's lives are mutually sustainable.

The role of infrastructure is very important for the level of GRDP. Infrastructure has a considerable influence on improving the quality of life and human welfare as well as economic growth. Therefore, progress in infrastructure development is very important so that economic facilities are adequate and economic activities run smoothly. Thus the level of GRDP of Central Java Province increases.

Table 1.1 [series 2010] Gross Regional Domestic Product (million Rupiah) of Central Java Province 2019-2020 at 2010 Constant Prices

Years	Gross Regional Domestic Bruto (GRDP)
2016	849099354,69
2017	893750296,17
2018	941091143,86
2019	991516543,31
2020	965225709,06

Source: BPS (processed)

Infrastructure development carried out with the hope of facilitating state/regional economic activities. The economic rate of Central Java Province is explained through GRDP on the basis of 2010 constant prices as a whole sector from 2016-2020 which is presented in table 1.1. There is an increase in the Gross Regional Domestic Product (GRDP) of Central Java Province in 2016-2020 experiencing a positive trend. Although there was a decline in 2020. This decline was due to several sectors experiencing a decline. This decrease was found in the districts/cities that were most severely affected by the Covid-19 pandemic. The layoffs in several sectors hampered and reduced the level of Gross Regional Domestic Product (GRDP) in Central Java Province

Based on the background that has been described, the purpose of this planned research is to test, analyze, and find out how the influence of road, water and health infrastructure development on the level of Gross Regional Domestic Product (GRDP) of Central Java Province in 2016-2020

## **LITERATURE REVIEW-**

### **A. *Economic Growth***

According to (Boediono.2012) in (Fatmawati, Inna.2015) claims that economic growth is an increase in the number of long-term per capita expenditures that prioritizes processes, outputs and the long-term economy within a certain period of time. a country that is developed for its economy is proof that the country's per capita income has increased significantly compared to the previous year. a successful economic growth is shown by how the process and results of an economic development in the region.

### **B. *Gross Regional Domestic Product (GRDP)***

GRDP provides a basis for measuring the added value of goods and services produced by business units from the economic activities of a particular region. GRDP (ADHB) at current prices is income that is allowed by residents of the area and is the added value of a good or service calculated using the price of the year concerned. Constant price GRDP (ADHK), on the other hand, is an evolution of the actual production of goods and services produced by regional economic activities.(BPS.2021)

### **C. *Road Infrastructure***

Road infrastructure is a physical infrastructure designed to connect an area with other areas, in addition to advancing the economic development of the community. The existence of road infrastructure affects variable costs and fixed costs that must be borne by economic actors. However, the implementation of road infrastructure procurement is the responsibility of the government, not the private sector. Not only is private construction expensive or very expensive for economic activity, but the existence of road infrastructure has a significant impact on transportation costs. Low shipping costs allow producers to distribute their products to rural and remote areas more quickly, effectively and efficiently, and local people can buy goods and services cheaply and easily.

### **D. *Water Infrastructure***

With the spirit of sustainable development in the field of drinking water and sanitation, it is one of the important points that must be met by the government so that the community can take advantage of the potential of existing natural resources.(Saniti.2012) in (Wadu Ludovikus Bomans,dkk.2020)

According to (Setyoad.2014) in (Wadu Ludovikus Bomans,dkk.2020) efforts to develop drinking water and sanitation facilities in certain areas can be successful and have a positive impact on community environmental health which contributes to increasing community productivity to reduce negative impacts and fight community inequality.

### **E. *Health Infrastructure***

Expansion of health infrastructure development is one way to advance the development of a country which is supported by almost all areas of life. The purpose and objective of this health infrastructure development is to increase awareness, enthusiasm, and ability of all parties to achieve maximum quality of welfare. Maximum health facilities must also be available to achieve optimal health. Health services and other health services through hospitals and health centers are expected to improve the quality of health that reaches the entire community in order to achieve equitable health development. The development of



health infrastructure, both quantitatively and qualitatively, will encourage an increase in regional income.

## METHODS

The analytical tool that will be used in this research is panel data analysis. Where this study will examine the analysis of the influence of infrastructure on the growth rate of GRDP of Central Java Province for the 2016-2020 period. In analyzing the variables that affect the level of Gross Regional Domestic Product, the econometric model estimation stage will include: parameter estimation of panel data model with Pooled Least Squares (PLS) or Common Effect Model (CEM) approach, Fixed Effect Model (FEM), and Random Effect Model (BRAKE); selection of the best estimator model with Chow Test and Hausman Test; model goodness test (model existence test and coefficient of determination) on the selected estimator model; and test the validity of the effect on the selected estimator model. So that it can be arranged with an econometric model as follows:

$$GRDP_t = \beta_0 + \beta_1 \text{Road Infrastructure} + \beta_2 \text{Water Infrastructure} + \beta_3 \text{Health Infrastructure} + \varepsilon_t$$

Where :

GRDP	: Gross Regional Domestic Product (GRDP) million
$\beta_0$	: Konstanta
Road Infrastructure	: highway length (km)
Water Infrastructure	: Clean Water Supply (m <sup>3</sup> )
Health Infrastructure	: Medical facility (unit)
$\beta_0$	: Constanta
$\beta_1 \dots \beta_3$	: Regression coefficient
$\varepsilon$	: <i>error term</i>
$i$	: Subscrip Place
$t$	: Subscrip time

### ***Good Model Determination***

#### ***A. Common Effect Model***

The simplest panel data regression approach in determining model estimates that combines all cross section data and time series data. In the common effect model, the behavior of the data for each individual is the same in various time periods. Thus, parameter estimation in the common effect model is carried out by combining cross section data and time series data as a unit without looking at time and individual differences.(Widarjono.2013)

#### ***B. Fixed Effect Model***

The method that can be used for model estimation in FEM is the Least Square Dummy Variable method or what is often called LSDV. In the LSDV method, estimation is done by entering a dummy variable which is used to explain the different intercept values due to differences in unit values.(Pangestika.2015)

#### ***C. Random Effect Model***

The application of the fixed effects approach has an impact on the reduction of degrees of freedom which is quite significant if we are faced with the number of cross section units. Then, eventually will reduce the efficiency of the estimated parameters. , it is necessary to have another approach which is also known as the Random Effect Model (REM).

### **Panel Data Testing Method**

#### **A. Chow Test (Likelihood Test)**

Tests to determine the most appropriate Fixed Effect or Random Effect model used in estimating panel data.

- Hypothesis formulation  
 $H_0$  : Pls (*Pooled Least Square*) model is better than *Fixed Effect Model*  
 $H_A$  : FEM (*Fixed Effect Model*) model is better than *Pooled Least Square*
- Determining the degree of significance ( $\alpha$ ) = 0,1 %
- Define test criteria  
 $H_0$  is accepted when the p-value is  $> \alpha$   
 $H_A$  is accepted when the p-value is  $\leq \alpha$

#### **B. Hausman Test**

After performing the Chow test, the next step is to determine the most appropriate model between Fixed Effect Model or Random Effect Model, this test is called the Hausman test. The Hausman test statistic follows a chi-square distribution with degrees of freedom the number of independent variables (k).

- Hypothesis formulation  
 $H_0$  : REM model (Random Effect Model) is better than FEM (*Fixed Effect Model*)  
 $H_A$  : FEM (Fixed Effect Model) model is better than REM (*Random Effect Model*)
- Determining the degree of significance ( $\alpha$ ) = 0,1 %
- Determine test criteria  
 $H_0$  is accepted when the p-value is  $> \alpha$   
 $H_A$  is accepted when the p-value is  $\leq \alpha$

### **Goodness Test Model**

#### **A. R Square ( $R^2$ )**

The coefficient of determination ( $R^2$ ) is used to determine the percentage of variation in the independent variable that can carry out the dependent variation. The regression accuracy level of  $R^2$  ranges from  $0 \leq R^2 \leq 1$ . The greater the value of  $R^2$ , the more precise a linear line is used as an approximation. If the approach value of  $R^2$  is equal to 1 then the approach is absolutely perfect.

#### **B. F Test (Simultaneous)**

The model exists if all free variables simultaneously have an influence on bound variables. The model existence test is the F test. In this study, the temporary conjecture is  $H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$  , free variables simultaneously have no effect on bound variables;  $H_A : \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$  , the free variable simultaneously affects the bound variable. The null hypothesis is not rejected if the statistical probability value of  $F > \alpha$ .; the null hypothesis is not accepted if the probability value of  $F \leq \alpha$ .

#### **C. Partial Regression Coefficient Test (t-test)**

The t-test is used to determine whether the independent variables partially have a significant effect or not on the dependent variable. The degree of significance used is 0,1. If  $t_{count} > t_{table}$  then this indicates that the independent variable has a significant effect on the dependent variable and vice versa, if  $t_{count} < t_{table}$  then this means that the independent variable has no significant effect on the dependent variable.

## RESULT

### *Panel Data Testing Method*

#### **A. Chow Test (Likelihood Test)**

Tests to determine the most appropriate Fixed Effect or Random Effect model used in estimating panel data. The results of the Chow test are :

Table 1

Effect Test	Statistic	d.f.	Prob.
Cross-section F	422.797321	(34,137)	0.0000

*Source* : Ouput results regression of panel data using Eviews10

Based on the results of the regression, it can be concluded that the probability F–statistical Chow test is 0.0000 ( $< 0.1$ ),  $H_0$  is rejected so that the model follows the Fixed Effects Model (FEM) approach.

#### **B. Hausman Test**

The Hausman test is a test to determine the right *Fixed Effect Model* or *Random Effect Model* to use in estimating panel data. The results of the hausman test are:

Table 2

Test Summary	Chi-Square Statistic	d.f.	Prob.
Cross-section random	27.934698	3	0.0000

*Source* : Ouput results regression of panel data using Eviews10

Based on the results of the regression, it can be concluded that it can be seen that the probability of  $\chi^2$  Hausman's test statistic is 0.0000 ( $< 0.1$ ), so  $H_0$  is rejected, which means the model follows the Fixed Effect Model (FEM) approach.

The results of the Chow test and Hausman test above conclude that the selected estimator model is the Fixed Effect Model (FEM). Complete FEM estimation results are:

Table 3

$PDRB_{it} = -63679.03 + 30.09043X1_{it} + 0.000499X2_{it} + 35.62630X3_{it}$			
	(0.0001)*	(0.0000)*	(0.0002)*
$R^2 = 0.995370$ ; DW-stat. = 0.864085; F-stat = 795.9584; Prob.F-stat. = 0,0000			

Sources: \* significant on  $\alpha = 0,01$ ; \*\*significant on  $\alpha = 0,05$ ; \*\*\*significant  $\alpha = 0,10$ ; the number in brackets is the t-statistical probability value.

The results of the estimation of the panel data regression equation obtained in this study are :

$$GRDP_t = -63679.03 + 30.09043 \text{Road Infrastructure}_{it} + 0.000499 \text{Water Infrastructure}_{it} + 35.62630 \text{Health Infrastructure}_{it} + \varepsilon_t$$

### *Coefficient of Determination Interpretation ( $R^2$ )*

Based on table 3 shows that the R-square ( $R^2$ ) value of the estimated model, namely the Fixed Effect Model (FEM) is 0.995370. This value shows that the ability of the variable length of highways, clean water, and health facilities is able to explain the variation of the GRDP variable by 99%, while the remaining 1% is explained by variables other than the variables used in this study.

### *FEM Estimated Model Existence Test (F test)*

The model exists when at least one independent variable affects the dependent variable (not all regression coefficients are zero). The model existence test is the F test. Because the best estimated model FEM (Fixed Effect Model) there are 3 independent variables, the formulation of the hypothesis is:  $H_0: \beta_1 = \beta_2 = \beta_3 = 0$  (regression coefficient of all four variables is zero or the model doesn't exist);  $H_A: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$  (at least one regression coefficient is not equal to zero or the model exists).  $H_0$  is not rejected if the p value (p value), probability, or empirical statistical significance  $F > \alpha$ ;  $H_0$  will be rejected if the p value (p value), probability, or statistical empirical significance  $F \leq \alpha$ . Based on Table 3, it can be seen that the p value (p value), probability, or empirical significance of the F statistic is 0.0000 ( $< 0.1$ ). So,  $H_0$  rejected. In conclusion, the FEM estimated model exists.

### *Partial Regression Coefficient Test (t-test)*

Tabel 4. T Test Panel Data Regression Results

Variabel	Prob t-Stat	Criteria	conclusion
Road Infrastructure	0.0001	$< 1$	Signifikan pada $\alpha 0,01$
Water Infrastructure	0.0000	$< 1$	Signifikan pada $\alpha 0,01$
Health Infrastructure	0.0002	$< 1$	Signifikan pada $\alpha 0,01$

Based on the results of the t-test regression in this study, it was found that the length of the highway, clean water, and health had a positive and significant effect on GRDP in Central Java in 2016-2020..

## DISCUSSION

The length of the road will affect Central Java's GRDP from 2016 to 2020. Road infrastructure is transportation In the economy of a region, roads function to support the regional economy. Roads are access from one area to another. According to this feature, roads play an important role in increasing GRDP and reducing disadvantaged areas. found that the length of the highway had a positive influence on GRDP in Palopo City in 2010-2017. The regional economy is highly dependent on road infrastructure facilities that open access to other regions, thereby increasing economic growth.(Warsilan.2015)

Based on the regression results, clean water has an influence on GRDP in Central Java in 2016-2020. Water infrastructure has a positive influence on GRDP, this is due to the relationship between physical infrastructure and the level of GRDP which can be explained through the role of infrastructure in an effort to significantly increase the productivity of workers who are used as inputs in the production process. GRDP. According to (Noor.2015) in research (Saputra ,Nur Dendi.2021) clean water has a positive influence on the level of GRDP. This can happen because in the production process there is a significant relationship between physical infrastructure and the level of GRDP. The high and low production yields greatly affect the productivity of workers in real terms.

Regression results show that there is a positive influence between health infrastructure and GRDP in Central Java. Family welfare goals are achieved if there is an increase in the development of health infrastructure which is closely related to almost all aspects of life. The purpose of this health infrastructure development is as an effort to increase awareness, willingness and ability to live healthy for everyone in order to have optimal quality of welfare. To achieve optimal health conditions, there must be maximum health facilities. (Sartiyah.2016)

## CONCLUSION

Based on the discussion of the results of the research analysis, several conclusions can be drawn as follows

1. Based on the results of the regression in this study the selected model is the Fixed Effect Model (FEM) model.
2. Based on the results of the t-test regression in this study it was found that the length of the highway, clean water, and health had a positive and significant effect on GRDP in Central Java in 2016-2020
3. Based on the results of the F test regression in this study, it was found that the model used existed
4. Based on the results shows that the R-square ( $R^2$ ) value of the estimated model, This value shows that the ability of the variable length of highways, clean water, and health facilities is able to explain the variation of the GRDP variable by 99%, while the remaining 1% is explained by variables other than the variables used in this study.

## REFERENCES

**Boediono.**2012.Teor Pertumbuhan Ekonomi.Yogyakarta:BPPE

**Pangestika, Styfanda.** 2015. “Analisis Estimasi Model Regresi Data Panel Dengan Pendekatan Common Effect Model (CEM), Fixed Effect Model (FEM), Dan Random Effect Model (REM).” *Unnes Journal* 2 (1): 106

**Saputra, Nur Dendi DKK.** (2021). Pengaruh Infrastruktur Ekonomi dan Infrastruktur Sosial Terhadap Pertumbuhan Ekonomi Provinsi Kepulauan Bangka Belitung. E-Jurnal EP Universitas Baturaja. Vol. 1 No. 2.

<https://journal.unbara.ac.id/index.php/klassen/article/view/991>

**Sartiyah.** (2016). Pengaruh Pendidikan, Kesehatan, Investasi dan Tenaga Kerja terhadap Produk Domestik Regional Bruto di Provinsi Aceh. Jurnal Ekonomi Universitas Syiah Kuala.<https://rp2u.unsyiah.ac.id/index.php/welcome/prosesCariPublikasi/12614/196610091992032002/Sartiyah/4>

**Sumadiasa, I Ketut DKK.** (2016). Analisis pengaruh pembangunan infrastruktur jalan, listrik dan PMA terhadap pertumbuhan PDRB Provinsi Bali. E-Jurnal EP Unud, 5 [7] : 925 – 947.<https://ojs.unud.ac.id/index.php/eep/article/view/22964>

**Warsilan & Akhmad Noor.**(2015). Peranan Infrastruktur Pertumbuhan Ekonomi dan Implikasi pada Kebijakan Pembangunan di Kota Samarinda. MIMBAR, Vol. 31, No. 2 359-366. <https://ejournal.unisba.ac.id/index.php/mimbar/article/view/1444>

**Wadu, Ludovikus Bomans.dkk.**2020. Penyediaan Air Bersih dan Sanitasi:Bentuk Keterlibatan masyarakat dalam pembangunan berkelanjutan. Jurnal pendidikan kewarganegaraan. Volume 10, no 02. 9318-25370-1-PB

## **Analysis Of The Effect Of GDRP, Wage, Domestic Investment, Population On Open Unemployment Rate In Six Provinces Of The Island Of Java for the 2015-2020 Period**

**Mochammad Alham Putra Pratama<sup>1</sup>, Eni Setyowati<sup>2</sup>**

<sup>1</sup> Faculty of Economic and Business, Muhammadiyah University of Surakarta  
b300180300@student.ums.ac.id

<sup>2</sup> Faculty of Economic and Business, Muhammadiyah University of Surakarta  
es241@ums.ac.id

**ABSTRACT** - This research treats the problem of unemployment which is still an important problem for the government and society in Indonesia. High unemployment rates can bring problems that are difficult to avoid. This research aims to analyse the effect of GDP, minimum wage, domestic investment, population on the open unemployment rate in six java provinces for the 2015-2020 period. Multiple regression quantitative model is the model used in this study. The data used is panel data with secondary data types for the 2015-2020 period obtained from the Central Statistics Agency (BPS). The results of the research show that the variables of GRDP, Minimum Wage and Population have a significant effect on open unemployment in 6 Java Province

**Keywords:** GRDP, Wage, Population, Domestic Investment, Unemployment

**ABSTRAK** - Riset ini mengolah permasalahan pengangguran masih menjadi masalah penting bagi pemerintah dan masyarakat di Indonesia. Tingginya tingkat pengangguran dapat membawa masalah yang sulit untuk dihindari. Riset ini punya tujuan menganalisis pengaruh GDRP, upah minimum, DI, jumlah penduduk terhadap tingkat pengangguran terbuka di enam provinsi pulau jawa periode 2015-2020. Model kuantitatif regresi berganda merupakan model yang digunakan dalam penelitian ini. Data yang dipakai adalah data panel dengan tipe data sekunder periode 2015-2020 yang di dapat dari Badan Pusat Statistik (BPS). Hasil dari riset menunjukan variabel GDRP, Upah Minimum dan Jumlah penduduk berpengaruh signifikan terhadap pengangguran terbuka di 6 Provinsi Pulau Jawa.

**Kata Kunci:** GDRP, Upah, Jumlah Penduduk, DI, Pengangguran Terbuka

### **INTRODUCTION**

Employment is an important aspect of the Indonesian economy. Indonesia's large population is a challenge for the government in terms of employment. Based on data released by the Central Statistics Agency (BPS) in 2016 entitled the Central Statistics Agency (BPS), Indonesia's population in 2015 reached 255,461,700 people. Meanwhile, Indonesia's population growth rate is still 1.38% per year. According to the BPS population forecast, in 2035, the total population of Indonesia will reach more than 300 million people, of which the majority of the Indonesian population is in the productive age group, namely from 1564. This puts Indonesia in a demographic bonus period, where the production age can be used for encourage development or become a burden on the economy, such as increasing unemployment.

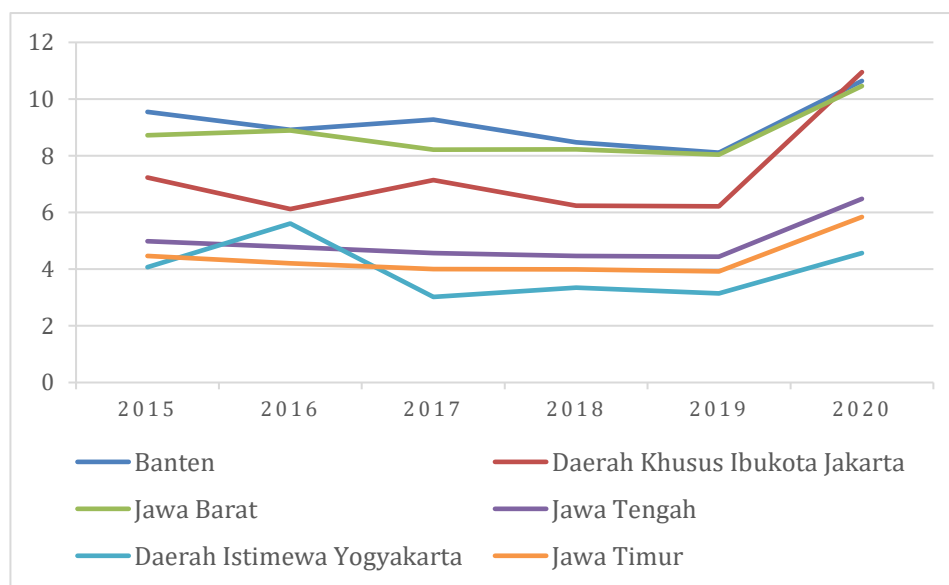
Unemployment is one of the main employment problems faced by developing countries, including Indonesia. Unemployment is a social problem that almost all countries in the world face, especially in developing countries like Indonesia. Unemployment has a high impact on the economy, individuals, and problems that occur in society inability to maximize the potential of wealth to achieve and reduce people's productivity and income Poverty, crime and other social problems (Herman, 2021).

Unemployed is defined as a person who is part of the labor force and is actively looking for work at a certain wage level but is unable to find the desired job. The large population of an area is not a problem that only affects the economic zone. On the other hand, this problem is also closely related to the social and educational fields. As it is today, not only people with low education are unemployed, but people with high education are also unemployed (Fathi, 2021). When unemployment occurs, some of the available labor inputs are not used, which means a loss of production. As a result of this increase in the number of unemployed, the country's economy can decline, and if not managed properly, unemployment can have a detrimental impact, such as indirectly increasing the poverty rate in the long term. Unemployed without a stable income gradually becomes poorer socially, but poverty is also an economic phenomenon and we need to find appropriate solutions, such as providing wide job opportunities for productive job seekers (Mar'afiah, 2017).

High unemployment is generally caused by the high standards expected of companies seeking to hire workers. The unemployment rate and the labor force as a whole indicate the large number of people who need to be involved in the development process. In short, unemployment and the labor force are part of the population that can drive economic processes. This makes it clear that the dynamics of the development process must be able to involve the entire workforce, which can hinder a large number of workers in economic development (Shun, 2019).

Quick and precise handling is needed because someone needs work to earn a living. Unemployment itself is residents who are not working but are looking for work or preparing for a new business, or residents who are not looking for work because they have worked but have not started working. The indicator to see the unemployment rate is to use the open unemployment rate (Marliana, 2022).

Table 1  
Unemployment in Provinces in Java Island 2015-2020



Source: BPS, 2022



Based on BPS data, the number of unemployed in all provinces on the island of Java, which tends to experience stability from 2015-2019, in 2020 has increased quite drastically. The increase was due to the COVID-19 pandemic which was followed by a reduction in employees by several companies. At the beginning of 2020, global economic growth was experiencing a decline, including Indonesia. This is due to an epidemic that has hit all of Indonesia, namely the corona virus disease.

## LITERATURE REVIEW

### *Unemployment*

According to the Central Statistics Agency (CSA) in employment indicators, unemployment is a population who does not work but is looking for work or is preparing for a new business, or has been accepted but has not started work. Unemployment is a reality faced not only in developing countries but also in developed countries. Unemployment is generally defined as a condition where a person in the labor force category is unemployed and is actively looking for work (Nanga, 2001). People who are not working but are actively looking for work cannot be classified as unemployed. In addition, unemployment is defined as a situation in which a person in the labor force wants to find a job but cannot find one (Johan et al., 2016).

Open unemployment results from an increase in vacancies, which is lower than an increase in the labor force. As a result, more and more workers will not be able to find work in the economy. The result of this situation is that they do not work for a long time. So they are unemployed for real and full time and hence it is called open unemployment. Open unemployment can also occur as a result of a decline in economic activity, technological advances that reduce labor input, or a decline in industrial development (Vidyattama, 2010).

According to Anggraini et al., (2022), unemployment is defined as a condition in which a person belonging to the labor force category does not have a job and is actively looking for work. To measure unemployment in a country, the unemployment rate is usually used, namely unemployment which is expressed as a percentage of the total workforce. Anggraini et al., (2022) explained that Edgar Edwards distinguishes the types of unemployment, especially those that often occur in developing countries, into the following forms:

1. Underemployment

Underemployed are workers who work fewer hours than they would like (mostly only working daily, weekly or seasonally).

2. Open Unemployment

Open unemployment are those who really do not work either voluntarily or because they are forced and are actively looking for work (Resika, 2020).

### *Gross Regional Domestic Product (GRDP)*

GRDP (Gross Regional Domestic Product) is the added value generated by all business units in a region, or is the total value of final goods and services produced by all economic units of an area within a period of one year (Putro & Setiawan, 2013).

Gross Regional Domestic Product (GDP) is a macroeconomic indicator that can provide an image of the state of the economy of a region. In calculating the Gross Regional Domestic Product (GDP) generated from a region, there are 3 approaches used, namely:

1. GRDP based on production approach

Is the total value of the final goods or services produced from various production units in an area at a certain time.

2. GRDP based on income approach

It is remuneration used by production factors that participate in the production process in an area at a certain time.

3. GRDP based on expenditure approach

Consists of all components of final expenditure such as: consumption expenditures for households and non-profit private institutions, government consumption, gross fixed capital formation, changes in stock and net exports within a certain period of time (Prishardoyo, 2008). Vidyattama, (2010) conducted research on the factors that influence the growth of GRDP in Indonesia, including investment, human capital (human capital), population, local government spending, infrastructure and open trade. The results show that investment and population have no significant effect on GRDP growth in Indonesia. Local government spending contributes positively to GRDP growth in Indonesia, while human resources, infrastructure, and open trade make a positive contribution to GRDP growth in Indonesia (Silaban et al., 2020).

### **Wage**

Regulation of the Minister of Manpower and Transmigration number 7 of 2013 regulates the minimum wage, which consists of a basic wage including a fixed allowance set by the Governor as a safety net. In the labor market, it is very important to determine the level of wages that companies must pay for a job. The Minimum Wage Law stipulates the minimum price for labor that must be paid.

In the Government Regulation of the Republic of Indonesia Number 78 of 2015 concerning Wages article 1 paragraph (1), wages are defined as the rights of workers/laborers received and expressed in the form of money as a reward from the entrepreneur or entrepreneur to the worker/labourer which is determined and paid according to the agreement. work, agreement, or statutory regulations including allowances for workers/laborers and their families for a job or service that has been or will be performed. Wages are rewards received by a worker or employee for one month in the form of money or goods paid by the company/office/employer (Vidyattama, 2010).

The minimum wage is a monthly minimum wage consisting of basic wages including fixed allowances and is valid for workers under one year according to Eni, (2013), the minimum wage is the minimum wage determined by region, regional sector, and sub-sector. In this case, the minimum wage is the basic wage and allowances. The minimum basic wage is the basic wage that is regulated at least regionally, regionally, and sub-sectorally. Well-regulated state regulations do not only include allowances in basic wages (Herman, 2021).

According to research by Lukis Panjawa and Soebagiyo, (2014), the minimum wage has a significant positive effect on the unemployment rate. When raising the minimum wage causes an increase in unemployment under investigation. The root cause of unemployment due to wage rigidity is the inability of wages to adapt to the equilibrium point where supply and demand for labor equal (Sarimuda, 2014).

### **Domestic Investment**

Domestic Investment is an investment activity to conduct business in the territory of the Republic of Indonesia carried out by domestic investors using domestic capital. According to Law no. 25 of 2005 concerning Investment, domestic investors can be made by individual Indonesian citizens, state business entities, and/or the state government investing in the territory of the Republic of Indonesia. In Presidential Regulation No. 36 of 2010 concerning Changes in the List of Business Fields Closed and Business Fields Open with Conditions in the Investment Sector, business activities or types of business open to investment activities, except for business fields or types of business which are declared closed and open with requirements and limitations. ownership of state capital in the field of business (Putri et al., 2021).

According to UURI No. 25 (2007:5), the objectives of implementing investment include: (1) increasing national economic growth; (2) creating job opportunities; (3) promote sustainable economic development; (4) increase the competitiveness of national businesses; (5) increase the capacity and capability of national technoi; (6) encourage the development of the people's

economy; (7) transforming the potential economy into real economic strength by using funds originating, both from within the country and from abroad; and (8) improve the welfare of the community.

#### 1. Foreign Investment (PMA)

According to RI Law no. 25 of 2007 concerning Investment (2007: 2) states that: Foreign Investment is an investment activity to conduct business in the territory of the Republic of Indonesia carried out by foreign investment, both using fully foreign capital and the Economix Journal Volume 4 Number 1 June 2016 92 joint ventures with domestic investors. Or Foreign Investment (PMA) is an individual foreign citizen, and/or foreign government that invests in the territory of the Republic of Indonesia.

#### 2. Domestic Investment (DI)

According to RI Law no. 25 of 2007 concerning Investment (2007: 3) states that: Domestic Investment is an investment activity to conduct business in the territory of the Republic of Indonesia carried out by domestic investors using domestic capital. Or domestic investment is an individual who is an Indonesian citizen, an Indonesian business entity in the state of the Republic of Indonesia, or an area that invests in the territory of the Republic of Indonesia (Kalasha Anajman Fathi, 2021).

Investment itself has two types, namely Foreign Investment (PMA) and Domestic Investment (DI). Based on Law Number 1 of 1967, PMA is a foreign capital financing carried out under the provisions of the Act and used to run a business in Indonesia. Meanwhile, based on Law Number 6 of 1968 Article 2, DI is the use of wealth as described in Article 1 either directly or indirectly to run a business that refers to the Act (Sarimuda, 2014; Faizah et al., 2019).

### **Population**

According to Silaban et al., (2020), a large population reduces per capita income and creates employment problems. High population growth will increase the number of the workforce. The population problem will increase the number of unemployed, because it is not balanced with the creation of new jobs (Hinestroza, 2018).

Muslim, (2014) researched based on a narrower framework, the number of employees, and the results agreed with the two predecessors. As the population and labor force increase, so does the unemployment rate. Because the number of existing jobs cannot be accommodated by the entire workforce (Indayani and Hartono, 2020).

Hinestroza, (2018) states that as the population increases, so does the workforce. This means that more and more people are looking for work or are unemployed. Malthus thought that there was a positive correlation between unemployment and population. If labor grows faster than food production, real wages will fall because of rising costs.

### **METHODS**

The data used in this study is secondary data including time series data for the 2015-2020 period and cross-sectional data covering 6 provinces on the island of Java. This study uses panel data analysis tools to see the direction and variables of Gross Regional Domestic Product (GRDP), Provincial Minimum Wage (UMP), Domestic Investment (DI) and Total Population (JP) on the open unemployment rate (TPT). panel. The analytical tools that will be used in this research are Pooled Least Squares (PLS), Fixed Effect Model (FEM), and Random Effect Model (REM) analysis with the following econometric models:

$$TPT = \beta_0 + \beta_1 GDRP_{it} + \beta_2 UMP_{it} + \beta_4 DI_{it} + \beta_5 JP_{it} + \varepsilon$$

The analysis technique in this study uses panel data regression which is processed with the Eviews 9 program. Tpt is open unemployment with units of percent, GRDP is Gross Regional

Domestic Product in billions of units, Ump is the provincial minimum wage in rupiah units. DI is a domestic investment with units of billions, Jp is the number of people with units of people.

### ESTIMATED RESULTS

The results of the panel data regression estimation on the econometric model using the Pooled Least Squares (PLS), Fixed Effect Model (FEM), and Random Effect (REM) approaches are shown in Table 2.

**Table 2. Panel Data Regression Results**

Variable	Regression Coefficient		
	CEM	FEM	REM
<i>C</i>	-101,7422	-121,4894	-101,7422
<i>GDRP</i>	-0,294375	-0,352209	-0,294375
<i>UMP</i>	6,370418	7,579158	6,370418
<i>DI</i>	-0,212260	0,022279	-0,212260
<i>JP</i>	2,187741	2,250872	2,187741
$R^2$	0,523232	0,734414	0,523232
Prob. Statistik <i>F</i>	0,000094	0,000014	0,000094

Model Selection Test

(1) Chow

Cross-section  $F(5,26)=4,134809$ ; Prob. $F(5,26)=0,0068$

(2) Hausman

Cross-section random  $\chi^2(4)=20,523404$ ; Prob. $F \chi^2=0,0004$

**Source:** Data processed, *Eviews 9*

### ESTIMATED MODEL SELECTION TEST

Chow test and Hausman test were used to select the best estimated model between CEM, FEM, and REM. If in the Chow test the selected model is FEM and in the Hausman test the selected model is also FEM, the best estimated model is FEM.

### CHOW TEST

Chow test is used to determine the estimated model between CEM (PLS) or FEM.  $H_0$  on the Chow test states that the estimated model is the Common Effect Model (CEM), and  $H_A$  on the Chow test states that the estimated model is the Fixed Effect Model (FEM) provided that if the probability value of Prob  $F > 0.05$  then  $H_0$  is not rejected with the model conclusion Common Effect Model (CEM) was chosen, while if the probability value of Prob. $F < 0.05$  then  $H_0$  was rejected with the conclusion that the Fixed Effect Model (FEM) was chosen.

Based on Table 2, it can be seen that the results of the Chow Test Analysis of the influence of GRDP, Minimum Wage, DI, population on the open unemployment rate in Banten Province for the 2017-2020 period show the prob. $F$  model value of  $0.000 < 0.05$ , so  $H_0$  is rejected, thus it can be concluded that the selected model is the Fixed Effect Model (FEM).

### HAUSMAN TEST

Hausman test is used to determine the estimated model between FEM or REM.  $H_0$  on the Hausman Test states that the estimated model is a Fixed Effect Model (FEM), and  $H_A$  on the Hausman Test states that the estimated model is a Random Effect Model estimated model provided that if the probability value of Prob Chi-Sq  $> 0.05$  then  $H_0$  is not rejected with the

conclusion the selected model is Random Effect Model (REM), whereas if the probability value of Prob Chi-Sq < 0.05 then H<sub>0</sub> is rejected with the conclusion that the model is selected Fixed Effect Model (FEM)

Based on Table 2, it can be seen that the results of the Hausman Test. Analysis of the influence of GRDP, Minimum Wage, DI, population on the open unemployment rate in Banten Province for the 2015-2020 period shows that the Prob Chi-Sq value is 0.0004 < 0.05 so H<sub>0</sub> is rejected. Thus it can be concluded that the model chosen is the Fixed Effect Model (FEM).

## CHOOSEN MODEL

**Table 3**  
**Fixed Effect Model (FEM) Estimation Results**

TPTit = -121,4894 – 0,3522GDRPit + 7,5791 UMPit + 0,0222 DIit				
	(0,0096)*	(0,3894)	(0,0000)*	(0,0000)*
$R^2 = 0,734414$ ; DW = 2,481253; F.Stat = 7,988535; Prob F-Stat = 0,000014				

**Note:** \*Significant at = 0.01; \*\* Significant at = 0.05; \*\*\* Significant at = 0.10; The number in brackets is the probability value of the t statistic.

## COEFFICIENT OF DETERMINATION (R<sup>2</sup>)

The magnitude of the coefficient of determination (R<sup>2</sup>) Analysis of the influence of GRDP, Minimum Wage, investment, population on the open unemployment rate in Banten Province for the 2017-2021 period is 0.734414, meaning that 73.44% of the variation in the open unemployment variable can be explained by GRDP, Minimum Wage, investment, population and the remaining 26.56% are influenced by other variables not included in the research model.

## PARTIAL SIGNIFICANCE TEST (T TEST)

The t-test was conducted to determine whether each independent variable had a significant effect on the dependent variable by assuming the other variables were constant. For the first econometric model, H<sub>0</sub> partial significance test in this study is  $\alpha_1, \alpha_2, \alpha_3, \alpha_4 = 0$ , or, GRDP, UMP, DI, and JP have no effect on TPT. Meanwhile, H<sub>A</sub>, stated that  $\alpha_1, \alpha_2, \alpha_3, \alpha_4 > 0$ , GRDP, UMP, DI, and JP had an effect on TPT. H<sub>0</sub> is not rejected if the t-statistical probability is > and H<sub>0</sub> is rejected if the t-statistical probability is .

**Table 3**  
**Effect Validity Test (t Test)**

Variable	t-statistic	Prob	Alfa	Conclusion
GDRP	-3.821897	0,0000	< 0,01	Significant at = 0.01
UMP	4.580576	0,0000	< 0,01	Significant at = 0.01
DI	-0.408469	0,9608	> 0,10	Not significant
JP	2.846759	0,0019	< 0,01	Signifikan pada $\alpha = 0,01$

Source: Data processed, Eviews 9

Based on the effect validity test (t test) it can be seen that the t-statistical probability for GRDP is 0.0000 ( $\leq 0.01$ ), (UMP) 0.0000 ( $\leq 0.01$ ), and (JP) 0.0019 ( $\leq 0, 01$ ) so that H<sub>0</sub> is rejected or GRDP, (UMP), and (JP) have an effect on the Open Unemployment Rate (TPT), while (DI) is 0.9608 ( $> 0.10$ ) so that H<sub>0</sub> is accepted or (DI) has no effect on the Unemployment Rate Open (TPT). Thus GRDP, (UMP), and (JP) have a

significant effect on the Open Unemployment Rate (TPT), while (DI) has no significant effect on the Open Unemployment Rate (TPT).

## DISCUSSION

Gross Regional Domestic Product has a regression coefficient of -0.3522 with a linear-linear relationship between the Open Unemployment Rate and Gross Regional Domestic Product, so that if the Gross Regional Domestic Product (GRDP) increases by 1 billion, the Open Unemployment Rate will decrease by 0,3522 percent as well as if the Gross Regional Domestic Product (GDP) decreases by 1 billion, the Open Unemployment Rate will increase by 0.3522 percent.

The results of the effect validity test (t test) on the econometric model show that the Gross Regional Domestic Product has a significant effect on the Open Unemployment Rate (TPT) in 6 Java Provinces. High economic growth must be balanced with equitable social welfare. For this reason, the government is expected to be able to further optimize the sectors in the GRDP so that these sectors are able to increase employment and reduce unemployment. This is in accordance with the initial hypothesis that GRDP has a significant effect on the Open Unemployment Rate in Java, and is in line with research conducted by R.B, Sarimuda & Soekarnoto (2014), Hinestroza, (2018), and Prishardoyo, (2008) regarding the Effect of GRDP, UMK, Inflation, and Investment on Open Unemployment in the Regency/City of East Java Province in 2007-2011 which shows that GRDP has a significant effect on the Open Unemployment Rate in the Regency/City of East Java Province in 2007-2011.

The Provincial Minimum Wage has a regression coefficient of 7.5791 with a linear-arithmetic relationship between the Open Unemployment Rate and the Provincial Minimum Wage, so that if the Provincial Minimum Wage (UMP) increases by 1 percent, the Open Unemployment Rate will increase by  $7.5791/100 = 0.0757$  percent as well as if the Provincial Minimum Wage (UMP) decreases by 1 percent, the Open Unemployment Rate will decrease by 0.0757 percent. The results of the effect validity test (t test) on the econometric model show that the Provincial Minimum Wage has a significant influence on the Open Unemployment Rate (TPT) in Java. Educated unemployment is different from open unemployment. Educated workers are more difficult to find work, not because no company is willing to accept them but because educated workers are more selective in getting jobs. If this is related to wages, educated workers have a minimum wage value, where if the higher the level of wages offered, the supply of educated workers will increase (many who offer to work) so that educated unemployment will decrease. This is in accordance with the initial hypothesis that the Provincial Minimum Wage has a significant effect on the Open Unemployment Rate in Java, and is in line with research conducted by Hajji & SBM, Nugroho (2013), Shun, (2019) and Marlina, (2022) which analyzed the GRDP, Inflation, Provincial Minimum Wage, and Literacy Rate on Open Unemployment Rates in Central Java Province 1990-2011. Which shows that the Provincial Minimum Wage has a significant effect on the Open Unemployment Rate in Central Java Province.

Total Population has a regression coefficient of 2.2508 with a linear-linear relationship between the Open Unemployment Rate and Total Population, so that if the Total Population (JP) increases by 1 percent, the Open Unemployment Rate will increase by  $(2.2508/100) = 0.0225$  percent as well as if the Total Population (JP) decreases by 1 percent, the Open Unemployment Rate will decrease by 0.0225 percent.

The results of the effect validity test (t test) on the econometric model show that the population has a significant influence on the Open Unemployment Rate (TPT) in Java. Because the population in 6 provinces on the island of Java is dominated by productive ages, job opportunities to improve life welfare are still wide open. This is because uncontrolled

population growth can result in not achieving the goals of economic development, namely the welfare of the people and suppressing the unemployment rate. With the increase in population as a driver of development so that it will move various kinds of economic activities and ultimately improve the welfare of the community so that the unemployment rate will decrease. Aisyah, (2021), Pramudjasi et al., (2019) and Resika, (2020) where the population has a significant positive effect on the unemployment rate in Paser Regency in 2007–2015.

## CONCLUSION

Based on the results of research that has been done with panel data regression testing, it can be concluded, among others:

1. The GRDP variable has a significant effect on the Open Unemployment Rate (TPT) variable in 6 provinces on the island of Java.
2. The Minimum Wage variable has a significant effect on the Open Unemployment Rate (TPT) variable in 6 provinces on the island of Java.
3. The Variable Population has a significant effect on the Open Unemployment Rate (TPT) variable in 6 provinces on the island of Java.
4. Domestic Investment Variables show no significant effect on the Open Unemployment Rate (TPT) in 6 provinces in Java.

## REFERENCES

- Aisyah, S. (2021). Analisis Faktor-Faktor Yang Mempengaruhi Tingkat Pengangguran Terbuka Di Provinsi Lampung (Periode 2009-2015). *Nuevos Sistemas de Comunicación e Información*, 2(1), 2013–2015.
- Anggraini, D., Muchtolifah, & Sishadiyati. (2022). Pengaruh Jumlah Penduduk, Pengangguran Dan Pengeluaran Pemerintah Terhadap Kemiskinan Di Kabupaten Timor Tengah Selatan. *Jambura Economic Education Jurnal*, 4(1), 87–96.
- Faizah, I., Fasa, M. I., Suharto, S., Rahmanto, D. N. A., & Athief, F. H. N. (2019). Determinants of Domestic Direct Investment in Indonesia: Islamic Economic Approach. *JEJAK*, 12(2), 282–297.
- Herman, H. (2021). Impact of Inflation and City Minimum Wages on Human Development Index in Indonesia. *Husnayain Business Review*, 1(1), 78–86. <https://doi.org/10.54099/hbr.v1i1.5>
- Hinestroza, D. (2018). Analisis Pengaruh Produk Domestik Regional Bruto, Tingkat Pengangguran Terbuka, IPM, Jumlah Penduduk dan Upah Minimum Terhadap Kemiskinan Di Provinsi Jawa Timur. *Universitas Islam Indonesia*, 7(1), 1–25.
- Indayani, S., & Hartono, B. (2020). Analisis pengangguran dan pertumbuhan ekonomi sebagai akibat pandemi covid-19. *Jurnal Ekonomi & Manajemen Universitas Bina Sarana Informatika*, 18(2), 201–208. <https://ejournal.bsi.ac.id/ejurnal/index.php/perspektif/article/view/8581>
- Johan, K., Marwoto, P. A. N. B., & Pratiwi, D. (2016). Analisis Pengaruh Pertumbuhan Ekonomi, Inflasi Dan Investasi Terhadap Pengangguran Di Indonesia. *Ilmiah Progresif Manajemen Bisnis (Jipmb)*, 13(2), 20–32.
- Kalasha Anajman Fathi. (2021). Analisis Pengaruh Pertumbuhan Ekonomi, Inflasi, Investasi pmdn, Upah Minimum dan Kualitas sdm Terhadap Pengangguran Terbuka Pada Enam Provinsi di Pulau Jawa Tahun 2005-2019. *Jurnal Ilmiah Uninvestias Brawijaya*, 9(2), 1–25.
- Lukis Panjawa, J., & Soebagiyo, D. (2014). Efek Peningkatan Upah Minimum Terhadap Tingkat Pengangguran. *Jurnal Ekonomi Dan Studi Pembangunan*, 15(1), 48–54.
- Mar'afiah, A. (2017). Pengaruh Investasi Penanaman Modal Asing dan Penanaman Modal

Dalam Negeri Terhadap Pertumbuhan Ekonomi di Kota Makasar. *Jurnal Economix Volume 4 Nomor 1 Juni 2016*, 5(2), 203–214.

Marliana, L. (2022). Analisis Pengaruh Indeks Pembangunan Manusia, Pertumbuhan Ekonomi dan Upah Minimum terhadap Tingkat Pengangguran Terbuka di Indonesia. *Ekonomis: Journal of Economics and Business*, 6(1), 87–91. <https://doi.org/10.33087/ekonomis.v6i1.490>

Pramudjasi, R., Juliansyah, & Lestari, D. (2019). Pengaruh Jumlah Penduduk dan Pendidikan serta Upah terhadap Pengangguran di Kabupaten Paser. *Kinerja*, 16(1), 69–77. <http://journal.feb.unmul.ac.id/index.php/KINERJA/article/view/5284/472>

Prishardoyo, B. (2008). Analisis tingkat Pertumbuhan Ekonomi Dan Potensi ekonomi Terhadap Produk Domestik Regional Broto (PDDb) Kabupaten Pati tahun 2000 - 2005. *Jejak*, 1(1), 1–90.

Putri, A., Azzahra, A., Andiany, D. D., Abdurrohman, D., Sinaga, P. P., & Yuhan, R. J. (2021). Perbandingan Faktor-Faktor Yang Mempengaruhi Tingkat Pengangguran Terbuka Di Indonesia Sebelum Dan Saat Pandemi Covid-19. *Jurnal Kajian Ekonomi Dan Pembangunan*, 3(2), 25. <https://doi.org/10.24036/jkep.v3i2.11592>

Putro, A. S., & Setiawan, A. H. (2013). *ANALISIS PENGARUH PRODUK DOMESTIK REGIONAL BRUTO, TINGKAT UPAH MINIMUM KOTA, TINGKAT INFLASI DAN BEBAN / TANGGUNGAN PENDUDUK TERHADAP PENGANGGURAN TERBUKA DI KOTA MAGELANG PERIODE. 2*, 1–14.

Resika, Y. (2020). Pengaruh Investasi Asing dan Investasi Dalam Negeri Terhadap Tingkat Pengangguran di Provinsi Sumatera Selatan. *Majalah Ilmiah Manajemen*, 09(01), 10–14.

Sarimuda, T. (2014). Pengaruh PDRB, UMK, dan Inflasi, dan Investasi Terhadap Pengangguran Terbuka di Kab/Kota Provinsi Jawa Timur. *Jurnal Ekonomi Dan Bisnis*, 6(2), 123–201.

Setyowati, Eni dan Fatimah NH, S. (2013). Analisis Faktor - Faktor Yang Mempengaruhi Investasi di Jawa Tengah Tahun 1980 - 2002. In *Jurnal Manajemen*.

Shun, M., & SBM, N. (2019). Analisis PDRB, Inflasi, UMP, dan AMH Terhadap Tingkat Pengangguran Terbuka Di Provinsi Jawa Tengah Tahun 1990-2011. *Diponegoro Journal of Economics*, 1(1), 159–169.

Silaban, P. S. M. J., Sembiring, I. P. S. B., & Sitepu, V. A. B. (2020). Analisis Pengaruh PDRB dan Inflasi terhadap Pengangguran Terbuka di Sumatera Utara Periode 2003-2019. *Jurnal Ilmiah Ekonomi Global Masa Kini*, 11(2), 127. <https://doi.org/10.36982/jiegm.v11i2.1077>

Vidyattama, Y. (2010). A Search for Indonesia's Regional Growth Determinants. *ASEAN Economic Bulletin*, 27(3), 281–294. <https://doi.org/10.1355/ae27-3c>



## **Review of Sharia Economic Law on Rahn's Practices at the Surakarta Sharia Pawnshop during the Covid-19 Pandemic**

**Lukmanul Hakim<sup>1</sup>, Muhammad Qias Faslur Rahman<sup>2</sup>, Shifa Sabilla Aprilia<sup>3</sup>**

<sup>1</sup>Fakultas Agama Islam, Universitas Muhammadiyah Surakarta

email: [lh312@ums.ac.id](mailto:lh312@ums.ac.id)

<sup>2</sup>Fakultas Agama Islam, Universitas Muhammadiyah Surakarta

<sup>3</sup>Fakultas Agama Islam, Universitas Muhammadiyah Surakarta

email: [shifasabilla01@gmail.com](mailto:shifasabilla01@gmail.com)

### **ABSTRACT**

*The huge impact of COVID-19 on the economy has made it difficult for people to meet their funding needs. The government established a pawnshop institution which is currently growing rapidly. Sharia pawnshops are currently the choice of the Muslim community because in practice there is no usury. The practice of pawning is familiar with the Rahn contract. Pawning activities have existed since the time of the Prophet sallallaahu 'alaihi wa sallam and he has been practicing. The process of pawning is allowed in Islam as long as it is in accordance with Islamic law, there is no interest / usury in the pawn transaction. Pawning / rahn has been regulated in the DSN-MUI fatwa Number 25/DSN-MUI/III/2022. The process of borrowing through pawnshops is much shorter and the terms are relatively simple, causing pawning activities to develop rapidly until now. The purpose of this study is to describe the process of rahn practice at sharia pawnshops during the COVID-19 pandemic and to describe the views of sharia economics regarding the practice of rahn contracts during the COVID-19 pandemic. The method used in this study is a qualitative method sourced from primary data, namely the Sharia Pawnshop which is located at Jl. Captain Mulyadi No.242, Ps. Kliwon, Kec. Ps. Kliwon, Surakarta City. Methods of data collection in this study in the form of interviews and observation methods. The practice of rahn contracts at the Sharia Pawnshop in Surakarta is in accordance with sharia economic law. In Sharia Pawnshops, they use savings services per 10 days, this is different from conventional Pegadaians which use interest per 15 days. During the Covid-19 pandemic, the Sharia Pawnshop in Surakarta provided relief / leeway in payment, the period of pawning / rahn in sharia economic law was 4 months, and reduced to 5 months.*

**Keyword :** *Shariah pawnshop, Rahn, Shariah Economi Law.*

### **ABSTRAK**

Dampak covid-19 yang sangat besar pada bidang ekonomi, menyebabkan masyarakat kesulitan mencukupi keperluan dana. Pemerintah mendirikan Lembaga pegadaian yang saat ini berkembang pesat. Pegadaian Syariah saat ini menjadi pilihan masyarakat muslim karena dalam praktiknya tidak terdapat riba. Praktik gadai familiar dengan akad rahn. Kegiatan gadai menggadai sudah ada sejak zaman Rosulullah shallallah 'alaihi wa sallam dan beliau sudah mempraktikan. Proses gadai diperbolehkan dalam Islam asalkan sesuai dengan syariat islam, tidak ada bunga / riba didalam transaksi gadai. Gadai / rahn sudah diatur dalam fatwa DSN-MUI Nomor 25/DSN-MUI/III/2022. Proses peminjaman melalui pegadaian yang jauh lebih singkat serta syarat yang relative sederhana menyebabkan kegiatan gadai menggadai berkembang pesat sampai sekarang. Tujuan penelitian ini untuk mendiskripsikan proses praktik rahn di pegadaian syariah di masa pandemic COVID-19 dan mendiskripsikan pandangan ekonomi syariah mengenai praktik akad rahn di masa pandemic COVID-19.

Metode yang dilakukan dalam penelitian ini adalah metode kualitatif yang bersumber data primer yaitu Pegadaian Syariah yang beralamat di Jl. Kapten Mulyadi No.242, Ps. Kliwon, Kec. Ps. Kliwon, Kota Surakarta. Metode pengumpulan data dalam penelitian ini berupa metode wawancara dan metode observasi. Praktik akad rahn di Pegadaian Syariah di Surakarta sudah sesuai dengan hukum ekonomi syariah. Di Pegadaian Syariah menggunakan jasa simpan per 10 hari, hal tersebut berbeda dengan Pegadaian konvensional yang menggunakan bunga per 15 hari. Pada masa pandemi Covid-19 Pegadaian Syariah di Surakarta memberikan keringanan / kelonggaran waktu dalam pembayaran, jangka waktu gadai / rahn dalam hukum ekonomi syariah selama 4 bulan, dan ringankan menjadi 5 bulan.

**Kata Kunci:** *Pegadaian Syariah, Rahn, Hukum Ekonomi Syariah*

## INTRODUCTION

The impact of Covid-19 has greatly affected the community's economy. No exception, MSMEs are getting a significant impact from the pandemic Covid-19 (Hakim, Prabandari, 2021). This encourages people to borrow and borrow from Muslims and non-Muslims. The government establishes a formal procurement institution. There are two formal institutions, namely, bank and non-bank institutions. Non-bank institutions are managed by the government to serve the people together with a public company (perum) that carries out pawnshop activities. The pawnshop offers and provides easy loans, a short process and simple terms and makes it easier for people to meet their funding needs.

Pawns have been known since the time of the Prophet sallallaahu 'alaihi wa sallam and he has practiced them, so it is not surprising that today pawns are still being carried out, as evidenced by the development of institutions that maintain a pledge from a problem. In Islam, it does not prohibit the pawnshop if it is in line with Islamic law itself, for example, does not take interest to carry out the practice of pawning at the pawnshop (Hanifa, Hamdani and Yono, 2021).

The introduction of the pawnshop business in Indonesia began during the Dutch era, which was around the end of the 19th century, by a bank called Bank Van Lening. In the era of independence, the Indonesian government took over the pawnshop business and transformed the status of the pawnshop into a state company (PN) based on Law no. 19 Prp. 1990. Then developments occurred on March 11, 1969 based on the Government Regulation of the Republic of Indonesia No. 7 of 1969 PN Pegadaian changed to a Bureau of Companies (Perjan). On April 10, 1990 Perjan Pegadaian changed to Perum Pegadaian (Yuniwati, Lestari and Alfiqoh, 2021).

For people who are experiencing financial difficulties and have valuable goods, it can be fulfilled by selling these valuables, so that they can meet their needs. However, the risk of this is that the goods sold will be lost and difficult to return and the total money received is sometimes greater than desired so that it can cause waste. However, in order to solve the difficulty of meeting the needs of funds without having to sell their valuables, the people can use their goods as collateral to certain institutions or it can be called a pawn to one of the official institutions in Indonesia that conducts its business in the form of a pawn, namely Perum Pegadaian Syariah. (Zain, Abbas and Idami, 2019)

Judging from the abundance of current needs, it causes people to want to get capital quickly and easily by pawning their goods. This is not only done by the lower middle class, but also the upper middle class. This is seen from the number of people who come to pawnshops to

pawn goods for various reasons, such as increasing business capital. So, to provide an explanation to the general public regarding sharia pawnshops, mainly on the issue of Rahn contract practice. (Yuniwati, Lestari and Alfiqoh, 2021)

Rahn is a contract that holds goods (al-ain) in concrete form and has value as a guarantee (watsiiqah) of debt, i.e. the goods are used to pay all or part of the debt when rahin is unable to pay off the debt. (Zain, Abbas and Idami, 2019)

The practice of pawning or commonly familiar with the rahn contract is mostly carried out by individuals to meet their needs and help each other in need, by providing a guarantee to get money so they can be trusted or dependents if the one who pawns the goods cannot pay off the debt. (Putri, Harahap and Hasibuan, 2022)

Since it was first built, sharia pawnshops have shown a good business profile, continuously increasing transaction values and additional total units in various regions in Indonesia which indicate that sharia pawnshops can carry out their duties as financial institutions that provide financial assistance to the people. On the other hand, the existence of a sharia pawnshop provides positive participation and influence on the people as well. (Studi *et al.*, 2003)

## **LITERATUR REVIEW**

### ***Definition of Rahn***

Pawn or ar-rahn in language can be interpreted by (al-stubut, al habs) namely determination and detention. The term positive law in Indonesia rahn is what is called collateral, collateral, collateral, reserves or reserves, and dependents.(Surahman and Adam, 2017) Azhar Basyir interprets rahn as an act that makes an item of value according to the syara' view as dependent on money, where the item is dependent on the whole or part of an acceptable debt. (Yuniwati, Lestari and Alfiqoh, 2021)

The purpose of establishing a sharia pawnshop is in line with PP 103 of 2000 article 8, Perum Pegadaian carries out a main business activity by distributing loan money on the basis of pawn laws and carrying out other businesses, such as distributing money loans based on custody services, certificates, precious metals and others. in harmony with the activities.(Ilmiah, 2015)

The umbrella of the sharia pawn law itself is that the fulfillment of sharia principles is guided by the DSN MUI fatwa no. 25/DSN-MUI/III/2002 Dated June 26, 2002 regarding rahn which describes loans by pledging goods as a guarantee of debt in the form of rahn is allowed, DSN MUI Fatwa No. 26/DSN-MUI/III/2002 regarding gold pawning. DSN-MUI also issued a fatwa No. 68/DSN-MUI/III/2008 concerning Rahn Tsajily. While in the institutional aspect, it still follows PP No. 103 of 2000. (Hanifa, Hamdani and Yono, 2021)

It can be concluded that a pawn is a guarantee against a debt, which is a guarantee of debt with an item that has economic value, where it is possible that the debt can be repaid with it, or from the sales achievement. The difference between pawning in Islamic law and positive and customary law is that pawning in Islamic law is a means of helping without compensation for services, while in positive law and customary the pawn contract can be a means of making a profit.

### ***Fatwa Rahn Nomor 25/DSN-MUI/III/2002***

This fatwa states that loans with goods as debt in the form of rahn are allowed with the following conditions:

1. Murtahin (recipient of goods) has the right to hold Marhun (goods) until all debts of Rahin (who delivered goods) are repaid.
2. Marhun and his benefits remain the property of Rahin. In principle, Marhun should not be used by Murtahin except with Rahin's permission, without reducing the value of Marhun and its use is just a substitute for the cost of maintenance and care.
3. The maintenance and storage of Marhun is basically Rahin's obligation, but it can also be done by Murtahin, while the cost and maintenance of storage remains Rahin's obligation.
4. The amount of maintenance and storage costs for Marhun cannot be determined based on the loan amount.
5. Marhun Sales:
  - a. When it is due, Murtahin must warn Rahin to pay off his debt immediately.
  - b. If Rahin is still unable to pay off his debt, then Marhun is forcibly sold/executed through an auction according to sharia.
  - c. The proceeds from the sale of Marhun are used to pay off debts, unpaid maintenance and storage costs and selling costs
  - d. The excess of the sale proceeds belongs to Rahin and the shortage becomes Rahin's obligation (Hanifa, Hamdani and Yono, 2021)

## METHODS

This research is a field research. This study focuses on the object of research by knowing the events that occur in the pawnshop. The research method used in this study is qualitative using data in the form of processes and useful words. The nature of the research in this research is descriptive research, which is obtained from the sources and collected in the form of a descriptive picture of the field regarding the state of the object. The primary data source in this study is the Sharia Pawnshop which is located at Jl. Captain Mulyadi No. 242, Ps. Kliwon, Kec. Ps. Kliwon, Surakarta City.

There are 2 methods of data collection carried out in this study, namely the interview method, namely giving questions to several predetermined people and prepared questions and the observation method, this method is carried out only by paying attention directly to the actual situation in the field. The method of data analysis carried out in this research is in the form of data reduction, data presentation and drawing conclusions.

## RESULTS

The existence of the Sharia Pawnshop helps the lower middle class Muslim community to borrow debt without interest / usury. The extraordinary impact of the Covid-19 pandemic on the economy of families, households, companies and even the state makes it difficult to fulfill daily needs. Ease of borrowing debt through a pawnshop that is relatively fast, easy requirements, guaranteed security of goods, loan period and funding sources from Islamic banking. This can be an option for people to choose pawnshops to be an option to meet their funding needs.

The law of pawning goods as collateral for debt is one form of rahn that is permissible. In practice the rahn contract during the Covid-19 pandemic is different from before the Covid-19 pandemic, for example, delaying the customer auction schedule which should have been 4 months to 5 months, this is done so that customers do not mind because during the Covid-19 pandemic many sectors are affected.

## DISCUSSION

### **Review of Sharia Economic Law on Rahn's Practices at the Surakarta Sharia Pawnshop during the Covid-19 Pandemic**

The extraordinary impact of the Covid-19 pandemic in the economic field has caused the lower middle class to have difficulty meeting their daily needs, paying school fees, paying taxes, and so on. Sharia pawnshops are one of the best solutions for making debt loans through mortgaging goods / assets that have an estimated value in sharia pawnshops, such as gold, vehicles, securities (BPKB), and electronic devices. Based on DSN\_MUI Fatwa Number 25/DSN-MUI/III/2002. The law of pawning goods as collateral for debt as a form of rahn is allowed.

The practice of the rahn contract at the Sharia Pawnshop in Surakarta :

a. The practice of the rahn contract at the Surakarta pawnshop

The practice of Rahn's contract at the Surakarta Sharia Pawnshop is in accordance with the sharia contract and economics. The practice of the rahn contract in this court does not have interest but a savings service, which is calculated per 10 days, this is different from conventional pawnshops which apply interest per 15 days..

The practice of different rahn contracts at the Surakarta sharia pawnshop was different before the COVID-19 pandemic from when a pandemic occurred, such as delaying the customer auction schedule by extending the time limit, which is usually 4 months to 5 months. This is done so as not to burden customers, because during the pandemic many sectors are affected.

b. Sharia Pawnshop Mechanism for customers who are making loans for the first time  
Customers who first make loans at sharia pawnshops by providing goods as collateral for debt loans are not given additional fees, such as the cost of paying for storage services or maintaining the goods. This is a policy for new customers.

c. Loan time period

The term of the loan at the sharia pawnshop is 4 months, but the customer does not have to redeem the pawned goods but by extending the pawned goods by paying for the saving service for the 4 months, so that the maturity of the customer's goods is 4 months in the future.

Sharia pawnshops do not emphasize the giving of interest on the pawned goods, even without interest. Sharia pawnshops continue to benefit and have been regulated by the National Sharia Council, namely in the form of imposing fees for maintaining the goods that are pawned. The cost of the item is calculated from its value not from the amount lent to the customer.

d. Minimum and maximum loan amount at Sharia Pawnshop

At the Sharia Pawnshop, the minimum loan we can get is Rp. 100,000 and maximum and 30% loan from OSL (outstanding loan). For example, at the Sharia Pawnshop, the Kliwon market branch has an OSL (outsanding loan) of 6 billion, so the maximum loan we can receive is 30% of the 6 billion.

e. When the collateral is due, it will be auctioned

When the goods are used as loan collateral before and after maturity, the Sharia Pawnshop contacts, reminding the relevant customer to extend the collateral to minimize auctions. If the customer in question after being contacted and does not want or extend the collateral, the Sharia Pegadaian will include the goods in the auction list for 60 days or 2 months, if the goods are still not resolved (redeemed or extended) by the customer, then Pegadaian Syariah will auction the item and in less than 60 days the item must be sold.

f. The products offered by the Sharia Court are:

1. Pawn (rahn): Loans with a term of 4 months by providing collateral in the form of gold, vehicles (motorcycles, bicycles or cars) and electronic goods (mobile phones).

2. Arrum gold: Loans by providing collateral such as gold and diamonds, with a flat system of installments and fees and in monthly installments. With a period of 1 year to 5 years.

3. Arrum Bpkb: Provide loans for micro business development by providing vehicle BPKB guarantees, using a monthly installment system with a flat fee

4. Amanah: Providing loans to finance the purchase of private vehicles such as motorbikes or cars, with the customer paying a down payment for the vehicle, then the Sharia Pawnshop will pay it to the dealer.

5. Arum Haji : Provide guarantees to customers with an estimated Rp. 2,000,000 to be registered for Hajj, then customers will get a portion of the pilgrimage to the Ministry of Religion. After that, the customer pays installments to the Sharia Pawnshop. The term can be 1 year to 5 years.

g. Conditions for making a loan

One of the requirements to apply for a loan at the Sharia Pawnshop is to submit personal data or an identity card (KTP), while new customers must use an identity card (KTP).

h. Fees (deductions) provided by Sharia Pawnshops to customers

Based on the group of loans and their discounted fees or administrative costs

**Table 1.** Sharia Pawnshop Discount Fee to Customers

Group	Loan Amount	Piece
A	Rp. 500.000	RP. 2.500
B	Rp. 510.000 – Rp. 1.000.000	Rp. 11.000
C	Rp. 1.010.000 – Rp. 2.500.000	Rp. 21.000
D	Rp. 2.550.000 – Rp. 5.000.000	Rp. 36.000
E	Rp. 5.000.000 – Rp. 10.000.000	Rp. 51.000
F	Rp. 10.100.000 – Rp. 15.000.000	Rp. 76.000
G	Rp. 15.100.000 – Rp. 20.000.000	Rp. 101.000
H	Loans above Rp. 20.100.000	Rp. 126.000

i. Loans and online payments at sharia pawnshops

Making loans and payments online can be done, namely by means of the customer contacting the Sharia Pawnshop by telephone to make a loan, then the customer takes a photo of the item and sends a photo of the item via the WhatsApp application after which the collateral item is sent via grab to Pegadian Syariah, after the item has been received. received by the Sharia Pawnshop, the collateral is photographed and sent to the customer with a note that the goods have been received and an appraisal of the goods has been carried out by the Sharia Pawnshop, after that the Sharia Pawnshop contacts the customer by telephone with the aim of notifying that the goods are estimated at a certain price. match what the customer wants. If the collateral that has been estimated matches the customer, the pawnshop will process the loan to the customer by means of transfer or cash delivered via grab courier services. If the collateral after an assessment is carried out and does not match the loan that the customer wants (not suitable) then the pawnshop returns the item to the customer using a grab courier service.

## CONCLUSION

Based on the results of the study on the practice of rahn contracts in terms of sharia economic law at PT Pegadaian Syariah (Persero) Surakarta based on the Fatwa of the National Sharia Council, it can be concluded that:

1. The process of practicing the rahn contract at Pegadaian Syariah Surakarta takes place because there is an agreement or agreement between two parties, namely rahin (the debtor) and murtahin (the person who gives the debt) in the pawn transaction process. While the procedure for pawning at the Syariah Pawnshop is very easy and the process is fast and in line with Islamic law, rahin gives collateral to the murtahin in the form of gold, vehicles or electronics, then rahin shows a personal identity card such as an ID card and then the pawned goods will be assessed, if the estimation of the pawned goods is appropriate and agreed upon by the customer, the customer and the sharia pawnshop will sign a letter of agreement that has been agreed upon by both parties, then the sharia pawnshop takes the collateral and provides loan funds from the pawned goods handed over to the customer along with the agreement letter The original.
2. The sharia economic view of the rahn contract process at the Sharia Pawnshop is in harmony with the sharia economy and does not contain usury. approved by DSN-MUI regarding Sharia pawnshops and with funding sources from Sharia Banking and Sharia MTN guaranteed sharia purity. Provide guarantee assistance to customers without having to harm one of the two parties.

## REFERENCES

- Hakim, L., & Prabandari, B. F. (2021, December). Dampak Pandemi Terhadap Jumlah Nasabah Pegadaian Syariah Cabang Karanganyar. In *ICONIS: International Conference on Islamic Studies* (Vol. 5, pp. 321-330).
- Hanifa, H., Hamdani, I. and Yono, Y. (2021) 'Analisis Implementasi Akad Rahn (Gadai) di Kantor Cabang Pegadaian Syariah Bogor Baru', *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 4(1), pp. 52–65. doi:10.47467/elmal.v4i1.524.
- Ilmiah, J. (2015) '( STUDI PADA PEGADAIAN SYARIAH CABANG LANDUNGSARI MALANG )'.
- Putri, J.K., Harahap, I. and Hasibuan, R.H. (2022) 'Konsep dan Penerapan Akad Rahn pada Pegadaian Syariah Kota Langsa', *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 3(6), pp. 1152–1158. doi:10.47467/elmal.v3i6.1235.
- Studi, P. *et al.* (2003) 'Pegadaian Syariah dalam Tinjauan Konseptual Sharia Pownshop in Conceptual Review Pendahuluan Hasil Dan Pembahasan'.
- Surahman, M. and Adam, P. (2017) 'Penarapan Prinsip Syariah Pada Akad', *Jurnal Law and Justice*, 2, pp. 135–146. Available at: <http://journals.ums.ac.id/index.php/laj/article/download/3838/3799>.
- Yuniwati, N., Lestari, E.D. and Alfiqoh, A. (2021) 'PEGADAIAN SYARIAH : PENERAPAN AKAD RAHN PADA PEGADAIAN SYARIAH', 2, pp. 189–199.
- Zain, I., Abbas, S. and Idami, Z. (2019) 'Klausula Akad Rahn Dari Perspektif Hukum Islam Dan Urgensi Notaris Dalam Penyusunannya', 26(2), pp. 410–431. doi:10.20885/iustum.vol26.iss2.art10.

## THE ROLE OF BMT NUR INSAN MANDIRI IN AL-QARDHUL HASAN FINANCING ON MEMBER'S WELFARE

Syara Istiqomah<sup>1</sup>, Sheylla Aqsa Bernadhita<sup>2</sup>, Lukmanul Hakim<sup>3</sup>

<sup>1 2 3</sup>Fakultas Agama Islam, Universitas Muhammadiyah Surakarta

email: [sheyllaabs@gmail.com](mailto:sheyllaabs@gmail.com)

**ABSTRACT** - MSMEs are one of the community entities that suffer economically during the pandemic. Not a few MSMEs are out of business in this difficult time. To survive or even rise, they need funds that are usually obtained through financial institutions. BMT as one of the non-bank Islamic financial institutions has an important role for them. One of the products of BMT Nur Insan Mandiri is Al Qardhul Hasan, which is a breath of fresh air for its members in need. This is after getting researchers to find out the role of BMT Nur Insan Mandiri in financing Al Qardhul Hasan for the welfare of members before and after getting financing. In addition to know the supporting factors and obstacles in its application. The supporting factors for the financing of Al-Qardhul Hasan at BMT Nur Insan Mandiri are the existence of grants, zakat, infaq, alms and other funds. Meanwhile, the obstacles in financing Al-Qardhul Hasan at BMT Nur Insan Mandiri in the introduction of financing have not been carried out intensively. The research methodology used is included in qualitative research where data is obtained from data in the form of interviews, while secondary data is obtained from literature and data documentation. The results of this study are, BMT Nur Insan Mandiri provides Al-Qardhul Hasan financing to members who experience a lack of capital. After receiving Al-Qardhul Hasan financing, four out of five members experienced increased income and welfare experiences.

**Keywords:** BMT, Al-Qardhul Hasan, Member's welfare

**ABSTRAK** - UMKM adalah salah satu entitas masyarakat yang menderita secara ekonomi di masa pandemi. Tidak sedikit UMKM yang gulung tikar di masa sulit ini. Untuk bertahan atau bahkan bangkit, mereka membutuhkan suntikan dana yang umumnya didapatkan melalui lembaga keuangan. BMT sebagai salah satu Lembaga keuangan syariah non Bank punya peran penting bagi mereka. Salah satu produk BMT Insan Mandiri adalah Al Qardhul Hasan, yang menjadi angin segar bagi anggotanya yang membutuhkan. Inilah yang mendasari peneliti untuk mengetahui peran BMT Nur Insan Mandiri dalam pembiayaan Al Qardhul Hasan untuk kesejahteraan anggota serta kesejahteraan anggota setelah mendapatkan pembiayaan. Selain itu untuk mengetahui faktor pendukung dan hambatan dalam penerapannya. Adapun faktor pendukung pembiayaan Al-Qardhul Hasan di BMT Nur Insan Mandiri yaitu dengan adanya dana hibah, zakat, infak, sedekah dan dana lainnya. Sedangkan hambatan dalam pembiayaan Al-Qardhul Hasan di BMT Nur Insan Mandiri dalam pengenalan pembiayaan belum dilakukan secara intens. Metodologi penelitian yang digunakan termasuk dalam penelitian kualitatif dimana data diperoleh dari data primer berupa wawancara, sedangkan data sekunder diperoleh dari literature dan dokumentasi data. Adapun hasil penelitian ini adalah, BMT Nur Insan Mandiri memberikan pembiayaan Al-Qardhul Hasan kepada anggota mengalami kekurangan modal. Setelah mendapatkan pembiayaan Al-Qardhul Hasan, empat dari lima anggota mengalami peningkatan pendapatan dan mengalami kesejahteraan.

**Kata kunci:** BMT, Al-Qardhul Hasan, Kesejahteraan Anggota.



## INTRODUCTION

Welfare is a dream of human life. Conditions that are opposite to welfare, namely poverty in which conditions that must be overcome to achieve each economic process strengthen. Poverty is seen as a condition of a person who does not have the conditions to fulfill the basic rights to develop and pursue a life with dignity. Poverty alleviation is a shared responsibility of professional institutions, government, universities, private and state. One of the efforts to reduce poverty is to break the chain of poverty itself through the development of micro-enterprises, because SMEs can promote small people (Prabowo, 2019).

Islam itself gives freedom to its people to do business. Economic growth and development can come from business actors, from large companies, multinational companies and small or medium businesses. In running a business, one of the supporting factors needed is capital. Sources of business capital can be obtained from own capital, government assistance, bank financial institutions and non-bank financial institutions. The size of capital affects business development in achieving income (Purwadi, 2014). Limited capital and marketing are often problems faced by business actors.

Therefore, the strategy that must be taken by business actors to strengthen micro, small and medium enterprises is to seek business capital loans. Prior to the existence of sharia savings and loan institutions, small and medium-sized people increased their business capital by borrowing from moneylenders or conventional savings and loan institutions that charged high interest rates and the public found it difficult to obtain sources of funds from banks because the applicable financing systems and programs were so complicated that people could not afford it. comply with these banking procedures.

In order to support economic activities, financing facilities are very important, especially in supporting economic activities through the movement of financing sources and their distribution effectively and efficiently. Therefore, BMT is expected to play a more active role in improving current social and economic conditions. BMT is an institution that is not only business-oriented but also for the community. BMT is an institution that originates from public awareness to help the majority group, namely micro and small entrepreneurs. An institution that is not trapped in a business game for personal gain, but an institution that builds togetherness to achieve mutual prosperity. The role of BMT can be realized in the financing of Al-Qardhul Hasan.

Al-Qardhul Hasan is a soft loan that is given on the basis of social obligations alone. Al-Qardhul Hasan financing is a financing agreement between BMT and its members, and only members who are deemed to meet the requirements can obtain this loan. Activities that can provide such financing are members who are pressed to fulfill non-business obligations, or entrepreneurs who want to develop their business (Hamzah & Suprihatin, 2016). Members are required to return the principal loan at once or in installments according to the agreement. Members are allowed to give rewards in the form of infaq to BMT.

According to the word of Allah SWT. in QS. Al-Baqarah (2):280:

وَإِنْ كَانَ ذُو عُسْرَةٍ فَنَظِرَةٌ إِلَىٰ مَيْسَرَةٍ ۚ وَأَنْ تَصَدَّقُوا خَيْرٌ لَّكُمْ إِنْ كُنْتُمْ تَعْلَمُونَ

"And if (the person is in debt) in difficulty, then give him a grace period until he gets relief. And if you make it easy, it is good for you, if you know."

Fiqh scholars agree that Al-Qardh is permissible, on the basis that humans cannot live without the help and assistance of their brothers. No one has everything that is needed for life. Therefore, borrowing and borrowing has become a part of life in the world, and Islam is a religion that is very concerned about all the needs of its people (Purwadi, 2014)

BMT Nur Insan Mandiri is a business institution that has dual functions, namely social and commercial functions as a provincial-level cooperative legal entity, operating business according to Islamic sharia principles guided by the Qur'an and the Hadith of the Prophet Muhammad. BMT is a joint business entity, a union (syirkah) of people who are members of a member community who have a vision, mission and goals to be achieved together. BMT Nur Insan Mandiri has a goal, namely for the benefit of the people to survive in the hereafter and prosper in the world for members and the general public, as well as to participate in building the national sharia economic order in order to create an advanced, just, prosperous primary society.

## **LITERATURE REVIEW**

Studies related to BMT are the focus of research. This is because the characteristics of BMT have practical uses for the community where BMT usually offers its products in order to be able to help its members.

Among these studies are those conducted (Hamzah & Suprihatin, 2016) which try to analyze funding for small traders or entrepreneurs. This research results that BMT Darussalam Madani distributes Al-Qardhul Hasan funds to Micro businesses which are very much needed in running their productive businesses. So the implications of Al-Qardhul Hasan continue to be informed to traders (entrepreneurs) who will borrow the funds. The steps for distributing Al-Qardhul Hasan funds provided by BMT Darussalam Madani are right on target for Micro Enterprises (Hamzah & Suprihatin, 2016).

If (Hamzah & Suprihatin, 2016) try to analyze funding for traders or small entrepreneurs, (Shabrina, 2013) focus on strategies in optimizing Al Qardh funds. This study found that the source of funds for Al-Qardh at BMT UMJ did not conflict with the DSN Fatwa Number 19/DSN-MUI/IV/2001 concerning Qardh. BMT UMJ has not been optimal in distributing Al-Qardh funds using FDR as the optimal standard for disbursing funds, which should be at least 80% - 85%. (Shabrina, 2013).

Research related to the role of BMT directly on its members is indeed widely carried out, in contrast to the research conducted (Rizal & Maulana, 2020) which only explains the analysis of the application of financing without any direct application to its members. The results of this study indicate that qardhul hasan financing is given to people who are economically still relatively low to be used as capital to build or develop a business (Rizal & Maulana, 2020).

In contrast to previous research, (Nur Wulan Oktavia, 2016) leads to risk management in Al-Qardh financing for problematic customers. Based on the results of this study, Financing Risk Management in the Al-Qard Agreement at BMT Assyafi'iyah is theoretically correct, but IMFIs Assyafi'iyah still has problematic customers. However, BMT Assyafi'iyah can solve problems that occur due to traffic jams, because the source of qardh funds comes from zakat, infaq, shodaqoh, so that they can continue to help the lower middle class people (Nur Wulan Oktavia, 2016).

(Prastiawati & Satya Darma, 2016) which is the latest research discusses the market trader sector and methods using survey methods and not using Al-Qard financing. The results of this study indicate that BMT financing to traditional market traders who are members of BMT in Bantul, does not significantly affect the perception of traders about their business development and improving their welfare. however, the merchant's perception of the development of his business has a significant positive effect on the perception of increasing his welfare. In general,

BMT already has a positive role in business development and welfare improvement, but it is too small or insignificant. (Rizal & Maulana, 2020).

Welfare is a condition in which people meet their minimum physical needs, including psychological and social needs. With a growing business will increase the income of members. If the income of members increases, the welfare of members will also increase. According to the Indonesian dictionary, welfare comes from the word prosperous which means safe, peaceful, prosperous and safe, or it can be interpreted as a good condition where people are in a healthy, peaceful and prosperous state.

Welfare is the desire and hope for every human being on this earth. Allah SWT. has guaranteed the welfare of his servants and living creatures as in the Qur'an Surah Hud verse 6:

وَمَا مِنْ دَابَّةٍ فِي الْأَرْضِ إِلَّا عَلَى اللَّهِ رِزْقُهَا وَيَعْلَمُ مُسْتَقَرَّهَا وَمُسْتَوْدَعَهَا كُلٌّ فِي كِتَابٍ مُبِينٍ

"And there is not a single creeping animal on the earth except that it is Allah Who provides for it." However, the guarantee will not be given without effort, as in Q.S Ar Ra'ad verse 11:

إِنَّ اللَّهَ لَا يَغَيِّرُ مَا بِقَوْمٍ حَتَّى يُغَيِّرُوا مَا بِأَنْفُسِهِمْ

"Indeed, Allah does not change the condition of a people until they change what is in themselves."

Prosperity is obtained by forming a mental dependence on Allah (fearing Allah), speaking honestly and truthfully and Allah recommends preparing the next generation to be strong in terms of piety and strong in economic terms (Sodiq, 2016).

The welfare indicators according to the Central Statistics Agency, include:

1. Have income, people who have a steady income can meet their needs. Such as the fulfillment of consumption or family expenses (food and non-food).
2. The need for housing, adequate housing facilities.
3. Health of family members in the form of easy access to health services. At any time, you can access cheap and quality health services
4. Children's education is fulfilled, everyone can access the highest education. With higher education the quality of human resources is increasing.
5. Ease of getting transportation facilities. If these indicators are met, the member can be said to be prosperous (Prastiawati & Satya Darma, 2016).

Al-Quran alludes to welfare indicators in the QS. Quraish verses 3-4:

فَلْيَعْبُدُوا رَبَّ هَذَا الْبَيْتِ الَّذِي أَطْعَمَهُمْ مِنْ جُوعٍ وَآمَنَهُمْ مِنْ خَوْفٍ

"So let them worship the Lord (owner) of this house (Ka'bah), who has given them food to quench their hunger and secure them from fear."

There are three indicators of welfare according to the verse above, firstly welfare depends on Allah, this shows that if all indicators of welfare are based on the fulfillment of material aspects, it does not guarantee that humans feel happy. Therefore, human dependence on God can be applied in worship. The second indicator is the loss of hunger (fulfillment of consumption needs) and should not be excessive, let alone to hoard. While the third indicator is the loss of fear, which is the creation of a sense of security, comfortable and peace (Sodiq, 2016)

## METHODS

The type of research used is a qualitative approach centered on the BMT Nur Insan Mandiri institution as the research subject. The object of this research is the role of BMT Nur Insan Mandiri in financing Al-Qardhul Hasan. The data used refers to primary data originating from

original sources directly obtained from the first party where it was obtained from interviews with staff and members of BMT Nur Insan.

As for secondary data obtained indirectly to support existing data or support the needs of primary data. Collecting valid data requires the existence of several techniques. For this study, interview and document techniques were used. As for data analysis using descriptive analysis by describing or describing the data collected as they are.

## RESULT

When starting a business, what is needed is capital, but there are often limitations in finding capital. Therefore, BMT (Baitul Maal wa Tamwil) has come to be one of the saviors who are actively engaged to improve conditions that occur, a real example is the financing of Al Qardhul Hasan. In this study, BMT Nur Insan Mandiri itself has carried out with this financing which of course provides loans to members who need capital to start their new businesses.

## DISCUSSION

### A. The role of BMT Nur Insan Mandiri in Al-Qardhul Hasan Financing for the Welfare of Members

BMT is always synonymous with social activities and is concerned with the benefit of the people for members and the community, with Al-Qardhul Hasan financing it is expected as one way to help small entrepreneurs in developing their businesses. BMT Nur Insan Mandiri budgets for grants, social funds, zakat, infaq and alms to be productive for micro and small businesses, especially in locations near BMT Nur Insan Mandiri.

At the BMT Nur Insan Mandiri location, there are several small businesses such as kupat tofu, fruit sellers, laundry businesses and others. BMT Nur Insan Mandiri tried to socialize to them about financing Al-Qardhul Hasan to help provide loan funds without any interest and any additional costs so that their business could develop more, but some were willing and some were not. There are several members who already know and immediately apply for Al-Qardhul Hasan financing. Members who received financing there were several who visited and bought their merchandise. Members and staff of BMT Nur Insan Mandiri also cooperate with each other by conducting socialization introducing the products available at BMT Nur Insan Mandiri.

BMT Nur Insan Mandiri allocates all social funds to finance Al-Qardhul Hasan. Carry out monitoring, control and supervision. Members who have received financing are monitored remotely. With this BMT Nur Insan Mandiri has played an active role not only waiting for members to come but also actively socializing to the outside community.

In accordance with one of the functions of BMT, namely to improve the welfare of its members, BMT Nur Insan Mandiri makes efforts to help small entrepreneurs through Al-Qardhul Hasan financing to improve the economy of its members in order to get a decent and prosperous life. Members can be said to be prosperous if they meet the welfare indicators according to the Central Statistics Agency.

Table 1 List of Members who Receive Al-Qardhul Hasan Financing

No.	Member's name	Type of Businesss	Financing Amount
1.	Mugioyono	Ice Merchant	Rp 2.500.000
2.	Kholifah	Food Stalls	Rp 2.000.000
3.	Prayitno	Typical food	Rp 2.000.000
4.	Prih Hartanto	Food Stalls	Rp 2.000.000
5.	Faisal Susanto	Kebab	Rp 2.000.000
6.	Abdul Kadir	Snack	Rp 2.000.000

Table 2 Comparison Before and After Receiving Financing

Member's name	Initial capital	Capital after financing	Income before financing	Income after financing
Mugioyono	Rp 3.000.000	Rp 5.500.000	Rp 40.000 – Rp 50.000	Rp 80.000 – Rp 200.000
Kholifah	Rp 3.000.000	Rp 5.000.000	Rp 40.000 – Rp 50.000	Rp 50.000 – Rp 150.000
Prayitno	Rp 6.000.000	Rp 8.000.000	Rp 50.000 – Rp 70.000	Rp 70.000 – Rp 100.000
Prih Hartanto	Rp 4.000.000	Rp 6.000.000	Rp 70.000	Rp 100.000 – Rp 200.000
Faisal S	Rp 18.000.000	Rp 20.000.000	Rp 90.000 – Rp 120.000	Rp 50.000

Table 3 Indicators of Member Welfare

Nama	Welfare Indicator				
	Income	Child Education	Residence	Transportation	Health Service
Mugioyono	Suffice	1 child has graduated, 2 children still in school	Own house	2 motorcycle	Personal money
Kholifah	Suffice	3 children in school	Own house	2 motorcycle	BPJS
Prayitno	Suffice	2 child has graduated , 2 still in school	Own House	2 motorcycle	BPJS
Prih Hartanto	Suffice	1 child in schoool	Own House	2 motorcycle	Personal money
Faisal S	Suffice	1 toddler	House for rent	1 motorcycle	Personal money

According to the Central Bureau of Statistics, a person is said to be prosperous if he has fulfilled five indicators of welfare, namely having income, housing, education for children, ease of access to health and ease of getting transportation. Of the five members who have received funding, four can be said to be prosperous and there has been an increase in income, including



Mogioyono, Prayitno, Kholifah and Prih Hartanto. Meanwhile, there was no increase in his business and his income decreased due to the impact of the Covid-19 pandemic and he had not sold for two months.

## B. Supporting and Inhibiting Factors of BMT Nur Insan Mandiri in Financing Al-Qardhul Hasan

Supporting factor is one of the factors that help and facilitate so that it causes something to happen. Al-Qardhul Hasan financing is a benevolent loan whose funds are supported from social funds. So the supporting factors for financing Al-Qardhul Hasan at BMT Nur Insan Mandiri are the existence of grants, zakat, infaq, alms and other funds that can be distributed to members who have productive businesses even though the funds are still limited. In addition, members and administrators of BMT Nur Insan Mandiri always work together to provide Al-Qardhul Hasan financing to those in need, because to get the financing there must be an agreement with all parties. Members and administrators conduct socialization to introduce the products contained in BMT Nur Insan Mandiri.

The inhibiting factor is something that can hinder, slow down or hinder the occurrence of something. The inhibiting factor for Al-Qardhul Hasan financing at BMT Nur Insan Mandiri in introducing the financing has not been done intensely, information is only conveyed by word of mouth but BMT Nur Insan Mandiri is still trying to introduce Al-Qardhul Hasan financing directly to the public. The limited funds are an inhibiting factor, so that BMT Nur Insan Mandiri has not been able to socialize to the wider community, it can only be socialized near his office. In addition, there are members who are not responsible for returning the loan funds, such as being late or overdue in returning the loan. No attempt has been made by BMT Nur Insan Mandiri against a member who has matured. Even though it has been explained that Islamic Financial Institution must ensure that its members experience difficulties in returning financing and may provide relief and wait until the customer is able to pay by extending the repayment period or rearranging the return schedule.

## CONCLUSION

BMT Nur Insan Mandiri conducted socialization to the public regarding Al-Qardhul Hasan financing to provide loan assistance without any interest and any additional costs so that their business could develop more, but some were willing and some were not. There are supporting factors for Al-Qardhul Hasan financing at BMT Nur Insan Mandiri, namely the existence of grants, zakat, infaq, alms and other funds although the funds are still limited, members and administrators of BMT Nur Insan Mandiri always work together, actively to introduce products in BMT Nur Insan Mandiri. Meanwhile, the inhibiting factor for Al-Qardhul Hasan's financing at BMT Nur Insan Mandiri in the introduction of the financing has not been carried out intensely, funds are still limited and no efforts have been made by BMT Nur Insan Mandiri for members who are past due.

## REFERENCE

- Hamzah, D., & Suprihatin. (2016). Peran BMT dalam Memberdayakan Usaha Mikro melalui Pembiayaan Al-Qardhul Hasan : Studi Kasus pada BMT Darussalam Madani Kota Wisata Gunung Putri Bogor. *Maslahah*, 7(2), 1–14.
- Oktavia, Nur Wulan. (2016). *Manajemen Risiko Pembiayaan Pada Akad Al-Qardh Di BMT Assyafi'iyah*.
- Prabowo, A. A. A. dan P. S. (2019). Kata kunci ۞. *Kinabalu*, 11(2), 50–57.
- Prastiawati, F., & Satya Darma, E. (2016). Peran Pembiayaan Baitul Maal Wat Tamwil

Terhadap Perkembangan Usaha dan Peningkatan Kesejahteraan Anggotanya dari Sektor Mikro Pedagang Pasar Tradisional. *Jurnal Akuntansi Dan Investasi*, 17(2), 197–208. <https://doi.org/10.18196/jai.2016.0055.197-208>

Purwadi, M. I. (2014). Al-Qardh dan Al-Qardhul Hasan sebagai Wujud Pelaksanaan Tanggung Jawab Sosial Perbankan Syariah. *Lipids*, 12(1), 66–74. <https://doi.org/10.1007/BF02532975>

Rizal, S. S., & Maulana, M. A. (2020). Analisis Penerapan Pembiayaan Al-Qordul Hasan di DI BMT NU Bungatan Situbondo. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(1), 368–376. <https://doi.org/10.36778/jesya.v4i1.354>

Shabrina, A. (2013). *Optimalisasi Pinjaman Kebajikan (Al-Qardh) Pada BMT (Studi Pada BMT UMJ)*.

Sodiq, A. (2016). Konsep Kesejahteraan Dalam Islam. *Equilibrium*, 3(2), 380–405. <http://journal.stainkudus.ac.id/index.php/equilibrium/article/view/1268/1127>

## **Analysis of the Effect of Gross Regional Domestic Product (GRDP), Human Development Index (IPM), and Open Unemployment Rate (TPT) on Poverty Rate in Lampung Province**

**Eka Pertiwi<sup>1</sup>, Didit Purnomo<sup>2</sup>**

<sup>1</sup> Economics and Business, University of Muhammadiyah Surakarta  
[b300180209@student.ums.ac.id](mailto:b300180209@student.ums.ac.id)

<sup>2</sup> Economics and Business, University of Muhammadiyah Surakarta  
[dp27@ums.ac.id](mailto:dp27@ums.ac.id)

**ABSTRACT** - *The level of poverty in Lampung Province is still quite high so that the level of welfare in the community is still low and not evenly distributed, this is because many factors cause poverty such as Gross Regional Domestic Product, Human Development Index, and Open Unemployment Rate. This study was conducted with the aim of testing and analyzing the effect of Gross Regional Domestic Product, Human Development Index, and Open Unemployment Rate on poverty in Lampung Province in the 2017-2021 period. Using the type of secondary data obtained from BPS Lampung Province and other supporting journal literature. In this study, the method used is panel data regression using the Eviews9 program. The results in this study indicate that the Gross Regional Domestic Product has a positive and insignificant effect on the poverty level and the Human Development Index has a negative and significant effect on the poverty level and the Open Unemployment Rate has a significant positive effect on the poverty level. The drawback in this study is that the time period is very short so it cannot detect the relationship between long-term variables properly. This research is expected to benefit the government, so that it can focus more on poverty alleviation programs so that the poverty rate in Lampung Province can decrease.*

**Keywords:** *Poverty Rate, Gross Regional Domestic Product, Human Development Index, Open Unemployment Rate*

**ABSTRAK** - *Tingkat kemiskinan di Provinsi Lampung masih tergolong cukup tinggi sehingga tingkat kesejahteraan pada masyarakat masih rendah dan belum merata, hal ini karena banyak faktor yang menjadi penyebab kemiskinan seperti Produk Domestik Regional Bruto, Indeks Pembangunan Manusia, dan Tingkat Pengangguran Terbuka. Penelitian ini dilakukan dengan tujuan untuk menguji dan menganalisis pengaruh Produk Domestik Regional Bruto, Indeks Pembangunan Manusia, dan Tingkat Pengangguran Terbuka terhadap kemiskinan di Provinsi Lampung pada periode 2017-2021. Menggunakan jenis data skunder yang diperoleh dari BPS Provinsi Lampung serta literatur-literatur jurnal pendukung lainnya. Pada penelitian ini metode yang digunakan adalah regresi data panel dengan menggunakan program Eviews9. Hasil dalam penelitian ini menunjukkan bahwa Produk Domestik Regional Bruto berpengaruh positif tidak signifikan terhadap tingkat kemiskinan dan Indeks Pembangunan Manusia mempunyai pengaruh negatif dan signifikan terhadap tingkat kemiskinan serta Tingkat Pengangguran Terbuka berpengaruh positif signifikan terhadap tingkat kemiskinan. Kekurangan yang ada dalam penelitian ini yaitu jangka waktu yang sangat singkat sehingga tidak dapat mendeteksi hubungan antar variabel jangka panjang dengan baik. Dengan adanya penelitian ini diharapkan dapat memberi manfaat pada pemerintah, agar lebih fokus dalam melakukan program-program pengentasan kemiskinan sehingga angka kemiskinan di Provinsi Lampung dapat menurun.*

**Kata Kunci:** *Tingkat Kemiskinan, Produk Domestik Regional Bruto, Indeks Pembangunan Manusia, Tingkat Pengangguran Terbuka*



## INTRODUCTION

Poverty is a fairly complicated problem in all countries in the world, especially in developing countries, but several developing countries have succeeded in making progress in terms of production and national income (Sartika & Al., 2016) . The condition of poverty in a country or region reflects the level of welfare of the people living in that country or region (Christianto, 2013) . In developing countries such as Indonesia, poverty is still a problem that gets attention. Poverty is a complex and multidimensional problem so that it becomes a development priority (Royat, 2015) . Poverty is one of the basic problems, and concerns the fulfillment of a need in life (Yacoub, 2010) . Poverty is not only related to financial problems, but has several dimensions such as short life, illiteracy, social exclusion, and lack of material means to improve family conditions (Omoniyi, 2013) . In addition, poverty is also associated with limited job opportunities and those who are classified as poor who are mostly unemployed and their education and health levels are generally quite poor. (World Bank, 2004) .

Poverty has several different understandings, it can be seen again in poverty reduction in developing countries over the last 50 years. Historically, the term 'poverty reduction' in developing countries has been used intentionally to refer to direct intervention in the provision of inadequate facilities (Singleton, 2003) . Poverty reduction has evolved over the past 50 years in response to a deep understanding of the complexities of development (Domfeh, KA, & Bawole, 2009) . Poverty alleviation since 2000 has increasingly become a rights-based issue, by the international community leading to its endorsement as a universal norm through MGDs (Adejumobi, 2006) . However, (Todaro & Smith, 2006) stated that in order to reduce poverty over the last half century with significant efforts, the situation of poverty persists in developing countries. Poverty reduction has become a sustainable development approach in many countries, especially developing countries over the last few decades (Todaro & Smith, 2006) . Many innovation also had been proposed to accelerate economic growth and poverty reduction (Athief, 2019).

Economic growth is indeed one of the most powerful instruments in reducing the level of poverty as long as it can create job opportunities for the poor (Kraay, 2004) , to increase their abilities and accumulate productive assets that prepare them for a better life (Morduch, 1998) . Poverty reduction can be achieved by increasing the income of the poor or increasing the distribution of income. Both characteristics of the growth process and their implications for poverty indicators are important analytical approaches to describe the relative importance of growth and distribution components in the poverty alleviation process (Bourguignon, 2003) . Based on the identification of the characteristics of the poor as well as the targets for aid and programs set by the government to reduce the percentage of poverty in the community, it is hoped that optimal results will be obtained. One of the important aspects to assist poverty reduction strategies is economic growth and economic development to achieve a better level of welfare. In this study, the objectives to be achieved are: to analyze how big the variables of GRDP, IPM, and TPT are on poverty in Lampung Province. To find out the relationship between these variables and poverty, multidimensional data analysis is needed, namely the *cross section* and *time series dimensions* , with this two-dimensional structure allowing researchers to observe dynamic changes in individual characteristics.

Poverty is seen as an economic inability to meet basic food and non-food needs as measured from the expenditure side (BPS, 2022a) . In Indonesia, poverty is still a serious problem, especially in Lampung Province, the problem of poverty is a very important issue. The high

poverty rate in Lampung Province in the last 5 years is still above 10%. In 2021 the poverty rate in Lampung Province is around 12.62% with a total poor population of 1,083.93 thousand people (BPS, 2022) .

The development of data on the percentage of poverty and population in Lampung Province is as follows:

Table 1.1  
Development of poverty percentage and number of poor people 2017-2021

Year	Percentage of Poor People (%)	Number of Poor People (Thousand People)
2017	13.69	1131.73
2018	13.14	1097.05
2019	12.62	1063.66
2020	12.34	1049.32
2021	12.62	1083.93

source: Central Bureau of Statistics (BPS)

Judging from the table above, the development of poverty in Lampung Province has experienced ups and downs in the last 5 years, it can be seen in 2017-2018 which is quantitative and the percentage has slightly decreased. The decline occurred in 2018-2019 by 1,063.66 thousand people or 12.62 percent and increased to 1,049.32 thousand people or 12.34 percent in 2020 and again experienced a slight increase in 2021 by 1,083.93 thousand people or 12.62 percent. The increase in the poverty rate occurred due to the impact of the Covid-19 pandemic that occurred in almost all countries, including in areas in Indonesia, one of which was the Province of Lampung. For this reason, it is necessary to research on the factors that can affect the level of poverty. Various programs are being pursued by the current government for poverty alleviation, such as: public health insurance (Jamkesmas), the Family Hope Program (PKH), meeting basic needs or increasing income and the Education Assistance Program requiring information about who and where the poor are located. .

According to (Sussy Susanti, 2013) , the magnitude of the poverty rate can be influenced by various factors, especially the Gross Regional Domestic Product (GRDP), Human Development Index (IPM), and the Open Unemployment Rate (TPT), which makes researchers interested in conducting research on poverty related to poverty. in Lampung Province, and the hope of this research is to be able to provide useful reports to the government about what factors can affect poverty in Lampung Province. According to the results of research conducted by (Sussy Susanti, 2013) in West Java, Gross Regional Domestic Product has a significant positive effect on poverty, which means that the higher GRDP in a district/city will increase poverty. Meanwhile, the Human Development Index (IPM) has a significant negative effect on poverty and the Open Unemployment Rate has a significant positive effect on poverty, meaning that the higher unemployment in a district/city will increase poverty.

## LITERATURE REVIEW

According to (Arsad, 2016) Poverty is a fundamental problem for every developing country. Therefore, poverty alleviation to achieve a better quality of life is a concern for economic development in developing countries. Higher economic growth results in the region being able to achieve economic prosperity which has an impact on poverty alleviation (Barika, 2015) , therefore the condition for economic growth is sufficient, which means that economic growth needs to be directly ensured in every sector that employs the poor. Economic growth and per capita income are the most important indicators to measure the success of a region's development (Eigbiremolen, 2004) .

Gross Regional Domestic Product is the net value of goods and services produced by various economic activities in a region in a certain period or the sum of the net economic output produced by all economic activities in a certain period. Gross Regional Domestic Product is also defined as the sum of value added generated by all business units in a given region or the total sum of all final goods and services produced by all economic departments in a region (Stimson, R., Stough, R., & Roberts, 2002) . The amount of GRDP produced by each region is highly dependent on the potential of these natural resources and production factors. Therefore, GRDP can describe the ability of the region in natural resource management. In providing these limited factors, the amount of GRDP between regions varies.

According to the Central Statistics Agency (BPS, 2022) , the Human Development Index is a measure of the achievement of human development based on a number of components based on quality of life. There are several factors, including the average length of schooling which measures people's purchasing power. The average amount of per capita expenditure.

Unemployment as someone who is willing or able to work but does not get a job with an appropriate wage (Aiyedogbon, JO & Ohwofasa, 2012) . Meanwhile (O'Higgins, 1997) mentions that unemployment itself refers to people who have not worked more than one hour during a short reference but someone who is willing to actively seek. In the International Labor Organization (ILO) as stated by (Okafor, 2011) Unemployment is the number of available population, including those who are economically active but do not have a job but are actively looking for work and lose their jobs and voluntarily quit their jobs. According to employment indicators from the Central Statistics Agency (BPS), people who are unemployed but are looking for work or starting a business and residents who are not looking for workers because they have got them but have not started working.

In this study, researchers have references from several previous research results, according to Prasetyoningrum, AK, & Sukmawat, 2018 the results of previous research explained that the Human Development Index (IPM) had a direct negative effect on poverty, while unemployment had a positive effect on poverty and economic development had no effect on poverty. Poverty rate.

According to research (Suliswanto, 2010) showing the effect of Gross Domestic Product (GDP) and Human Development Index (IPM) on poverty in Indonesia, that which has a negative and significant influence is IPM. In the results of research (Saputra & Drs. Y Bagio Mudakir, 2011) regarding the analysis of the influence of population, GRDP, IPM, unemployment on poverty levels in Central Java Regency/City in 2011 explains that IPM has a negative impact on poverty levels. In addition, research conducted by (Sudarlan, 2015) shows that the Human Development

Index has a positive effect and affects the poor in terms of the education and health sectors. Furthermore, empirical studies (Singh, 2012) clearly reveal that the Human Development Index and income per capita have a significant impact on poverty reduction. IPM and per capita income have a large influence on poverty alleviation, while IPM has a negative impact on poverty

## METHODS

This research was conducted based on locations in 15 regencies/cities in Lampung Province by collecting data from the unit of analysis, namely Gross Regional Domestic Product, Human Development Index, Open Unemployment Rate and Poverty Level. This study uses a quantitative approach with secondary data types. Sources of data obtained through the official publication of the Central Statistics Agency (BPS) of Lampung Province as well as some literature that can support the object of the study to analyze the poverty rate that occurred in Lampung Province from 2017 to 2021 by using panel data analysis tools. Panel data analysis used calculations with *Eviews9* and *Microsoft Excel* to determine the direct dependence of the dependent variable on the independent variable, the analysis was carried out in 15 districts/cities in Lampung Province. Combining cross sections and time series with panel data can make panel data clearer so that there will be a lot of freedom and more efficiency.

### *Variable Measurement*

In measuring the criteria for calculating Gross Regional Domestic Product, Human Development Index, Open Unemployment Rate and poverty level. The following is an operational definition for each variable:

1. Poverty (Y) is someone who is below the poverty line and cannot fulfill their needs. Data on the number of poor people in Lampung from 2017 to 2021
2. Gross Regional Domestic Product (X1) as the amount of added value generated by business units in the region. Total data for Lampung Regency domestic products in 2017-2021 was obtained from the official website of the Lampung Regency Central Statistics Agency.
3. The Human Development Index (X2) is a strategic indicator used to identify the efforts and performance of development programs in a region. Lampung Human Development Index data for 2017-2021 was obtained from the official website of the Central Statistics Agency of Lampung Province.
4. The Open Unemployment Rate (X3) The Open Unemployment Rate (X3) is for people who do not have a job but are actively looking for work. Data on the Lampung Open Unemployment Rate for 2017-2021 were obtained from the official website of the Central Statistics Agency of Lampung Province.

In this study, panel data regression was used to determine the independent variable from the dependent variable.

$$Y = + b_{1\log} X_1 + b_{2\log} X_2 + b_{3\log} X_3 + e$$

Where:

Y : Poverty

a : Constant

b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub> : Determinant Coefficient

X<sub>1</sub> : Gross Regional Domestic Product (GRDP)

X<sub>2</sub> : Human Development Index (IPM)

X<sub>3</sub> : Open Unemployment Rate (TPT)

e : Error

Several approaches will be taken to streamline the panel data regression model calculations, such as: general effects model, fixed effect model, random effects model.

#### 1. General effects model (CEM)

This model approach does not pay attention to time or individuals, which means that the data in each company is the same in certain periods (Aldino, 2018). The simplest approach in the panel data model. This is because we did not examine time or individuals, only time series data and one-sided data. This is similar to the usual least squares (OLS) approximation.

#### 2. Fixed effects model (FEM)

This estimation method approach can still be done without weighting or Least Square Dummy Variable (LSDV), Weighting is to reduce non-uniformity between parts. This model is suitable for interpreting data and determining changes in data behavior for each variable (Aldino, 2018).

#### 3. Random effect model (REM)

In this model involves a dummy which has the consequence of reducing degrees of freedom so that it reduces the efficiency of the parameter, to overcome it using an error variable (error term). This approach estimates panel data in which the disturbance variables are interdependent over time (Aldino, 2018).

Then the steps will be taken to determine the best model among the three approaches above, through the Chow test, Hausman test, and Lagrange Multiplier (LM) test.

## RESULTS

Table 4.1

## Descriptive Analysis

	Y	PDRB	IPM	TPT
Mean	72.33587	29055069	68.22320	4.097733
Median	59.89000	25709051	67.63000	3.890000
Maximum	167.6400	2.76E+08	77.58000	8.850000
Minimum	14.31000	15117157	61.87000	0.650000
Std. Dev.	50.93518	29555951	3.973170	1.573897

In the results of the table above, it can be seen that the average dependent variable is 72,335 thousand people and the independent variable is GRDP of 29055069 million, IPM of 68.22% and TPT of 4.09%.

From the results of the determination for the mean value of the dependent variable is 59.890 thousand people and the independent variable is GRDP of 25709051 million, IPM of 67.63% and TPT of 3.89%.

It can also be seen that the maximum value of the dependent variable is 167,640 thousand people and the Independent variable is GRDP of 2.76E+08 million, IPM of 77.58% and TPT of 8.85%.

Meanwhile, the minimum value for the dependent variable is 14,310 thousand people and the independent variable is GRDP of 15117157 million, IPM of 61.87% and TPT of 0.65%.

To determine the effect of Gross Regional Domestic Product, Human Development Index, Open Unemployment Rate on Poverty, a significance test was conducted to determine the selected model with the following results:

## Chow test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2307.071314	(14,57)	0.0000
Cross-section Chi-square	475.612758	14	0.0000

From the results of the Chow test panel data with a *p-value* of  $0.0000 < 0.05$ , which means that  $H_0$  is rejected, the model chosen is the *fixed effect model*.

## Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.153930	3	0.2453

From the results of the Hausman test panel data with a *p-value* of  $0.2453 > 0.05$ , which means that  $H_0$  is rejected, the model chosen is the *Random effect model*.

## Lagrange Multiplier (LM) Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	133.1679 (0.0000)	2.529403 (0.1117)	135.6973 (0.0000)

*Lagrange Multiplier* test panel data with *Both*, the results are  $0.0000 < 0.05$ , which means that  $H_a$  is rejected and  $H_0$  is accepted so that the chosen model is the *Random effect model*.

**Reporting Research Results**

Judging from the results of the tests carried out, it can be concluded that the model chosen in this study is the *Random Effect Model*. The following is the estimation result of the REM table:

Table 4.2

## Estimated Results of Random Effect Model Method

$Y = 783.6261 + 0.640669PDRB - 171.8828IPM + 2.500515TPT + e$		
(0.5682)	(0.0000)*	(0.0262)*
$R^2 = 0.319591$ , DW-Stat = 1.206057, F-Stat = 11.11631, Prob F-Stat = 0.000005		

Source: data processing, Eviews9. Note: \*significant at  $\alpha=0.001$ ; \*\*significant at  $\alpha=0.005$ ; \*\*\*significant at  $\alpha=0.010$ .

From the table determining the results of the regression on panel data using the REM method, then the goodness of the model is tested:

## a. Effect validity test (t test)

- The results of the Prob value of  $t_{PDRB} 0.5682 > 0.05$  then  $H_0$  is accepted, meaning that the Gross Regional Domestic Product variable has a positive but not significant effect on poverty.
- The results of the Prob value of  $t_{IPM} 0.0000 < 0.05$  then  $H_0$  is rejected, meaning that the Human Development Index variable has a negative and significant effect on Poverty.
- The results of the Prob value of  $t_{TPT} 0.0262 < 0.05$  then  $H_0$  is rejected, meaning that the Open Unemployment Rate variable has a positive and significant effect on Poverty.

## b. F Uji test

Based on the results of the statistical probability value F of  $0.000005 < 0.05$ , then  $H_0$  is rejected, which means that all independent variables affect the dependent variable.

## c. Determinant Coefficient Test

From the results of the estimated  $R^2$  value, it can be seen that the coefficient of 0.319591 means that 31.95% of the independent variables can explain the dependent variable, the remaining 68.05% is explained outside the model.

**DISCUSSION****Gross Regional Domestic Product**

From the results of the *Random Effect Model test*, it shows that the Gross Regional Domestic Product has a positive but not significant effect on the poverty level. In other words, the value of the Gross Regional Domestic Product is directly proportional to the poverty rate in 2017-2021 in Lampung Province. An increase in the number of GRDP increases poverty in Lampung Province. Because GRDP is not significant, if the GRDP increases by 1%, the poverty rate will increase by 0.640%. The reverse burden of research (D. Dahliah & Andi Nirwan Nur, 2021) entitled "the Influence of Unemployment, Development Index and Gross Domestic Product on Poverty level" states that Gross Regional Domestic Product has a negative and insignificant effect on poverty in Lawu Regency East 2010-2020 period.

### **Human Development Index**

*Random Effect Model test* indicate that the human development index has a negative effect on the poverty level because the IPM coefficient value is -171.88 and significant  $p < 0.0000$ , an increase of 1% can reduce the poverty rate by 171.88%. The decrease in poverty due to the increase in IPM indicates that human work with sufficient income to meet the needs of life can be more productive. This study supports previous research (Nainggolan et al., 2020) on "Factors Affecting Poverty in North Sumatra" in the results of this study, the Human Development Index has a significant negative impact on poverty. Where the coefficient value is -0.706, meaning that for an increase in IPM of 1%, the number of poor people decreases by 4.2379 % and vice versa.

### **Open Unemployment Rate**

Tests based on the *Random Effect Model consideration model* show that Open Unemployment has a positive and significant effect on Poverty. If the coefficient value is 2.50% and the probability is  $0.0262 < 0.05$ , it is significant, meaning that for every 1% increase in the unemployment rate, poverty increases by about 2.50%. Therefore, the higher the unemployment rate, the higher the poverty rate in Lampung Province. Based on these results in accordance with research conducted (Windra et al., 2016) on "Analysis of the Effect of Inflation, Economic Growth, and Unemployment Rates on Poverty in Indonesia" that the Unemployment Rate has a positive and significant influence on poverty in Indonesia, if there is an increase in unemployment rate of 1% then poverty will increase by 1.32%. Meanwhile (ZuIPMyaty & Kaluge, 2017) in the study "Analysis of Factors Affecting Poverty in Indonesia During the Last Five Years (case studies in 33 provinces) TPT has a negative and insignificant effect on poverty with a constant value of  $-1.12E-05$  and prob of  $0.9824 > 0.05$ , supported by research results (Ketut, N. & Endrayani, 2016) that not all unemployed people are poor people or people who are still supported by someone who has sufficient income.

### **CONCLUSION**

Based on the results of a survey conducted to examine the variables of Gross Regional Domestic Product, Human Development Index, and Open Unemployment Rate for poverty in Lampung Province in 15 districts/cities from 2017 to 2021, researchers can conclude Gross Regional Domestic Product. This has a positive effect, but not so much for the poor level. For every 1% increase in total GRDP, the poverty rate increases by 0.640669 %. If the IPM has a significant negative effect on the poverty level on the Human Development Index variable, it can be concluded that an increase in IPM by 1 percent reduces the poverty rate by 171.8828%. Meanwhile, the Open Unemployment Rate variable concludes that the TPT has a positive effect on the poverty level, but it is not significant. That is, for every 1% increase in the unemployment rate, the poverty rate increases by about 2.50515% . Based on the results of the



discussion described previously, the suggestions from researchers to the government are expected to be more serious in dealing with poverty that occurs especially in the government in Lampung Province, to reduce poverty. The unemployment rate can open up more jobs and the government is expected to further increase the IPM by increasing the average length of schooling in the community, as well as making it easier for the community to get access to a more decent education so that they can develop human resources that can increase productivity, where education is as one of the important factors in poverty indicators. The advantages in this study can be used to determine the results of the influence analysis. If used according to the rules, an accurate analysis will be obtained. This analysis can be used to measure the interaction of the relationship between the variables GRDP, IPM and, TPT on poverty and can simplify complex problems in a model.

## REFERENCES

Athief, F. H. N. (2019). Embedding crowdfunding structure in Islamic venture capital for SMEs development. *Economica: Jurnal Ekonomi Islam*, 10(1), 1-28.

Adejumobi, S. (2006). Governance and poverty reduction in Africa: A critique of the poverty reduction strategy papers (PRSPs). *A Paper Presented to the "Inter-Regional Conference on Social Policy and Welfare Regimes in Comparative Perspectives"* , Texas University. USA, pp.1–3.

Aiyedogbon, JO & Ohwofasa, BO (2012). Poverty and youth unemployment in Nigeria, 1987-2011. *International Journal of Business and Social Science* , 3 (20).

Aldino. (2018). *the effect of analysis of IPM, GRDP, minimum wage on poverty in Central Java for the period 2011-2015* .

Arsad, L. (2016). [Development Economics] Fifth Edition. *YKPN* , Yogyakarta: UPP STIM.

Barika, B. (2015). THE EFFECT OF ECONOMIC GROWTH, GOVERNMENT EXPENDITURE, UNEMPLOYMENT AND INFLATION ON POVERTY RATE IN THE PROVINCE OF SUMATERA. *Journal of Economics And Development Planning* , 5 (1), 27-36. ISSN 1979-7338.

Bourguignon, F. (2003). *"The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity across Countries and Time Periods," World Bank research paper memo* .

BPS. (2022a). *No Title* . <https://ppukab.bps.go.id/subject/23/kemiskinan.html>

BPS. (2022b). human development. *Central Bureau of Statistics Jambi Province* . <https://jambi.bps.go.id/subject/26/index-pembangun-human.html>

BPS. (2022c). *Percentage of Poor Population* . Central Bureau of Statistics of Lampung Province. <https://lampung.bps.go.id/indicator/23/36/2/persentase-penresiden-miskin.html>

Christianto, T. (2013). *Determinants and characteristics of poverty in Riau province . Volume VII* , ISSN: 1978-3612.

D. Dahliah & Andi Nirwan Nur. (2021). "the Influence of Unemployment, Development Index and Gross Domestic Product on Poverty level." *Golden Ratio of Social Sciences and Education*

, 1 (2), 95-108 ISSN [Online] 27975827.

Domfeh, KA, & Bawole, JN (2009). Localizing and sustaining poverty reduction: experiences from Ghana. *int. Journal of Management of Environmental Quality* , 20 (5), 490–505. <http://dx.doi.org/10.1108/14777830910981186>

Eigbiremolen, A. (2004). “Human Capital Development and Economic Growth: The Nigerian Experience.” *International Journal of Academic Research in Business and Social Sciences* , 4 (4), 12–14.

Ketut, N. & Endrayani, E. (2016). ANALYSIS OF FACTORS AFFECTING THE POVERTY LEVEL OF DISTRICT / CITY IN BALI PROVINCE. *Faculty of Economics and Business, Udayana University (Unud )*, Bali , Indonesia *Economic Gaps Or Inequality of Income Distribution Between Community Groups* , 1 , 63–88.

Kraay, A. (2004). “When is Growth Pro-Poor? Cross Country Evidence” *IMF Working Paper* . WP/04/47.

Morduch, J. (1998). “Poverty, Economic Growth, and Average Exit Time,” *Economics Letters* , 59 , 385–390.

Nainggolan, LE, Sembiring, LD, & Nainggolan, NT (2020). Factors Affecting Poverty in North Sumatra. *International Journal of Research and Review* , 7 (12), E-526-533 ISSN: 2349-9788; P-ISSN: 2454-2237.

O'Higgins, N. (1997). *The Challenges of Youth Unemployment, Employment and Training Paper No.7*, ILO, Geneva . [www.ilo.org/public/English/employment/skills/youth/publ/](http://www.ilo.org/public/English/employment/skills/youth/publ/)

Okafor, E. . (2011). Youth unemployment and implications for stability of democracy in Nigeria. *Journal of Sustainable Development in Africa* , 13 (1), 358–373.

Omoniyi, MBI (2013). The Role of Education in Poverty Alleviation and Economic Development: A Theoretical Perspective and Counseling Implications. *British Journal of Arts and Social Sciences* , 15 (2), 176–185.

Royat, S. (2015). *Government Policy in Poverty Reduction. Coordinating Minister for People's Welfare for Poverty Reduction Coordination*. Jakarta .

Saputra, WA, & Drs. Y Bagio Mudakir, M. (2011). ANALYSIS OF THE EFFECT OF THE NUMBER OF POPULATION, GRDP, HDI, UNEMPLOYMENT ON POVERTY LEVEL IN CENTRAL JAVA DISTRICT / CITY. *Lmu in Economics and Development Studies, Faculty of Economics, Diponegoro University* .

Sartika, C., & Al., E. (2016). *No Title* . 106–118.

Singh, R. (2012). Human development index and poverty linkage. *International Journal of Marketing and Technology* , 2 (5), 219–230.

Singleton, D. (2003). Poverty alleviation: the role of the engineer. *The ARUP Journal* , 3–9.

Stimson, R., Stough, R., & Roberts, B. (2002). *Regional economic development: Analysis and planning strategy* . Berlin: Springer.

Sudarlan. (2015). Contribution of Human Development Index on Per Capita Income Growth and Poverty Alleviation in Indonesia. *International Journal of Scientific & Technology Research* .

Suliswanto, MSW (2010). THE EFFECT OF GROSS DOMESTIC PRODUCT (GDP) AND HUMAN DEVELOPMENT INDEX (HDI) ON POVERTY RATE IN INDONESIA. *Journal of Development Economics* , 8 (2), 358–366.

Sussy Susanti. (2013). The Influence of Gross Regional Domestic Product, Unemployment and Human Development Index on Poverty in West Java by Using Panel Data Analysis. *Journal of Integrative Mathematics* , 9 (1), 1–18.

Todaro, PM, & Smith, SC (2006). *Economic Development, (9th ed)* . Washington D. C: Pearson Education Harlow.

Windra, .M, PB, & Rafani, Y. (2016). Analysis of the Effect of Inflation, Economic Growth, and the Unemployment Rate on Poverty in Indonesia. *JOURNAL OF BUSINESS PROGRESSIVE SCIENTIFIC MANAGEMENT (JIPMB)* , 14 (2), 19-27 ISSN 2354-5682.

World Bank. (2004). *Definition of Poverty* .

Yacoub, Y. (2010). The effect of the unemployment rate on the poverty rate of districts/cities in the province of West Kalimantan. *Journal of Exos* , vols 8 , 9.

Zuhdi Myaty, N., & Kaluge, D. (2017). ANALYSIS OF FACTORS AFFECTING POVERTY IN INDONESIA OVER THE LAST FIVE YEARS (Case Study in 33 Provinces). *Scientific Journal: Asian Business And Economics* , 11 (2), 27–31.

## TABLES AND FIGURES

Table 5.1  
Chow Test Results

Equation: MODEL\_FEM

Test cross-section fixed effects

Effects Test	Statistics	df	Prob.
	2307.07131		
Cross-section F	4	(14.57)	0.0000
Cross-section Chi-square	475.612758	14	0.0000

Cross-section fixed effects test equation:

Dependent Variable: Y

Method: Least Squares Panel

Date: 05/29/22 Time: 21:35

Sample: 2017 2021

Periods included: 5

Cross-sections included: 15

Total panel (balanced) observations: 75

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	-992.6931	549.3563	-1.807011	0.0750
LOG(GDP)	40.97719	15.35663	2.668371	0.0094
LOG(IPM)	83.36822	119.7169	0.696378	0.4885
LOG(TPT)	10.48002	16.00141	0.654944	0.5146

R-squared	0.142562	Mean dependent var	72.33587
Adjusted R-squared	0.106332	SD dependent var	50.93518
SE of regression	48.15107	Akaike info criterion	10.63842
Sum squared resid	164615.3	Schwarz criterion	10.76202
Likelihood logs	-394.9408	Hannan-Quinn Criter.	10.68777
F-statistics	3.934928	Durbin-Watson stat	0.074288
Prob(F-statistic)	0.011749		

Table 5.2  
Hausman Test Results

Correlated Random Effects - Hausman Test  
Equation: MODEL\_REM  
Test cross-section random effects

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	4.153930	3	0.2453

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(GDP)	0.563777	0.640669	0.001444	0.0430
	-	-		
	177.12951	-		
LOG(IPM)	2	171.882761	13.518583	0.1536
LOG(TPT)	2.531225	2.500515	0.001425	0.4159

Cross-section random effects test equation:

Dependent Variable: Y

Method: Least Squares Panel

Date: 05/29/22 Time: 21:38

Sample: 2017 2021

Periods included: 5

Cross-sections included: 15

Total panel (balanced) observations: 75

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	807.0447	133.9799	6.023625	0.0000
LOG(GDP)	0.563777	1.118078	0.504238	0.6160
LOG(IPM)	-177.1295	30.81037	-5.749022	0.0000
LOG(TPT)	2.531225	1.102068	2.296796	0.0253

Effects Specification

---

Cross-section fixed (dummy variables)

---

R-squared	0.998489	Mean dependent var	72.33587
Adjusted R-squared	0.998039	SD dependent var	50.93518
SE of regression	2.255577	Akaike info criterion	4.670252
Sum squared resid	289.9949	Schwarz criterion	5.226449
Likelihood logs	-157.1345	Hannan-Quinn Criter.	4.892336
F-statistics	2216,391	Durbin-Watson stat	1.528347
Prob(F-statistic)	0.000000		

Table 5.2  
Lagrange Multiplier (LM) Test Results

## Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

---

	Cross-section	Hypothesis Test time	Both
Breusch-Pagan	133.1679 (0.0000)	2.529403 (0.1117)	135.6973 (0.0000)
Honda	11.53984 (0.0000)	-1.590410 --	7.035310 (0.0000)
King-Wu	11.53984 (0.0000)	-1.590410 --	4.037324 (0.0000)
Standardized Honda	13.02352 (0.0000)	-1.425051 --	4.882742 (0.0000)
Standardized King-Wu	13.02352 (0.0000)	-1.425051 --	1.852347 (0.0320)
Gourieriou, et al.*	--	--	133.1679 (< 0.01)

---

\*Mixed chi-square asymptotic critical values:

1%	7.289
5%	4.321
10%	2,952

---

## **A Review of Islamic Law on Overmacht Settlement (Case Study of Ijarah Practice on Car Rental Campus)**

**Azhar Alam<sup>1</sup>, Vinia Yudiswari<sup>2</sup>, Dafa Anisa<sup>3</sup>**

<sup>1</sup>Universitas Muhammadiyah Surakarta

[aa123@ums.ac.id](mailto:aa123@ums.ac.id)

<sup>2</sup>Universitas Muhammadiyah Surakarta

[viniayudiswari14@gmail.com](mailto:viniayudiswari14@gmail.com)

<sup>3</sup>Universitas Muhammadiyah Surakarta

[dafanisa9@gmail.com](mailto:dafanisa9@gmail.com)

### **ABSTRACT**

The purpose of this study was to determine the settlement of the overmacht cases on car rental practices and to analyze them of Islamic legal views. This study uses a type of field research with qualitative descriptive methods to find field data in words and pictures. This research was conducted by conducting interviews with two customers as the tenant and one person as the owner of the rental car. The purpose of this interviews is to obtain detailed information and a direct description of the *ijarah* object. The findings of this study indicate that the settlement of overmacht cases that occur in the practice of *ijarah* car rental is very contrary to Islamic law because there are many differences are found in the settlements applied by the car rental owner. The results showed that the implementation of the car rental *ijarah* contract on Campus Car Rental has weaknesses in the form of unclear warranties related to overmacht. According to Islam, this research also shows that in the context of an overmacht (accidental accident), it is a risk that must be borne by the car rental owner. The renter is not responsible for this if the renter is proven not to cause damage but in a compelling situation. This study suggests car rental parties to provide clarity of evidence of accidental injury and to cooperate with insurance companies to minimize losses.

**Keywords:** *Overmacht, Ijarah, Car rental, Islamic legal view*

### **ABSTRAK**

Tujuan penelitian ini adalah untuk mengetahui penyelesaian kasus *overmacht* pada praktek sewa mobil dan menganalisisnya dalam pandangan hukum Islam. Penelitian ini menggunakan jenis penelitian lapangan dengan metode deskriptif kualitatif untuk mencari data-data lapangan berupa kata-kata maupun gambar. Penelitian ini dilakukan dengan melakukan wawancara terhadap dua orang *customer* sebagai pihak penyewa dan satu orang sebagai pemilik sewa rental mobil. Tujuan dari wawancara tersebut adalah untuk memperoleh informasi dan gambaran dari objek *ijarah* secara terperinci. Temuan dari penelitian ini menunjukkan bahwa penyelesaian kasus *overmacht* yang terjadi dalam praktek *ijarah* rental mobil sangat bertentangan dengan hukum Islam karena banyak ditemukan perbedaan pada penyelesaian yang diterapkan oleh pemilik sewa rental mobil. Praktek *ijarah* pada Campus Rental Mobil memiliki kelemahan dalam bentuk ketidakjelasan akad yang berkaitan dengan *overmacht*. Penelitian ini juga menunjukkan bahwa *overmacht* (kecelakaan yang tidak disengaja) menurut Islam merupakan resiko yang harus ditanggung pemilik sewa mobil, sehingga pihak penyewa tidak bertanggung jawab akan hal tersebut jika terbukti tidak menyebabkan kerusakan melainkan atas keadaan memaksa. Penelitian ini menyarankan

para pemilik rental mobil untuk menyediakan kejelasan bukti kerusakan tidak disengaja dan bekerjasama dengan pihak asuransi untuk meminimalisir kerugian.

**Kata Kunci:** *Overmacht, Ijarah, Rental mobil, Tinjauan hukum Islam*

## INTRODUCTION

Economic activities carried out by the community include buying and selling, renting goods and services. At this time car rental is quite popular among the public and students who need a vehicle as a means of traveling long distances to their destination. Because the cost of buying transportation is not cheap, therefore car rental is a solution for people who need a means of transportation which in Islamic principles is a transfer of the benefits of goods from one person to another called *ijarah*. However, several problems were found in the practice of *ijarah* car rental around the Muhammadiyah Surakarta University campus that abused the principle of *ijarah* (Aruni, 2013).

Sale and purchase contracts and leases (*ijarah*) are *muamalah* contracts that are often carried out by everyone to fulfill their daily needs, both through business and trade. Because buying and selling and renting contracts are easy strategies to get profits in business. The two *muamalah* contracts have the same substance as buying and selling, because both the lease and sale contracts have the same goal of transferring ownership. The difference between the two contracts lies in the object of ownership. If in a sale and purchase contract, the object of ownership is the substance of the goods as well as the benefits without being limited by time, while in the lease contract (*ijarah*), the object of ownership is the benefit of the goods which are limited in time (Harun, 2017).

Basically, *ijarah* has terms and conditions. In addition, the pillars of *ijarah* itself have an object and will be disabled if there is no object. If reviewed, the *ijarah* lease includes many things in the form of objects that are rented according to what is desired. Then the maintenance fee is deferred to the owner of the lease, but there is legal uncertainty about the goods being rented in the event of an accident beyond the control of the tenant (*overmacht*).

This study aims to determine the settlement of *overmacht* in car rental cases and the view of Islamic law on *overmacht* cases. This research is expected to serve as reference information for entrepreneurs and the public to be more aware of the procedures in car rental in the Islamic view of the *overmacht* case.

## LITERATURE REVIEW

### *Rental Overview (Ijarah)*

In Islam the lease is called *al-ijarah*. Etymologically, *ijarah* means "wages" or "replacements" or "rewards". Meanwhile, in terminology, it is taking the benefits of an object by replacing it (Prof. Dr. H. Idri, 2008).

According to Karim, the goods to be rented must be optimally prepared by the renting party so that they can be used by the tenants. For example, the battery is weak in the car so that it can't be used, then the rental party must replace it first. If the lessor is unable to repair it, the tenant has the option to cancel the contract or receive the damaged benefits. If this is the case, the renter can reduce the rental price in advance with the cost of repairing the damage.

The end of the *ijarah* (*intiha al-ijarah*) as explained by Burhanuddin (2009) in addition to the fact that the goal was achieved was also due to the cancellation of:



- 1) If the purpose of the contract has been achieved, then the ijarah will end automatically. If the purpose of the ijarah contract has been achieved, it means that the lessee (*musta'jir*) has benefited (*ma'jur*) from the object being leased. And conversely, the party who rents out (*mu'jir*) has received compensation in the form of compensation (*ujrah*).
- 2) According to Hanafiyah scholars, if one of the parties to the contract dies, the ijarah can end. Because according to this opinion the heirs do not have the right to continue it. However, according to the majority of scholars, the ijarah contract is not canceled because of the death of one of the parties, because of the inheritance of the right.
- 3) Damaged ijarah objects, so that their benefits cannot be taken. However, there are opinions of several scholars who state that if the damage to the rental property can still be replaced, it will not cause the ijarah contract to expire.

### **Definition of Overmacht**

In a state of neglect, there are 2 factors that encourage a person to make mistakes. The first factor is not possible to avoid or beyond their capabilities (*overmacht*) such as natural disasters, theft, or accidents. While the second factor is due to lack of professionalism in doing work which makes mistakes made so that one party suffers a loss.

Overmacht is an urgent situation beyond the ability of the debtor which can prevent the debtor from fulfilling his achievements. This is regulated in book 3 of the Civil Code concerning engagements (Zulkarnain, 2015). Overmacht or in Dutch is called *force majeure* which means a state of compulsion. It can also be interpreted as a situation in which the debtor defaults to the creditor after the contract occurs, where the debtor cannot be blamed and does not bear the risk and cannot predict when the contract was made due to events that are beyond the limits of his ability (Hardianto, 2010). In general, *overmacht* regulations are contained in the *Bagian Umum Buku III KUHPerdara* (Miru, Ahmadi, 2008):

- 1) Pasal 1244 KUHPerdara: If there is a reason for that, the debtor must compensate for costs, losses, or interest if he cannot prove that it was not or not at the time the engagement was carried out, due to an unexpected thing, he cannot be held responsible, all of which, too, is not bad faith. is on his side.
- 2) Pasal 1245 KUHPerdara: It is not necessary to replace costs, losses, or interest if due to forced circumstances or accidental events the debtor is unable to provide or do something that is required, or because of the same things a prohibited act is carried out.
- 3) Pasal 1444 KUHPerdara: If certain goods become contracted goods, are destroyed, can be traded again, or are lost in such a way that it is not at all known whether the goods are still there, then the agreement is terminated, provided that the goods are destroyed or lost beyond the fault of the debtor and neglect to deliver them.

### **METHODS**

This type of research uses field research with qualitative descriptive methods. The author conducts research in detail and is formed with field data in the form of words and pictures (Moleong, 2018). In this study, researchers look for data that has occurred in car rentals at the Car Rental Campus which is located east of Pabelan field (Pabelan gas station to the north 50 meters) precisely at Pabelan Ruko Complex, St. Pabelan 1, Kartasura.

This study uses interviews as one of the methods used to obtain information directly from an object that is examined in detail, starting from how to borrow, loan collateral, car rental payments, and other provisions. Interview activities in this study were conducted on

three respondents, namely one car rental owner and two students as customers of the tenant who had experienced overmacht cases as the author is currently researching.

In addition, this study documents what is in the Car Rental Campus in the form of notes, documents, and photos as authentic evidence in obtaining the results of the research. The data analysis used in this qualitative research is deductive or deductive. This data analysis is used in the process of finding the real problem, then building hypotheses and conducting field observations by testing the actual data (Moleong, 2018).

## RESULTS

In this study, the author will analyze overmacht in car rental, cases that have occurred, and efforts to resolve overmacht. In this study, there are two problems for the overmacht case, in the first and second cases, which resulted in accidental damage to the car or commonly known as overmacht which caused the lessee to be responsible for the negligence.

The DSN fatwa NO: 09/DSNMUI/IV/2000 discusses the financing of *ijarah*. It is stated that if the leased item is damaged not because of the permissible violation of the tenant nor because of the tenant's negligence in maintaining it, then he is not responsible for the limit of the damage. Based on the fatwa above, the lessee is not obliged to bear the loss for damage to the rental property if it is proven that he has committed an overmacht (unintentional accident) because it is beyond his capacity.

This is related to Pasal 1564 KUHPdata which reads: "The tenant is responsible for all damage issued to the leased property during the rental period, unless he proves that the damage occurred beyond his fault". In this case, the tenant must be able to prove that the damage to the car he rented occurred outside of his negligence.

According to Ahmad Miru in the book of Contract Law and Contract Design, not all overmachts are free from the responsibility of the lessee, therefore it is necessary to investigate whether the incident was truly an overmacht or an artificial or engineered thing. If there is true damage or loss, then the problem is seen first whether there is an element of negligence or intentional or not.

## DISCUSSION

### **Overmacht Cases**

Based on the results of research and field surveys with car rental parties, they found many complaints related to overmacht cases (unintentional accidents). They stated that the rental party did not respond to cases of overmacht incidents even though there was evidence or witnesses involved. The following are the results of the author's interview with the tenants:

- 1) There was a car paint beret that happened to a tenant. According to interviews, the tenant said that the paint beret occurred because of irresponsible people. The chronology of the incident occurred during the return journey from Jepara to Solo, where in the middle of the trip there was a road project asking for donations, but the tenant just drove and did not respond to the person. When arriving in Solo, without the knowledge of the tenant, there were long paint scratches on the right side of the car as if it was rubbed with a hard object, but when returning the car, the rental party asked for compensation of Rp. 600,000, but the tenant objected and asked for a reduction in the price to Rp. .300,000.
- 2) The case that happened to one of the car tenants. The incident occurred when he was about to return a rental car during a Solo-Jogja trip. There was a woman who was a motorcycle rider who suddenly came out of the alley into the middle of the road, because

to avoid the mother the renter stopped the car and turned the steering wheel to the right of the road and the tire hit the pavement causing damage to the ass, rims, tires and some dented car body. Then the tenant reports the incident to the rental party, then the rental party picks up the car with a tow truck service. After the car was inspected, the rental party also charged the renter with damages of up to Rp. 30,000,000.

### ***Overmacht Case Resolution On Campus Rental Mobil***

Based on the results of the author's interview with the owner of the Campus Rental Car rental car, the rental contract agreed at the beginning is a legal basis for the responsibility of the tenant. The lease agreement contract is actually a mutually beneficial contract for both parties, so they do not pay close attention if there is an Overmacht issue, even though this Overmacht event can happen anytime and anywhere because it does not know the time. The things that cause Overmacht are not human engineering but events that come suddenly and can happen at any time.

For proof by the Campus Rental Car, if it is true that the Overmacht incident occurred, the rental party will take into account first and conduct a crime scene directly with the car rental owner. And there are several provisions in the event of an Overmacht accident which has two solutions, namely in the following way:

The first way:

1. Pay an insurance claim of IDR 300,000 and a maximum of IDR 500,000
2. Pay compensation of 50% of the car rental price during the car repair period
3. The maximum amount of compensation is calculated within a period of 5 months.

The second way:

1. Bring the damaged car to the repair shop (workshop) according to the tenant's wishes.
2. 100% loss is charged to the tenant
3. Do not pay compensation (only pay rent during usage)

Meanwhile, if the tenant is unable to pay directly the amount of the loss, it can be repaid in installments on condition that the guarantee is held until the compensation is paid off. And if the tenant uses the driver service provided by the tenant, then it is free from the burden of accident responsibility. The campus car rental party only waives fees if there is damage to a consumable car component such as the campus rental car's negligence in checking the clutch, brake, radiator water, car battery, etc. which are exhausted because they have been used for a long time and require replacement. Any damage other than that is borne by the lessee.

### ***Case Analysis of Overmacht***

Based on the results of research conducted by the author on the cases that occurred to the two tenants, both of them experienced overmacht due to circumstances that could not be avoided by both of them when driving the car which they rented. For settlement efforts made by the Campus Rental Car, if an overmacht event occurs, the loss is borne by the tenant in accordance with the applicable provisions above. So, when viewed in this case, of course, the obligation to compensate for the damage to the rented car is very detrimental to the tenant.

Related to the function of the goods is the tenant's mandate and must be maintained as well as possible. Damage caused by negligence is the responsibility of the tenant. Meanwhile, in the context of overmacht (unintentional accident) is the risk of the car rental

owner, the lessee is not responsible for this. Regarding compensation/risk here, which is charged to the lessee, it is one of the parties who feels disadvantaged in terms of material.

If there is an *overmacht*, the lessee must really experience damage to the agreed object and there is no element of fraud. If one of the parties is proven to have engineered, then the party who carried out the engineering is obliged to compensate for the loss of the goods. According to Pasal 1244 KUHPerdata in a state of coercion there must be elements of *overmacht* as follows:

1. There is an event that prevents the tenant's obligations
2. There is no element of wrongdoing on the tenants for the occurrence of the obstruction event.
3. Can't predict beforehand.

Next, on Pasal 1245 KUHPerdata states that "There will be no reimbursement of costs, losses, and interest if it is caused by compelling circumstances or due to things that happen unintentionally". From the Pasal 1244 and 1245 KUH Perdata, it can be concluded that the two articles discuss the same thing, namely releasing or not being charged with compensation for someone who experiences something that is unintentional or beyond his ability.

However, in an *ijarah* lease, the party doing the *overmacht* is required to prove the occurrence of an unforeseen event that causes the lessee to be unable to fulfill an obligation on the lease or can be said to have violated the terms of the lease by something unintentional. By submitting a self-defense, the lessee can show that he is not guilty of unintentional events and things that occur beyond his control that led to an event arising from the situation. This provision provides relief to the lessee not to reimburse the cost and compensation for damage to the goods he borrowed for circumstances that occurred beyond his fault and were unexpected.

The purpose of proof is to strengthen the truth of the arguments about the facts at hand. A very important issue in the law of proof is part of the burden of proof. In the distribution of the burden of proof, it can be seen who can bear the burden of proof. The distribution of the burden must be done as fairly as possible and not one-sided. But on the Pasal 1244 and 1245 KUHPerdata as explained above, this article provides an exemption on the burden of damages if the tenant can prove the occurrence of the event due to a compelling circumstance or an unintentional event (*overmacht*).

If the *overmacht* is proven to be fabricated or engineered, it indicates that one of the parties intentionally made a mistake. In contract law it is said that one of the cancellations of the agreement is a fraud that is listed in the pasal 1328 KUHPerdata or due to negligence, then the other party can claim their rights legally.

*Overmacht* is one of the risks in leasing which in the agreement is generally the obligation to be responsible for losses caused by events that occur to one of the parties due to unintentional accidents. The risk of renting that is regulated in the Pasal 1553 KUHPerdata it is stated that if the goods occur outside the fault of one of the parties, then the lease agreement is null and void by law. Likewise in the rental business, if an event occurs beyond the limits of ability and the party has proven that he is not guilty of this, the landlord is not entitled to ask for compensation because the lessee is not obliged to pay for the loss, but it is a risk that must be taken. borne by the owner of the lease as a businessman.

In the *sharia* provisions, the *fiqh* rules regarding *ijarah* or leasing are contradictory in terms of carrying out excessive responsibilities. Basically, Islamic law has a concept of justice where no one in any business guarantees a profit, so that if there is an accidental consequence

that is unintentional in the real sense, the party who rents it should dare to take action according to the concept of ijarah car rental according to the provisions in Islam.

The provisions of the contract at the beginning are something that is justified in Islam. These provisions are made in writing and accepted by both parties (the pleasure of both parties) in order to maintain the vigilance of the owner of the lease on the assets owned from anything that harms him. Basically, contracts are made for mutual benefit and not to harm or harm the other party. However, if an overmacht event occurs and the lessee can prove that the incident was not a negligence or fault of his or her, then the renting party should bear all the risks because the situation is beyond the control of the lessee. Such case cannot be solved by a straightforward 'urf theory (Athief, 2019).

## CONCLUSION

From the research above, it can be concluded that the implementation of the ijarah contract for renting a car at the Campus Rental Car has weaknesses in contracts related to overmacht so that many agreements are still unclear in making compensation decisions. Whereas in Islamic law it has different characteristics of overmacht with renting a Campus Rental Car.

The unilateral decision given by the Campus Rental Car owner in the implementation of compensation resulted in the renter under any circumstances having to replace the rented car and in the event of accidental damage (overmacht) the rental party did not want to be involved because according to the tenant, every car is a productive asset that every day rented at a price or money.

In Islamic law, the function of goods is a mandate in the hands of the lessee and must be maintained as well as possible. If there is damage due to negligence is the responsibility of the tenant. Meanwhile, according to the Islamic view, the context of overmacht (unintentional accident) is a risk that must be borne by the car rental owner, so that the renter does not need to be responsible for this if the renter is proven not to have caused damage but to a forced situation. The matter of compensation here is very contrary to Islamic law. The Campus Rental Car charges the renter for the loss which causes the tenant to feel more disadvantaged in terms of material even though overmacht is a risk from the rental owner.

## REFERENCES

- Al-Faifi, Syaikh Sulaiman Ahmad Yahya, *Ringkasan Fikih Sunnah Sayyid Sabiq* (Jakarta: Pustaka Al-Kautsar, 2009)
- Aruni, luna calista. (2013). Praktik Sewa Menyewa Mobil Di Rental Mobil Sekitar Kampus Universitas Muhammadiyah Yogyakarta Ditinjau Dari Perspektif Fiqh Ijarah. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Athief, F. H. N. (2019). Konsep 'Urf Sebagai Variabel Produk Hukum. *Suhuf*, 31(1), 40-57.
- Burhanuddin, *Hukum Kontrak Syariah*, Pertama (Yogyakarta: BPFE-YOGYAKARTA, 2009)
- Eprianti, Nanik, and Olypia Adhita, 'Pengaruh Pendapatan Ijarah Terhadap Profitabilitas (Studi Kasus Pada Bank Jabar Banten Kantor Cabang Syariah Bandung)', *Amwaluna: Jurnal Ekonomi Dan Keuangan Syariah*, 1.1 (2017), 19–33  
<<https://doi.org/10.1017/CBO9781107415324.004>>
- Guntoro, Heru, 'Perjanjian Sewa Menyewa Yang Dibuat Di Hadapan Notaris Kaitannya Dengan Putusan Hakim Mahkamah Agung', *Jurnal Hukum Ius Quia Iustum*, 19.3 (2012), 471–86  
<<https://doi.org/10.20885/iustum.vol19.iss3.art8>>
- Hardianto, S. (2010). *Overmacht Menurut Hukum Positif Dan Hukum Islam*.

- Harun. (2017). *Fiqh Muamalah*. Muhammadiyah University Press.
- Hidayat, Enang, *Kaidah Fikih Muamalah* (Bandung: PT Remaja Rosdakarya, 2019)
- Hilmi, M. Y. M. (2019). *M Yazid Masdar Hilmi*. Universitas Islam Negeri Walisongo.
- Miru, Ahmadi, and S. P. (2008). *Hukum Perikatan Penjelasan Makna Pasal 1233-1456 BW*. PT Raja Grafindo Persada.
- Moleong, L. J. (2018). *Metodologi Penelitian Kualitatif Edisi Revisi*. PT Remaja Rosdakarya.
- Nazir, Muhammad, 'Jurnalmetode Penelitian Kualitatif', 2002, 50–61
- Nugraha, Wawan, Maman Surahman, and Yayat Rahmat H, 'Tinjauan Fiqih Muamalah Terhadap Sistem Sewa-Menyewa Di Tokyo', 477–82
- Prof. Dr. H. Idri, M. A. (2008). *Prinsip-Prinsip Ekonomi Islam*. Lintas Pustaka.
- Putri, Mutia Kartika, 'Pembuktian Keadaan Memaksa (Force Majeure) Oleh Debitur Dalam Sengketa Wanprestasi', *Journal of Chemical Information and Modeling*, 53.9 (2018), 1689–99 <<https://doi.org/10.1017/CBO9781107415324.004>>
- Rahman, Abdul, Ghufuran Ihsan, and Dkk, *Fiqh Muamalah* (Jakarta: Kencana Prenada Media Group, 2010)
- Sahroni, O., & Hasanuddin, M. (2016). *Fikih Muamalah Dinamika Teori Akad dan Implementasinya dalam Ekonomi Syariah*. PT RajaGrafindo Persada.
- Sanuji, 'Tinjauan Hukum Islam Tentang Overmacht (Studi Kasus Sewa Menyewa Di PT.Plengkung Gading Asri Perumahan Media Raya Pejaten)', *Skripsi*, 2017, 74
- Sherly, Regina Maya, 'Penyelesaian Wanprestasi Dalam Sewa Menyewa Mobil Perspektif Hukum Ekonomi Syariah', *International Reviews of Immunology*, 66.1 (2018), 1–15 <<https://doi.org/10.3109/08830185.2014.902452>>
- Simanjuntak, Ricardo, *Hukum Kontrak Teknik Perancangan Kontrak Bisnis* (Jakarta: Kontan Publishing, 2011)
- Sudiarti, Sri, *Fiqh Muamalah Kontemporer*, 2018
- Tutik, Titik Triwulandari, Prinsip-prinsip Ekonomi Islam, and Lintas Pustaka, 'Idri Dan Titik Triwulandari Tutik, Prinsip-Prinsip Ekonomi Islam (Jakarta: Lintas Pustaka, 2008), h. 1.', 2008
- Yanis, M. (2017). Analisis Hukum Islam Terhadap Konsep Ijarah Dalam Proses Sewa-Menyewa Mobil Rental (Studi Kasus Cv. Rosidah Jaya Mobil, Kecamatan Johan Pahlawan) [Sekolah Tinggi Agama Islam Teungku Dirundeng Meulaboh]. In *Skripsi* (Vol. 9, Issue 5). <https://doi.org/10.1016/j.tmaid.2020.101607> <<https://doi.org/10.1016/j.ijisu.2020.02.034>> <<https://onlinelibrary.wiley.com/doi/abs/10.1111/cjag.12228>> <<https://doi.org/10.1016/j.ssci.2020.104773>> <<https://doi.org/10.1016/j.jinf.2020.04.011>> <<https://doi.org/10.1016/j.jinf.2020.04.011>>
- Yuhendrata. (2019). *Tinjauan Hukum Islam Terhadap Ganti Rugi Kerusakan Rumah Kontrakan Di Perumahan Aston Villa Jambi*. Universitas Islam Negeri Jambi.
- Yuwono, Lukman, 'Upaya Perusahaan Rental Untuk Menyelesaikan Wanprestasi Dan Overmacht Yang Berupa Kerusakan Pada Perjanjian Sewa Menyewa Mobil', 2013, 1–21 <<http://hukum.studentjournal.ub.ac.id/index.php/hukum/article/view/152/145>>
- Zulkarnain, A. (2015). *Overmacht Dalam Pejanjian Jual Beli Sistem Kredit (Studi Komparatif Antara Hukum Islam Dan Hukum Perdata)*. IAIN Ponorogo.



## **Analysis of The Influence of Financing To Deposit Ratio (FDR), Non Performing Financing (NPF), Return on Equity (ROE) on Mudharabah Financing in Bank Mandiri Syariah Surakarta**

**Galih Permata Sukma Putri<sup>1</sup>, Salma Audiena Alfaizah<sup>2</sup>**

<sup>1</sup>Faculty of Economic and Business, University Muhammadiyah Surakarta  
email: [galihpermatasukmaputri@gmail.com](mailto:galihpermatasukmaputri@gmail.com)

<sup>2</sup>Faculty of Economic and Business, University Muhammadiyah Surakarta  
email: [salma.alfaizah@gmail.com](mailto:salma.alfaizah@gmail.com)

**ABSTRACT** -.The purpose of this study is to analyze the effect of Financing To Deposit Ratio (FDR), Non Performing Financing (NPF), Return on Equity (ROE) on Mudharabah Financing at Bank Mandiri Syariah Surakarta in 2016-2021. The method used is panel data regression model. The results showed that FDR has significant effect on Mudharabah. However, the NPF and ROE has no significant effect on Mudharabah Financing in Bank Mandiri Syariah over the peiod 2016-2021.

**Keywords:** Mudharabah, FDR, NPF,ROE, Panel Data

**ABSTRAK** - Tujuan dari penelitian ini adalah untuk menganalisis pengaruh Financing To Deposit Ratio (FDR), Non Performing Financing (NPF), Return on Equity (ROE) terhadap Pembiayaan Mudharabah pada Bank Mandiri Syariah Surakarta Tahun 2016-2021. Metode yang digunakan adalah model regresi data panel. Hasil penelitian menunjukkan bahwa FDR berpengaruh signifikan terhadap Mudharabah. Namun, NPF dan ROE tidak berpengaruh signifikan terhadap Pembiayaan Mudharabah di Bank Mandiri Syariah selama periode 2016-2021.

**Kata Kunci:** Mudharabah, FDR, NPF,ROE, Panel Data

### **INTRODUCTION-**

The Indonesian state is a country that is developing in all sectors, both in order to improve economic distribution or build economic growth where the economic sector is a top priority for the government for such improvement. financial institutions, namely bank financial institutions whose role is more visible in carrying out economic development within the Indonesian state. Banking is everything related to banks, including institutions, business activities, as well as methods and processes in carrying out their business activities. Banks are defined as financial institutions whose business activities are to collect funds from the public and channel these funds back to the public and provide other banking services. While the definition of a financial institution is any company engaged in finance where its activities are only collecting funds or only distributing funds or both (Kasmir, 2014).

Credit given by banks is based on trust so that lending is giving trust to customers. Because lending by banks is intended as an attempt to earn profits, banks may only pass on public deposits to their customers in the form of credit if they are absolutely sure that the debtor will return the loan he received in accordance with the terms and conditions that have been agreed upon by both parties. This shows the need to pay attention to the ability and willingness factors, so that prudence is concluded by maintaining the element of security and at the same time the element of profit from a credit. Economic development cannot be separated from the banking

sector. Because banking has an important role in economic growth. This is because the banking sector has a main function, namely as a financial intermediary between those who have funds (surplus funds) and those who need funds (Julita, 2011).

Seeing the development of Islamic banks that are increasingly advanced, the government with its policies stipulates Law no. 21 of 2008. With the enactment of the Act, Islamic banks that have been around for a long time in Indonesia finally have an institutional legal basis for their organization. Article 68 of the Sharia Banking Law which states that Conventional Commercial Banks that have Sharia Business Units are required to separate their units if the asset value of the unit has reached 50% of the total parent bank. This obligation is aimed at making Islamic Commercial Banks separate in management from Conventional Commercial Banks, so that they are expected to be more obedient to sharia principles.

The separation process above is known as the spin off process. The spin off process is a process in which the separation of ownership of a business is carried out so that the business has future prospects. This process means encouraging national Islamic banking to increase, be able to compete and be independent. In theory, Islamic banking is slightly different from conventional banking. Islamic banks in their operations must be related to the provisions contained in the Al-Quran and Al-Hadith. Transactions at Islamic banks must also be free of usury (interest), do not contain elements of an uncertain contract (gharar and maysir), emphasize the principle of profit sharing, and prioritize investment in the halal sector. While conventional banks set interest as the price, both for deposit products such as savings, time deposits, and loan products (credit) that are given based on a certain interest rate (Rama, 2011).

Because I think that if conventional banks continue with Islamic banks, it will not necessarily be suitable, especially in independent banking in Surakarta. Because both conventional and Islamic banks are still guided by Bank Indonesia. So I take an example relating to an independent Islamic bank with a conventional bank. The variables I chose include analysis of the relationship between Financing to Deposit Ratio, Non Performing Financing, Return on Equity in Mudharabah Financing at Bank Mandiri Syariah Surakarta in 2016-2020.

## **LITERATURE REVIEW-**

(Indra pratama, 2020) found that NPF has a significant effect on ROA/ROE. FDR has a negative and significant effect on ROA/ROE, while the PMD variable has no effect on ROA/ROE, there is only one significant variable, namely Non-Performing Financing. To overcome this problem, it is necessary to balance the variables from conventional banks with Islamic bank variables, especially in independent banks, both non and sharia in the Surakarta area in 2016-2020.

Based on the research and estimation results from the regressions that have been carried out regarding the Analysis of ROA, BOPO, FDR, CAR and NPF on Profit Sharing Mudharabah at Bank Syariah Indonesia using the analytical method Ordinary Least Square (Bramanidta, 2020). Rifka (2018) found that Mudharabah and Murabahah partially have no effect on ROA of BUS and UUS for the 2015-2018 period. It can be seen that there is no significant effect between the Mudharabah variable and the ROA variable. Likewise with the Murabahah variable, which means that there is no significant effect between the Murabahah variable and ROA. Furthermore, the FDR and NPF variables have a significant effect on ROA. This can be seen in the probability values of these variables. This shows that there is a significant effect between the FDR and ROA variables. While the NPF variable has a significant effect on the ROA variable.



(Nofianti, 2015) used Return On Asset (ROA), BOPO, Interest Rate, Financing to Deposit Ratio (FDR) and Non Performing Financing (NPF) as independent variables, and the rate of profit sharing for mudharabah deposits is shared as the dependent variable. Part The results show that Return On Assets (ROA) and Financing to Deposit Ratio (FDR) have a significant positive effect on the rate of profit sharing for mudharabah deposits. While BOPO, Interest Rate and Non-Performing Financing (NPF) have no effect.

## METHODS-

To determine the magnitude of the influence of an independent variable on the dependent variable, this study used a panel data method. The dependent variable in this study is Mudharabah Profit Sharing Financing (PMD), while for the independent variables there are 3, namely, Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), Return on Equity (ROE). The object of this research is Bank Mandiri Syariah Surakarta during the period 2016-2020. The data used is sourced from the official website of the Financial Services Authority (OJK). The econometric model is as follows:

$$PMD_{it} = \alpha + \beta_1 FDR_{it} + \beta_2 NPF_{it} + \beta_3 ROE_{it} + \mu_{it}$$

where,

PMD	: Mudharabah Financing
FDR	: Financing to Deposit Ratio
NPF	: Non Performing Financing
ROE	: Return on Equity
$\alpha$	: Intercept/Constant
$\beta_1 \beta_2 \beta_3$	: Coefficient dependent variable
i	: cross section data/ bank
t	: time series data/year
$\mu$	: eror term

## RESULTS-

This study uses panel data with a combination of 5 years time series with a cross section of 8 Islamic banks in Surakarta. The time series used is larger than the cross section, therefore according to Gujarati (2012), panel data is a combination of time series data and cross section data. The data panel is able to provide more data resulting in a greater degree of freedom. Second, combining information from time series and cross section data can overcome problems that arise when there is a variable crime problem. The results of the panel data analysis are shown in Table 1.

Table 1. Panel Data Estimation Result

Variabel	CEM	FEM	REM
C	44.6745 (0.0397)	49.50811 (0.0552)	47.61922 (0.0464)
FDR	0.568597 (0.0054)	0.480630 (0.1131)	0.522273 (0.0355)
NPF	-5.602899 (0.5417)	-8.538452 (0.4074)	-7.651629 (0.4249)
ROE	-1.054699 (0.5529)	-0.242718 (0.9144)	-0.576706 (0.7727)
R-squared	0.238629	0.520937	0.159205
Prob (F-statistic)	0.019026	0.007557	0.096735

Table 1. explains that in the panel data method there are stages in selecting the best model, namely the Chow test, Hausman test, and LM test. Chow test to determine the best model between CEM and FEM. After testing all the test, this study uses the CEM model as the best model.

Table 2. Chow Test

Effects Test	Prob.
Cross-section F	0.0426
Cross-section square	Chi- 0.0098

In Table 2, the results of the Chow test show that the Chi-square cross-section probability value is 0.0098, so it can be interpreted as less than alpha (0.05), so that in the Chow test the selected model is FEM. Then the Hausman test is carried out to determine the best model with FEM and REM.

Table 3. Hausman Test

Test Summary	Prob.
Cross-section random	0.9832

Table 3 is the result of the Hausman test which shows that the random cross-section probability value is 0.9832 so that it can be interpreted as more than alpha (0.05), so that in the Hausman test the selected model is REM. Then, the LM test was carried out to determine the chosen model between CEM and REM.

Table 4. LM Test

Null (no rand. effect)	Prob.
Breusch-Pagan	0.0626

In Table 4, the results of the LM test show that the One-sided cross-section probability value is 0.0626 so that it can be interpreted as more than alpha (0.05), so that in the LM test the selected model is CEM.

## DISCUSSION -

This study uses the CEM model because in testing the best model with the Chow test of 0.0098, the Hausman test of 0.9832 and the LM test of 0.0626 so that the model selected in the panel data regression is CEM.

The estimation results show that FDR has a positive and significant effect on PMD with a significance value of 0.00054 ( $<0.05$ ) and a coefficient of 0.568597. This means that when FDR increases by 1 percent, PMD increases by 14.6252, So the cycle in banking will cause or

affect credit offers made by the bank. Because the higher the FDR value in a bank, the bank will reduce the number of credit offers made or if in Islamic Banks the financing is disbursed.

The estimation results show that NPF has a negative and insignificant effect on PMD with a significance value of 0.5417 ( $>0.05$ ) and a coefficient of -5.602899. This means that when NPF increases by 1 percent, PMD decreases by 5.602899. Because in the banking world it is also influential where the higher the value of an NPF in a bank, the bank is reluctant to provide financing to a customer. Very influential on the profits of a bank itself.

The estimation results show that ROE has a negative and insignificant effect on PMD with a significance value of 0.5529 ( $>0.10$ ) and a coefficient of 1.054699. This means that when ROE increases by 1%, PMD decreases by 1.054699. Here it can be explained that a bank will refuse a financing from a customer because the ROE value increases. because it can result in the financing process is not smooth in the future. And that is very much avoided from the SOP of each bank, both conventional banks and Islamic banks.

### CONCLUSION-

From the results of the research and discussion that have been described, it can be concluded that the variable Financing to Deposit Ratio (FDR) has significant effect on PMD in Bank Mandiri Syariah Surakarta during the period 2016-2020. However, Non Performing Financing (NPF) and Return on Equity (ROE) has no significant effect on PMD in Bank Mandiri Syariah Surakarta during the period 2016-2020.

Furthermore, suggestions for banks, researchers suggest to pay more attention to the level of prudence in providing financing for customers in order to reduce the level of bad loans. As for the government or policy makers, the government is expected to provide support for the development of sharia financing. Thus, it can increase profitability and efficiency to move forward and develop with the government, and for suggestions, further researchers are expected to be able to research more innovative and multiply other variables related to Mudharabah Financing Variables (PMD), Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), and Return on Equity (ROE). In addition, it is necessary to extend the research period in order to better increase the accuracy of the research data so that a more presentative or accurate estimate is obtained.

### REFERENCES

- Bramandita, 2020. Analisis Pengaruh ROA, BOPO, FDR, CAR, NPF terhadap TingkatT Bagi Hasil Mudharabah pada Bank umum Syariah Studi Khusus BNI SYARIAH tahun 2016-2018. Jurnal eprints.ums.ac.id
- Indra, Pratama (2020). Analisis Pembiayaan Bagi Hasil Mudharabah, Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), terhadap Profitabilitas Return on Asset (ROA) pada Bank Mandiri Syariah tahun 2015-2020. Jurnal eprints.ums.ac.id
- Mousa Almanaseer, *The Impact of The Financial Crisis on The Islamic Banks Profitability-Evidence From GCC*. International Journal of Financial Research, Volume 5 Nomor 3, 2014.
- Nana Nofiani, Analisis Pengaruh Return on Asset (ROA), Biaya Operasional terhadap Pendapatan Operasional (BOPO), Suku bunga, Financing to Deposit Ratio (FDR) dan Non Performing Financing (NPF) terhadap Tingkat Bagi Hasil Deposito Mudharabah.

- Nouaili, Makram. Abaoub, Ezzeddine dan Ochi, Anis. 2015. The Determinants of Banking Performance in Front of Financial Changes: Case of Trade Banks in Tunisia. *International Journal of Economics and Financial Issues*. Vol. 5, No. 2.
- Nurbaiti, dkk. (2016). *Analysis of The Factors That affecting Islamic Bank Profitability (Empirical Study on Islamic Bank in Indonesia Period 2012-2014)*. *Smart Collection for Business in Technology and Information Industries*.
- Rachman, Aulia Apriani (2019) Analisis Loan To Deposit Ratio (Ldr) Terhadap Profitabilitas (Roa) Pada Pt. Bank Panin Tbk, (Studi Kasus Bursa Efek Indonesia Tahun 2014-2018). Diploma thesis, Universitas Komputer Indonesia
- Rifka Anissa Wattimury. 2018. Analisis Pembiayaan Bagi Hasil, Pembiayaan Jual Beli, Financing to Deposit Ratio, dan Non Performing Financing terhadap Profitabilitas Bank Umum Syariah dan Unit Usaha Syariah di Indonesia periode 2015-2018. *Jurnal UIN*.
- Setyowati, Lilis dan Kim Budiwinarto. 2017. “Analisis Pengaruh NIM, BOPO, LDR, NPL, CAR Terhadap ROA pada Bank Umum Nasional di Bursa Efek Indonesia Periode 2012-2015”, *Jurnal Ekonomi Bisnis dan Kewirausahaan*, Vol. VI, No. 2.
- Soares, Pedro. 2018. “The Effect Of NPL, CAR, LDR, OER and NIM to Banking Return On Asset”, *International Journal of Economics, Commerce and Management*, Vol. 6, Issue 3.
- Standar Akuntansi Keuangan. (2015). Pengaruh Kebijakan Dividen , Likuiditas , Net Profit Margin , Return on Equity , Dan Price To Book Value Terhadap Harga Saham Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia 2010 – 2013. *Jurnal Akuntansi*, XIX(02), 276–294.
- Wahyuni, Sri Fitri. 2016. “Pengaruh Loan To Deposit Ratio (Ldr), Capital Adequacy Ratio (Car) Dan Rasio Beban Operasional Pendapatan Operasional (Bopo) Terhadap Return On Assets (Roa) Pada Perbankan Yang Terdaftar Di Bursa Efek Indonesia”, *Jurnal Agribisnis Sumatera Utara*, Vol. 4, No. 1.
- Yuliani, Kadek Puspa, Desak Nyoman Sri Werastuti dan Dr. Edy Sujana. 2015. Pengaruh loan to deposit ratio (LDR), non performing loan (NPL), return on asset (ROA) dan beban operasional terhadap pendapatan operasional (BOPO) terhadap capital adequacy ratio (CAR). *E-Journal Ak SI Universitas Pendidikan Ganesha*, 3(1).

## **ANALYSIS OF SHARE IN JAR PRACTICE, POSITIVE LAW VS ISLAMIC LAW PERSPECTIVE**

**Afief El Ashfahany**

Corresponding author: [aea930@ums.ac.id](mailto:aea930@ums.ac.id)

Islamic Economis and Law, Universitas Muhammadiyah Surakarta

**Tegar Abi Aufan**

Islamic Economis and Law, Universitas Muhammadiyah Surakarta

[eghaaufan@gmail.com](mailto:eghaaufan@gmail.com)

**Muliadi**

Academy of Islamic Studies, University of Malaya

[muliadi@siswa.um.edu.my](mailto:muliadi@siswa.um.edu.my)

### **ABSTRACT**

Cosmetics are an important need for most women, therefore many cosmetic industries continue to try to meet consumer needs for cosmetics. Then the term share in jar appears, share in jar is the process of dividing the contents of an original size product into several smaller places or containers. This product is loved by consumers who want to try it on their skin. However, this practice creates problems that can harm consumers and brand holders, so there needs to be a solution according to positive law and Islamic law. The author uses a qualitative method where the data sources are obtained from literature and legislation and then described in the form of information. The results of this study indicate that the practice of share in jar causes losses to consumers and brand owners because it violates the UUPK and does not fulfill the CPKB requirements and there is an element of gharar where the harm is greater, therefore this practice is better avoided. The author's suggestion for this research is that consumers are expected to avoid share in jar products and the government is expected to make specific regulations regarding the distribution of share in jar products.

**Keywords: cosmetics, share in jar, positive law, Islam law**

### **ABSTRAK**

Kosmetik merupakan kebutuhan penting untuk sebagian besar wanita, oleh sebab itu banyak industri kosmetik terus berusaha memenuhi kebutuhan konsumen akan kosmetik. Maka muncul istilah *share in jar*, share in jar ialah proses membagi isi sebuah produk ukuran asli kedalam beberapa tempat atau wadah yang lebih kecil. Produk ini digemari oleh konsumen yang ingin untuk dicoba pada kulit mereka. Namun praktik tersebut menimbulkan permasalahan yang dapat merugikan konsumen dan pihak pemegang merk sehingga perlu adanya solusi menurut hukum positif dan hukum islam. Penulis menggunakan metode kualitatif dimana sumber data didapatkan dengan literatur dan perundang-undangan lalu diuraikan dalam bentuk keterangan. Hasil dari penelitian ini menunjukkan bahwa praktik share in jar menimbulkan kerugian pada konsumen dan pemilik merk sebab melanggar UUPK dan tidak terpenuhinya syarat CPKB serta terdapat unsur gharar dimana mudharat lebih besar oleh sebab itu praktik tersebut lebih baik dihindari. Saran penulis untuk penelitian ini diharapkan bagi konsumen menghindari produk share in jar dan bagi pemerintah diharapkan membuat peraturan yang spesifik tentang peredaran produk share in jar.

**Kata kunci : kosmetik, share in jar, hukum positif, hukum islam**

## INTRODUCTION

Cosmetics are one of the important needs for women, so many cosmetic industries continue to try to meet consumer needs for cosmetics with various kinds of innovations according to market demand. In 2016 a new idea emerged to follow the market by providing sample products for consumers who want to try an original packaged product, namely share in jar. The method is where cosmetics with large sizes or packaging are transferred into several economical or smaller containers to make it easier for consumers who just want to try a product or who want to save money.

There are quite a variety of cosmetic products on the market and are made in attractive packaging, but often local and imported products do not have licenses and product standardization is still inadequate. According to the findings of BPOM Medan, they succeeded in destroying 632 types of illegal confiscated products throughout 2019, 632 types of products destroyed consisted of 441 types of drugs consisting of 18,323 packages, then 175 types of cosmetics with 24,763 packages, and 16 types of food products. with 8,261 packs. (Kumparan.com, 2019)

Behind the benefits above, the share in jar system has turned out to be causing several problems, there are several factors that should be prohibited because they can cause harm and possibly harm consumers. Based on applicable laws or regulations, the sale of skin care with the share in jar system turns out to contain an element of brand infringement. However, in reality, there are still many business actors who dare to sell these products, which causes losses to brand holders who have struggled to pioneer and maintain the brand image of the brand.

Based on applicable law, the sale of skin care with the share in jar system turns out to contain an element of brand violation as regulated in article 66e (RI Law No. 20 Yrs, 2016) concerning brands and geographical indications which reads:

*“imitation or misuse that can be misleading in relation to the place of origin of the goods and/or products or the quality of the goods and/or products contained in:*

- 1. wrapping or packaging*
- 2. captions in advertisements*
- 3. information in the document regarding the said goods and/or products*
- 4. misleading information regarding its origin”*

In Islam, there is a possibility that the product with the share in jar system contains an element of gharar, because the packaging does not include detailed information related to the original product and the possibility of product counterfeiting. Due to the rise of share in jar products which have several impacts and legal vacuums, legal protection for brand owners and consumers and the perspective of the share in jar system according to Islam is an important thing. So the researchers tried to compile it in a thesis entitled " **ANALYSIS OF SHARE IN JAR PRACTICE, POSITIVE LAW VS ISLAMIC LAW PERSPECTIVE**"

## LITERATURE STUDY

Dita Dwi Lestari (2020) explained that in practice, cosmetics in the share in jar system at the Cantiqueute Purwokerto cosmetic store were initially allowed because they had met the requirements and pillars of buying and selling in Islam. but because it is always packaged in a new container and there is no longer a description such as an expiration date. So the sale and



purchase of share in jar cosmetics based on an analysis of the benefits and harms is not allowed because the share in jar cosmetics are feared to exceed the expiration date which can cause harm to consumers.

Rani et al. (2021) they revealed that a form of legal protection for consumers who use cosmetic products (share in jar) is the right of consumers to clear information regarding the composition of the cosmetic products sold (share in jar). They also explain the form of responsibility of business actors in which business actors are obliged to compensate for losses suffered by consumers which must be carried out by business actors. In accordance with the statement of Article 19 of the UUPK which requires business actors to compensate for losses suffered by consumers. And if the business actor does not want to be responsible for the loss he makes, the consumer has the right to file a lawsuit in court.

Wahyuningtyas et al. (2021) concluded that the online store @share\_skincarekediri's share in jar system does not use labels and does not include information clearly which causes consumers to doubt the product. According to Sad al-Dhari'ah's analysis, the use of the share in jar system at the @share\_skincarekediri online store is not allowed because if viewed from a quality perspective, it is included in the actions carried out which are likely to lead to death, because it uses the practice of eliminating information clearly and lucidly. of the product so that it causes qat'i mafsadatan. In addition, the analysis of Law Number 8 of 1999 on the use of skincare with the share in jar system is also still not appropriate because it does not match what consumers want and there is no accountability from @share\_skincarekediri, there are some cosmetics that have not been registered with BPOM, and there are no marketing authorization for selling cosmetics using the share in jar system.

Intan Puspita Sari (2020) explained that Consumer Protection for Share In Jar Cosmetic Products that do not have a distribution permit has not run optimally because many business actors are not aware of the law and do not understand their rights and obligations as share in jar business actors to be required to register their distribution permit. in accordance with applicable law.

Nafida Ika Apriliya (2021) concludes that based on the current laws and regulations in Indonesia, share in jar cosmetic products are included in the dangerous category and are prohibited from being traded or distributed. Because it violates the consumer protection law and the health law on distribution permits.

Dai et al. (2019) concluded that legal protection for cosmetic consumers to feel comfortable, safe and secure in relation to the distribution of cosmetics without a normative distribution permit has actually been attempted by the government and its staff by establishing regulations regarding guidance and supervision based on the Decree of the POM Agency. RI Number HK.03.1.23.12.11.10052 of 2011 concerning Supervision of the production and distribution of cosmetics and sanctions based on Law Number 36 of 2009 concerning health which is expected to make business actors aware so that they do business in good faith.

Azizah et al. (2021) stated that the practice of buying and selling with the share in jar system is legal, because it has fulfilled the pillars and conditions of buying and selling. Buying and selling with the share in jar system does not contain elements of fraud and does not include gharar because the nature and type can be known. In this buying and selling transaction, there is a willingness between two parties and an element of consensual ('an tarāḍin minkum).



## **METHOD**

This study uses the library research method, which is a research that collects literature, laws and regulations, arguments and hadiths that are processed and related to the issues that are the subject of research. Then the data is described and presented in the form of information.

## **RESULTS AND DISCUSSION**

### **1. Possible Losses in the Share In Jar System According to BPOM**

According to the Food and Drug Supervisory Agency (BPOM) in its 2018 report, the Food and Drug Supervisory Agency (BPOM) has made the distribution of packaged products (share in jars) a study of drug and food crimes. Therefore, cosmetics with the share in jar system cause losses to several parties.

#### **1.1 Brand Owner**

Based on the applicable legal provisions, the distribution of share in jar packaging products is included in the element of violation of Marks and Geographical Indications which have been regulated under Law 20 of 2016 concerning Marks and Geographical Indications article 1 Number 1 that Marks are: "Signs that can be displayed visually graphics in the form of pictures, logos, names, words, letters, numbers, color arrangement, in the form of 2 (two) dimensions and/or 3 (three) dimensions, sound, holograms, or a combination of these 2 (two) or more elements to distinguish goods and/or services produced by persons or legal entities in the activities of trading goods and/or services." (RI Law No. 20 Yrs, 2016)

Another risk that arises is not including the identity of the product, such as the expiration date, restrictions and side effects on the product and the last is the composition of the ingredients of the original product. So that consumers do not get clear information on the products purchased so that it has the potential to cause harm to the brand owner if one day something unwanted happens to the consumer, one of which is the damage to the brand image. But there are also business people who try to include expiration information even though the business is still not safe, because the expiration date listed and valid for products that have been opened is the After Opening Period or abbreviated as PAO, while the expiration date listed by skincare product business actors share in jar only valid when the product packaging has not been opened. PAO itself is symbolized by a logo such as a product lid that has been opened and indicates the period of time the product can be used after the packaging is opened. So, for example, a skincare product has an expiration date in 2022 with a PAO of 6M or 6 months, then the product opens in early 2021, then the product can only be used for 6 months. If it passes the PAO period, then the product is considered unfit for use. (parapua.co, 2021)

Sales of well-known brands without a permit can harm the holders of well-known brands who have registered their products, as well as harm the original image of the brands that have been successfully and painstakingly pioneered by the holders of the well-known brands, this is contrary to the applicable regulations in Law no. 20 of 2016. However, in reality the distribution of cosmetic products with a share in jar packaging system for skincare products has no legal provisions that specifically regulate the circulation of these products.

#### **1.2 Consumers**

Buying and selling in the practice of the share in jar system does not include clear and detailed information which causes consumers to be doubtful about the product. Because cosmetics with the share in jar system are included in the category of repackaging a product that was initially in a large container and then repackaged into a smaller or economical

container. It is clear that this is strictly prohibited because it does not meet the requirements for the Good Manufacturing Practice of Cosmetics (CPKB) in accordance with those stipulated in the regulation of the minister of health.

In the production process of share in jar cosmetic products there is interference and air which can reduce the quality and possibility of contamination by bacteria entering the share in jar product, this is still ignored by share in jar business actors and directly causes the possibility of harm to consumers. So the application of the requirements in obtaining a distribution permit is considered very important because it involves quality and safety.

In Purbasari's Beauty Talk at AEON BSD, Saturday (2/2/2019) Soraya Hylmi commented about the share in jar *"I'm really concerned about share in jar make up. That's the contents of make up or skin care transferred from the original packaging to the mini packaging, we don't know whether the mini packaging has been sterilized or not, there is air contact too, so it's risky," Soraya Hylmi added, "air contact during the process of transferring make up or skin products. care can change the texture, color and function of the product. Of course this can affect your skin."*(Suara.com, 2019)

Based on an interview with a victim on May 10, 2019, named Nadya Chrismonika, she once bought and used cosmetic products in share in jar packaging at an economical price, she got them online (online-shop). The risk that arises from using this product is that pimples appear on his facial skin which are very painful even though he has only used the product once and makes his face breakouts which are very hard. Finally she decided to stop using the product and consulted a dermatologist and the doctor said that her face was irritated due to the harsh ingredients of the beauty products she bought.(Intan Puspita Sari, 2020)

From these problems, consumers should get legal protection in order to get security, comfort, and safety in using cosmetic products. The form of consumer legal protection from these products is the right to get clear information about the composition of the share in jar product. Actions taken by business actors who do not provide clarity in the product can result in harm to consumers.

### **1.3 Share In Jar in Practice**

Based on the statement from the seller or share in jar business actor that the share in jar product they circulate is genuine without mixing it with other substances/ingredients. For the expiry period of share in jar products, some business actors do not include the expiration date on the grounds that it is still old and the stock is always new, but there are also business actors who include the expiration date by explaining that the EXP of the original product is 3 years but for PAO it is 1 year from opened the original packaging. So it can be concluded that share in jar skincare products can only be used within a year or even less than a year. If the consumer experiences a loss, the business actor protects himself by saying "it may not be suitable for the product (original brand product)" and explains that the share in jar product they sell is safe because all the packaging has been sterilized and does not mix anything in the product and says that consumers who decide to buy share in jar products are beyond their responsibility, especially if there is a match / unsuitability problem because the purpose of share in jar is only to try or as a tester before buying a full size product. And the responsibility of business actors is only if there is damage in packaging or product shortages can be refunded.

## **2. How Share In Jar Relates to Possible Disputes and Legal Vacancies and Consumer Protection**

Because the information about the share in jar product is not clear, there is a possibility of a dispute between the business actor and the consumer or the business actor and the brand owner. If there is a dispute between the consumer and the brand owner and the business actor, then the dispute resolution with the business actor can be done through litigation (court) and non-litigation (outside court). (Intan Puspita Sari, 2020)

These disputes can occur between business actors and consumers or business actors and product/brand owners. According to one resource person from Almira Mey Theda's research, he as the Directorate General of Intellectual Property explained that "share in jar business actors do not have a legal umbrella in distributing their products, unless the share in jar business actor has permission from the brand owner". (Theda et al., 2021)

With this legal vacuum, consumers need guarantees for protection from transactions carried out so that there are no disputes or fraud from business actors on the goods being transacted. A form of legal protection for consumers who use cosmetic products in packages (share in jars) is the right of consumers to clear information regarding the composition of cosmetic products sold in these containers. Actions carried out by business actors who do not provide clarity in the product can harm consumers in an immaterial aspect. (Rani et al, 2021)

Based on the statement above, share in jar cosmetic products have a legal vacuum. This results in the absence of legal regulations that specifically violate the distribution of the share in jar product. This includes legal uncertainty (*rechtsonzekerheid*) and is more severe if it results in legal chaos (*rechtsverwarring*). This is because the void of legal instruments is the reason for the opportunity for cosmetic business actors to run their business by selling share in jar products.

Legal protection for consumers' rights to correct, clear, and honest information regarding the condition and guarantee of goods in the Regulation of the POM RI Number HK.00.05.4.17.45 Regarding Cosmetics has actually been clearly regulated in relation to the obligations of business actors to provide complete information. in full to avoid loss to cosmetic consumers. And for cosmetic consumers who experience losses, based on Article 19 of the UUPK, business actors are required to provide compensation, while the government has the responsibility to foster, supervise and facilitate so that cosmetic consumers get what they are entitled to. (Dai et al., 2019)

Because the share in jar process is classified as a prohibited act, because it is not in accordance with BPOM standardization. If at any time the product is processed in accordance with BPOM standards, such as maintaining hygiene, completing related product information, under the supervision of BPOM, and registering a distribution permit, the share in jar product may be allowed to be circulated. (Nafida Ika Apriliya, 2021)

### **3. How to practice sharing in jar according to Islam and the solution**

In accordance with the provisions of buying and selling practices where the terms and pillars must be met, namely the absence of fraud, manipulating the product and must comply with the regulations both Islamic law and positive law. The fraud in question is one of them falsifying the product or mixing the product with other products. Based on the reality on the ground, the practice of buying and selling skincare using the share in jar system is not appropriate because it does not use labels and there is no clear information that causes consumers to doubt the product.

Skincare product transactions are actions that are basically allowed, but using the share in jar system is an act that should be avoided because there is uncertainty in the

transaction and in the object because of the possibility of not fulfilling the terms of sale and purchase and violating applicable regulations, the regulation in question is the right to get information about the object being transacted. In the practice of buying and selling skincare, share in jar is also inseparable from the possibility of a risk occurring, in this case the risk in question is that something unexpected happens or fraud occurs in practice.

The practice of buying and selling skincare using the share in jar system actually provides benefits for consumers and brand holders, one of the benefits for consumers is getting cheaper prices and as a tester before buying products with full size packaging. Meanwhile, the benefit for product owners is indirectly increasing product sales due to demand from consumers who are interested in the share in jar system as long as there are no complaints and losses from consumers. However, these benefits are not proportional to the possibility of harm to consumers and brand owners. One of the disadvantages for consumers is the possibility of counterfeiting by business actors for profit, while for brand owners it is the damage to the brand image if things happen that are not desired by consumers.

Based on a statement by the chairman of the MUI, Muahammad Cholil Nafis, he said that "what the government thinks is illegal for the benefit of the people, religion also prohibits it" (Cnnindonesia.com, 2021). The illegal determination in question is violating the BPOM rules regarding distribution permits as regulated in Law Number 36 Year 2009 Article 106 paragraph 1 concerning Health which explains that "Pharmaceutical preparations and medical devices can only be circulated after obtaining a distribution permit". So, in this practice the disadvantaged party is the consumer and the brand holder and this practice does not contain any benefits when there is harm.

From the description of the legal perspective and literature above, the practice of buying and selling products with a share in jar system is included in the sale and purchase of gharar, because there is an unclear type of contract object. Knowing the type of object being traded is a legal requirement for buying and selling. So, if the object being traded in the practice of the share in jar system is unknown, the law is invalid.(Harun, 2017)

In Islam, this gharar transaction is included in the sale and purchase which is prohibited. Based on the words of the Prophet sallallaahu 'alaihi wa sallam in the hadith of Abu Hurairah which reads:

نَهَى رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ عَنْ بَيْعِ الْحَصَاةِ وَعَنْ بَيْعِ الْغَرَرِ

*"Rasulullah sallallaahu 'alaihi wa sallam forbade buying and selling al-hashah and buying and selling gharar"*

Judging from the form of gharar, share in jar is classified as majhul buying and selling, namely buying and selling in which the goods/objects are not clear. Many of the consumers who buy share in jar products while the product is not known for information about the truth whether the share in jar product comes from the original product. Meanwhile, business actors should have an honest attitude because this must be instilled in every Muslim, moreover it concerns information that must be provided to consumers, because if not, it can cause harm to consumers and possibly cause other impacts. And Allah has said in Surah Al-Baqarah/2:188

وَلَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ وَتُدْخُلُوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنْتُمْ تَعْلَمُونَ

*"And let not some of you eat up the wealth of others among you in a false way and (do not) bring (the affair) the property to the judge, so that you may eat some of the property of others by sinning, even though you are knowing"*

Based on the classification of share in jar products included in the gharar katsir category, namely the obscurity of the object is at the top level or the level of ambiguity is high, it is proven that in the plain packaging container and in the process of transferring the contents of the product where the consumer does not know directly the possible transfer process can cause harm to consumers.

Basically, buying and selling skincare cosmetics with a share in jar system if viewed from a quality perspective, is classified as an act that is likely to cause damage. However, the share in jar practice causes damage because it causes losses and even endangers consumers. Judging from the fact that the packaging process and the absence of information create doubts and safety when using the product. Therefore, the practice of buying and selling skincare with the share in jar system leads to more damage than benefits, so the law is not allowed.

## CONCLUSION

- a. Cosmetic products with the share in jar system cause losses to several parties, namely the damage to the brand image of the original brand / brand owner if there is a loss to consumers. While the loss from the consumer is the possibility of product counterfeiting where the share in jar product does not meet the requirements for Good Cosmetics Manufacturing Practices (CPKB).
- b. The void of legal instruments in the distribution of cosmetics with the share in jar system, namely the absence of legal regulations that specifically regulate the distribution of share in jar products, this creates confusion among the public regarding the quality and safety of cosmetic products with the share in jar system. Therefore, some problems that arise such as lack of information and clarity on the product so that it has the potential to cause harm to the brand holder and the consumer.
- c. In Islam, the practice of selling with the share in jar system is classified as an element of gharar because there is no clarity of the object and it causes damage in terms of quality, even though at first the act contains benefits for the brand holder and consumers. But the element of damage is more than the element of benefit, therefore the law is prohibited.

## Suggestions

- a. BPOM as the drug and food regulatory agency should give an appeal to consumers to avoid skincare cosmetic products with the share in jar system and appeal to business actors not to distribute skincare cosmetics with this method, because it causes some harm to consumers and even brand holders.
- b. Consumers should always be aware of the widespread circulation of cosmetic products and always prioritize the quality and clarity of a product. Meanwhile, business actors should prioritize rights and obligations to consumers as stipulated in the UUPK. In addition to this, business actors should show good faith by providing detailed and honest information about the goods they sell.
- c. It is hoped that the government will immediately make legal regulations that specifically prohibit the distribution of share in jar products and should conduct regular checks on business actors and conduct socialization to the public so that their rights as users or consumers of skincare cosmetics are not harmed.
- d. As Muslims, in conducting buying and selling transactions as a form of muamalah as a necessity of life, they should avoid buying and selling that contains an element of uncertainty, because it allows losses to arise.



## REFERENCES

- Azizah, I. N., Febriadi, S. R., & Hidayat, Y. R. (2021). Tinjauan Fiqh Muamalah Terhadap Jual Beli Skincare Dengan Sistem Share in Jar. *Prosiding Hukum Ekonomi Syariah*, 498–501.  
[http://karyailmiah.unisba.ac.id/index.php/hukum\\_ekonomi\\_syariah/article/view/31007](http://karyailmiah.unisba.ac.id/index.php/hukum_ekonomi_syariah/article/view/31007)
- Cnnindonesia.com. (2021). *MUI Bahas Rambu-rambu Kripto, Belum Ada Fatwa Haram*. Ramadhan Rizki Saputra. <https://www.cnnindonesia.com/ekonomi/20211028121036-92-713557/mui-bahas-rambu-rambu-kripto-belum-ada-fatwa-haram>
- Dai, F. R. F., Kasim, R., & Martam, N. K. (2019). Perlindungan Hukum Bagi Konsumen Terhadap Peredaran Kosmetik Ilegal. ... (*Seminar Nasional Teknologi ...*, 2019(SemanTECH), 316–331.  
<http://jurnal.poligon.ac.id/index.php/semantech/article/view/498>
- Dita Dwi Lestar. (2020). Pandangan Hukum Islam Atas Penjualan Kosmetik Dengan Sistem Share in Jar Di Toko. *Skripsi*, 1–81.
- Harun. (2017). *Fiqh muamalah*. Muhammadiyah University Press.
- Intan Puspita Sari. (2020). *KOSMETIKA SHARE IN JAR YANG TIDAK Disusun untuk memperoleh gelar Sarjana Hukum Oleh*.
- Kumparan.com. (2019). *BPOM Medan Musnahkan 632 Produk Ilegal Senilai Rp 1,1 Miliar*. Nur Khafifah. <https://kumparan.com/kumparannews/bpom-medan-musnahkan-632-produk-ilegal-senilai-rp-1-1-miliar-1sTxo6v4D3x/full>
- Nafida Ika Apriliya. (2021). *PERAN BPOM ATAS PEREDARAN KOSMETIK DALAM BENTUK SHARE IN JAR MENURUT HUKUM POSITIF INDONESIA*. 193, 3674–3687.
- parapua.co. (2021). *Risiko Beli Produk Skincare Viral di TikTok dalam Bentuk Share In Jar*. Ratu Monica. <https://www.parapuan.co/read/532954682/risiko-beli-produk-skincare-viral-di-tiktok-dalam-bentuk-share-in-jar?page=3>
- Rani, Ni Nyoman, and I. M. M. Y. (2021). *Penjualan Produk Kosmetik Dalam Kemasan Kontainer ( Share in Jar )* □. 1–17.
- Suara.com. (2019). *Lagi Ngetren Make-up Share in Jar, Ini Risiko yang Harus Diwaspadai*. News. <https://www.suara.com/lifestyle/2019/03/02/181500/lagi-ngetren-make-up-share-in-jar-ini-risiko-yang-harus-diwaspadai>
- Theda, A. M., Sopyan, Y., & Dewi, N. M. (2021). Perlindungan Hukum Terhadap Pemegang Hak Atas Merek Skin Care Skin1004 atas Penjualan Produk Kemasan (Share In Jar). In *JOURNAL of LEGAL RESEARCH* (Vol. 2, Issue 3).  
<https://doi.org/10.15408/jlr.v2i3.18650>
- UU RI No. 20 Thn. (2016). *UU RI No. 20 Thn 2016 Tnt Merek dan Indikasi Geografis. 1*.  
[https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.dpr.go.id/dokjdih/document/uu/1684.pdf&ved=2ahUKEwi3xqnrybvxAhWRX30KHXftChUQFjADegQICBAC&usq=AOvVaw0-PVyPOkjjQp\\_Tw27Jb3BI](https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.dpr.go.id/dokjdih/document/uu/1684.pdf&ved=2ahUKEwi3xqnrybvxAhWRX30KHXftChUQFjADegQICBAC&usq=AOvVaw0-PVyPOkjjQp_Tw27Jb3BI)

Wahyuningtyas, A., Islam, U., Sunan, N., Hukum, J., Islam, P., Studi, P., & Ekonomi, H.  
(2021). *Analisis Sad Al- Dhari ' Ah Dan Undang-Undang No . 8 Tahun 1999 Terhadap  
Jual Beli Skincare Share in Jar Di Online Shop @ Share \_ Skincarekediri. 8.*

## **Employment Vulnerability Amid Covid-19: Evidence from Metropolitan Cities in Indonesia**

**Ariska Nurfajar Rini<sup>1</sup>, Mayangita Kirana<sup>2</sup>, Tri Wahyu Rejeginingsih<sup>3</sup>**

<sup>1</sup>Universitas Diponegoro  
[ariskanurfajarrini@lecturer.undip.ac.id](mailto:ariskanurfajarrini@lecturer.undip.ac.id)

<sup>2</sup>Universitas Diponegoro  
[mayanggitakirana@lecturer.undip.ac.id](mailto:mayanggitakirana@lecturer.undip.ac.id)

<sup>3</sup>Universitas Diponegoro  
[triwahyu@lecturer.undip.ac.id](mailto:triwahyu@lecturer.undip.ac.id)

### **Abstract**

Jakarta, Bogor, Depok, Tangerang and Bekasi (Jabodetabek) are metropolitan cities in Indonesia and they provide immense opportunities for migrants and workers to build up their careers and fortune. However, pandemic Covid-19 change their life as a worker in these metropolitan areas. In this study, we construct ‘vulnerable’ only for vulnerable towards layoff during pandemic and use different vulnerability indicators to capture the risks or vulnerabilities related to employment in the urban labor market during covid-19 health crisis. Utilize *Survey Angkatan Kerja Nasional* (Sakernas) year 2020 in city level, this study identifies the employment vulnerability and the effect of social economy condition on each employee amid Covid-19 pandemic in Jabodetabek area. The study uses multiple regression analysis in four selected sectors; accommodation, transportation, retail, and manufactures. The highest contribution to vulnerable workers comes from Job Positions. It implies that in blue-collar workers, craft workers, and service workers have larger likelihood to be laid off during pandemic. Transportation sector is the biggest contributor to vulnerable workers in availability to working from home. More importantly, gender still one of the main factors to determine the multidimension vulnerability index. Besides, age and education level still significantly to affect employment vulnerability in four sectors.



## References:

- Bagus P, A., N, A., Fathin, A., Ranggajati, A., W, A. D., S, D. R., Wijayanti, R., & W., Y. M. (2020). Melindungi Pekerja Rentan di Masa (dan Pasca) Pandemi Covid-19. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Bazillier, R., Boboc, C., & Calavrezo, O. (2014). *Employment vulnerability in Europe: Is there a migration effect?* 33, 0–30. [www.univ-orleans.fr/leo/](http://www.univ-orleans.fr/leo/)
- Chetty, R., John Friedman, N., Hendren, N., & Stepner, M. (2020). How Did Covid-19 and Stabilization Policies Affect Spending and Employment? a New Real-Time Economic Tracker Based on Private Sector Data. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9).
- Forsythe, E., Kahn, L. B., Lange, F., & Wiczer, D. G. (2020). Evidence from vacancy postings and UI claims. *NBER Working Paper*, 27061 (April 2020), 1–16. <http://www.nber.org/papers/w27061>
- International Labour Organization (ILO). (2020a). ILO Monitor : COVID-19 and the world of work . Sixth edition. *Part I . Latest Labour Market Developments : Continuing Workplace Closures , Working-Hour Losses and Decreases in Labour Income*, 1–25.
- International Labour Organization (ILO). (2020b). *Program Pekerjaan Layak Nasional (DWCP) untuk Indonesia 2020-2025*.
- Kong, E., & Prinz, D. (2020). Disentangling policy effects using proxy data: Which shutdown policies affected unemployment during the COVID-19 pandemic? *Journal of Public Economics*, 189, 104257. <https://doi.org/10.1016/j.jpubeco.2020.104257>
- Kumar, N. P., & Srivastava, A. (2021). Measuring the Employment Vulnerability Among Female Workers in Uttar Pradesh. *Indian Journal of Human Development*, 15(2), 307–322. <https://doi.org/10.1177/09737030211040842>
- Monastiriotis, V., & Laliotis, I. (2019). *Labour Market Vulnerability and Labour Market Outcomes during the Economic Upswing*. <https://op.europa.eu/en/publication-detail/-/publication/5a705dc4-3299-11ea-ba6e-01aa75ed71a1>
- Rahman, M. A., Kusuma, A. Z. D., & Arfyanto, H. (2020). Employment Situations of Economic Sectors Impacted By the Covid-19 Pandemic. *SMERU Issue Brief*, 1, 1–4. [http://smeru.or.id/sites/default/files/publication/ib01\\_naker\\_en.pdf](http://smeru.or.id/sites/default/files/publication/ib01_naker_en.pdf)
- Yang, D., Yue, Q., & Fang, C. (2014). Labor market vulnerability in Urban China. *Chinese Research Perspectives on Population and Labor*, 1, 99–117. [https://doi.org/10.1163/9789004273184\\_008](https://doi.org/10.1163/9789004273184_008)

## **Population Dynamics and Economic Growth in Indonesia**

**Banatul Hayati <sup>1</sup>, Edy Yusuf Agung Gunanto <sup>2</sup>, Achma Hendra Setyawan <sup>3</sup>**

<sup>1</sup>Economics and Business Faculty, Diponegoro University

banatulhayati@lecturer.undip.ac.id

<sup>2</sup>Economics and Business Faculty, Diponegoro University

achmahendrasetiawan@lecturer.undip.ac.id

<sup>3</sup>Economics and Business Faculty, Diponegoro University

edyyusufag@lecturer.undip.ac.id

### **ABSTRACT**

*Indonesia's population growth rate has a declining trend. The Data from interim population census on 2015 show that the largest population decline occurred during 1990 to 2015, population growth reached 1.43 percent. Meanwhile, economic growth during this period fluctuated but was relatively stable, ranging from 3 to 6 percent, except for the 1998-1999 monetary crisis period. Besides, process transition from high fertility and mortality to low fertility and mortality rates undertook rapidly. There is no consensus and inconsistent findings on how population growth affect economic growth. Based on production function approach this research examines the effect of Indonesian dynamic population and the other factor of production such as capital formation, net export, and human capital to Indonesian economic growth during 1991-2015. The data used from World Bank Development Indicator and using Error Correction Model to analyze data. This result show negative effect of increase in fertility and positive effect of decrease in mortality to economic growth in the short run and long run period. In the short run and long run, foreign direct investment, net export, and primary school enrollment indicate positive effect on economic growth. These findings confirm that high economic growth in Indonesia during 1991-2015 contributed both of economic variable and Indonesian dynamic population.*

*Keyword : Economic growth, population dynamic, production function, error correction model*

## References

- Bloom, D. E., Canning, D., & Malaney, P. N. (1999). Demographic Change and Economic Growth in Asia. Center for International Development Working Paper No. 15. Harvard University, Cambridge, MA.
- Bloom, D. E., Canning, D., & Malaney, P. N. (2000). Population Dynamics and Economic Growth in Asia. *Population and Development Review*, 26, 257-290.
- Bloom, D. E., & Williamson, J. G. (1998). Demographic Transitions and Economic Miracles in Emerging Asia. *The World Bank Economic Review*, 12(3), 419-455.
- Bloom, D. E., & Finle, E. J. (2008). Demographic Change and Economic Growth in Asia. *PGDA Working Paper no 41*.
- Golley, J & Wei,Z.,A.,(2015) .Population Dynamics and Economic Growth in China .*China Economic Review*,35,15-
- Kelley, A. C., & Schmidt, R. M. (1995). Aggregate Population and Economic Growth Correlations: The Role of the Components of Demographic Change. *Demography*, 32(4), 543-555.
- Mankiw, N.,G., (2009). *Macroeconomics, Fifth Edition*, Worth publisher: New york.
- Wardhana, A. Kharisma,B, & Noven, S.A.,(2020).Population Dynamic and Economic Growth in Indonesia.*Economic Study Buletin*
- Wilson, R.,(2013) Populatio Dynamic and Economic Growth. *journal of Economic and Business*
- Sade, T.,Akananni,P.,& Idowu, S.,(2013). Populatio Dynamic and Economic Growth in Sub Saharan Africa. *Journal of Economic and Suitanable Development vol.4,No.13*
- Song, Sijia, "Demographic Changes and Economic Growth: Empirical Evidence from Asia" (2013). Honors Projects. Paper 121.  
[http://digitalcommons.iwu.edu/econ\\_honproj/121](http://digitalcommons.iwu.edu/econ_honproj/121)
- Tung SL.,(1984) . An Econometric analysis of the effect of population change n economic growth: a study of Taiwan. *PMID*
- Zhang, S.&popul, C.J.,(1993) .The Effect of Population Growth in China in the course of economic Growth. *PMID*
- Todaro,M. & Smith,S.C.,(2009), *Economic Development. Tenth edition* .Pearson Addison Wesley Press.

## **LITERATURE REVIEW THE EFFECT OF SHARIA FINANCING, CONVENTIONAL FINANCING, PRICE AND QUALITY OF SERVICES ON PURCHASE DECISIONS AT SALAM RI BUILDINGS STORE, KARTASURA DISTRICT, SUKOHARJO REGENCY**

**Afa Muhammad Yusuf<sup>1</sup>, Agung Riyardi<sup>2</sup>, Azhar Alam<sup>3</sup>, Angga Syahputra**

<sup>1</sup>Faculty of Economics and Business, University of Muhammadiyah Surakarta

<sup>1</sup>[Afamuhammad3@gmail.com](mailto:Afamuhammad3@gmail.com)

<sup>2</sup>Faculty of Economics and Business, University of Muhammadiyah Surakarta

<sup>2</sup>[agungriya@yahoo.com](mailto:agungriya@yahoo.com)

<sup>3</sup>Faculty of Sharia Economic Law, University of Muhammadiyah Surakarta

<sup>3</sup>[aa123@ums.ac.id](mailto:aa123@ums.ac.id)

**ABSTRACT** - The purpose of this study was to find out whether there was a positive and significant effect of Islamic financing, conventional financing, price and service quality simultaneously on purchasing decisions at the Bangunan Salam RI Store, Kartasura District, Sukoharjo Regency and to find out whether there was a positive and significant influence on Islamic financing, financing conventional method, price and quality of service partially on purchasing decisions at the Bangunan Salam RI Store, Kartasura District, Sukoharjo Regency. This research uses quantitative methods and Study Literature. The population is all consumers who have made purchases at the Building Salam RI Store, Kartasura District, Sukoharjo Regency as many as 35 people while the sample in this study was 32 people. The data analysis technique used is multiple regression analysis with SPSS 21. The prerequisite test uses the normality test, linearity test, and multicollinearity test. Based on the results of the research, the Islamic financing variable has a positive and significant influence on purchasing decisions. Conventional financing variables have a positive and significant influence on purchasing decisions. The price variable has a negative and significant effect on purchasing decisions. The service quality variable has a positive and significant influence on purchasing decisions. Meanwhile, the variables of Islamic financing, conventional financing, price and service quality together have a significant effect on purchasing decisions.

**Keywords:** Islamic Financing, Conventional Financing, Price and Service Quality, Purchase Decision.

**ABSTRAK** - Tujuan penelitian ini untuk mengetahui apakah ada pengaruh yang positif dan signifikan pembiayaan syariah, pembiayaan konvensional, harga dan kualitas layanan secara simultan terhadap keputusan pembelian pada Toko Bangunan Salam RI Kecamatan Kartasura Kabupaten Sukoharjo dan untuk mengetahui apakah ada pengaruh yang positif dan signifikan pembiayaan syariah, pembiayaan konvensional, harga dan kualitas layanan secara parsial terhadap keputusan pembelian pada Toko Bangunan Salam RI Kecamatan Kartasura Kabupaten Sukoharjo. Penelitian ini menggunakan metode kuantitatif dan studi literature. Populasi adalah seluruh konsumen yang pernah melakukan pembelian pada Toko Bangunan Salam RI Kecamatan Kartasura Kabupaten Sukoharjo sebanyak 35 orang sedangkan sampel dalam penelitian ini sebanyak 32 orang. Teknik analisis data yang digunakan adalah analisis regresi ganda dengan SPSS 21. Uji prasyarat menggunakan uji normalitas, uji linearitas, dan uji multikolinieritas.

*Berdasarkan hasil penelitian variabel pembiayaan syariah mempunyai pengaruh positif dan signifikan terhadap keputusan pembelian. Variabel pembiayaan konvensional mempunyai pengaruh positif dan signifikan terhadap keputusan pembelian. Variabel harga mempunyai pengaruh negatif dan signifikan terhadap keputusan pembelian. Variabel kualitas layanan mempunyai pengaruh positif dan signifikan terhadap keputusan pembelian. Sedangkan secara bersama-sama variabel pembiayaan syariah, pembiayaan konvensional, harga dan kualitas layanan berpengaruh signifikan terhadap keputusan pembelian.*

**Kata Kunci:** *Pembiayaan Syariah, Pembiayaan Konvensional, Harga Dan Kualitas Layanan, Keputusan Pembelian.*

## INTRODUCTION

Economy is activity economy in a country that does not can miss from life Public especially sector effort. UMKM (Micro, Small and Medium Enterprises) is one of the sector economy that holds very big role in advance and improve Indonesian economy. out of necessity or something goods frequently used tree daily or already Becomes habit and start Becomes obligation in the needs could help significant in restore Indonesian economy. One of them is shop buildings which are SMEs that help and improve Indonesia's economy is experiencing impact big to income because happening plague *covid - 19*. According to Rosita (2020), MSMEs are: type the most effort caught impact from plague *Covid-19*. Income from shop building caused because with along growth residents, and happened accidental damage or on purpose whichever is getting big needs will building for to do improvement house nor building will along increase Request to ingredient building that. Government To do policy policy in handle plague *covid -19* with give limitations in activity Public for reduce deployment plague *covid- 19*, resulted in drop income to shop building that.

Working capital make one problem from company shop building, because need big funds and goods to be sold have high capital. Amount necessary preparations fulfilled more before like land, development shop, development warehouse and shelves rack arrangement for items to be for sale. Business capital financing according to Nugraha ( Yolla and Vicky, 2022) are the funds used for start open capital business can in the form of money, goods, places and so on, which can be add riches in this thing for operate activity effort. Because of that financing is one Street go out for eradicate or complete problem for capital, though with a lot institutions/ companies that give service that. Financing there is two different institutions that is sharia institutions and institutions conventional. If financing from Islamic institutions use system for results at each transactions / contracts, applying anti- usury and contracts / agreements based on on each other pleasure. Whereas if from institution conventional use system interest and agreement based decision from party institution financing that.

Then As for the price according to Muhammad and Nurdahlana (2022) "price" is something handed over in exchange for get something goods or service and rate very influential price in economy shop building, because with increase price price material shop building could result in drop Request to something goods it and will look for other stuff with more price inexpensive from shop building competitor or with method outsmart it with buy good price and quality product below which has alternative and the same function. With price goods in shop rising buildings give influence to quality service provided to consumer when at one conditions on policy shop building, according to Kotler and Keller "Quality service must started from needs customer and end with satisfaction customer as well as perception positive to quality service" (Tjiptono, 2016: 125). Purchase is factor determinant where increase economy from something company because the

more many purchase to something product the more prosperity also increases economy company that. Purchase decisions made by customers on base weighing weighing from many factor that happened good from aspect quality, quantity, price, effectiveness , and others.

Because the shop building still new and held by children child still young study in the business world where still not yet existence awareness owner shop that Islamic financing affects purchase consumer, financing conventional influence purchase consumer, price influence purchase consumer to something goods, quality services provided company by different, and interest consumer to something different stuff different.

So that this research was conducted for test is sharia financing, financing conventional, price and quality service could influence significant to decision shop purchases building greetings to the Republic of Indonesia in the district Kartasura districts the current Sukoharjo this is indonesia currently experience slump economy, soaring debt, and high number deployment plague Covid - 19.

## **LITERATURE REVIEW**

### ***Islamic Business Ethics***

According to Mustopa (2019), business ethics is a set of norms that are focused on aqidah and morals taken from the Qur'an and Sunnah which are used as benchmarks in business activities and matters related to them.

According to Mustopa (2019), the business scope includes several activities, namely: production, distribution, consumption, trade in goods and services, and impacts in the short and long term.

According to Mustopa (2019) the principles of business activities include several, namely: At-tauhid, Al-amanah, As-sidiq (honesty), Al-is (justice), Al-ibadah (permissibility), At-ta'awun (please help), Al-maslahah, At-tardi (mutual willingness), and Al-akhla al-karimah (politeness).

According to Mustopa (2019) the values and benchmarks of business ethics include several, namely: there must be no element of gharar (speculation), there must be no Jahalah element (vagueness) and must be carried out transparently, there must be no maisir element (gambling element), no there may be elements of tyranny (oppression), must not contain elements of usury, there must be no elements of ad-darar (elements that are harmful or detrimental), there must be no elements of cheating and fraud, must not result in ta'assuf (abuse of rights) in the short term or in the long term. In the long term, there should be no elements of monopoly and conglomeration, the object of business is not illegal, and there should be no neglect and waste of wealth.

### ***Financing***

According to Ramdani , Khairina and Antin (2022) Financing is Provision of funds or all related bills with funding, based on appropriate contract in agreement and have approved Among second split which party is the obligation the party receiving the capital for refund or borrowed bills the in accordance with period available time in agreement. Financing issued with through two type institution finance, namely institution finance conventional and institutional Islamic finance. The system contained in each institution the have difference in management, such as institution finance conventional apply system interest and Islamic financial institutions apply system for result, where most people Islam in Indonesia is more choose use institution Islamic finance because in the teachings people Islam there is ban use usury and interest is one form dri usury that. As for the product venture capital financing from institution Islamic finance and financial institutions conventional, namely:



## ***Sharia Financing***

### ***1. Contract Mudharabah***

According to Saeed (Sa'diyah and Arifin, 2013) Mudharabah is a contract between two parties where one party called rab al-mal (owner of capital) entrusts money to a second party, called mudharib (capital manager), for the purpose of running a trading business. According to Sa'diyah and Arifin (2013) the legal basis for the mudharabah contract is the Koran. The pillars and sharia of the mudharabah contract according to Sa'diyah and Arifin (2013) are: Ijab and Qabul, two parties who collaborate, capital, business and profit ratio.

## ***Financing Conventional***

### ***1. Credit***

According to Risa (in Erwin, Ade and Nensi, 2022) the definition of credit according to the banking Law No. 10 of 1998 concerning Banking is a provider of funds or claims that can be equated with it based on agreements and loan agreements between banks and other parties that require the borrower to pay off the debt / in installments on a predetermined period with an additional amount of interest.

According to Ismail (in Diana, 2022) credit in a general sense is a belief in the ability of the debtor (credit recipient) to pay a certain amount of money in the future. From several definitions, credit has several elements that allow credit to occur. The elements of credit according to Darmawi (2018) are as follows: trust, agreement, time period, risk and reward.

## ***Price***

According to Buchari (2014:169) defines price as "price is the value of an item expressed in money".

According to Suparyanto and Rosad (2015) price is the amount of something that has value in general in the form of money that must be sacrificed to get a product.

According to Linda and Leonard (2022) Pricing aims to determine a value attached to a product or service.

Pricing is very necessary in producing a product, so that the product can be in demand by the public and the price greatly influences consumers in purchasing a product (Sri and Apriani, 2017).

According to Tjiptono (2015: 291) the purpose of pricing is grouped into several parts, namely: profit-oriented goals, volume-oriented, image-oriented and price stabilization oriented.

According to Private and Irawan (in Makhfudin, 2016) explained that in reality the price level that occurs is influenced by several factors, namely: economic conditions, supply and demand, elasticity of demand, competition, costs, company objectives and government supervision.

## ***Service quality***

According to Kotler & Keller (in Tjiptono and Chandra, 2016) stated that service quality must start from customer needs and end with customer satisfaction and positive perceptions of service quality.

"Service quality can be interpreted as a measure of how good the level of service provided is in accordance with customer expectations." (Lewis and Booms in Tjiptono and Chandra, 2016: 125).

## ***Purchase Decision***

Kotler and Armstrong (2016) explain that purchasing decisions are part of consumer behavior such as how individuals, groups and organizations choose, buy, use and how goods, services, ideas and experiences to find their needs and desires.

According to Tjiptono and Diana (2016), the purchase decision is a pre-purchase stage that includes all consumer activities that occur before the purchase and use of the product occurs.

According to Kotler and Armstrong, (2017) purchasing decisions are a stage in the decision-making process, namely when consumers actually buy the product.

According to Indah, Lisbeth and Sjendry (2022) Decision making is an individual activity that is directly involved in obtaining and using goods offered by producers.

According to Philip Kotler and Armstrong (2016:176) the decision-making process is a problem-adjusting approach which consists of five stages that consumers do, the five stages are problem recognition, information search, alternative evaluation, making alternatives, making decisions, and postoperative behavior. purchase.

According to Kotler and Armstrong (2016: 188), purchasing decisions have the following dimensions: product choice, brand choice, dealer choice, purchase time, purchase amount and payment method.

### ***Literature Review***

1. Research conducted by Rahmad Fadly Siregar (2019) with title “The Influence of Price, Trust and Quality Information Against Purchase Decisions on the BUKALAPAK Site for Students Faculty of Economics and Business, University of North Sumatra”. Method analysis used is method analysis descriptive and method analysis multiple linear regression with perform t test (partial), f test (simultaneous) and coefficient determinant ( $R^2$ ). Research results showing that by simultaneously price, trust and quality information take effect significant to decision purchases on the BUKALAPAK site for students Faculty of Economics and Business, University of North Sumatra. by partial, variable price and trust take effect positive and not significant to decision purchases on the BUKALAPAK site for students Faculty of Economics and Business, University of North Sumatra. Quality information take effect positive and significant to decision purchases on the BUKALAPAK site for students Faculty of Economics and Business, University of North Sumatra.
2. Research conducted by Rizki Nurmindani (2019) with title "The Influence of Price Level and Service Quality on Car Financing Decisions at Al Ijarah Indonesia Finance (ALIF) Surabaya Branch". Method research used in this research is approach descriptive quantitative with data analysis using validity test, reliability test, assumption test classic, regression test multiple, t test (partial) and f test (simultaneous). Research results showing that the validity and reliability test declared valid and reliable, to test assumptions classical data is normally distributed, no occur multicholenearity and heteroscedasticity. by simultaneous (F test)  $10.348 > 3.11$  and the value of Sig.  $0.00 < 0.05$ , which means variable level price and quality service by together take effect to decision financing car, by partial (T test) variable level price shows  $3,574 > 1,990$ , meaning level price take effect positive and significant to decision financing car, however variable quality service shows  $1.145 < 1.990$ , it means quality service no take effect to decision financing. Of the two variables, the most dominant is variable price with score constant  $0.0448/44.8\%$ . Results show level price or low margin Becomes determinant decision customer in To do financing car and aside quality services offered by Al Ijarah Finance Surabaya Branch.
3. Research conducted by Ruth Yanti Djakaria (2017) with title “Quality Influence Service, Price, Promotion and Atmosphere Shop To Asia Fashion Purchasing Decision Making ”. Method in This research uses method analysis descriptive and analysis regression multiple with data analysis using validity test, reliability test, assumption test classic, t-test (partial), f-test



(simultaneous) and coefficient. test determinant ( $R^2$ ). Research results showing that quality service, price, promotion, and atmosphere shop take effect to taking decision purchases and these variables by damn influential to taking decision purchase. Based on results coefficient determination quality service, price, promotion and atmosphere shop explain 90% of variation taking decision purchase and 10% variation taking decision purchase explained other variables that are not researched in this research.

Difference in study previously with study I is in the variable sharia financing and financing conventional and method in analyze data using analysis with validity test, reliability test, multiple linear regression, t test (partial), f test (simultaneous), correlation test multiple with use formula r. Where is this research for test how much correlation and effect positive good individually and by together Among independent variable with variable dependent.

## METHODS

This type of research is associative quantitative research. According to Sugiyono (2012) Associative Research is research that aims to determine the relationship between two or more variables and a literature study that is useful for obtaining a series of descriptions of the factors that influence the results of the variables studied. Steps in taking a literature study using methods from online journals sourced from Google Scholar. The data obtained from the questionnaire which was distributed to the customers of the Salam RI Building Shop, Kartasura District, Sukoharjo Regency were then processed using the SPSS application. According to Sugiyono (2012:142) "Questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer".

## RESULTS AND DISCUSSION

### 1. *Results of multiple linear regression analysis*

According to Sugiyono (2012) multiple linear regression is carried out to predict how the condition (up and down) of the dependent variable will be, if two or more independent variables as predictor factors are manipulated (increases in value).

$$Y = 3,107 + 0,159X_1 + 0,756X_2 - 0,281X_3 + 0,159X_4$$

- A constant of 3.107 with positive parameters indicates a constant + perception of Islamic financing, conventional financing, price and service quality, the purchasing decision will increase by 3.107.
- The regression coefficient for Islamic financing shows a positive coefficient of 0.159. Thus, it can be seen that the larger the Islamic financing, the higher the purchasing decision, and vice versa, the smaller the Islamic financing, the lower the purchasing decision.
- The regression coefficient for conventional financing shows a positive coefficient of 0.756. Thus, it can be seen that the larger the conventional financing, the higher the purchase decision, and vice versa if the conventional financing is smaller, it reduces the purchasing decision.
- The price regression coefficient shows a positive coefficient of -0.281. Thus, it can be seen that the higher the price, the lower the purchasing decision, and vice versa, the smaller the price, the higher the purchasing decision.
- The regression coefficient of service quality shows a positive coefficient of 0.159. Thus, it can be seen that the greater the quality of service, the greater the purchase decision, and vice versa if the quality of the service decreases, it decreases the purchasing decision.

### 2. *T Test*

According to Ghazali (2018: 98), the t statistical test basically shows how far the influence of one explanatory or independent variable individually in explaining the variation of the dependent variable.

**Table 1. T Test**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.107	3.568		.871	.392
P_Syariah	.159	.059	.272	2.682	.012
P_Konvensional	.756	.097	.780	7.800	.000
Harga	-.281	.101	-.279	-2.779	.010
K_Layanan	.159	.074	.218	2.141	.041

**Source:** secondary data (processed)

- The Islamic financing variable is known to have  $t_{\text{count}}$  (2.682) greater than  $t_{\text{table}}$  (2,000) or it can be seen from the significance value of  $0.012 \leq 0.05$ . Therefore,  $H_0$  is rejected, meaning that Islamic financing has a positive and significant influence on purchasing decisions.
- The conventional financing variable is known to have  $t_{\text{count}}$  (7,800) greater than  $t_{\text{table}}$  (2,000) or it can be seen from the significance value of  $0.000 \leq 0.05$ . Therefore,  $H_0$  is rejected, meaning that conventional financing has a positive and significant influence on purchasing decisions.
- The price variable is known to have  $t_{\text{count}}$  (-2.779) greater than  $t_{\text{table}}$  (-2,000) or it can be seen from the significance value of  $0.010 \leq 0.05$ . Therefore,  $H_0$  is rejected, meaning that the price has a negative and significant influence on purchasing decisions.
- The service quality variable is known to have  $t_{\text{count}}$  (2.141) greater than  $t_{\text{table}}$  (2,000) or it can be seen from the significance value of  $0.041 \leq 0.05$ . Therefore,  $H_0$  is rejected, meaning that service quality has a positive and significant influence on purchasing decisions.

### 3. F Test

According to Ghazali (2018: 98) the F statistical test basically shows whether all independent or independent variables included in the model have a joint influence on the dependent or dependent variable.

**Table 2. F Test**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.005	4	13.751	20.385	.000 <sup>a</sup>
	Residual	18.214	27	.675		
	Total	73.219	31			

**Source:** secondary data (processed)

The results prove that  $F_{\text{count}} > F_{\text{table}}$  ( $20.385 > 3.23$ ) with a value of sig  $0.00 < (0.05)$ , then  $H_0$  is rejected, meaning that the variables of Islamic financing, conventional financing, price and service quality together affect the decision. purchase. So the model used is fit.

#### 4. $R^2$ Test

The coefficient of determination ( $R^2$ ) is used to measure how much the independent variable's ability to explain the dependent variable is.

**Table 2. R Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.867 <sup>a</sup>	.751	.714	.82133

**Source:** secondary data (processed)

The calculation results for the  $R^2$  value obtained in the multiple regression analysis obtained the coefficient of determination with an adjusted- $R^2$  of 0.714. This means that 71.4% of the variation in purchasing decision variables can be explained by the variables of Islamic financing, conventional financing, price and service quality, while the remaining 21.6% is explained by other factors outside the model studied.

### Discussion

#### *The Effect of Islamic Financing on Purchase Decisions*

Sharia financing is one of the important variables in increasing capital which is very important for companies to increase the number of products and services. And also as a tool to influence consumers in purchasing activities and using services in accordance with their wishes and needs, with Islamic financing can keep consumers from usury which results in harm and harm to Muslims. Based on the results of this study, it has similarities and can be strengthened with other studies such as research (Arie & Fitry, 2014) proving that Islamic financing has a positive and significant influence on purchasing decisions, where high consumer purchasing decisions can be formed or obtained from Islamic financing. and shows high sharia financing can improve consumer purchasing decisions to make purchases. This shows that Islamic financing has an effect on consumer purchasing decisions, this statement can be supported based on the results of relevant previous studies, namely: (Duduh, 2018), (Rizki, 2019), (Dikky, 2020).

#### *The Effect of Conventional Financing on Purchase Decisions*

Conventional financing is one of the important variables in increasing capital which is very important for companies to do in increasing the number of products and services. And also as a tool to influence consumers in purchasing and using services according to their wants and needs,

conventional financing can protect consumers from lack of capital. Based on the results of this study, it has similarities and can be strengthened with other studies such as research (Rizki & Adi, 2015) proving that conventional financing has a positive and significant influence on purchasing decisions, where high consumer purchasing decisions can be formed or obtained from conventional financing. good and shows high conventional financing can improve consumer purchasing decisions to make purchases. This statement can be supported based on the results of relevant previous studies, namely (Desy & Bertha, 2017), (Vargo & Hendri, 2020), (Cahyo, 2021), (Hengki, 2017).

### ***The Effect of Price on Purchase Decision***

Price is one of the important variables in determining purchasing decisions, where prices can influence consumers in making decisions to buy a product. The prices offered by the company have different prices for some consumers. The price offered is a consideration for potential consumers before making a purchase decision. Based on the results of this study, they have similarities and can be strengthened with other studies such as in research (Ruth, 2017), the results of the research that tried to show that the price variable had a significant negative effect on purchasing decisions. Price has an effect on purchasing decisions, this statement can be supported based on the results of previous relevant studies, including (Cindy, Johny & Lucky, 2021), (Lubis, 2015), (Faroh, 2017), (Davin & Metta, 2017).

### ***The Effect of Service Quality on Purchase Decisions***

Service quality is one of the important variables in determining purchasing decisions, where service quality can influence consumers in making decisions to buy a product. The quality of service offered by the company has different levels for some consumers. The quality of the services offered is a consideration for potential consumers before making a purchase decision. Based on the results of this study, they have similarities and can be strengthened with other studies such as in research (Apriwati, 2018), The results of the research that tried to show that the Service Quality Variable had a significant positive influence on purchasing decisions. Service quality affects purchasing decisions, this statement can be supported based on the results of previous relevant studies, including (Yumi & Joyce & Agus, 2017), (Meilina & Sonata & Dewi, 2018), (Gede & Gusti, 2020), (Dani & Muhammad, 2019).

## **Conclusions and Sugession**

### ***Conclusion***

Based on the results that have been described in the analysis and discussion, the author can provide a hypothetical conclusion for research namely as follows:

1. Islamic financing variable has a positive and significant influence on purchasing decisions. The higher and better the Islamic financing taken by the company, the higher the available products, the higher the consumer's purchase decision on a product.
2. Conventional financing variable has a positive and significant influence on purchasing decisions. The higher and better the conventional financing taken by the company, the higher the product available, the higher the consumer's purchase decision on a product.
3. Price variable has a positive and significant effect on purchasing decisions. The more good perception price by consumer so will impact to decision purchase on a products and services.

4. Service quality variable has a positive and significant effect on purchasing decisions. The higher and better the perception of Service Quality by consumers so will impact to decision purchase on a products and services.

### ***Suggestion***

As for the suggestions presented writer is For further researchers, it is expected to add other independent variables in order to know and explain what variables affect purchasing decisions then it is very necessary more study carry on for complete variables and other factors that can influence decision purchase. And awareness people Islam for use Islamic financing because it is very good for self-served, good for offspring, and good for environment.

### **REFERENCES**

- Alma, Buchari. (2014). *Marketing Management and Services Marketing*. Bandung: CV Alfabeta.
- Arie & Fitri. (2014). *The Effect of Sharia Mortgage Financing on the House Purchase Decision Process in the City of Cirebon (Survey of Home Purchases by Mortgage at BNI Syariah Cirebon City)* . Edunomic Journal. 2(2): 96-103.
- Ariyono, Linda Dwi & Manafe, Leonard Adrie. (2022). *Determination of Product Selling Price Against Sales Volume on CV. Vylkanido Eternal Partner*. Journal of Business and Entrepreneurship. 3(1): 40-42.
- Batubara, Mustopa Marli. (2019). *"Business Ethics in the Muhammadiyah Tarjih Judgment Association"*. Available: <http://blog.um-palembang.ac.id/mustopamarlibatubara/2019/04/23/333/> On January 7, 2022.
- Boediono, Meilina & Cristian, Sonata & Immanual, Dewi Mustikasari. (2018). *Influence Quality Product and Quality Service on Purchase Decision Consumer Sealantwax* . PERFORMANCE Journal. 3(1).
- Cindy, Johnny & Lucky. (2021). *The Influence of Price on Consumer Purchase Decisions at the Pelita Jaya Shop, Buyungon Amurang*. Productivity Journal. 2(1): 69-72.
- Dikky. (2020). *Dimensions of Consumer Religiosity in Influencing Decisions to Purchase Subsidized Homes Through Sharia Mortgages in Prabumulih City (Case Study of Housing Evidence of Permata Residence Prabumulih)*. UNISRI Thesis.
- Djakaria, RY (2017). *The Influence of Service Quality, Price, Promotion and Store Atmosphere on Asian Fashion Purchase Decision Making*. USD Thesis.
- Duduh. (2018). *The Effect of Murabahah Financing and Profit Margin for Tapak IB Mortgages on Purchase Decisions of BTN Syariah Customers in Bandung Branch*. Al Amwal Journal. 1(1): 58-74.
- Faroh, Wahyu Nurul. (2017). *Analysis of the Effect of Price, Promotion and Service Against Purchase Decisions*. Journal Keatif Scientific Management Study Program University Pamulang . 4(2).
- Fauzi, Rizki Ahmad & Hamidi, Adi. (2015). *Influence Quality Service , Interest Rate, Procedure Credit and Insurance Credit Against Decision Making Credit at PT. Bess Finance Bogor 2 2013-2015*. Journal Bodybuilding . 11(2): 1-12.
- Febriansyah, Erwin; Yulinda, Ade Tiara; and Yuniarti, Nensi. (2022). *Analysis of Factors Affecting Credit Distribution (Study on Conventional Commercial Banks Listed on the*

- Indonesia Stock Exchange Year (2014-2018)*. Scientific Journal of Economics and Business. 10(1): 252
- Ghozali, Imam. (2018). *Multivariate Analysis Application with IBM SPSS 25 Program*. Diponegoro University: Semarang.
- Iskandar, Dani & Nasution, Muhammad Irfan Bahari. (2019). *analysis Influence Trust, Safety and Quality Service Against Purchase Decisions at the Lazada Online Shop (Study The Case of FEB UMSU Students)*. Journal Puskiibi SNK. 1(1): 128-137.
- Joshua, Davin & Padma, Metta. (2017). *Influence Quality Products and Prices Based on Purchase Decisions Consumers*. Journal Entrepreneur and Entrepreneurship. 5(1):1-44.
- Kotler, P., & Armstrong, G. (2016). *Marketing Principles*. Eddie 's i13. Volume 1. Jakarta: Erlangga.
- Kolter, P., & Armstrong, G. (2017). *Principles of Marketing*. Issue 17. London UK: Pearson.
- Lubis, Akrim Ashal. (2015). *Effect of Price and Quality Product Regarding the Decision to Purchase Newspapers at PT. Suara Medan Orbit Daily Green Line*. Journal Scientific Management and Business. 16(2).
- Makhfudin. (2016). *Effect of Price and Service Quality on Repurchase at Mulya Material Stores, Kuwarasan District, Kebumen Regency*. UMP Thesis.
- Malayati, Diana. (2022). *The Influence of Public Knowledge About Usury on Decisions to Use Credit Services for Moneylenders (Case Study in Ciherang Village, Picung District, Pandeglang Regency)*. Thesis of UIN SMH BANTEN.
- Maramis, Beautiful SM; Mananeke, Lisbeth and Loindong, Sjendry SR (2022). *Analysis of the Effect of Brand Image, Service Quality on Purchase Decisions Mediated by Mercke'kolongan Pharmacy Customer Trust*. EMBA Journal. 10(1): 41.
- Meifa, Yolla Triyana & Sanjaya, Vicky F. (2022). *The Influence of Business Capital, Environment and Self Efficacy on Entrepreneurial Interest*. Journal of Islamic Business Management. 3(1): 66.
- Merentek, Yumi Febiola & Lapien, Joyce & Soegoto, Agus Supandi. (2017). *Influence Quality Product, Atmosphere Shop and Quality Service on Purchase Decisions at KFC Bahu Mall Manado*. Journal Emba. 5(3).
- Natalia, Desy & Mawarti, Bertha Reni Pudji. (2017). *Influence Communication Persuasive Sales Card Credit Against the Decision to Use Card BCA Bank Credit*. Journal Administration and Health. 2(2).
- Nur, Muhammad and Nurdahlana. (2022). *The influence of product quality and price on the level of demand for catering services at Hidayah Restu in Meureudu District, Pidie Jaya Regency*. Ecobism Journal. 2(1): 37.
- Nurmindani, Rizki. (2019). *The Influence and Quality of Service on Car Financing Decisions at Al Ijarah IndonesiaFinance (ALIF) Surabaya Branch*. UINSA Thesis.
- Pramono, Cahyo. (2021). *Influence Quality Services, Promotions, and Procedures Credit Regarding the Decision to Use Credit Services House at Bank Mandiri Gombing Branch*. Putra Bangsa University Thesis.
- Raharu, Sri & Simatupang, Apriani. (2017). *Dies Pricing Strategy With the Method of Minimizing Costs and Maximizing Profits*. Office Administration Journal. 5(1): 199-208.
- Saputra, Gede Vishnu & Ardani, Gusti Agung Ketut Sri. (2020). *The Effect of Digital Marketing, Word Of Mouth and Quality Service to the Purchase Decision*. E - Journal Management. 9(7).



- Sa'diyah, Mahmudatus & Arifin, Meuthiya Athifa. (2013). *Mudharabah in Fiqh and Sharia Banking*. Journal of Equilibrium. 1(2): 303-313.
- Shalihah, Apriwati. (2018). *Influence Promotion Sales and Quality Service on Purchase Decisions at Crema coffee*. JOM FISIP Journal. 5(1): 1-15.
- Ramadani; Tambunan, Khairana; and Kurniasih, Antin. (2022). *Effectiveness of the Implementation of Islamic Microfinance through Micro Financing in Business Development and Increasing the Income of MSME Customers (Case Study on Islamic Banks in Medan City)*. Journal of Computer Science, Economics and Management. 2(1): 11-29.
- Rosita, Rahmi. (2020). *THE EFFECT OF THE COVID-19 PANDEMIC ON MSMES IN INDONESIA*. JURNAL LENTERA BISNIS. 9(2): 109.
- Simarmata, Hengki accompanying Parulian. (2017). *Influence Service Quality, Company Image and Loan Interest Rate Against Decision Making Product Credit Micro*. Journal Pure Be aware. 7(1): 16-31.
- Siregar, RF (2019). *The Influence of Price, Trust and Service Quality on Purchase Decisions on the BUKALAPAK Site for Students of the Faculty of Economics and Business*. USU's Thesis.
- Sugiyono. (2012). *Quantitative, Qualitative and R&D Research Methods*. Bandung: Alfabeta.
- Suparyanto & Rosad. (2015). *Marketing Management*. Yogyakarta: In Media.
- Tjiptono. (2015). *Marketing Strategy*. Yogyakarta: CV. Andi Offset.
- Tjiptono, Fandy, & Chandra. (2016). *Service Quality Satisfaction*. Yogyakarta: CV. Andi Offset.
- Tjiptono, F., & Diana, A. (2016). *Brand Management & Strategy*. Yogyakarta: CV. Andi Offset.
- Tobing, Vargo Christian L. & Herman, Hendri. (2020). *Analysis Loan Interest Rates and Guarantees Credit Against Decision Making Credit to Financing Companies in Batam City*. Journal Assets. 5(2).

## THE EFFECT OF SUBJECTIVE NORMS AND RIBA KNOWLEDGE INTEREST IN USING CONVENTIONAL E-MONEY

**Adriansyah<sup>1</sup>, Tenny Badina<sup>2</sup>, Muhammad Fakhrudin<sup>3</sup>**

<sup>1</sup>Economics & Business, Sultan Ageng Tirtayasa University

Email : [Adriansyah13d@gmail.com](mailto:Adriansyah13d@gmail.com)

<sup>2</sup>Economics & Business, Sultan Ageng Tirtayasa University

Email : [Tenny.badina@untirta.ac.id](mailto:Tenny.badina@untirta.ac.id)

<sup>3</sup>Economics & Business, Sultan Ageng Tirtayasa University

Email : [Muhamadfakhrudin@untirta.ac.id](mailto:Muhamadfakhrudin@untirta.ac.id)

### ABSTRACT

*This study aims to determine the effect of subjective norms and knowledge of usury on interest in using e-money in students at Sultan Ageng Tirtayasa University. The sampling technique in this research is purposive sampling, this technique is used because not all students can be sampled. The sample in this study amounted to 73 respondents. The data collection method used a Likert scale. The analytical techniques used are validity and reliability tests, normality tests, multicollinearity tests, heteroscedasticity tests, multiple regression analysis, hypothesis testing (t test and f test), and the coefficient test of determination R<sup>2</sup>. By using IBM SPSS statistical software 23. It was found that subjective norms partially affect the interest in using e-money.*

*Keywords: Subjective Norms, Knowledge of Riba, Interests.*

### INTRODUCTION

Advances in information technology that continue to develop until now have opened up conveniences for human survival, as well as changes that occur in people's lifestyles in transactions and payment systems which have shifted from cash payments to non-cash payments with the intention of being more efficient and economical. Prasiti, Mukhlis & Haryono, 2015). The payment system in Indonesia, which was originally made in cash, is now shifting to non-cash payments, this is the influence of technological advances in the payment



system (Permata & Yulfan, 2020). Based on Bank Indonesia regulation number 20/6/PBI/2018, e-money is an instrument issued on the basis of the value of money that is deposited in advance to the issuer, managed by the issuer, then stored in a media server or chip, and is not a deposit as referred to in the Law that regulates banking. Electronic money is defined as money that is used as a means of payment in electronic transactions involving internet networks such as digital price storage (Karnadi & Alwie, 2018).

The current use of e-money can be influenced by several factors such as security and also the influence of the surrounding environment that can affect the use of e-money such as the influence of family, friends, social environment or lecturer recommendations. This includes subjective norms, subjective norms are the tendency of a consumer to pay attention to references from family, friends or friends, superiors, subordinates or an expert (Nugroho, 2018). Ownership of electronic money issuing companies is dominated by foreign ownership, Bank Indonesia noted that there are at least 5 electronic money issuers owned by foreigners with foreign ownership of 49%. According to the senior deputy governor of Bank Indonesia, Destry Damayanti, stating that e-money growth jumped 173% in January 2020, e-money transactions reached IDR 15.8 trillion (US\$1,000,000). 1 billion) in January 2020, this figure is three times the last year's transactions which only reached Rp. 5.8 trillion. Based on data from Bank Indonesia, the top e-wallet applications in Indonesia based on the number of monthly active users from 2017 to 2019, namely, Gojek as the top, then OVO, DANA, LinkAja, and Jenius. ([www.bi.go.id](http://www.bi.go.id)).

Bank Indonesia noted that there were 51 lists of electronic money issuers in Indonesia. However, what is of concern is that as a country with a majority Muslim population, electronic money issuers rarely use sharia principles in their use. This is because electronic money issuers are dominated by conventional banks such as Bank Cimb Niaga, Bank Mega, Bank Nobu and others. This shows that very few companies consider the demand for the halal industrial sector ([www.bi.go.id](http://www.bi.go.id)) with the development of the Indonesian Muslim community increasingly literate with Islamic literacy, marked by the high number of halal culinary, Muslim fashion styles, halal medicines to religious tourism, also the high growth in the use of Islamic financial products as evidenced by data from the OJK which shows Islamic financial assets grew 14.01% (yoy), this indicates that the demand for sharia-based e-money will continue to increase, which then becomes a good opportunity for Islamic electronic money issuer, because of the high market share in Indonesia. ([www.ojk.go.id](http://www.ojk.go.id)) The Indonesian people are now increasingly aware and knowledgeable about usury and the government should begin to develop and regulate e-

money products that are more sharia-compliant. It is based on the fact that e-money-based chips in Indonesia are currently owned by conventional banks and it would be a good idea if Islamic banks design and develop sharia-based e-money (Aji, Berakon & Riza, 2020).

Currently, e-money provider companies are dominated by companies born from conventional banks, so this is contrary to the e-money criteria based on DSN-MUI number 116/DSN-MUI/IX/2017 that funds deposited by customers in the form of balances must be placed in a bank account. Islamic Bank. Dr. Erwandi Tarmizi Lc, MA is of the opinion that the contract used in the balance top-up is a Qardh or loan contract, in which the consumer is the muqrid (lender) and the Gopay operator (Gojek) is the muqtarid (loan recipient), and discounts or The discount that is obtained at the time of top-up is usury in accordance with the rules of fiqh. In line with Adi Warman Karim's opinion regarding regulations from BI regarding e-money, there are no promos and discounts and according to him, discounts or promos should be carried out by a different company, not an E-money provider to avoid the practice of usury in e-money transactions. This study refers to previous research conducted by (Aji, HM, Berakon & Riza, AF, 2020) with subjective norm research variables and using usury knowledge as a moderating variable, so this study makes usury knowledge an independent variable as well as subjective norms , to determine its effect on interest in using e-money.

## **LITERATURE REVIEW**

### ***Subjective Norms***

*Subjective-norm* subjective norms are social influences around individuals regarding a perception, which gives rise to an expectation to perform or not to perform certain behaviors (Ramdhan, 2016). Subjective norms are defined as individual beliefs, which will then be seen by the reference group when performing certain behaviors. Most of the members of his group also do it (Al-Swidi, Huque, Hafeez, and Sharif, 2014). Subjective norms occur due to individual belief in certain references, subjective norm construction is formed due to the influence of people around, as well as assumptions formed from individual to individual so that it influences someone to use a technology, this perception has a subjective nature as attitudes and behavior are also influenced by belief (Anjelina, 2018).

### ***Knowledge of Riba***

Knowledge is something that is the result of what is known which is obtained through the five human senses (Febriyanto, 2016). Based on the Big Indonesian Dictionary (KBBI),

knowledge is defined as, everything that is known, intelligence, he has in the field of engineering, everything that is known regarding the subject (subject). Knowledge is defined as an information consisting of a combination of experience, context, interpretation, and reflection. And can also be defined as a combination of organized ideas, rules and procedures (Harun, Rashid and Hamed, 2015).

Knowledge of usury or in practice is knowledge of usury or interest in practice today is knowledge of Islamic religious teachings that have been embraced by someone (Abdullah & Shaharuddin, 2016). The knowledge of usury is the understanding of the community in interpreting usury in every aspect of life and in this case the knowledge of usury can help the community in avoiding practices that contain elements of usury. The knowledge of usury in this study can also be interpreted as individual understanding (Muslims) in the act of economic transactions in terms of usury (additional) and everything related (Farooq, M. 2017).

### ***Electronic Money (E-money)***

Electronic money is described as the latest instrument according to Neda Popovska-Kamnar in the payment system is defined more broadly, is money that is transferred electronically, but to be able to explain electronic money more complex and precise is a problem, this is because electronic money is a dynamic phenomenon. in a static framework. (Firdaus, 2018). Based on the publication of the International Bank for Settlement (BIS), electronic money is described as a stored-value or prepaid product, meaning the value of money stored on electronic media owned by a person (Hidayati, et al, 2006).

1. Issued on the basic value of money that was deposited in advance to the issuer.
2. Value for money is stored in a media server or chip
3. Used as a means of payment to merchants who are not the issuers of the electronic money.
4. The value of electronic money managed by the issuer is not a deposit as referred to in the law governing banking.

Meanwhile, sharia-based electronic money is electronic money that is in accordance with sharia principles and has been regulated in DSN-MUI No. 116/DSN-MUI/XI/2017. In principle, the electronic money used at this time is conventional (Ribawi) or Non-Sharia, this happens because the contract that occurs between the e-money parties is not clear or in the view of Islam is called gharar, and does not follow the scheme in sharia transactions so that allrights and obligations of the parties involved cannot be known. In addition, there is also interest

generated from placing user funds in conventional banks as partners in providing electronic money services. Thus, using e-money at this time is not permitted except in an emergency and fulfills several indicators such as:

1. Required by law
2. There is no Sharia e-money provider
3. And there is a primary financial risk if you don't use e-money.

If there are transactions in electronic money, then the value of electronic money has the same function as money in general, so that the exchange between the value of cash and electronic money is defined as an exchange or buying and selling of currencies known as Al-sharf (Septiani, et al, 2018).

### ***Interest in Using E-Money***

According to the Big Indonesian Dictionary (KBBI) interest has the meaning of a high inclination towards something. Interest is defined as the tendency of the subject in each individual that encourages interest in a particular field of study or discussion that causes a sense of pleasure when done (Utami, 2017). Davis (1989) in Utomo, (2018) interest is a person's desire to do a certain activity, interest arises because of the desire to do something that can provide positive and fun things.

Interest in using e-money can be interpreted as an individual's intention or tendency to use electronic money or e-money. This tendency can be caused by several factors such as the encouragement of the individual, the factor of social motives, the factor of emotional or feeling encouragement (Tarmidhi, 2019).

## **METHOD**

This type of research is a descriptive quantitative type, quantitative research methods are methods based on the philosophy of positivism that are used to examine certain populations or samples, data collection using research instruments, quantitative or statistical data analysis with the aim of testing predetermined hypotheses, research This study uses a descriptive approach for the purpose of describing the object of research or research results through data or samples that have been collected. The subjects in this study were students majoring in Islamic economics, Faculty of Economics and Business, University of Sultan Ageng Tirtayasa.

The population in this study were active students majoring in Islamic Economics at Sultan Ageng Tirtayasa University, totaling 267 students from the 2017 to 2021 class. In this case the sample used by the researcher was students majoring in Islamic economics at Sultan Ageng Tirtayasa University class 2017, 2018, 2019, 2020, and 2021. In this sampling, the Slovin formula is used to obtain the number of samples that can represent many populations. Where after the calculation, it was found that the number of respondents needed was 73, and for sampling each group used the proportional random sampling formula.

The data in this study were sourced from primary and secondary data, for primary data came from the results of questionnaires distributed online using google forms. Primary data is data obtained from respondents through questionnaires, groups, focus groups, and panels, or also in the form of data from interviews conducted by researchers with resource persons. While secondary data is in the form of data related to research obtained from company websites and official agencies related to this research.

## **RESULTS AND DISCUSSION**

### ***The effect of Subjective Norms on Interest in Using E-Money***

The results of data analysis on the t-test test on the Subjective Norm variable obtained a significance value of 0.046, this number means it is smaller than 0.05 ( $0.046 < 0.05$ ) This shows that the subjective Norm variable has a significant influence on interest in using E-money . And if you look at the beta regression coefficient, you get a value of 0.243 or 24.3%, it means that there has been a change from the interest in using e-money by 24.3% which is caused by the Subjective Norm factor. This is based on the results of respondents who realize that subjective norms have an influence on individual decisions to use e-money. About 53% of respondents answered that the surrounding environment affects their interest in using e-money.

In addition, this is also proven by the results of hypothesis testing where the value of  $t_{count} > t_{table}$  of  $2.029 > 1.994$  with a sig value of  $0.046 < 0.05$ , which means that there is a positive and significant influence between the Subjective Norm variable (X1) on Interest in Using e-money (Y), thus the hypothesis proposed in this study is accepted.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.767	4.411		1,534	.129
Subjective Norms	.243	.120	.227	2,029	.046
Knowledge of Riba	.436	.173	.282	2.525	.014

a. Dependent Variable: Interest in using E-Money

### ***The Effect of Riba Knowledge on Interest in Using E-Money***

The results of data analysis on the Riba Knowledge variable obtained a significance value of 0.014, this number means it is smaller than 0.05 ( $0.014 < 0.05$ ). This shows that the Riba Knowledge variable has a significant influence on interest in using E-money. And if you look at the beta regression coefficient, you get a value of 0.436 or 43.6%, it means that there has been a change from interest in using e-money by 43.6.3% caused by the Knowledge of Riba. Thus the hypothesis proposed on the subjective norm variable is accepted.

In addition, this is also evidenced by the results of hypothesis testing where the value of  $t_{count} > t_{table}$  is  $2.252 > 1.994$  with a sig value of  $0.014 < 0.05$ , which means that there is a positive and significant effect between the variable Knowledge of Riba (X2) on Interest in Using e-money. (Y), thus the hypothesis proposed in this study is accepted. This is based on the results of respondents' answers, that about 68% of respondents understand that usury is an unfair practice and burdensome only one party. There are also about 71% of respondents know that bank interest is usury.

In this study, what is meant by knowledge of usury is knowledge of usury, where someone has information in the form of knowledge of usury, who knows basically about usury. Someone who knows usury will affect the decision in making transactions and in this case using e-money. Thus, from the results of the analysis above, the researcher states that knowledge of usury has an influence on interest in using e-money, which is probably because the knowledge of Islamic economics students at Sultan Ageng Tirtayasa University can influence the decision to use e-money. the greater the interest of students majoring in Islamic Economics at Sultan Ageng Tirtayasa University to use e-money.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.767	4.411		1,534	.129
Subjective Norms	.243	.120	.227	2,029	.046
Knowledge of Riba	.436	.173	.282	2.525	.014

a. Dependent Variable: Interest in using E-Money

### ***The Influence of Subjective Norms and Knowledge of Riba on Interest in Using E-Money***

Subjective Norms and Riba Knowledge simultaneously affect the interest in using e-money, this is evidenced by the results of the significance test (F test) which obtained, the Ftable value for this study is  $F_{table} = F(k ; nk)$ ,  $F = (2 ; 73-2)$ ,  $F_{table} = (2 ; 71)$  and the value for the Ftable is 3.13. Based on the results of the simultaneous significance test (f test) shows that  $F_{count} > F_{table}$  or  $5.128 > 3.13$  then  $H_3$  is accepted. Furthermore, this study obtained a sig value of 0.008 so it can be concluded that the value of  $sig < 0.05$  or  $0.008 < 0.05$  then  $H_a$  is accepted. From this description, it can be concluded that the independent variables simultaneously have a significant influence on the interest in using e-money in students of the Islamic Economics Department, Sultan Ageng Tirtayasa University.

This was obtained from the results of respondents who answered related to their interest in using e-money that there were 55% of respondents who had an interest in using e-money. And 62% of respondents have sufficient knowledge in using e-money. 58% of respondents who were asked about their interest in using e-money had an interest in using e-money. 47% of respondents who answered related to convenience and benefits were interested in using e-money. And 49% of respondents decided to use e-money. So from the results of these respondents found results that support the interest of students in using e-money.

**ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	114.381	2	57.191	5.128	.008 <sup>b</sup>
Residual	780.632	70	11.152		
Total	895.014	72			

a. Dependent Variable: Minat menggunakan E-Money

b. Predictors: (Constant), Pengetahuan Riba, Norma Subjektif

## CONCLUSION

Based on the results of the research and discussion that have been described previously regarding subjective norms and knowledge of usury on interest in using e-money in students majoring in Islamic economics at Sultan Ageng Tirtayasa University by distributing questionnaires to active students, it can be concluded that subjective norms have a partial effect on interest using e-money. Also, knowledge of usury has a partial effect on interest in using e-money. And subjective norms and knowledge of usury simultaneously influence the interest in using e-money in students majoring in Islamic economics at Sultan Ageng Tirtayasa University.

## REFERENCE

### *Book*

- Ghozali, I. (2013). Application of Multivariate Analysis with IBM SPSS 21 Program. Semarang: Diponegoro University.
- Sugiyono, pD (2013). Qualitative research methods and R&D. in journal of chemical information and modeling (19th ed., vol.53, issue 9). Alphabet.
- Sugioyono, p. D. (2018). Quantitative research methods (m. P. Setiawan, sh (ed.); 1st ed.). Alphabet

### *Journal Article*

- Aji, HM, Berakon, I., & Riza, AF (2020). The effects of subjective norm and knowledge about usury on intention to use e-money in Indonesia. Journal of Islamic Marketing.
- Aji, H., M, Berakon, I., & Kholid, M., N. (2019). The Moderating Role of Knowledge About Riba on Intention to Use E-Money: Finding from Indonesia. 2019 IEEE 6th International Conference on Industrial Engineering and Applications (ICIEA).
- Al-Swidi, A., Huque, SMR, Hafeez, MH, & Shariff, MNM (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. British Food Journal, 116(10), 1561–1580.<https://doi.org/10.1108/BFJ-05-2013-0105>
- Angga, MP (2020). Public knowledge about usury on debt and credit practices in Paduraksa Village, Middle Tribe District, Lakitan Ulu Tengan Lakitan Ulu Terawas, Musi Rawas Regency (Doctoral dissertation, IAIAN Bengkulu).



- Ariyanto, D. (2018). The Influence of Attitude, Subjective Norm, and Perceived Behavioral Control on E-Money Repurchase Intention. *Journal of Management Science*, 6(4).
- ASTUTY, TD (2018). The Influence of Perception and Product Knowledge on Interest in Using E-Money in an Islamic Economic Perspective (Study on Lecturers and Employees of the Islamic Economics and Business Faculty, UIN Raden Intan Lampung) (Doctoral dissertation, UIN Raden Intan Lampung).
- Ayudya, A., C., & Wibowo, A. (2018). The Intention to Use E-Money Using Theory of Planned Behavior and Locus of Control. *Journal of Finance and Banking*, 22(2).
- Bank Indonesia (2020). The amount of electronic money in circulation in 2016-2020 Bank Indonesia (2020). List of electronic money organizers as of 27 may 2020
- Cheng, YM (2014). Exploring the intention to use mobile learning: The moderating role of personal innovativeness. *Journal of systems and information technology*, 16 (1).
- Esthiningrum, A., & Sari, SP (2020). Theory Rasoned Action (Tra) and Technology Acceptance Model (Tam) Approaches in Interest in Transactions Using E-Money.
- Febriyanto, MAB (2016) the relationship between knowledge and behavior of consuming healthy snacks at MI Sulaimaniyah Mojo Agung Jombang, thesis from Airlangga University Surabaya.

Feb.untirta.ac.id (2022). At a glance. Feb.untirta.ac.id.<https://feb.untirta.ac.id/sekilas-pandang/>

- Karnadi, Z., Zulkarnain, Z., & Alwie, A., F. (2018). The Influence of Perceived Benefits, Perceptions of Ease, Attitudes, Behavioral Control, and Subjective Norms on Interest in Using Electronic Money in State-Owned Banks in Pekanbaru City. *Journal of Business Management Tepak*, 10(3).
- Lestianawati TA & Riharjo IB (2020). The influence of public knowledge about usury and product knowledge on interest in using cashless through OVO applications, *journals and accounting research (JIRA)* 9 (4).
- Miliani, L., & Indriani, M., T., D. (2013). Adoption Behavior of E-Money Usage. *Information Management and Business Review*. 5(7)

- Muslikh, M., & Huda, N. (2019). The Influence of Attitudes, Subjective Norms, Behavioral Controls, and Religiosity on Intentions to Use Electronic Money. *Journal of Economics, Finance, Banking and Accounting*, 11(2).
- Financial services authority (OJK). Syariah banking
- Parastiti, DE, Mukhlis, I., & Haryono, A. (2015). Analysis of the use of electronic money in students of the Faculty of Economics, State University of Malang. *Journal of Economics and Development Studies*, 7(1), 75–82.
- Permata, N., D., & Yulfan, A., N. (2020). Effect of Subjective Norm, Usefulness, Security, and Benefits on Interest in Continuous Use of Electronic Money OVO (Study on Surakarta Students). Doctoral Dissertation IAIN SURAKARTA.
- Putra, RD (2019). Analysis of the influence of knowledge of usury and attitudes towards Islamic banks on the intention to become customers of Islamic Banks. (Case study on STIE Indonesia Banking School students) (doctoral dissertation STIE Indonesia Banking School).
- Rahmatika, U., & Fajar, M., A. (2019). Factors Affecting Interest in Using Electronic Money: Integration of the TAM-TPB Model with Perceived Risk. *Nominal: Barometer of Accounting and Management Research*, 8(2).
- Ramdhani, N. (2016). Preparation of Measurement Tools Based on Theory of Planned Behavior. *Bulletin Psychology*, 19(2), 55–69.
- Schiffman, L., & Kanuk, L. (2010). *Consumer Behavior* (10th ed.). USA: Pearson.
- Subhan, M. (2020). The Influence of Promotion, Subjective Norms and Benefits on Decisions to Use E-Money in the Community (Study of E-Money Users in DKI Jakarta). Bachelor's Thesis, Faculty of Economics and Business UIN Jakarta.
- Sugiyono, pD (2013). Qualitative research methods and R&D. in *journal of chemical information and modeling* (19th ed., vol.53, issue 9). Alfabet.
- Sugioyono, p. D. (2018). Quantitative research methods (m. P. Setiawan, sh (ed.); 1st ed.). Alfabet.
- Sujarweni, VW (2020). *Business and Economic Research Methodology*. PT. New Library.
- Utami, SS, & Kusumawati, B. (2017). Factors Influencing Interest in Using E-Money (Study on STIE Ahmad Dahlan Jakarta Students). *BALANCE: Economics, Business, Management and Accounting Journal*, 14(02).

- Utomo, I., T. (2018). The Influence of Perceived Convenience, Perceived Benefits, Attitudes and Subjective Norms on the Use of E-Money among Indonesian Islamic University Students.

*Government Publication*

- Unitrta.ac.id (2022). Untirta history. Untirta.ac.id.<https://Untirta.ac.id/about/sejarah-untirta/>
- [Www.BI.go.id](http://www.BI.go.id)
- [Www.Ojk.go.id](http://www.Ojk.go.id)

## FACTORS AFFECTING THE COMPANY'S CAPITAL STRUCTURE

**Solihatul Adawiyah<sup>1</sup>, Tenny Badina<sup>2</sup>, Mohamad Ainun Najib<sup>3</sup>**

<sup>123</sup>Sultan University Ageng Tirtayasa

Email

:[Solihatuladawiyah@gmail.com](mailto:Solihatuladawiyah@gmail.com)

**ABSTRACT** - This study aims to explain the variables of firm size, profitability, tangibility and non-debt tax shield in influencing the company's capital structure. The research population is Manufacturing Companies listed on the Indonesian Sharia Stock Index (ISSI) for the 2016-2021 period. The data used in this study is panel data from 16 samples of selected companies, with a total sample of 54. The results show that firm size, profitability, tangibility, and non-debt tax shield have a positive and significant effect on the company's capital structure.

**Keywords :** Capital Structure, Firm Size, Indonesian Sharia Stock Index, Manufacturing Company, Non Debt Tax Shield, Profitability, Tangibility.

### INTRODUCTION –

The increasingly fierce competition in the business world in this era of globalization has encouraged increasingly fierce competition and made companies strive to increase the value of their companies. Companies are required to survive and compete with domestic companies, foreign companies, and foreign products entering the domestic market. Competition in the business and economic world causes the financial aspect of the company to be very important with the aim of building and ensuring the life of the company (Setyawan, et al 2016).

Capital structure is an important issue for every company, because the good or bad of the company's capital structure will have a direct impact on its financial position. A company that has a capital structure that is not good, which has a very large debt will give a heavy burden to the company. The company as much as possible obtains the necessary funds with minimal costs, the fulfillment of company funds can come from internal or external sources. The capital structure in a company concerns how the company will finance its debts and decisions about the form and composition of capital to be used by the company, whether in the form of external capital, or internal capital and when the company obtains the capital.

The capital structure in this study can be measured through the debt to equity ratio (DER), which is the ratio between total debt to equity. According to Cahyani (2017), financial managers need to consider several important assets in determining capital structures such as sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitude, attitude of lenders and rating agencies, market conditions, financial conditions internal company, and financial flexibility.

There are several assets that are considered to have an effect on the company's capital structure. In this study, there are four assets that affect the capital structure, namely: Firm Size, Profitability, Tangibility and Non Debt Tax Shields (NDTS).

Seeing the importance of capital structure, many researchers are trying to find out

What variables affect capital structure. Several previous studies have analyzed the factors that affect the capital structure with different results. Research on the effect of Firm Size on Capital Structure has been conducted by (Andrayani and Sudirman, 2012) and (Cahyani and Handayani, 2017) which show that the Firm Size variable has no effect on the company's capital structure. Meanwhile, research conducted by (Fachri and Adiyanto, 2019), (Widodo and Djawahir, 2014), (Kusno and Jonnardi, 2020), and (Dewi and Badjra, 2014) shows that the firm size variable has an effect on the direction of a positive relationship to capital structure. company.

The next factor is profitability. Profitability or profitability is the company's ability to generate profits during a certain period. According to research (Nainggolan, 2017), (Cahyani and Handayani, 2016), (Wijaya and Jessica, 2017), (Maryanti, 2016) and (Dewi and Badjra, 2012), the results show that profitability has a negative and significant effect on capital structure company. While research conducted by (Kusno and Jonnardi, 2020), (Eviani, 2015), (Indrajaya, et al 2011), (Yushinta and Suryandari, 2010) and (Widodo and Djawahir, 2014), shows that profitability has a significant positive effect on the structure of the company. company capital.

Tangibility assets is a permanent asset that is used in the company's operations. Asset structure plays an important role in determining a company's financing. This is because product demand will be high if the company has assets keep long term high. Companies whose assets are in the form of receivables and inventories, the value is highly dependent on the stability of the level of profitability and not dependent on short-term financing (Kusno and Jonnardi, 2020). In research conducted by (Khariry and Yusniar, 2016), (Margaretha and Ramadhan, 2010), (Cahyani and Handayani, 2017), (Widodo and Djawahir, 2014), (Kusno and Jonnardi, 2020), and (Dewi and Badjra, 2012), shows that the tangibility variable has a significant influence on the company's capital structure. In contrast to research conducted by (Andrayani and Sudirman, 2012), (Wijaya and Jessica, 2017), and (Ariyanti, 2019) it shows that the tangibility variable has no effect on the company's capital structure.

Next, Non-debt tax shield, is a determinant of capital structure that is not from debt, in the form of charging depreciation and amortization costs to profit and loss (Nainggolan, 2017). Research on the non-debt tax shield has been conducted by (Dewi and Dana, 2017) and (Widodo and Djawahir, 2014), which state that the non-debt tax shield has no effect on the company's capital structure. In research conducted by (Kharismar and Stella, 2014), (Luthfi, et al 2021), (Putri, 2021) and (Hutama, 2021) the non-debt tax shield variable affects the company's capital structure.

## **LITERATURE REVIEWS –**

### ***Sharia Capital Market***

The Islamic capital market is a capital market whose entire mechanism of activity, especially regarding issuers, the types of securities traded, and the trading mechanism are in accordance with sharia principles. Meanwhile, what is meant by sharia securities are securities as referred to in the laws and regulations in the capital market sector whose contracts, company management, as well as the method of issuance comply with sharia principles. As for what is meant by sharia principles, they are principles based on sharia Islamic teachings whose stipulation is carried out by the DSN-MUI through fatwas (Setyani, 2017).

### ***Capital Structure***

The optimal capital structure is a capital structure that optimizes the balance between risk and rate of return so as to maximize stock prices (Margaretha, 2011) in

(Setyawan, et al 2016).

The capital structure is fixed financing which reflects the balance between long-term debt and own capital (Nainggolan, 2017).

In this study, the capital structure ratio used is the Debt to Equity ratio (DER) because DER reflects the large proportion between total debt and total shareholder's equity (total own capital consisting of total paid-in share capital and retained earnings) owned by the company. (Khariry and Yusniar, 2016). This ratio shows the composition of total debt tototal equity.

$$\text{DER} = \frac{\text{Liabilities}}{\text{Total Equity}} \times 100\%$$

### ***Firm Size***

Company size is a scale that can classify the size of a company seen from the size of the assets owned by a company (Nainggolan, 2017).

According to (Fachri and Adiyanto, 2019), Firm Size or company size is the amount of assets owned by the company, which describes the company's ability in a certain period and is usually described by total assets (LN). In this study, the size of the company will be measured by the following model:

$$\text{SIZE} = \text{LN (Total Assets)}$$

### ***Profitability***

According to (Nainggolan, 2017), profitability is the net result of a series of policies and decisions and is usually indicated by profit.

The indicator used to determine the level of profitability of a company in this study is return on assets (ROA), namely by comparing net income with own capital (Cahyani and Handayani, 2017). ROA is formulated in the formula to be:

$$\text{ROA} = \frac{\text{PAT (Profit After Tax)}}{\text{Total Aset}} \times 100\%$$

### ***Tangibility***

*Tangibility assets* is a permanent asset that is used in the company's operations. The asset structure describes some of the assets owned by the company that can be used as collateral to obtain external funding. Asset structure is measured by a ratio scale that uses the formula (Cahyani and Handayani, 2017):

$$\text{SA} = \frac{\text{Fixed Assets}}{\text{Total Aset}} \times 100\%$$

### ***Non-debt tax shield***

*Non-debt tax shield*, is a determinant of capital structure that is not debt, in the form of charging depreciation and amortization costs to profit and loss (Nainggolan, et al 2016). Non-debt tax shield is the division between total depreciation and amortization costs to total assets which can be formulated as follows (Wulandari and Januri, 2020):

$$\text{NDTS} = \frac{\text{Depresiasi}}{\text{Total Aset}} \times 100\%$$

## METHODS-

This type of research belongs to the type of quantitative research, which uses panel data, which is a combination of individual data (cross section) and time series data (time series).(Gujarati & Porter, 2012). The data in this study were sourced from secondary data, namely data obtained through other parties, not directly examined by researchers from the research subject. Secondary data is obtained from reference books, internet, literature, journals, and data related to research objectives(Sujarweni, 2020).

The population in this study are sharia entities from the manufacturing sector listed on the Indonesian Sharia Stock Index as many as 121 companies during the period 2016-2021. The sampling method in this research is purposive sampling. This method is used so that the samples taken are relevant to the design of this study. Purposive sampling is one of the sample research techniques with certain considerations or criteria(Sujarweni, 2020). The assessment criteria in sampling in this study are as follows:

1. Companies that have consistently entered the List of Sharia Securities on the Indonesia Stock Exchange (IDX) for four consecutive years in the period 2016 to 2021.
2. Companies that publish and publish annual reports and financial statements in a row during the 2016-2021 period on the website of each company and have complete data related to the variables used in the study.
3. Companies that use rupiah in their financial statements.
4. Manufacturing companies that have complete data.

In accordance with the existing criteria, there are sixteen (16) companies that meet the four criteria.

### *Data analysis technique*

This study uses panel data analysis as data processing using the Eviews 9 program and Microsoft Office Excel to assist in processing statistical data accurately and quickly, as well as producing various outputs desired by decision makers. Panel data is a combination of time series and cross section data. There are three approaches in making panel data regression, namely Common Effect, Fixed Effect, and Random Effect.

## RESULTS-

**Table 4 1**  
**Descriptive Analysis Table**

	Y	X1	X2	X3	X4
mean	76.26331	28,84917	8.527980	42.97666	35.48070
median	52.14150	28.77655	6.320000	43.63000	40.91000
Maximum	341.00000	31.15980	45.74000	79.66000	80.81000
Minimum	10.33000	25,68820	-12.63	16.06000	0.100000
Std. Dev.	70,83840	1.624337	10.00589	14.18017	21.69840
Observations	96	96	96	96	96

Source: Eviews 9.0 (data processed, 2022)

The results of this descriptive analysis inform that the level of Capital Structure in manufacturing companies listed on the Indonesian Sharia Stock Index (ISSI) throughout 2016 - 2021 is the lowest in 2016 at PT Intan Wijaya Internasional Tbk. with a value of 10.33% while the highest level of Capital Structure occurred in 2021 at PTUnilever Indonesia Tbk. with a value of 341%. Meanwhile, the calculation of the average value of the Capital Structure in manufacturing companies is 76.26% with a standard deviation of 70.84%. The standard deviation value that is lower than the mean indicates a small variation in the capital structure.

**Table 4 2**  
**Statistical T Test Results**

Dependent Variable: Y  
Method: Least Squares Panel  
Date: 03/17/22 Time: 12:01  
Sample: 2016 2021  
Periods included: 6  
Cross-sections included: 16  
Total panel (balanced) observations: 96

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	4.276171	5.478281	1.780568	0.0375
X1	0.801959	0.789034	2.947400	0.0064
X2	0.343134	0.566045	1.696196	0.0462
X3	0.056030	0.822395	1.968131	0.0159
X4	0.122803	0.360159	1.840969	0.0341

Source: Eviews 9.0 (Data processed, 2022)

Table 4.2 is the output of testing the independent variables, namely Firm Size, Profitability, Tangibility, and Non Debt Tax Shield on Capital Structure in Manufacturing Companies Listed on the Indonesian Sharia Stock Index (ISSI) for the 2016-2021 Period. The following is a partial interpretation (t test):

1. Effect of firm size on capital structure

The test results show that the firm size variable has a prob value. ( $0.0064 < 0.05$ ) with a coefficient value of 0.8019. These results indicate that firm size has a positive and significant effect on capital structure. So it can be said that the increase or decrease in the capital structure is influenced by the level of firm size.

2. Effect of profitability on capital structure

The test results show that the profitability variable has a prob value. ( $0.0462 < 0.05$ ) with a coefficient value of 0.3431. These results indicate that profitability has a positive and significant effect on capital structure. So it can be said that the increase or decrease in the capital structure is influenced by the level of profitability.

3. The effect of tangibility on capital structure

The test results show that the tangibility variable has a prob value. ( $0.0159 < 0.05$ ) with a coefficient value of 0.0560. These results indicate that tangibility has a positive and significant effect on capital structure. So it can be said that the rise or fall of the capital structure is influenced by tangibility.

4. Influence of non-debt tax shield to the capital structure



The test results show that the non-debt tax shields variable has a prob value. (0.0341 < 0.05) with a coefficient value of 0.1228. These results indicate that non-debt tax shields have an effect on the capital structure. So it can be said that the increase or decrease in the capital structure is influenced by non-debt tax shields.

### **Reporting Research Results**

Based on the determination of the type of model used in the panel data regression analysis, which is based on 3 tests, namely the Chow test, Hausman test, and the Lagrange Multiplier test. The results of the Chow test and Hausman test found that the right model to be used in this study was the Fixed Effect Model (FEM).

Multiple linear regression analysis was used to determine the effect of Firm Size (X1), Profitability (X2), Tangibility (X3), and Non Debt Tax Shield (X4), on Capital Structure (Y). Multiple linear analysis is specifically intended to examine in this research model there are dependent and independent variables (Ghozali, 2018). Following are the results of the panel data regression equation using the Fixed Effect Model (FEM):

**Table 4 3**  
**Multiple Linear Regression Test Results**

Dependent Variable: Y				
Method: Least Squares Panel				
Date: 03/17/22 Time: 12:01				
Sample: 2016 2021				
Periods included: 6				
Cross-sections included: 16				
Total panel (balanced) observations: 96				
Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	4.276171	5.478281	1.780568	0.0375
X1	0.801966	0.789034	2.947400	0.0064
X2	0.343134	0.566045	1.696196	0.0462
X3	0.056030	0.822395	1,968131	0.0159
X4	0.122803	0.360159	1.840969	0.0341
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.880917	Mean dependent var		0.762633
Adjusted R-squared	0.851147	SD dependent var		0.708384
SE of regression	0.273305	Akaike info criterion		0.426596
Sum squared resid	5.676872	Schwarz criterion		0.960835
Likelihood logs	-0.476605	Hannan-Quinn Criter.		0.642544
F-statistics	29,59015	Durbin-Watson stat		2.066841
Prob(F-statistic)	0.000000			

---

Source: Eviews 9.0 (data processed, 2022)

Following are the results of panel data regression using the Fixed Effect Model (FEM) method:

$$Y = 4,2761 + 0,8019X1 + 0,3431 X2 + 0,0560 X3 + 0,1228 X4 + E$$

From the regression equation above, we can interpret several things, including the following:

1. The constant value of the equation above is 4.2761, which means that in general, if firm size, profitability, tangibility, and non-debt tax shields are constant (unchanged) then the capital structure will be 4.2761.
2. Firm size variable has a positive regression coefficient value of 0.8019. A positive coefficient value indicates that the firm size ratio has a positive effect on the capital structure. This illustrates that if there is an increase in firm size of 1 percent, it will cause an increase in the capital structure of 0.8019 percent, assuming the other independent variables are held constant.
3. The profitability variable has a positive regression coefficient value of 0.3431. A positive coefficient value indicates that profitability has a positive effect on the capital structure. This illustrates that if there is an increase in profitability as much as 1 percent, it will cause an increase in capital structure as much as 0.3431 percent, assuming the other independent variables are considered constant.
4. The tangibility variable has a positive regression coefficient value of 0.0560. A positive coefficient value indicates that tangibility has a positive effect on the capital structure. This illustrates that if there is an increase in tangibility of 1 percent, it will cause an increase in the capital structure of 0.0560 percent, assuming the other independent variables are held constant.
5. The non-debt tax shields variable has a positive regression coefficient value of 0.1228. A positive coefficient value indicates that non-debt tax shields have a positive effect on the capital structure. This illustrates that if there is an increase in non-debt tax shields of 1 percent, it will cause an increase in the capital structure of 0.1228 percent, assuming the other independent variables are held constant.

**Table 4 4**  
**F Statistic Test Results**

F-Statistics	29.59
Prob (F-Statistic)	0.00
F-Table	2.70

Source: Eviews 9.0 (data processed, 2022)

Based on the regression table above, the F statistic is 29.59. In addition, with  $n = 96$  and  $k = 4$ , the F table value is 2.70 with  $df1 = 3$  and  $df2 = 92$  with a critical value of 5%. Because  $F \text{ count} > F \text{ table}$  ( $29.59 > 2.70$ ) and  $\text{prob value} < 0.05$  ( $0.00 < 0.05$ ), it can be concluded that firm size, profitability, tangibility and non-debt tax shields variables have a

significant effect. on the capital structure of manufacturing companies listed on the Indonesian Sharia Stock Index for the 2016-2021 period.

**Figure 4 5**  
**Coefficient of Determination Test Results**

R-Squared	0.8809
Adjusted R-Squared	0.8511

Source: EvIEWS 9.0 (data processed, 2022)

Based on the regression results using the Fixed Effect Model as listed in the table above, it is known that the adjusted R-squared value is 0.8511. This shows that the variation of the dependent variable, namely capital structure, can be explained by the independent variables, namely firm size, profitability, tangibility, and non-debt tax shields of 85.11% while the remaining 14.89% is influenced by other factors outside the variables studied.

## **DISCUSSION –**

### **1. Effect of Firm Size on Capital Structure**

Testing on H1 based on table 4.2 shows the output results with a probability value ( $0.0064 < 0.05$ ) with a coefficient value of 0.8019. These results indicate that firm size has a positive and significant effect on the capital structure of manufacturing companies listed on ISSI. In this study, H1 was accepted, namely Firm size (firm size) had a significant influence with a positive influence on DER (capital structure). When the size of the company increases, the DER tends to increase. This shows that the larger the size of a company, the greater the tendency to use external funding sources. This is because large and rapidly growing companies require large funds to support their operations by relying on external capital.

This study supports research (Fachri and Adiyanto, 2019), (Widodo and Djawahir, 2014), (Kusno and Jonnardi, 2020), and (Dewi and Badjra, 2012) with results that explain that Firm Size has a positive and significant influence on the structure of the company. capital. However, this study is not in line with research conducted by (Andrayani and Sudirman, 2012) and (Cahyani and Handayani, 2017) which showed that the Firm Size variable had no effect on the company's capital structure.

### **2. Effect of Profitability on Capital Structure**

Testing on 2 based on table 4.2 above, the test results show that the profitability variable has a probability value ( $0.0462 < 0.05$ ) with a coefficient value of 0.3431. These results indicate that profitability has a positive and significant effect on the capital structure of manufacturing companies listed on ISSI. In this study, H2 is accepted, namely Profitability has a significant influence with a positive influence on DER (capital structure). Profitability has a significant influence on the capital structure because the level of profitability in the company affects the company's capital structure. Companies that have high profitability indicate that the company has retained earnings that can be used as a source of internal funds for the company. If the

company uses retained earnings as an additional capital, it can reduce the debt owned by the company. This is in accordance with the pecking order theory, where companies prefer financing with the safest securities, namely retained earnings, then use external funds with debt and share sales.

The results of this study are in line with research (Kusno and Jonnardi, 2020), (Eviani, 2015), (Indrajaya, et al., 2011), (Yushinta and Suryandari, 2010) and (Widodo and Djawahir, 2014), showing that profitability has a significant positive effect on company capital structure. However, this study is not in line with research conducted by (Nainggolan, 2017), (Wijaya and Jessica, 2017), and (Dewi and Badjra, 2012), the results of the research show that profitability has a negative and significant effect on the company's capital structure.

### **3. Effect of Tangibility on Capital Structure**

Testing on 3 based on table 4.2 above, the test results show that the tangibility variable has a prob value. ( $0.0159 < 0.05$ ) with a coefficient value of 0.0560. These results indicate that tangibility has a positive and significant effect on capital structure. In this study, H3 was accepted, namely Tangibility had a significant influence with a positive direction on DER (capital structure).

This means that companies that have more assets will find it easier to obtain external funding because these assets can be used as collateral if the company cannot pay off its obligations. The greater the assets owned by the company, the greater the loan that can be obtained by the company for the guarantees given to creditors. This result is in accordance with the theory put forward by Brigham and Houston (2006) in Cahyani and Handayani (2017) which states that companies whose assets are suitable as collateral for loans tend to use more debt and are also in accordance with the pecking order theory which makes debt as an alternative for financing. external. The results of this study are consistent with research conducted by (Khariry and Yusniar, 2016), (Margaretha and Ramadhan,

### **4. Effect of Non Debt Tax Shield on Capital Structure**

Testing on 4 based on table 4.2 above, the test results show that the non-debt tax shields variable has a probability value ( $0.0341 < 0.05$ ) with a coefficient value of 0.1228. These results indicate that non-debt tax shields have a positive and significant effect on capital structure. In this study, H4 was accepted, namely the Non Debt Tax Shield had a significant influence with a positive direction on DER (capital structure).

So it can be concluded that the non-debt tax share has a significant effect on the capital structure. *Non-debt tax shield* (NDTS) or tax savings that are not derived from debt are tax savings that do not come from the interest paid on the loan. According to Wijandari (2020), the non-debt tax shield is in the form of depreciation of fixed assets. The higher the depreciation of a company, the higher the fixed assets owned by the company, so the company will find it easier to get debt from outside parties by pledging assets from the company. This study is in line with research conducted by (Kharismar and Stella, 2014), (Luthfi, et al 2021), (Putri, 2021) and (Hutama, 2021) the non-debt tax shield variable affects the company's capital structure.

## **CONCLUSION**

Based on the results of the analysis described in the previous chapter, regarding the effect of Firm Size, Profitability, Tangibility, and Non Debt Tax Shield on Capital Structure, the following conclusions can be drawn : Firm Size, Profitability, Tangibility, and Non Debt Tax Shield variables have a significant effect on Capital Structure.

## REFERENCES

### *Book*

- Ghozali, I. (2018). Application of Multivariate Analysis with IBM SPSS 25 Program (9th ed.). Diponegoro University Publishing Agency
- Gujarati, DN, & Porter, DC (2012). Fundamentals of Econometrics Book 1 (5th ed.). Salemba Four.
- Sujarweni, VW (2020). Business and Economic Research Methodology. PT. New Library.

### *Journal article*

- Andrayani, NPD, & Sudirman, IMSN (2014). Effect of Sales Growth, Company Size and Tangibility Assets on Capital Structure (Doctoral dissertation, Udayana University).
- Ariyanti, R. (2019). The Effect of Tangible Assets, Roe, Firm Size, Liquidity on Price Book Value with Capital Structure as an Intervening Variable in Banking Companies. BALANCE: Economics, Business, Management and Accounting Journal, 16(1).
- Cahyani, NI, & Handayani, N. (2017). Effect of Profitability, Liquidity, Size, Institutional Ownership, and Tangibility on Capital Structure. Journal of Accounting Science and Research (JIRA), 6(2).
- Dewi, NKSM, & Badjra, IB (2014). Effect of Liquidity, Profitability, Tangibility Assets, Company Size and Taxes on Capital Structure (Doctoral dissertation, Udayana University).
- Dewi, NKTS, & Dana, IM (2017). Effect of Growth Opportunity, Liquidity, Non-Debt Tax Shield and Fixed Asset Ratio on Capital Structure (Doctoral dissertation, Udayana University).
- Eviani, AD (2016). The effect of asset structure, sales growth, dividend payout ratio, liquidity and profitability on capital structure. Journal of Accounting and Information Technology Systems, 11(2).
- Fachri, S., & Adiyanto, Y. (2019). The Effect of Non-Debt Tax Shield, Firm Size, Business Risk and Growth Opportunity on Capital Structure in Automotive Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 Period. Management Science, 5(1).
- Hutama, CN, Atang Hermawan, SE, MSIE, A., & Ridwan, M. (2021). The Effect of Profitability, Business Risk, Non-Debt Tax Shield, and Tangibility Assets on Capital Structure (Study on Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange 2014-2018 Period) (Doctoral dissertation, Library of the Faculty of Economics and Business Unpas).
- Indrajaya, G., & Setiadi, R. (2012). The Influence of Asset Structure, Firm Size, Growth Rate, Profitability and Business Risk on Capital Structure: Empirical Study on Mining Sector Companies Listed on the Indonesia Stock Exchange for the Period 2004-2007. Max, 6(2).
- Khariry, M., & Yusniar, MW (2016). Factors Affecting Capital Structure (Case Study on Manufacturing Companies listed on the Indonesia Stock Exchange for the Period 2011–2014). JWM (Journal of Management Insights), 4(2), 113-125.
- Kharismar, E., & Sumantri, S. (2014). The Influence of Collateralized Assets, Profitability, Income Tax, Non-debt Tax Shield, Firm Size and Growth on Capital Structure. Journal of Business and Accounting, 16(2), 114-122.

- Luthfi, M., Ichdan, DA, & Pratama, IS (2021). Effect of Diversification, Earnings Management, Business Risk, Company Life Cycle and Non Debt Tax Shield (Ndts) on Capital Structure. *Malahayati Journal of Accounting and Management Research*, 10(1), 41.
- Margaretha, F., & Ramadhan, AR (2010). Factors that affect the capital structure of the manufacturing industry on the Indonesia Stock Exchange. *Journal of Business and Accounting*, 12(2), 119-130.
- Maryanti, E. (2016). Analysis of Profitability, Company Growth, Sales Growth and Asset Structure on Capital Structure in Consumer Goods Industrial Sector Companies listed on the Indonesia Stock Exchange (Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange in 2012-2014). *Indonesian Accounting and Finance Research*, 1(2), 143-151.
- Nainggolan, MV, Azlina, N., & Julita, J. (2017). The Effect of Dividend Policy, Profitability, Company Size, Business Risk, Cash Holding, Ownership Control, and Non Debt Tax Shield on Capital Structure in Manufacturing Companies Listed on the Indonesia Stock Exchange (Period 2011-2014) (Doctoral dissertation, Riau University).
- Putri, YY (2021). The Effect of Profitability, Non Debt Tax Shield and Liquidity on Capital Structure Through Leverage as an Intervening Variable in Companies Listed in the Jakarta Islamic Index Period 2017-2019 (Doctoral dissertation, University of Muhammadiyah Surakarta).
- Setyani, O. (2017). The Influence of Inflation and Exchange Rates on the Indonesian Sharia Stock Index (Doctoral Dissertation, State Islamic University "Sultan Maulana Hasanuddin" BANTEN).
- Setyawan, AIW, & Nuzula, NF (2016). The Effect of Firm Size, Growth Opportunity, Profitability, Business Risk, Effective Tax Rate, Asset Tangibility, Firm Age and Liquidity on the Company's Capital Structure (Study on Property and Real Estate Sector Companies Listed on the Stock Exchange in 200. *Journal of Business Administration*, 31(1) ), 108-117.
- Widodo, MW, & Djawahir, AH (2014). The Effect of Tangibility, Profitability, Company Growth, Non Debt Tax Shields, Cash Holding and Company Size on the Company's Capital Structure (Study on Manufacturing Companies Listed on the Stock Exchange 2010-2012). *Journal of Management Applications*, 12(1), 143-150.
- Wijandari, A. (2020). Determinants of Capital Structure with Non Debt Tax Shield as Moderation (Study on Property, Real Estate and Building Construction Companies Listed on the Indonesia Stock Exchange for the 2015-2018 Period). *Tirtayasa Ekonomika*, 15(1), 175-194.
- Wijaya, E., & Jessica, J. (2017). Analysis of the Effect of Asset Structure, Company Size, Profitability, Growth Opportunity, Tangibility, Business Risk and Liquidity on Company Capital Structure in the Property & Real Estate Sector Listed on the Indonesia Stock Exchange in 201. *Procuratio: Scientific Journal of Management*, 5(4), 440-451.
- Wulandari, DA, & Januri, J. (2020). The Effect of Profitability and Non Debt Tax Shield on Capital Structure in Manufacturing Companies in the Pharmaceutical Sub-Sector Listed on the Indonesia Stock Exchange. *Journal of Accounting and Business Research*, 20(1), 45-50.
- Yensen Kusno, J. Effect of Profitability, Firm Size, Tangibility, and Growth Opportunity on Capital Structure. *Journal of Accounting Paradigms*, 2(2), 717-724.
- Yusinta, P., & Suryandari, E. (2010). Analysis of Factors Affecting Capital Structure. *Journal of Accounting and Investment*, 11(2), 179-188.

## FACTORS AFFECTING THE REST OF BUSINESS RESULTS ON SHARIA SAVE AND LOAN COOPERATIVES

Satiroh Husnayati <sup>1</sup>, Teny Badina <sup>2</sup>, Ahmad Fatoni <sup>3</sup>

<sup>123</sup> Sultan Ageng Tirtayasa

University Email :

[5554180013@untirta.ac.id](mailto:5554180013@untirta.ac.id)

**ABSTRACT** - This study aims to explain the variables of own capital, capital loans, number of members and financing in influencing the confiscation of business results. The data in this study used time series data or time series by taking a case study at the Benteng Mikro Indonesia sharia cooperative in Banten Province in the 2016-2020 period. The results showed that own capital, loan capital, the number of members and financing together have an effect on the operating income (SHU). The own capital variable has no effect on the remaining income. Meanwhile, the loan capital variable, the number of members and financing affect the remaining operating results (SHU).

**Keywords:** Own Capital, Loan Capital, Number of Members, Financing, Remaining Operating results (SHU), Sharia Cooperative

### INTRODUCTION –

The savings and loan cooperative or *Koperasi Simpan Pinjam* (KSP) is expected to become a professional institution in savings and loan issues among the society and can help the economy by increasing income through businesses finance by savings and loan cooperatives. So that, the more members and make transactions, the more profit or remaining operating results will increase. With increasing residual income of cooperative, it will increase the welfare of its members and also can create activities that are able to improve the welfare of its members and the society.

Based on Law no. 25 Article 45 Section 1 "Remaining Operating Results or *Sisa Hasil Usaha* (SHU) is the income of cooperative earned within one year financial minus costs, depreciation, and other obligations, including taxes in the relevant financial year". (Law of the Republic of Indonesia, 1992). According to (Hidayati & Filianti, 2019) the factors that can affect the amount of the remaining business results of cooperatives are seen from non-financial aspects and financial aspects, namely loan capital, own capital and business volume. The cooperative's remaining operating income or *Sisa Hasil Usaha* (SHU) from each period is used as consideration for increasing profits from its activities and become a benchmark in assessing the welfare of members.

Benteng Mikro Indonesia sharia cooperative is a cooperative where the business activities include savings, loans and financing according to sharia principles, including managing zakat, infaq/alms and waqf that focus on serving community micro-enterprises and aim at self-reliance with character and dignity in accordance with sharia principles in creating benefits in the economic, educational, health, social and spiritual fields (Kamarudin, 2020: 25). Therefore, the researchers chose the Benteng Mikro Indonesia sharia cooperative in Banten Province as the object of the research because this cooperative provides the information needed in this study.

**Table 1 1**  
**Data on the Amount of Remaining Operating Results (SHU) in the Benteng**  
**Mikro Indonesia Sharia Cooperative 2016-2020**

No	Year	SHU (RP)
1	2016	10,701,222,249
2	2017	12,584,868,816
3	2018	16,095,318,709
4	2019	17,201,748,227
5	2020	3,283,759,144

Source: Benteng Mikro Indonesia Sharia Cooperative

Seen from the financial statements of Benteng Mikro Indonesia sharia cooperatives, in 2016-2019 there was an enhancement for around 28.26% and in 2020 there was a very drastic degression for around 80.91% which was influenced by a 64.69% degression of capital reserves that causing the performance of this sharia cooperative not optimal enough and the obligations that must be paid to the bank annually in 2020 decreased for round 31.46% so that it affects the remaining operating results that must be distributed to members. Meanwhile, according to the balance sheet report of the Benteng Mikro Indonesia sharia cooperative in 2016-2020, there was an increase in the indicator of the number of members in the amount of 8% in 2020. So according to the theory, it should be directly proportional to the enhancement of members with an enhancement in the remaining operating results.

This study aims to determine the effect of own capital, loan capital and the number of members on the Remaining Operating Income or *Sisa Hasil Usaha* (SHU) based on previous research conducted by (Anggara et al., 2018) with the title “Effect of Own Capital, Loan Capital, Number of Members Against Remaining Operating Income (SHU) in Savings and Loan Cooperatives (KSP) in Gianyar Regency for the 2016-2018 period”, the results is own capital and loan capital have a significant positive effect and the number of members has no effect on the remaining operating results.

## **LITERATURE REVIEWS -**

### ***Sharia Cooperative***

Definition of Sharia Cooperatives According to the Ministry of Cooperatives for SMEs RI in 2009 article 1, states that sharia financial services cooperatives are institutions where the business activities are engaged in financing, investment and savings in accordance with the pattern of profit sharing (sharia). The basic foundation of Sharia Cooperatives as the other Islamic economic institutions refers to the Islamic economic system itself that implied through the phenomena of the universe and its also stated on the Qur'an and Al Hadith and Law No. 7 of 2021 regarding the convenience, protection and empowerment of cooperatives and micro, small and medium enterprises as a substitute for the Law of the Republic of Indonesia Number 17 of 2012. The purpose of this sharia-based cooperative is to improve people's welfare by strengthening the Indonesian economy as regulated in the 1945 Constitution and Pancasila which is based on the Qur'an and Hadith. . Therefore, the purpose of this sharia cooperative is to build and develop the potential and capabilities of its members, to improve their socio-economic welfare (Hidayati & Filianti, 2019).

Cooperative business can be seen from the type of business by cooperatives that conducted in Law No. 7 of 2021 about Cooperatives, five types of cooperatives are known, one of which is savings and loan cooperatives. This cooperative is often equated with the



credit cooperative, this cooperative provides savings services and at the same time provides credit to members. These services place the cooperative as a member servant to fulfill the needs of better and advanced financial services for members. In their position as Cooperative services for members are saving in the form of mandatory savings, voluntary savings and time deposits, which are a source of capital for cooperatives. (<https://nik.depkop.go.id>)

### **Remaining Operating Results**

According to Law No.25/1992, regarding cooperatives, Chapter IX, article 45 that the income of cooperative earned in one year financial period less costs, depreciation, and other obligations including taxes in the relevant financial year (*Law of the Republic of Indonesia*, 1992). The remaining operating results are profits that are divided to the economic activities of its members which come from the results of reducing income - operating expenses in a certain period. Therefore, the amount received by members differs from each other depending on the capital and loans that can be cooperative income. If a member do the transaction with a large nominal, then the SHU distributed the big income and vice versa.

### **Owner's equity**

Own capital is capital that comes from cooperative founders or shareholders who invested their capital to establish a cooperative and the members itself. There are several own capital on the cooperative including ( <https://nik.depkop.go.id> ):

1. Principal Savings, is the contribution that must be paid by members with the same nominal when they first join as a member of cooperative. The contribution nominal has been regulated in the Articles of Association / by-laws in a cooperative, and this savings cannot be taken as long as still a member of the cooperative.
2. Mandatory savings is the contributions that must be paid at a certain time with a different nominal for each member.
3. Reserve Funds is the funds generated from the allowance for remaining operating results which are used for additional capital and to cover deficiencies or losses incurred if necessary. In the Articles of Association, the reserve fund is 20% of the annual profit earned by SHU. The composition of SHU for members is 40% of the total SHU after Tax and is distributed according to the member's contribution.
4. Grants is the funds in the form of donations obtained from certain parties which are submitted to cooperatives in an effort to develop cooperative businesses.

The formulation of own capital according to Elvira & Pratiwi (2013) as follow.

Own capital = total principal savings + total mandatory savings + total reserve funds + total grants

### **Loan Capital**

Loan capital or more commonly known as external capital is the capital that consisting of money or goods with a certain nominal obtained from outside the cooperative such as from members of cooperatives, banks, others cooperatives and so on which has been regulated in legislation. This capital must be returned to the lender because it is used as debt for the cooperative and returned in accordance with the agreement letter that has been made (MP Sari & Rivandi, nd). In accordance with Article 41 Section (3) of Law no. 25/92, loan capital comes from: 1) Loans from members; loans granted by members of the cooperative and prospective members of the cooperative. 2) Capital loans from other cooperatives; loans on the basis of cooperation agreements made between cooperatives or members outside the cooperative itself. 3) Loans from banks and other financial institutions; loans from banks or other institutions that have been regulated in the applicable laws and regulations. 4) Issuance of bonds and debt acknowledgments; a letter of acknowledgment of long-term debt to the holder with the ability to pay interest and return according to the agreement. 5) Other legitimate sources; This loan capital is obtained from non-members which is not carried out through public offerings (Itang, 2016)

### **Number of Members**

Cooperative members are people who join into cooperatives that have the status of owners and users of services in the cooperative. Becoming a member in a cooperative already has the rights and obligations that have been regulated in the articles of association and by-laws, such as cooperative members have the right to become administrators or manage cooperatives. (Winarko, 2014). The rights and obligations of members are stated in Article 20 section (1) and (2) of Law No. 25 of 1992 Cooperatives (*Law of the Republic of Indonesia 1992*).

A. Section (1) Members have the following obligations:

1. Comply the regulations contained in the Articles of Association and by-laws and the agreements that have been agreed upon at the member meeting.
2. Participate in activities organized by the cooperative.
3. Fostering togetherness on the basis of the principle of kinship.

B. Section (2) Members have the right:

1. Participate and active in providing suggestions and participating in member meetings.
2. Participate as a candidate and have the right to choose to become a member of the management and supervisor.
3. Organize member meetings.
4. Giving advice and opinions or suggestions to the organizer outside the members' meeting, both requested and unsolicited.
5. Get information related to developments in the cooperative.

### **Financing**

Financing is *funding* provided by a parties to another parties to support planned investments, either by themselves or by institutions. (Al-Arif.2010, p. 42). In the "Supervision and Assessor Module of KJK and KJKS", Ministry of Cooperatives and Micro and Medium Enterprises of the Republic of Indonesia (2013, p. 360), financing is defined as funds distributed by cooperative to recipients (*mudharib*) for investment or capital cooperation between cooperative with members, prospective members, other cooperatives and their members in the form of the remaining returns, both principal and profitsharing, which have not been returned by the recipient of the financing. According to the Law of the Republic of Indonesia Number 1 of 2013 concerning Microfinance Institutions, financing is the provision of funds by microfinance institutions (*sharia cooperatives*) to the public which must be returned in accordance with the agreement with *sharia* principles.

### **METHODS**

This type of research belongs to the type of quantitative research, which uses time series data, namely a series of values of a variable that are recorded in successive periods (Agus Widarjono, 2016: 3). The population in this study is the financial report of the Benteng Mikro Indonesia Sharia Cooperative from 2013 to 2021. In taking the sample must be in accordance with the criteria and represented the object of the research. The researchers used *purposive sampling* as the sampling method, namely the financial report for the last 5 years from the Indonesia Benteng Mikro sharia cooperative from 2016-2020. The data processing in this study uses the *Eviews* version 10 program and *Microsoft Office Excel* to assist in processing statistical data accurately and quickly, and produces various *outputs* that are expected to be taken.

### Data analysis technique

1. Descriptive analysis is an analysis that is used as an assessor of the characteristics of a data to be studied and will provide a descriptive interpretation of the data that can be seen from the average value ( *mean* ), standard deviation, variance, maximum value, minimum value, *range*, *sum*, *kurtosis*, and *skewness* (Ghozali, 2016).
2. Regression analysis is a technique to find out how influential the independent variable is on the dependent variable by predicting the value of the variable (Ghozali, 2013). There are three steps in making *time series data regression*, namely stationary, cointegrity, correction model, *vector autoregression*.
3. Classical assumption test is an important step to do. If there are no symptoms of classical assumptions, it is hoped that a reliable regression model can be produced according to the BLUE (*Blue Linear Unbiased Estimator*) rule, which produces an unusual and reliable regression model as an interpreter (Winarno, 2017). The classical assumption test consists of four types, which are: Normality Test, Autocorrelation Test, Heteroscedasticity Test, and Multicollinearity Test.

### RESULTS-

**Table 4 1**  
**Descriptive Analysis Table**

	Y	X1	X2	X3	X4
mean	21.95936	25.85464	25.2600 5	11.85837	26.3120 7
median	22.11127	25,88795	25.2104 3	11.83638	26.3845 6
Maximum	23,56828	26.21219	25.8786 1	12.08719	26.7157 5
Minimum	17.49613	25,42835	24.8129 7	11.64924	25,7456 9
Std. Dev.	1.178970	0.259377	0.24827 2	0.135156	0.28840 0
Observatio Ns	60	60	60	60	60

Source: *Eview 10* (data processed, 2022)

Seen from Table 4.1, the results of the descriptive analysis inform that the remaining operating results of the Benteng Mikro Indonesia sharia cooperative in 2016- 2020 are the lowest by obtaining a value of 17.49613 in June 2020. Meanwhile, the average value calculating of the remaining operating results for about 21,95936 and for the highest value obtained by the Benteng Mikro Indonesia Sharia Cooperative in 2019 on December in the amount of 23,56828 with a standard deviation of 1.178970.

**Table 4 2**  
**Statistical T-Test**  
**results**

Variable	Coefficient	Std. Error	t-Statistics	Prob.*
Y(-1)	0.556933	0.136460	4.081288	0.0002
Y(-2)	0.232627	0.139459	1.668063	0.1029
Y(-3)	-0.254328	0.129335	-1.966425	0.0560
D(X1)	-10.54941	13.30079	-0.793141	0.4323
D(X2)	-0.601674	1.204545	-0.499503	0.6201
D(X2(-1))	-1.732420	1.287121	-1.345966	0.1857
D(X2(-2))	-1.660550	1.251427	-1.326925	0.1919
D(X2(-3))	-4.031330	1.132202	-3.560609	0.0010
D(X3)	-27.65626	11.15053	-2.480265	0.0173
D(X3(-1))	8.945508	10.19884	0.877110	0.3855
D(X3(-2))	1.408200	9.373905	0.150226	0.8813
D(X3(-3))	-1962381	9.324682	-2.104502	0.0415
D(X4)	10.45647	3.156281	3.312909	0.0019
D(X4(-1))	-5.555731	3.235673	-1.717025	0.0935
C	10.68490	3.114735	3.430435	0.0014

Source: *Eview 10* (data processed, 2022)

Based on the Table 4.2 , the test results show that the equity variable (X1) has a probability value greater than (  $0.4323 > 0.05$  ) with a coefficient value of -10.54941 and has no lag. These results indicate that own capital has no significant effect on the remaining operating results. When the own capital increases, it will not affect the remaining operating results. The test results show that the loan capital variable (X2) has a probability value smaller than (  $0.0010 < 0.05$  ) with a coefficient value of -4.4031330. These results indicate that loan capital has a negative and significant effect on the remaining operating results. When the loan capital increases, the remaining operating results decrease and vice versa. So it can be said that the increase or decrease in the remaining operating results is influenced by the level of loan capital

The test results show that the variable number of members (X3) has a probability value less than  $\alpha$  (  $0.0173 < 0.05$  ) with a coefficient value of -27.65626. These results indicate that the number of members has a negative and significant effect on the remaining operating results. When the number of members has increased, the remaining operating results have decreased and vice versa. So that it can be said that the increase or decrease in the remaining operating results is influenced by the level of the number of members. The test results show that the Financing variable (X4) has a probability value smaller than (  $0.0019 < 0.05$  ) with a coefficient value of 10.45647. These results indicate that financing has a positive and significant effect on the remaining operating results. When the financing increases, the remaining operating results increase and vice versa. So it can be said that the increase or decrease in the remaining operating results is influenced by the level of financing.

### **Reporting Research Results**

Stationarity testing was conducted to find out the integrated data in the same or different orders. At this stage the test uses the *Augmented Dickey Fuller* (ADF) test with the results showing that the remaining business results are stationary at the level stage while for independent variables such as: own capital, loan capital, number of members and stationary financing at 1<sup>st</sup> difference or integrated on the order of I(1) with a significance level of 1%.

**Table 4 3**  
**The Results of Stationarity Test Analysis using *AUGMENTED DICKY FULLER* (ADF)**

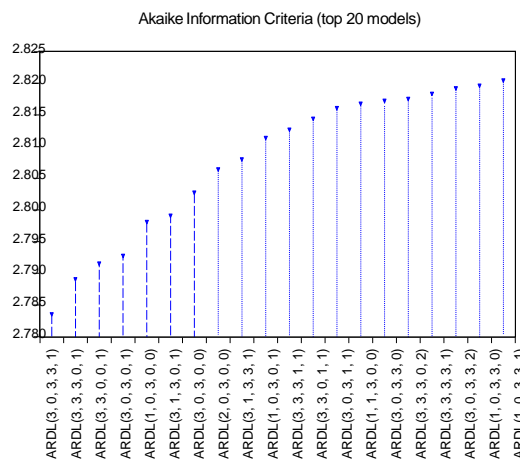
No	Variable	<i>AUGMENTED DICKY FULLER</i> (ADF)	
		stat	st
		Level	1
1	Remaining Operating Results (Y)	-4.338266*	-
2	Own Capital (X1)	-1.145638**	-4.698529*
3	Loan Capital (X2)	-1.122219**	-8.577076*
4	Number of Members (X3)	0.1201561**	-6.427510*
5	Financing (X4)	-1.727440**	-5.878182*

Source: *Eview 10* (data processed, 2022)

Note: the significance of 1% and 10% is indicated by \*,\*\*.

The *ARDL Bounds Test procedure* has two stages. The first step in the *ARDL bounds test* is to determine the length of the lag used in estimating the general *ARDL* equation. Lag length determination is done automatically with *Eviews 10*. The selection of the best *ARDL* model with the optimal combination of lags is selected based on the *Akaike Info Criterion* (AIC) criteria. The criterion with the smallest AIC value is the best of the 20best models presented by the AIC criteria. Based on AIC selection, the best *ARDL* model for this researchmodel is *ARDL* (3 ,0,3,3,1 ).

**Figure 4 1**  
**optimal lag selection results**



Source: *Eview 10* (data processed, 2022)

Based on the results of the bound test, the f-statistics value is greater than the critical f-value for about 1 percent of the first difference, which is  $3.629 > 3.49$ , which means that the research variable has a long-term cointegration with a significance level of 5 percent. The results of the bound test are as follows:

Table 4 4				
cointegration test results using the <i>Bounds Test method</i>				
F-Bounds Test		Null Hypothesis: No relationship		levels
Test Statistics	Value	Significant.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistics	3.629676	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: *Eview 10* (data processed, 2022)

In the estimation of the ARDL ( 3,0,3,3,1 ) model, the long-term estimation coefficient is obtained from the probability value of the estimation results.

Table 4 5				
ARDL . long-term regression results				
Levels Equation				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistics	Prob.
D(X1)	-22.69821	32.28533	-0.703050	0.4860
D(X2)	-17.26876	8.473789	-2.037903	0.0480
D(X3)	-79.45111	43.09433	-1.843656	0.0725
D(X4)	10.54448	9.205764	1.145422	0.2587
C	22.98972	0.668857	34.37163	0.0000
EC = Y - (-22.6982*D(X1) -17.2688*D(X2) -79.4511*D(X3) + 10.5445*D(X4) + 22.9897 )				

Source: *Eview 10* (data processed,

2022)Information :

X1 = own

capitalX2 =

loan capital

X3 = number of

membersX4 =

financing

Based on the parameters of the ARDL model estimation results ( 3,0,3,3,1 ), the long-term estimation coefficient can be obtained. From ARDL's long-term estimation, long-term loan capital has an effect on the remaining operating results. This significant negative effect is in accordance with the theory that when there is cooperation with investors and maximizing the use of loan funds, it will affect the remaining operating results. Meanwhile, the number of members in the long term has a significant negative value. So that, the number of members affects the remaining operating results with a coefficient value of -79.45111 and

a significance level of 10%. In accordance with the opinion put forward by Winarko (2014) that the number of members greatly affects the remaining business results if these members

are active in maximizing their role as member. Meanwhile, there are several variables such as own capital and financing that do not have a significant effect in the long term on the remaining operating results.

**Table 4 6**  
**ARDL . short-term regression coefficients**

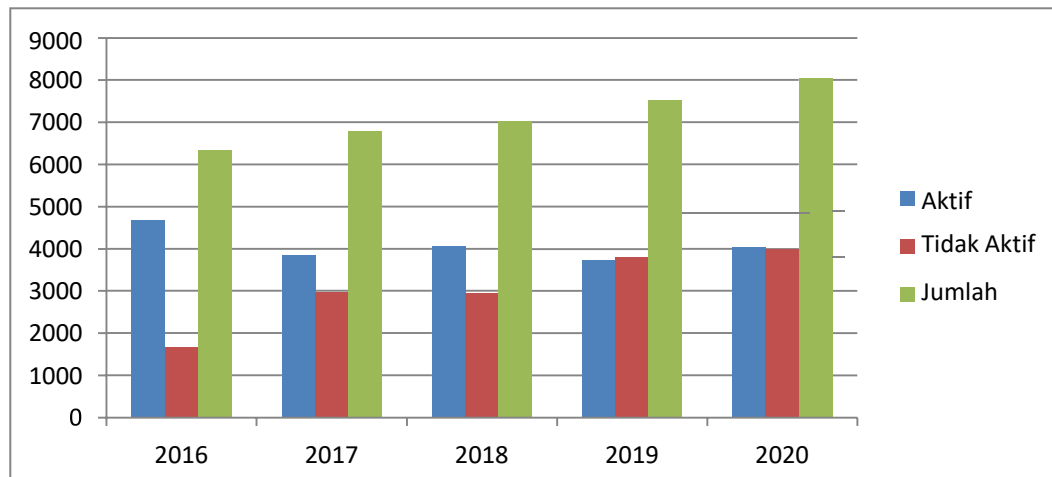
<b>ECM Regression</b>				
<b>Case 2: Restricted Constant and No Trend</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistics</b>	<b>Prob.</b>
<b>D(Y(-1))</b>	0.021701	0.116123	0.186883	0.8527
<b>D(Y(-2))</b>	0.254328	0.115332	2.205192	0.0331
<b>D(X2, 2)</b>	-0.601674	0.957162	-0.628602	0.5331
<b>D(X2(-1), 2)</b>	5.691880	1.248169	4.560183	0.0000
<b>D(X2(-2), 2)</b>	4.031330	0.929191	4.338539	0.0001
<b>D(X3, 2)</b>	-27.65626	8.979709	-3.079862	0.0037
<b>D(X3(-1), 2)</b>	18.21561	8.503429	2.142149	0.0382
<b>D(X3(-2), 2)</b>	19.62381	7.299524	2.688369	0.0103
<b>D(X4, 2)</b>	10.45647	2.368952	4.413966	0.0001
<b>CointEq(-1)*</b>	-0.464768	0.094024	-4.943068	0.0000
<b>R-squared</b>	0.588389	Mean dependent var		-
				0.006950
<b>Adjusted R-squared</b>	0.507856	SD dependent var		1.170968
<b>SE of regression</b>	0.821469	Akaike info criterion		2.604988
<b>Sum squared resid</b>	31.04135	Schwarz criterion		2.966658
<b>Likelihood logs</b>	-62,93967	Hannan-Quinn Criter.		2.745207
<b>Durbin-Watson stat</b>	1.961328			

Source: *Eview 10* (data processed, 2022)

Short-term ARDL using ECM. The error correction variable which is the previous period error is indicated by the CointEq(1) variable of -0.464768 with a probability value of 0.0000 which means that cointegration occurs in the model. The value of the error correction variable is negative and significant, it means that the ARDL ECM model is valid and shows the existence of cointegration between the dependent variable and the independent variable. A negative coefficient value indicates that the model is headed for equilibrium if there is a disruption at a rate of 46.40 percent per month, which supports the existence of a short-term correlation between model variables. Around 46.40 percent of the imbalance that occurred in the previous period will return to the equilibrium point in the current period. *The error correction coefficient* is statistically significant at the 1% level. In this ECM model ARDL there is one variable that is not recorded because it has no lag.

## DISCUSSION –

Banten Province has 903 cooperatives in 2018 including sharia cooperatives spread across various cities and districts in Banten in the amount of 66 sharia cooperatives that have been registered and have licensing certification. From 66 sharia cooperatives, one of them is Benteng Mikro Indonesia sharia cooperative which has 65 branch offices spread across many sub-districts.

**Figure 4 2****Graph of the Number of Cooperatives in Banten Province in 2016-2020**

Source: Office of Small and Medium Enterprises Cooperative Banten Province.

According to the data Figure 1.1. from the Banten Province Enterprises Cooperatives Service (*Dinas Koperasi Usaha Kecil dan Menengah Provinsi Banten*), that the number of cooperatives in Banten from 2016 to 2020 was fluctuated, which has a decrease in 2017-2019 and an increase in 2020. Some cooperatives that are no longer actively operate can lead to negative viewpoint against cooperatives that are active, and can interfere with the performance of the cooperative itself (lisahuang.com: 2016), which has impacting the Indonesia Sharia Microfinance or *Keuangan Mikro Syariah Indonesia* (IKMS) sector that caused by Covid-19 pandemic. There are several relaxation and restructuring policies for loan or financing customers in financial institutions that were made to deal with these impacts as stated in the Financial Services Authority Regulation or *Peraturan Otoritas Jasa Keuangan* (POJK) No. 11/POJK.03/2020, namely: (1) The first risk is the increase in non-performing financing (NPF). (2) liquidity and reputation risk. The policies for this risk are bank debt restructuring, reducing the services of the Sharia Financing Savings and Loans Unit or *Unit Simpan Pinjam Pembiayaan Syariah* (USPPS), and creating conducive conditions. (3) market and operations related to the collection and withdrawal of installments. For that, it is necessary to open transactions via bank transfer or a cooperative digital platform. Then communication of assistance programs and service information to members through social media and video call. (4) strategy risk. The policy is to approach the major donors to support cooperative liquidity. Then, prioritize big financing billing. Then, the revision of achievements and survival strategies are stay alive. Also, activate Baitul Maal for social assistance. (5) proposals for liquidity assistance for KSPPS, including direct social assistance to cooperatives, through the Revolving Fund Management Agency or *Lembaga Pengelola Dana Bergulir* (LPDB), and banks with the People's Business Credit or *Kredit Usaha Rakyat* (KUR) scheme. (6) corporate and employee income tax relief for KSPPS. Third, advocacy for the relaxation of KUR policies, Ultra Micro (UMi) and LPDB financing. (knks.go.id. 2020)



## CONCLUSION-

The capital variable itself has no significant effect on the remaining operating results of the Sharia Savings and Loan Cooperative, the case study of Micro Benteng Indonesia Sharia Cooperative for the 2016-2020 period. It means that if the own capital hasan increases, it will not affect the remaining operating results. The loan capital variable has a negative and significant effect on the remaining operating results. When the loan capital increases, the remaining operating results decrease and vice versa. So it can be said that theincrease or decrease in the remaining operating results is influenced by the level of loan capital. The variable number of members has a negative and significant effect on the remaining operating results. When the number of members has increased, the remaining operating results have decreased and vice versa. So that it can be said that the increase or decrease in the remaining operating results is influenced by the level of the number of members. The financing variable has a positive and significant effect on the remaining operating results. When the financing increases, the remaining operating results increase and vice versa. So it can be said that the increase or decrease in the remaining operating results is influenced by the level of financing

The results of this study are seen from the financial report of the Benteng Mikro Indonesia Sharia Cooperative from 2016-2019 on the indicators of own capital, loan capital, number of members and financing have increased every year, then in 2020 it has a very drastic degradation for about 80.91% on the remaining operating results. In the comparison of the tests between 2016-2020 and 2016-2019, the results were very different. In 2016-2019, which found that the financing variable had a positive effect on the remaining operating results. So it can be concluded that there is an external influence or pressure from outside parties of the Benteng Mikro Indonesia Sharia Cooperative of 52.47% that cannot be avoided by the cooperative, which is: in the final year of 2019 to 2020 or the year of research where there is a phenomenon that has an impact on all aspects of human life, that is the *coronavirus* ( Covid-19) so that the cooperative implements several policies that make the cooperative's income decrease but the cooperative must pay the obligations it bears. The variables of own capital, loan capital, number of members and financing have a significant simultaneous effect on the remaining operating results.

## REFERENCES

### Book

- Agus, W. (2018). *Introductory Econometrics and Its Applications With Guide toEViews*. UPP STIM YKPN. Yogyakarta
- Kamaruddin Batubara. (2020). *Guidebook for Saving, Borrowing, & Financing theBmi Syariah Model*. *PT Elex Media Komputindo*. Jakarta
- Ghozali, I. (2013). *Application of Multivariate Analysis with IBM SPSS 21 UpdatePLS Regression Program* (7th ed .). Diponegoro University Publishing Agency.
- Ghozali, I. (2016). *Application of Multivariate Analysis with IBM SPSS 23 Program* (8th ed .). Diponegoro University Publishing Agency.
- Ghozali, I. (2018). *Application of Multivariate Analysis with IBM SPSS 25 Program* (9th ed .). Diponegoro University Publishing Agency

### Journal article

- Anggara, IWB, Aryawan, G., & Manuaba, IMP (2019) Effect of Own Capital, Loan Capital, Number of Members on Remaining Earnings (Shu) in Savings and Loans Cooperatives (Ksp) in Gianyar Regency for the 2016–2018 Period.
- Azwar, Khairul. (2018). Business Volume and Its Impact on Remaining Operating Results (SHU) in the Indonesian Civil Service Cooperative (KPRI) Simalungun Regency. *JAKK ( Journal of Contemporary Accounting and Finance)*, 1(1).
- Buchori, NS (2010). Cooperatives in Sharia Economic Perspective. *Maslahah (Journal of Islamic Law and Sharia Banking)*, 1(1), 93-115.
- Farida, P H., Sunarto., Eko, W. (2018). Analysis of the Effect of Murabahah Financing and Multipurpose Savings on SHU KSPPS BMT Barepan Cawas Klaten 2013-2017. *Journal of Management and Accounting Medan*
- Fifi Hasmawati. (2013). *Cooperative management* . Ambassador Azhar
- Firdaus, F. (2020). Effect Of Total Members And Current Ratio On The Rest Of Cooperative Business Result. *Ilomata International Journal Of Management* , 1 (2), 38-44.
- Hendiarto, RS, & Widajati, VW (2020). Factors Remaining Business Results On The Quality Of Savings And Loan Cooperative Financing In Subang Regency. *Scientific Journal of Public Administration* , 10 (1), 53-62.
- Herlan, F., Idris, G., Cucu, M., Wilda, R., Yana, M. (2022). The Effect of Member Savings and Financing on SHU on KSPPS BMT Sinergi Cendekia Indonesia. *Journal of Maps (Sharia Banking Management)*, 5(2).
- Hidayati, AN, & Filianti, D. (2019). Factors Affecting Remaining Operating Results (Shu) in Sharia Cooperatives in Surabaya in the 2014-2018 period. *Journal of Theory and Applied Islamic Economics* , 6 (9), 1862-1876.
- Winarko, SP (2018). Factors Affecting Remaining Operating Results in Cooperatives in the City of Kediri. *Scientific Journal of Scholar Accounting* , 4 (3), 1-14.

### Government publication

- Bank Indonesia. (2013). Financing Pattern for Sharia Small Medium Enterprises for Beef Cattle Breeding Business. Bank Indonesia. Jakarta.
- *Law of the Republic of Indonesia* , 1992
- *Law of the Republic of Indonesia* , 2021
- <https://nik.depkip.go.id> accessed on 12 April 2021 at 15.00
- <https://banten.bps.go.id> accessed on April 12, 2021 at 14.00
- <https://knks.go.id> accessed on April 12, 2021 at 19.00
- <https://kopsyahbmi.co.id> accessed on June 13, 2021 at 21.00