



# Determination Analysis of Employment in the Oil Palm Plantation Sector on Sumatra Island

Ainul Mardhiyah<sup>1</sup>, Sya'ad Afifuddin<sup>2</sup>, Irsad<sup>3</sup>, Dede Ruslan<sup>4</sup>

<sup>1,2,3</sup>Universitas Sumatera Utara, Medan, Indonesia.

<sup>4</sup>Universitas Negeri Medan

<sup>1</sup>Email: [ainul@unimed.ac.id](mailto:ainul@unimed.ac.id)

## ABSTRACT.

This study aims to test the theory of demand for Pappas and Mark Hirshey derivatives in the oil palm plantation sector in Sumatra, the absorption of labor in the oil palm plantation sector is a demand for derivative labor, because the demand is based on the development of the plantation sector on the island of Sumatra. This study modified the theory of Pappas and Mark Hirshey with the addition of supporting variables associated with the theory of labor demand. This study looked at the influence of variable minimum wage, general allocation funds, human development index and production on labor absorption in the oil palm plantation sector on the island of Sumatra. The analysis method used is a simultaneous analysis method using panel data, which is a combination of cross section data and time series data for a period of 10 years starting from 2011 to 2020 per 10 provinces on the island of Sumatra, the results of the first stage of estimates show that the Minimum Wage has a negative and insignificant effect on labor absorption so that the hypothesis is rejected. The General Allocation Fund (DAU) has a positive and significant effect on employment so that the hypothesis is accepted. The human development index (HDI) has a positive and significant effect on labor absorption so that the hypothesis is accepted. Production has a positive and insignificant effect on labor absorption so the hypothesis is rejected. Simultaneously the Minimum Wage (UM), the general allocation fund (DAU), the human development index (IMP), and production affect the absorption of labor so that the hypothesis is accepted.

**Keywords:** Labor Absorption, Minimum Wage, General Allocation Fund, Human Development Index, Production.

DOI Number: 10.48047/NQ.2023.21.3.NQ33033

NeuroQuantology2023;21(3): 307-318

## 1. Introduction

In labor economics it is assumed that labor has the goal of maximizing utility maximization, that is, that one is assumed to strive to achieve the goal of making oneself as happy as possible at the level of limited resources (Ehrenberg and Smith, 2012). The problem of employment is still one of the problems that cannot be solved, this is due to the fact that the number of people and the labor force who have not found a high job is not balanced with balanced employment. The higher the labor force certainly requires decent jobs, but in reality jobs are not always available. Sumatra Islands is an island located in the western part of the archipelago cluster. The area of Sumatra Island is approximately 473,481 square km. The geographical condition of Sumatra Island based

on the area map of this island is further divided into ten provinces including: Aceh Province, North Sumatra Province, Riau Province, West Sumatra Province, Riau Islands Province, Jambi Province, Bengkulu Province, South Sumatra Province, Lampung Province, Bangkabelitung Islands. Sumatra Island is also one of the areas that has the largest population. The oil palm plantation sector can be said to be one of the plantation sectors that is able to absorb a lot of labor in it (Maksum et al., 2021). This is because many people on the island of Sumatra own oil palm plantation land (Sihombing et al., 2015). And among the ten existing provinces, North Sumatra Province is one of the provinces that has the largest oil palm plantation land in Indonesia.



The labor market, like any other market in the economy is controlled by the forces of supply and demand, but the labor market is different from most other markets because labor demand is derived demand where the demand for labor is highly dependent on the *demand* for the output it produces (Mankiw,2006). In a production process to produce goods and services, labor is one of the production factors used in the production process (Muda et al., 2018a). By examining the relationship between the production of goods and the demand for labor, it will be possible to determine the factors that determine the balance wage. The minimum wage policy is a wage system that has been widely implemented in several countries, which can basically be seen from two sides. First, the minimum wage is a protective tool for workers to maintain that the value of wages received does not decrease in meeting the needs of daily life.

Law Number 33 of 2004 concerning financial balance between the central government and local governments explains that DAU aims to equalize financial capabilities between regions which is intended to reduce inequality in financial capabilities between regions through the application of formulas that take into account regional needs and potentials. Darwanto and Yustikasari (2007) stated that the granting of DAU to local governments is a consequence of the handover of central government authority to local governments. Thus, there is a significant transfer in the state budget from the central government to the local government, and the local government can freely use the DAU whether to provide better services to the community so that it will create a healthy life and a longer life expectancy, improve the quality of education and the standard of living of the community. One of the factors that cause the high unemployment rate is caused by the high growth of the population. Basically, the increase in the number of inhabitants has two different sides. A large population is a capital in achieving national development goals, but on the other hand with improper regulation, a large population can cause

crucial population problems, especially in the field of employment.

A large number of inhabitants is a capital in economic development. The productive age population included in the labor force is a workforce that is absorbed in the field of work and a driver in producing the output of an area. In relation to the Human Development Index (HDI), if the Human Development Index shows good conditions, at least a lot of labor is absorbed in employment and the reduction in the number of unemployed of productive age. The Human Development Index (HDI) contains three important dimensions in development, namely related to aspects of meeting the need for a long life and healthy life, to gain knowledge and be able to meet a decent standard of living. The better the level of labor health, high knowledge and obtaining a decent life, the better and more qualified the work results will be, on the contrary, the worse the state of the workforce, the worse the work will be or not qualified.

The results showed that there is a relationship and influence of the minimum wage, general allocation fund, human development index on the absorption of labor in the oil palm plantation sector on the island of Sumatra by carrying out several policies and changes that will increase employment (Muda et al., 2018b). This study aims to test the theory of demand for Pappas and Mark Hirshey derivatives in the oil palm plantation sector in Sumatra, the absorption of labor in the oil palm plantation sector is a demand for derivative labor, because the demand is based on the development of the plantation sector on the island of Sumatra.

## 2. Theoretical Framework

Independent variables that affect employment are the Minimum Wage, General Allocation Fund (DAU), Human Development Index (HDI), and Production variables. The Minimum Wage affects Employment. According to wage efficiency and wage rigidity, the number of inhabitants is concerned with the absorption of labor according



to the theories of Malthus, Ibn Khaldun and Marxists. The minimum wage has a positive and insignificant effect on employment in Riau Province. This is certainly not in accordance with the hypothesis that the minimum wage has a negative and significant effect on employment.

Rakhmawati's research (2022), the results of the analysis show that the General Allocation Fund has a Negative and Significant effect on the Economy, this is not in accordance with the hypothesis that the General Allocation Fund (DAU) has a positive and significant effect on employment. Hafiz, (2021) mentioned that the Human Development Index (HDI) has a positive effect on employment. Research by Nurlina (2017), the Human Development Index has a positive and significant effect. Research by Aulia (2020), the Human Development Index has a positive and significant effect on the number of workers in Riau Province.

Another phenomenon is from research (Prawoto, 2018) concluded that the Human Development Index (HDI) has a negative and insignificant influence on employment in Central Java. This is certainly not in accordance with the hypothesis that the Human Development Index has a positive and significant effect on employment. According to the new growth theory, it emphasizes the importance of the role of government in 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 shown by increasing one'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. Companies will get more results by hiring workers with high productivity, so that with the absorption of more and more labor leads to a reduction in the unemployment rate (Todaro. 2003). Research (Tampubolon, 2021) concludes that production negatively affects employment. This is certainly not in accordance with the hypothesis that palm oil production has a positive and significant effect on

employment. Meanwhile, research (Ayuningsih, 2014) concluded that production has a positive and significant effect on employment. This theory is appropriately applied to the absorption of labor. Based on previous research and the theory of experts, research was formed that has four independent variables, namely the Minimum Wage, General Allocation Fund (DAU), Human Development Index (IMP) and Production.

### 3. Research Methods

This study took the variables studied were the Provincial Minimum Wage, General Allocation Fund (DAU), Human Development Index (HDI), and Palm Oil Production which are independent variables. Employment in the Oil Palm Plantation Sector as a dependent variable. This research was conducted in 10 provinces in the Sumatra Islands sourced from BPS North Sumatra. This research is quantitative, which is a study to get conclusions from hypotheses that are built by analyzing quantitative data (numbers) using mathematical models based on theories and / or hypotheses related to phenomena. The data in this study is information related to the development of the oil palm plantation sector in the Sumatra Islands.

The data collection technique used in this study is by means of observation and research library, namely collecting and processing data from previous information and reports related to the problem under study. The number of observations from this research data is as many as 10 provinces on the island of Sumatra consisting of Aceh Province, Riau Islands Province, West Sumatra Province, North Sumatra Province, Riau Province, Bengkulu Province, Bangka Belitung Province, Lampung Province, South Sumatra Province, and Jambi Province. To explain the determining factors that affect the absorption of Oil Palm Plantation Sector Labor on the island of Sumatra. The constructed model is a mathematical function as follows:  $L = f(W, DAU, IPM, Pro)$  From these functions can be modified into a linear model with the following model specifications:



$$L = a_0 + a_1W_i + a_2DAU_i + a_3IPM_i + a_4Pro_i$$

Where:

- L = Labor Absorption
- W = Minimum Wage
- DAU = General Allocation Fund
- HDI = Human Development Index
- Pro = Palm Oil Production

The data used in this study are panel data, so to test the hypothesis, a Fixed Effect and Random Effect model was used (Greene, 2000).

### 3.1 Multicholinerity Test

To test whether free variables have a linear non-free relationship, thus causing information on redundant free variables using the Multicholinerity test, the method carried out to detect the presence of Multicollinerity in research is to look at the value of variance inflating factor (VIF), namely:

$$VIF = \frac{1}{1 - R_{12}^2}$$

### 3.2 Statistical Test F

The Overall Test is performed to show whether all the independent variables included in the model have a common influence on the dependent variables. With a degree of numerator of 95 % ( $\alpha = 5\%$ ), the degree of freedom of the numerator (numerator) is k-1 and the denominator (denominator) is n-k.

### 3.3 Statistical Test t

A t-test is an individual regression coefficient test. Basically, this test is to find out how far each independent variable affects the change in the dependent variable, assuming that other independent variables are fixed or constant.

## 4. Results and Discussion

The results of the estimation of labor absorption in Sumatra Island using the Fixed Effects method are shown in table 5.5 of the determination of the use of the *Fixed Effects* Method based on the Hausman test.

**Table 1 Fixed Effects Method Estimation Results**

	C	Wages (X <sub>1</sub> )	General Allocation Fund (X <sub>2</sub> )	HDI (X <sub>3</sub> )	Production (X <sub>4</sub> )
Coefficient	-8870609.	-0.397441	0.000281	1480.203	0.081939
Prob.	0.0221	0.1859	0.0246	0.0145	0.8218
Prob(F-statistic)	0.000000				
R-squared	0.702279				
<b>Fixed Effects (Cross)</b>					
Aceh	2.582993				
Sumut	0.398412				
West Sumatra	0.933488				
Riau	0.346220				
Kepri	2.373486				



Jambi	-1.356628
Humpback	-1.764805
Sumsel	-0.836955
Bangkabelitung	-1.732499
Buoys	-0.943712

Source : Processed Results with Eviews

**a. Minimum Wage**

The wage regression coefficient is equal to -0.397441. This means that if wages increase by 1 percent, then employment will decrease by 39.7 percent or 3 people. Conversely, if wages fall by 1 percent then employment will increase by 39.7 or 3 people. This shows that high wages will not automatically reduce employment significantly on the island of Sumatra.

**b. General Allocation Fund (DAU)**

The DAU variable regression coefficient is 0.000281. A DAU coefficient equal to 0.000281 means that if the DAU increases by 1 percent, it will increase the absorption of work by 1 person. The effect of DAU on employment is relatively very low from other free variables as well as significant at a 95 percent confidence level. The DAU variable has a positive and significant effect on the absorption of labor on the island of Sumatra.

From the results of this estimate, it is increasingly clear that the absorption of labor on the island of Sumatra is largely determined by the level of the General Allocation Fund (DAU). The relatively small value of the DAU coefficient indicates that the effect of the DAU on labor absorption is small.

**c. Human Building Index (HDI)**

The estimation results show the regression coefficient of the HDI variable of 1480,203. This means that every time the HDI increases by 1 percent, the absorption of Manpower will increase by 1480 people. The effect of the HDI variable on employment is significant at a 95 percent confidence level. It is true that the higher the HDI level, the higher the absorption of labor.

**d. Production**

The estimation results show a regression coefficient of production variables of 0.081939. This means that every time the production increase is 1 percent, the absorption of labor will increase by 1 person. The effect of production variables on Labor absorption is significant at a 95 percent confidence level. It is true that the higher the HDI level, the higher the absorption of labor. The Hausman test yields a Prob value. *Cross-section* random of  $0.0226 < 0.05$ , then  $H_1$  is accepted. That is, the right model used to analyze the data in this study is the *Fixed Effects model*.

**Table 2 Hausman Test Results**

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq. Statistics	Chi-Sq. d.f.	Prob.
Cross-section random		11.379139	4	0.0226

Source: Processed Results with Eviews



### 5.1 Model Conformity Test Results

a. Unison test results (F-statistics)

Prob Grade. (F-statistic) of 0.000000 (greater). This means that together (simultaneously) free variables (Wages, DAU, HDI and Production) affect the absorption of labor. The estimation results have met the model suitability test for simultaneous testing, so that the estimation results can be used for analysis.

b. Coefficient of determination result ( $R^2$ )

$R^2$  is located between 0 and 1.  $R^2$  is equal to 1, meaning the free variables describe 100 percent of the variation of bound variables. In contrast,  $R^2$  is equal to 0, meaning that the free variables in the model do not describe the slightest variation of the bound variable. The model is said to be better if the  $R^2$  gets closer to 1 (Gujarati: 99). The model estimate yields an  $R^2$  of 0.70. That is, the existence of free variables (Wages, DAU, HDI and Production) is able to explain the bound variables (Labor Absorption) by 70 percent, the remaining 30 percent is explained by other variables outside the model. With  $R^2$  0.70, the estimated result meets the conformity test from the aspect of the coefficient of determination. The estimation results are worth analyzing.

c. Partial test results (t-test)

Partial tests are also called test-of-significance. Prob Grade. Wages of 0.18, meaning that wages have a negative but not significant influence on employment; Prob grades. DAU of 0.0246, meaning that DAU has a positive and significant influence on energy absorption; Prob value. The HDI is 0.0145, meaning that the HDI has a positive and significant influence on employment, and the value of the Prob. Production is 0.8218, meaning that production has a positive but insignificant influence on employment. So, the results of the model estimate have met the conformity test from the aspect of partial test. The results of the model estimation can be analyzed.

### 5.2 Multicholnearity Test

Ragnar Frisch (1934) states that a regression model is said to be exposed to multicholnearity when there is a perfect linear relationship between some or all of the free variables of a regression model. This multicholnearity test will be multicolorary between independent variables ( $X_1, X_2, X_3, X_4$ ) if the correlation coefficient is high enough above 0.85, it is suspected that there is multicolnearity in the model. The results of such tests can be displayed as follows:

**Table 3 Multicholnearity Test Results**

	$X_1$	$X_2$	$X_3$	$X_4$
$X_1$	1.000000	0.140450	0.730705	0.112870
$X_2$	0.140450	1.000000	0.135552	0.105682
$X_3$	0.730705	0.135552	1.000000	0.130026
$X_4$	0.112870	0.105682	0.130026	1.000000

Source : Regression Results, processed by yourself

From the Table 3 above it can be seen that the correlation between free variables has a value of < 0.85. The results concluded that there was no multicollnearity.

### 5.3 Heteroskedasticity Test

Then perform a heteroskedasticity test by collaborating the variables  $X_1, X_2, X_3, X_4$  with residual abs values.



**Table 4 Heteroskedasticity Test Results**

Dependent Variable: RESABS				
Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	-6743409.	2384503.	-2.828015	0.6258
X1	-0.217718	0.186803	-1.165495	0.2470
X2	0.000366	7.69E-05	4.753731	0.3210
X3	1004.359	371.8205	2.701192	0.2683
X4	0.072491	0.227319	0.318897	0.7506

Source : Regression Results, processed by yourself

The heteroskedasticity test obtained a probability value of  $X_1$  of 0.2470;  $X_2$  of 0.3210;  $X_3$  of 0.2683;  $X_4$  of 0.7506. From the entire probability value it can be seen that all free variables have a prob value. > 0.05, then the data is said to have no hetseroskedasticity.

**5.4 R Square**

Free variables (Wages, DAUs, HDI and Production) are able to explain bound variables (Labor Absorption) by 70 percent, the remaining 30 percent is explained by other variables outside the model.

The variables that are likely to affect labor absorption are

a. MSMEs

According to Nuraini's research (2006) in her research entitled *Micro, Small, And Medium Enterprises (Msmes) And Poverty Reduction*: empirical evidence from Indonesia shows that MSMEs statistically affect the reduction of poverty in Indonesia either directly or indirectly through employment.

b. Technology

According to Nurfiat's research (2018) in his research entitled *The Effect of Wages And Technology On Productivity And Labor Absorption In The Furniture Industry In Denpasar City* shows that technology and work productivity have a positive and significant effect on the absorption of labor in the wooden table furniture industry in Denpasar City.

c. Investment

According to Ancient Research (2020) in his research entitled *Analysis of the Effect*

of Investment on Economic Growth and Provincial Labor Absorption on the Island of Sumatra, Indonesia shows that PMDN Investment has a positive and significant effect on employment.

**5.5 Effect of Minimum Wage on Labor Absorption**

The size of wages will theoretically affect the size of the absorption of people's goals for finding work in a sector. However, the wages given by the oil palm plantation sector are not the same as the wages earned outside the oil palm plantation sector. People who work in the oil palm plantation sector can only work in the oil palm plantation sector and will not be able to find additional work outside the sector.

Because of this, it seems that workers/laborers working in the plantation sector do not look economically prosperous, because everything looks like they are distributed according to their respective groups, for example like rice. Meanwhile, if they are looking for additions outside the plantation sector, their income will be different. In contrast to urban workers or those working in other sectors such as the industrial sector and the service sector. Workers who work in the industrial sector and their service sector can work and can look for additional work or open other part-time businesses. But the plantation sector is not that easy, for example it is not easy to open a workshop in a garden. Therefore, the plantation sector has not become a destination or prima



donna for a place to find work, except at the top level, such as managers, assistant managers who require higher education. But workers in the plantation sector, such as middle and lower-class workers, cannot get a decent wage and they cannot take their monthly income out of the garden. It is very likely that when they are taken out they will be used up within a week. In this case it is necessary to review that the plantation sector is the main sector in the workforce, the wage system cannot rely on the existing District Minimum Wage (UMK) and Regional Minimum Wage (UMR). Because their work in the plantation sector is limited to their duties, but if they work in the industrial sector, for example in a factory, after work they can take a motorcycle taxi outside, open a shop and so on. The life of plantation workers can be categorized as not prosperous and not feasible in terms of housing and others. Therefore, how should the policy regulation on the plantation wage system be reviewed to differentiate it from other sectors, not generalized to the UMK and UMR, so that the production sector becomes the destination for employment. This will also reduce the massive urbanization of the city which is a problem today. Workers who work in the pure plantation sector only get wages in the plantation sector. This all serves to increase absorption capacity and to suppress massive urbanization which is a national problem today.

Research (Nurhalimah, 2018) also corroborates the results of this study which shows that the independent variable district minimum wage has a negative effect on employment in districts/cities of Lampung province. This is confirmed by research (Sholeh, 2012) that the enactment of the minimum wage law depends on the seriousness of its implementation. If the law is not enforced and its implementation monitored, then there will be no significant changes. Thus, even if the government imposes a minimum wage rate, workers may not necessarily earn the actual minimum wage. Another method is to recruit workers from relatives or those close to the company owner. Through this method the company can pay less

than the minimum wage rate, and it is free from the monitoring of the labor department.

### **The Effect of General Allocation Funds on Labor Absorption**

Pappas and Mark Hirshey's theory (1995), states that demand is a number of goods or services purchased by consumers during a certain period based on certain situations and conditions. There are two basic demand models, one of which is the derived demand model, namely the demand for raw materials as input in the manufacture of goods or services that are requested to be distributed into other products. These goods and services are acquired not because of their direct consumption value but because they are an important input in the manufacture or distribution of the product. We say that the demand for them is derived from the demand for the products they are used in manufacturing. Thus, the demand for all inputs used by a firm is derived demand. In other words, derived demand is the demand for inputs used in production.

The empirical findings of this study show positive and significant results, which conclude that general allocation funds have a positive and significant effect on employment. The general allocation fund (DAU) and its relation to employment in the plantation sector theoretically have no effect because the general allocation fund (DAU) is a fund from the central government that is transferred to the province, district/city to be used in the regions. In the regulatory system for governance and government financial benefits, it is stated that the General Allocation Fund (DAU) can only be used for the construction of government-owned facilities or assets, such as in the construction of infrastructure for the construction of bridges, schools, markets and so on. The DAU transferred can only be used to build infrastructure outside the plantation area, both private and state-owned, such as national roads, provincial roads, district/city roads in existing sub-districts or villages, then in the health sector, for example building a health center, the General Allocation Fund (DAU) is not can be used in the plantation area, because it is





already a regulatory regulation for the government's financial designation for the development sector. If the general allocation funds are used to build facilities within the plantation area, this will become a problem, all facilities such as schools, health centers, traditional markets, etc., can only be built by the plantation owners themselves.

### **The Effect of the Human Development Index on Labor Absorption on the Island of Sumatra**

Human Capital Theory explains about a form of capital as well as machines and technology. Humans also have a role or responsibility in all economic activities, such as production, consumption and transactions. As this theory develops, the concept of human capital can be defined into three concepts. The first concept is human capital as an individual aspect. This concept states that human capital is an ability that exists in humans, such as knowledge and skills. The empirical findings of this study show positive and significant results, which means that they support the Human Capital theory. The findings of this study are in line with research (Wati, 2022), and (Aulia, 2020) which found that the Human Development Index (IPM) variable has a positive effect on employment, which concludes that the Human Development Index (IPM) positive and significant effect on employment absorption.

However, the findings of this study are not in line with (Anzari, 2022). He found that the variable Human Development Index (IPM) had a negative and insignificant effect on employment absorption, while the empirical findings of this study had significant positive results. This is in line with research results (Hafiz, 2021) which show that the Human Development Index (IPM) actually has a positive effect, because it stimulates worker acceptance rates. In a study in the Regency/City of West Java found a positive effect on employment and the Human Development Index (IPM) and a positive effect of the Human Development Index on employment in the Regency/City of West Java. Research (Wati, 2022) shows that an increase in the Human Development Index will prove an increase in

employment for workers. In districts/cities in West Kalimantan the Human Development Index is effective in increasing employment. In addition, the results of the study show that the Human Development Index has a positive and significant effect on employment absorption.

### **Effect of Production on Labor Absorption**

In the theory of production with two changing factors, this can be analyzed by assuming that there are two factors of production that can be changed, for example labor and capital and these two factors can be interchanged. This means that if the price of labor and the price of capital per unit are known, then an analysis of how a producer will be able to minimize costs in his efforts to achieve a certain level of production (Nuraini, 2016)

Sulfiana's research (2021), Production has a positive and significant effect on employment, RosaliaAgistaNurWulansari's research (2019) production value has a significant influence on employment in small industries and household crafts in Tuban Regency, these results are in line with research PutuAgus Yoga IndraMuda (2019) and DiahAyuAlawiyah (2021), show that production has a positive and significant effect on employment. This research is not in line with the research of MeliaKusumaDewi (2022), the test results show that there is no effect of production values on employment absorption, where the production value does not have an impact on absorption of a person's workforce in small and micro industrial companies. The results of this study are in line with research according to Fadliilah&Atmanti (2012) which shows that production values have a significant influence on the absorption of small-scale industry workers and will not change.

The empirical findings of this study show positive and insignificant results, which means that they support the Assauri theory. The findings of this study are in line with the research of Sulfiana (2021), Wulansari et al (2019), which concludes that production has a positive and insignificant effect on employment. This research is not in line with the research of Dewi (2022),



the test results show that there is no effect of production values on employment absorption, where the amount of production values does not have an impact on absorption of a person's workforce in small and micro industrial companies. The results of this study are in line with research according to Fadliilah&Atmanti (2012) which shows that the value of production has a significant influence on the employment of small industries and will not change.

## 6. Conclusion

In accordance with the research title which aims to analyze the effect of Wages, General Allocation Funds, HDI, and Production on Labor absorption on the island of Sumatra, the conclusions drawn from this study are: (1) Minimum Wage has a negative and insignificant effect on employment absorption so the hypothesis is rejected. (2) the General Allocation Fund (DAU) has a positive and significant effect on employment so that the hypothesis is accepted. (3) The human development index (IPM) has a positive and significant effect on employment so that the hypothesis is accepted. (4) Production has a positive and insignificant effect on employment so that the hypothesis is rejected. (5) Simultaneously the Minimum Wage (UM), general allocation funds (DAU), human development index (IMP), and production affect employment absorption so that the hypothesis is accepted.

## BIBLIOGRAPHY

Anzari, D. A. (2022). The Influence of Gross Regional Domestic Product (GDP), Total Population, Human Development Index (Ipm), and Minimum Wage on Labor Absorption in Central Java Province 2010–2020.

Aulia, R. (2020). *Pengaruh Pdrb, Upah Minimum Kabupaten/Kota, Dan Indeks Pembangunan Manusia Terhadap Jumlah Tenaga Kerja Kabupaten/Kota Di Provinsi*

*Riau Tahun 2013-2019*(Bachelor's Thesis, Fakultas Ekonomi Dan Bisnis Uin Jakarta).

Ayuningsih, N. S. M &Setiawina, N. D. (2015). Pengaruh Jumlah Produksi, Kurs Dollar Amerika Serikat Dan Luas Areal Lahan Terhadap Ekspor Karet Indonesia Tahun 1993-2013. *E-JurnalEkonomi Pembangunan Unud* 3 (8) : 366-375.

Ayuningsih, N. S. M and Setiawina, N. D. (2014). Effect of Amount of Production, United States Dollar Exchange Rate and Land Area on Indonesian Rubber Exports in 1993-2013. *E-Journal of Development Economics Udayana University*. 3(8). 366-375

Darwanto and Yulia Yustikasari, (2007). *The Influence of Income Economic Growth*. Original Region and General Allocation Fund for Budget Allocation.

Dewi, M. K., & Syaifullah, Y. (2022). Analisis Pengaruh Jumlah Industri, Nilai Investasi, Dan Nilai Produksi Terhadap Penyerapan Tenaga Kerja Sektor Industri Kecil Dan Mikro Di Jawa Timur. *Jurnal Ilmu Ekonomi*, 6(1), 145-155.

Diah, A.A. (2021). The Influence of Capital, Production Value, and Wage Levels on Labor Absorption in the Perspective of Islamic Economics (Study of the Furniture Industry in South Lampung Regency) (Doctoral Dissertation, Raden Intan State Islamic University Lampung).

Ehrenberg, R. G. & Smith, R. S., (2012). *Modern Labor Theory and Public Policy*. Issue 11. New York: Pearson.

Ehrenberg, R. G., Smith, R. S., & Hallock, K. F. (2021). *Modern labor economics: Theory and public policy*. Routledge.

Fadliilah, D. N., & Atmanti, H. D. (2012). Analysis of Labor Absorption in Small Industries (Case Study in Salted Fish Small Industry Centers in Tegal City). *Diponegoro Journal Of Economics*, 1(1), 155-167.

Gujarati, Damodar, (2003). *Basic Econometrics*, Translation, Jakarta: Erlangga.

Maksum, A., Lubis, A., (2021, May). The Linearity of Oil Palm Plantations Owned by State-



- Owned Enterprises and Private Oil Palm Plantations to Production using the PLS Warp Application Approach. In *Journal of Physics: Conference Series* (Vol. 1899, No. 1, p. 012065). IOP Publishing. <https://iopscience.iop.org/article/10.1088/1742-6596/1899/1/012065>
- Mankiw N.Gregory (2006). *Macroeconomic Theory*, Erlangga Translation, Third Edition. Jakarta.
- Muda, I, F.Roosmawati, H.S Siregar, Ramli, H.Manurung&T.Banuas. (2018b). Performance Measurement Analysis of Palm Cooperative Cooperation with Using Balanced Scorecard. *IOP Conference Series : Materials Science and Engineering* 2017.288. <https://iopscience.iop.org/article/10.1088/1757-899X/288/1/012081>
- Muda, I., Siregar, H. S., Sembiring, S. A., Manurung, H., &Zein, Z. (2018). Economic Value of Palm Plantation in North Sumatera and Contribution to Product Domestic Regional Bruto. In *IOP Conference Series: Materials Science and Engineering* (Vol. 288, No. 1, p. 012080). IOP Publishing.<https://iopscience.iop.org/article/10.1088/1757-899X/288/1/012080/pdf> doi:10.1088/1757-899X/288/1/012080
- Napitupulu, Aprilia S. (2007). The Effect of Human Development Index Composite Indicators on Decreasing Poor Population in North Sumatra, Faculty of Economics, University of North Sumatra" North Sumatra.
- Nuraini. (2006). PotensiKapangKarotenogenikUntukMemproduksiPakanSumberBkaroten Dan PengaruhnyaTerhadapRansumAyamPedagang Dan Petelur. Disertasi. Program PascaSarjanaUniversitasAndalas, Padang.
- Nurfiat, N. A., &Rustariyuni, S. D. (2018). PengaruhupahdanteknologiterhadapproduktivitasdanpenyerapanTenagakerjapadaindustri mebel di kota Denpasar. *Piramida*, 14(1), 34-48.
- Nurhalimah, A. (2018). Women's Participation in Village Fund Management Planning. *Journal of State Administration (JUANA)*, 6(2), 35-54.
- Nurlina(2017). The Analysis of The Effects of Capital Expenditure and Human Development Index on Economic Growth and Poverty in East Aceh Regency. *International Journal of Economic Research*. 14(17). 415-428.
- Pappas, James L, and Mark Hirschey. 1995. *EkonomiManajerial*. Jilid 1. ed. Daniel Wirajaya. Jakarta: BinarupaAksara.
- Prawoto, D. A. (2018). PengaruhUpah, Upah Minimum, Pdrb Dan InflasiTerhadapPenyerapan Tenaga Kerja Di Jawa Tengah Tahun 2011-2015.
- Rakhmawati, E. (2022). Analysis of the Influence of Gross Regional Domestic Product (Pdrb), Regional Original Income (Pad), General Allocation Fund (Dau), Regional Allocation Fund (Dak) and Human Development Index (Ipm) on Poverty in Banten Province in 2010-2020.
- Sholeh, M. B. (2012). Wages for sandal workers in the sandal home industry in Wedoro Village in the perspective of Islamic law and the Labor Law (Doctoral dissertation, IAIN SunanAmpel Surabaya).
- Sihombing, M, Jumilawati, E, Dharsuky. (2015). The Implementation of Oil Palm Based Regional Innovation System (SIDA) In Supporting The Masterplan For The Acceleration And Expansion Of Indonesia's Economic Development (MP3EI) of The Economic Corridor Of Sumatera-Indonesia. *European Journal of Business and Innovation Research*. 3(5), 13-24. <https://repository.usu.ac.id/bitstream/handle/123456789/69231/fulltext.pdf?sequence=1&isAllowed=y>
- Sulfiana, D., &Sentosa, S.U. (2021). The Influence of Foreign Direct Investment, Inflation and Exchange Rates on Manufacturing Export Performance in Indonesia. *Ecosains: Scientific Journal of Economics and Development*, 10(2), 98-105.



- Tambunan, Tulus. (2001). *The Indonesian Economy: Theory and Empirical Findings*. Second printing. Jakarta.
- Tampubolon, H., (2021). The effect of total population, median income, and unemployment rate on poverty risk in Europe. *International Journal of Multidisciplinary Research and Growth Evaluation*. 2(1). 430-434.
- Todaro, M.P. And Stephen C. Smith. (2003). *Economic Development in the Third World*. Sixth Edition: Gramedia., p. 76, Jakarta.
- Against North Sumatra's GRDP " (PDF), Accessed August 27, 2019
- Wati, H. (2022). The Influence of Education Level, Regional Minimum Wage and Inflation on Labor Absorption in Makassar City with Economic Growth as an Intervening Variable. *Icor: Journal Of Regional Economics*, 2(3). 1-18.
- Wati, I. (2022). The Influence of Economic Growth, Human Development Index (Ipm) and Capital Expenditures on District/City Labor Absorption in West Kalimantan. *Journal of Development and Equity*, 11(4).
- Wulansari, R. A. N., Imaningsih, N., &Wijaya, R. S. (2021). The Influence Of Capital, Number Of Business Units, Investment Value And Minimum Wage On Labor Absorption In Small And Medium Industry In Tuban Regency. *Equilibrium: Scientific Journal of Economics, Management and Accounting*, 10(2).

