

**DETERMINANT ANALYSIS OF LABOR ABSORPTION IN  
NORTH SUMATRA**

**ANALISIS DETERMINAN PENYERAPAN TENAGA KERJA DI  
SUMATERA UTARA**

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***Abstract***

*As for the ways and efforts to increase the number of workers at work, there may be several influencing factors including: UMP, GRDP, Investment, Inflation and Exports. The research was conducted to examine the number of workers absorbed in North Sumatra for the 2011-2020 period so that it can be studied. This type of data uses secondary data from BPS, Sakernas (National Labor Force Survey), and the Ministry of Manpower. The method was studied using a quantitative associative approach with multiple linear regression models assisted by the E-views 9.0 computer program. The results of data processing stated that the UMP, Investment and Export had a positive effect. GRDP and Inflation have a negative effect. positive and negative signs on each variable explain that a positive sign if there is an increase in each independent variable has an impact on the increase in the dependent variable and vice versa. Variables that are not significant are UMP, Investment, and Inflation. Meanwhile, the significant variables are GRDP and Exports.*

**Keywords:** labor absorption; UMP; GRDP; investment; inflation; export

### **Abstrak**

*Adapun cara dan usaha dalam meningkatkan jumlah tenaga kerja dalam bekerja kemungkinan ada beberapa faktor yang berpengaruh diantaranya: UMP, PDRB, Investasi, Inflasi dan Ekspor. Adapun penelitian tersebut dilakukan untuk mengkaji jumlah tenaga kerja yang terserap di Sumatera Utara periode 2011-2020 agar dapat ditelaah. Jenis data menggunakan data sekunder berasal dari BPS, Sakernas (Survei Angkatan Kerja Nasional), dan Kementerian Ketenagakerjaan. Metode dikaji menggunakan pendekatan asosiatif kuantitatif dengan model regresi linear berganda dibantu program komputer E-views 9.0. Hasil dari pengolahan data menyatakan UMP, Investasi dan Ekspor berpengaruh positif. PDRB dan Inflasi berpengaruh negatif. tanda positif dan negatif pada setiap variabel menjelaskan yaitu tanda positif apabila terjadi kenaikan setiap variabel bebas berdampak juga kenaikan pada variabel terikat dan sebaliknya. Variabel yang tidak signifikan yaitu UMP, Investasi, dan Inflasi. Sementara variabel yang signifikan yaitu PDRB dan Ekspor.*

**Kata kunci:** penyerapan tenaga kerja; UMP; PDRB; investasi; inflasi; ekspor

## **A. INTRODUCTION**

Indonesia is part of national development which consists of areas including smaller areas because development must also pay attention to the small part that includes the development. Every development must have a goal to create and make the unitary state of the Republic of Indonesia into a just and prosperous society that is materially and spiritually evenly distributed (Imsar, 2018). In the long term, the first development creates progress in the welfare of the people. The supporting factors for this development are driven by various development policies, one of which is economic policy. In fact, the increase and progress of the economic development has not been able to solve other economic developments, namely the problem of labor which is still unsolved (Hasibuan, 2020).

The labor factor has a large and important influence on the success of the implementation of national development in Indonesia. Indonesia has a large growing population that has two sides to a country, the first side has a positive effect if the population can be directed to become effective workers so that they can obtain development capital large enough to benefit various development efforts in various fields. The second side of the negative impact is that if the population is not accompanied by job opportunities, rapid population growth has a negative impact on national economic growth.

The imbalance between the availability of employment and absorbed workers has a negative impact, causing the unemployment rate to rise which is a burden on the state

budget. It is undeniable that as a developing country, Indonesia is in a position in terms of employment issues. Indonesia consists of several provinces, one of which is North Sumatra, unemployment in Indonesia also occurs on a provincial scale, one of which is North Sumatra Province, also experiencing unemployment problems. In the province of North Sumatra, unemployment has not yet reached a point of completion and it can be seen in the table below that there are ups and downs in the number of unemployed in North Sumatra Province as a result of the availability of jobs that have not been achieved.

**Table 1.**  
**Population, Number of Labor Force and Unemployment in North Sumatra in 2011-2020**

Year	Population	Number of Labor Force	Unemployment	Percentage (%)
2011	8.911.109	6.026.020	493.052	0.08 %
2012	9.058.353	6.274.874	393.989	0.06 %
2013	9.205.210	6.500.750	419.449	0.06 %
2014	9.351.041	6.272.083	390.712	0.06 %
2015	9.498.974	6.391.098	428.794	0.06 %
2016	9.641.892	6.362.909	371.680	0.05 %
2017	9.789.363	6.743.277	377.288	0.05 %
2018	10.356.521	7.453.271	413.780	0.05 %
2019	10.532.473	7.411.780	399.262	0.05 %
2020	10.703.311	7.350.057	507.805	0.06 %

Source: National Labor Force Survey (Sakernas, 2016)

Table 1 provides an explanation that there is an increase in the population from year to year. Along with the fluctuating workforce from 2011-2020. Meanwhile, seen from the data, the number of unemployed in North Sumatra has increased, namely from 2020, although in 2019 it has decreased.

The policy that will be taken by the government is by setting a minimum wage policy in overcoming labor problems. In addition to the wage factor, there are other factors that affect employment issues such as GRDP, Investment, Inflation and Exports. Based on the table below, there are data on the number of workers, UMP, GRDP, Investment, Inflation and Exports of North Sumatra during 2011-2020.

**Table 2.**  
**UMP, GRDP, Domestic Investment and Number of Workers in North Sumatra 2011-2020**

<b>Year</b>	<b>UMP</b>	<b>PDRB</b>	<b>Domestic Investment</b>	<b>Number of Workers</b>
2011	1035.500	353 147.59	2 004 055,78	5.532.968
2012	1200.000	375 924.14	2 970 186,19	5.880.885
2013	1 375.000	398 727.14	5 068 881,40	6.081.301
2014	1 505.850	419 573.31	5 231 905,85	5.881.371
2015	1 625.000	440 955.85	4 287 417,30	5.962.304
2016	1 811.875	463 775.46	4 954 829,29	5.991.229
2017	1 961.355	487 531 .23	11 683 639,20	6.365.989
2018	2 132.189	512 765.63	8 371 820,30	7.039.491
2019	2 303.403.43	539 526.60	19 748 995,10	7.012.518
2020	2 499.423	533.746.35	18 189 528,40	6.842.252

*Source: Ministry of Manpower (Kemnakertrans, 2020)*

Table 2 explains that workers employed from the 2011-2020 period experienced fluctuating, for 2014, 2019, 2020 there was a decrease from the previous year. Some may be influenced by factors such as UMP, GRDP, Investment, Inflation and Exports.

Table 2 also explains that the level of the North Sumatra UMP in general from 2011-2020 has increased from year to year, and the number of workers absorbed also follows the increase in the UMP although there are several years that the workforce has decreased, but from 2011, 2012, 2013 and 2015-2018 the number of absorbed labor also increased in accordance with the increase in the North Sumatra UMP. The statement is in accordance with the data but different from the theory that if the UMP increases, there will be a reduction in the workforce by the company.

Table 2 shows that the value of GRDP has increased from year to year except that in 2020 it has decreased, the highest increase was in 2019 which reached 539 526.60 from 512 765.63 in 2018. This increase in GRDP should be followed by an increase in the workforce, but the fact is that The GRDP which increased in 2014 and 2019 even saw a decrease in the level of employment. The existence of these data statements is not in accordance with the theory it should be, in which the theory is that if the GRDP increases, the increase must be accompanied by an increase in the number of workers.

If seen from table 2, investment in 2011-2020 looks fluctuating, in 2014 and 2019 investment went up instead there was a decrease in labor, and in 2015 and 2018 investment fell, instead there was an increase in the number of workers. This is not in accordance with the Harrod-Domar theory.

**Table 3.**  
**Inflation, Exports and Number of Workers in North Sumatra 2011-2020**

<b>Year</b>	<b>Inflation(%)</b>	<b>Exports (Billion Rupiah)</b>	<b>Number of Workers</b>
2011	3.67	8 161 004	5.532.968
2012	3.86	8 695 941	5.880.885
2013	10.18	9 275 890	6.081.301
2014	8.17	9 087 526	5.881.371
2015	3.24	9 008 520	5.962.304
2016	6.02	8 387 357	5.991.229
2017	3.20	8 981 772	6.365.989
2018	1.23	9 645 621	7.039.491
2019	2.33	9 553 937	7.012.518
2020	1.96	8 833 505	6.842.252

*Source: Central Bureau of Statistics (BPS) North Sumatra*

Based on table 3, it provides an explanation of inflation from 2011-2020 looks fluctuating, in 2014 the inflation rate decreased while the number of employed workers decreased, while in 2011-2013, and 2016 the inflation rate increased from the previous year instead there was an increase. total manpower. The data above is inversely proportional to the theory.

The explanation of table 3 shows that the export value in North Sumatra from 2015-2016 decreased but the number of workers increased. Based on the above statements and theories from several variables studied, there are potentials and opportunities that can be created, especially in the ability to absorb labor in North Sumatra, indicating that when the UMP, GRDP, Investment, Inflation and Export values increase, the results are not in accordance with the theory based on the statement. This proves that the absorption of labor absorbed in North Sumatra has not been optimally absorbed by several factors that

influence it. Based on exposure, this research will examine how the influence of UMP, GRDP, investment, inflation, and export to the labor absorption in North Sumatera.

## **B. LITERATURE REVIEW**

### **Definition of Labor**

Workers are residents of working age i.e. -15 years old and +64 years old as well as all residents of working age who are ready to work or someone who is able to produce production works of both goods and services and when there is a demand for labor they are willing to enter the world of work (Nahla Muzlena Dan Syahrituah Siregar, 2020).

### **Definition of Labor Demand and Supply**

Demand for workers is all workers desired by an agency or company at some time and the demand for these workers affects wages and demand for results (Maimun Sholeh, 2007). While the supply of labor is all workers willing to work at a certain wage level. The existence of conditions between supply and demand in Indonesia as a reference for decision making by the private sector and the government.

### **Understanding Job Opportunities**

Employment opportunities are the opening of job vacancies to be filled for all residents of the specified working age, both those who have not worked at all, someone who is looking for work or someone who is working but wants to change jobs for some reason (Efendie, 2017).

### **Definition of Labor Absorption**

Employment of workers is the employment of actors in a job that has been determined by the company or the circumstances indicate the opening of employment opportunities within a certain time (M. Toha, 2000).

### **Understanding Wages and Minimum Wages**

In Sadono Sukirno's opinion, the notion of wages is a compensation/reward that must be issued by the company or producer to a worker in accordance with the agreement between the two parties, while the compensation aims to support the fulfillment of a living economy. to meet the needs of himself and his family.

The minimum wage is the minimum wage set by the government which is used by employers/employers for their workers, the provisions of this minimum wage itself are based on the minimum living needs of the workers, the minimum wage setting policy carried out by the government is to protect the interests of the wider community, especially workers and wage determination minimum every year.

### **Wages in Islamic Perspective**

In the Islamic perspective, the word wage comes from the word *ujrah* from the *ijarah* contract through the word *al-ajru*, which is compensation in a job (Mustofa, 2016). The Prophet Saw. also gave orders to employers/entrepreneurs so that wages are given as soon as possible and not to delay. From 'Abdullah bin 'Umar, the Prophet *Sallallaahu 'Alaihiwasallam* said (Syaiikh Abdullah bin Abdurrahman Al-Jibrin, 63).

Meaning: Give a worker his wages before his sweat dries (Narrated by Ibn Majah, Sahih). There are 3 criteria as the basis for the pillars of *ijarah* according to the number of scholars as follows:

1. a person with a contract; meet the criteria of puberty, reason, and the existence of no coercion in the contract
2. *ujrah* and its benefits; known, clearly stated and good
3. *Shigat* contract (sentence used in the transaction).

The application of *ijarah* in sharia banking to operations as a contract does not cause problems because according to some scholars it is in accordance with sharia provisions to be applied in sharia financial products and instruments (Sudiarti, 2018).

### **Definition of GDP**

GRDP is all units in an area that produce final goods and services regardless of the ownership factor. The economic growth of a country is seen in the value of GRDP at constant prices which reflects the increase in the production of goods and services from the previous period to the following year.

Some basic understandings of economic growth Look at it from an Islamic perspective, including regarding the boundaries of the problem economics, the Islamic perspective is the same as that adopted by capitalists, in What is meant by economic problems, namely the problem of wealth and wealth? lack of resources. The Islamic

perspective states that it is in accordance with the capitalization that has been provided by Allah to fulfill human needs aimed at overcoming life's problems man (Susanti, 2017).

### **Understanding Investment**

Siti Munawaroh and Sugiono (2019) investment or investment is a commitment or agreement between the investor and the recipient of the investment in a number of funds to be invested by the investor, while the activity is aimed at obtaining profits in the future or when the invested funds have been operated. The word investment or investment is often heard in business activities and the word investment is more popular in the business world than investment. The party who invests is called the investor.

### **Definition of Inflation**

Inflation is defined as an increase in prices that generally lasts a long time, a decline in prices and the value of money continuously. Inflation is a condition that describes the existence of uncontrolled money in the market, as a result, uncontrolled money circulation will have an impact on high price increases to stabilize the money supply (Yafiz, 2015). Inflation can affect high public consumption, uncontrolled circulation of money so that it will affect speculation so that the distribution of goods is hampered resulting in a decrease in the value of the currency.

### **Definition of Export**

Export is the issuing of goods and services in the country to outside the country both legally and illegally, the party who exports is called the exporter. The purpose of exports itself is to overcome economic problems in countries in the world, including developing countries, where foreign trade will earn foreign exchange for the exporting country to boost the country's economy (Berata, 2014).

### **Research Hypothesis**

The hypothesis is a temporary assumption that has or does not affect the results of the study. Based on the existing problems, the research hypotheses can be drawn:

1. There is a significant effect between the UMP (X1) on the absorption of Manpower (Y) in North Sumatra.



2. There is a significant effect between GRDP (X2) on employment in North Sumatra.
3. There is a significant effect between Investment (X3) on the absorption of Manpower in North Sumatra.
4. There is a significant influence between Inflation (X4) on the absorption of Manpower in North Sumatra.
5. There is a significant influence between Exports (X5) on the absorption of Manpower in North Sumatra.

### **C. RESEARCH METHODS**

This research method uses quantitative research data through associative models. Source of research data with secondary data. using time series data for the period 2011-2020 in the form of figures obtained from the official agency of the Central Statistics Agency (BPS) of North Sumatra through the North Sumatra website and other supporting data obtained from books, journals, and other research. This study uses multiple linear regression with the help of E-views 9 software as an estimation tool.

#### **Types and Sources of Research Data**

This research method uses quantitative data. Source of research data with secondary data. The definition of secondary data is official data that has been collected by a person or institution that takes shelter in the data from existing sources and can also mean that the data. have been collected by other parties (Yuliando, 2018). With the data will support the research with the help of several sources of books obtained will help and provide a more in-depth study on the research. The method in quantitative research uses time series data for the period 2011-2020 in the form of numbers obtained from the official agency of the Central Statistics Agency (BPS) of North Sumatra through the North Sumatra website and other supporting data obtained from books, journals, and other research.

## **Population And Sample**

### **1. Population**

Population is all subjects or objects that will be the target of research. The research subject is the place or location used. Population is an area consisting of subjects and objects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions are drawn. The population collected from the entire data of UMP, GRDP, Investment, Inflation, Exports and Number of Workers in North Sumatra as research data, then taken the last 10 years from 2011-2020 from the Central Statistics Agency.

### **2. Sample**

The sample is part of the population that has the characteristics of the population that provides a general picture so that the sample in the population used can represent the observed population. Based on Sugiono's opinion, the sample is part of the number and characteristics of the population. Based on the understanding of the sample, the authors took research samples from the 2011-2020 quarterly interpolated data, namely research data for 10 years x interpolated 4 quarters = 40 samples. In this study, the technique used is total sampling where all members of the population are sampled. In this study, the authors took data from UMP, GRDP, Investment, Inflation, Exports and Labor as samples from 2011-2020 which were taken through data processing until the Quarter, so that 40 samples were obtained in the form of time series data through Interpolation data.

### **Determination of the Estimation Model**

This research use classical assumption test such as normality test, heteroscedasticity, multicollinearity, and autocorrelation to test the datas. In this study using multiple regression model because the variables are more than one or two, while the purpose of multiple linear regression is to see the effect of the independent variables (UMP/ $X_1$ , GRDP/ $X_2$ , Investment/ $X_3$ , Inflation/ $X_4$ , and Exports/ $X_5$ ) on the dependent variable (LabourAbsorption/ $Y$ ). This research uses the Eviews 9 software. This study uses the assumption of *ceteris paribus*, meaning that other variables outside the study have not changed. Stages of hypothesis testing in multiple linear regression by determining the regression equation as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

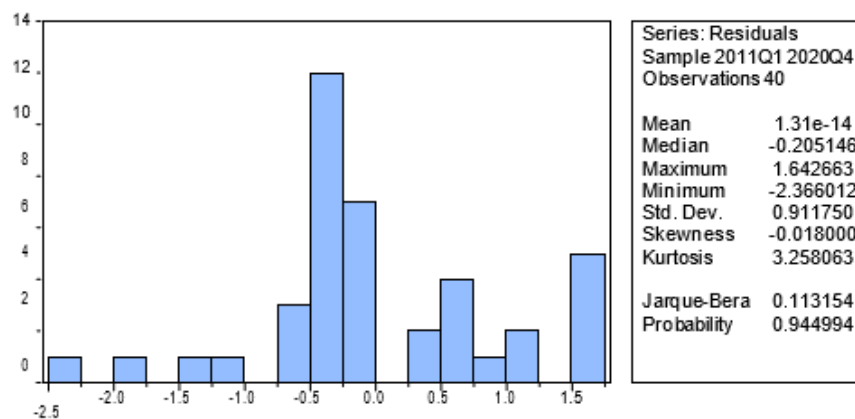
Hypothesis Test used as for how to find out the level of significance of each type of independent variable regression coefficient on the dependent variable using statistical tests such as: Coefficient of Determination (R-Square/R<sup>2</sup>), t-Statistic Test (Partial Test), Simultaneous F-Statistic Test. This reseach used 5% tolerance for statistic test to prove the hypothesis.

**D. RESULTS AND DISCUSSION**

The method of data analysis is in accordance with the research pattern of variables, and the method of analysis in this study is the method of multiple linear regression analysis. To find out the relationship between UMP, GRDP, Investment, Inflation, and Exports on employment in North Sumatra, the processing method using the Ordinary Least Square (OLS) model is used. The OLS method is used to obtain estimates in analyzing the effect of the independent variable on the dependent variable. The reason for choosing this method is because it is a simple method with strong and popular regression analysis, with certain assumptions.

- 1. Classical assumptions
  - a. Normality test

**Figure 1**  
**Normality Test Results**



Based on the picture above, the Jarque-Bera value is 0.113154 and the probability value is 0.944994 where > 0.05 means that the normality test is normally distributed.

b. Heteroscedasticity Test

**Table 4. Heteroscedasticity Test Results**

Heteroskedasticity Test: White

F-statistic	3.84E+15	Prob.F(18,21)	0.0000
Obs*R-squared	40.00000	Prob.Chi-Square(18)	0.0021
ScaledexplainedSS	16.70086	Prob.Chi-Square(18)	0.5438

Source: *Processed with E-Views9*

Based on the table 4, it can be seen that the p value of the Prob value. Chi-Square with an Obs\*R-Square value of 0.0021, while the p-value is 0.0021 < 0.05, meaning that there is no heteroscedasticity problem in this study.

c. Multicollinearity Test

**Table 5. Multicollinearity Test Results**

Variance Inflation Factors

Sample: 2011Q12020Q4

Included observations: 40

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.980368	41.12561	NA
UMP	0.007393	34.57159	1.899666
PDRB	0.022697	27.50255	2.138253
INVESTASI	0.191926	2.644229	1.246746
INFLASI	0.007756	8.352357	1.888393
EKSPOR	32.79921	2.832896	2.500201

Source: *Processed with E-Views9*

It can be seen in the table that the VIF value of each UMP variable (X1): 1.899666, GRDP (X2): 2.138253, Investment (X3): 1.246746, Inflation (X4): 1.888393, and Exports (X5): 2.500201, < 10, meaning that the regression model does not have multicollinearity symptoms.

d. Autocorrelation test

**Table 6. Autocorrelation Test Results**

Breusch-GodfreySerialCorrelationLMTest:

F-statistic	172.9588	Prob.F(2,32)	0.0000
Obs*R-squared	36.61302	Prob.Chi-Square(2)	0.0000

TestEquation:

Dependent Variable: RESID

Method: Least Squares

Sample: 2011Q12020Q4

Included observations: 40

Presample missing value lagged residuals settozero.

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	0.147178	0.297730	0.494334	0.6244
UMP	-0.007398	0.025794	-0.286812	0.7761
PDRB	-0.017259	0.045228	-0.381604	0.7053
INVESTASI	-0.065886	0.148745	-0.442943	0.6608
INFLASI	-0.002216	0.026736	-0.082903	0.9344
EKSPOR	2.769387	2.063491	1.342089	0.1890
RESID(-1)	1.499802	0.132718	11.30064	0.0000
RESID(-2)	-0.651484	0.153488	-4.244539	0.0002
R-squared	0.915325	Meandependentvar		1.31E-14
AdjustedR-squared	0.896803	S.D.dependentvar		0.911750
S.E.ofregression	0.292893	Akaikeinfocriterion		0.558839
Sumsquaredresid	2.745165	Schwarzcriterion		0.896615
Loglikelihood	-3.176779	Hannan-Quinnrcriter.		0.680968
F-statistic	49.41681	Durbin-Watsonstat		2.159666
Prob(F-statistic)	0.000000			

Sourcer:Processed withE-Views9

The results obtained through the Eviews program have a D-W value of 2.159666, a number that lies between -2 and + 2 means that there is no autocorrelation either positive or negative.

In this study using multiple regression model because the variables are more than one or two, while the purpose of multiple linear regression is to see the effect of the independent variables (X1, X2, X3, X4 and X5) on the dependent variable (Y). The results obtained from multiple linear regression in the table below are as follows:

**Table 7. Multiple Linear Regression Model Results**

Dependent Variable: POWER

Method: Least Squares

Sample: 2011Q1 2020Q4

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	71.16069	0.990135	71.86966	0.0000
UMP	0.023498	0.085984	0.273286	0.7863
PDRB	-0.598158	0.150655	-3.970373	0.0004
INVESTASI	0.701394	0.438093	1.601015	0.1186
INFLASI	-0.068442	0.088069	-0.777141	0.4424
EKSPOR	31.81903	5.727060	5.555910	0.0000
R-squared	0.659329	Meandependent var		68.79650
AdjustedR-squared	0.609230	S.D.dependentvar		1.562097
S.E.ofregression	0.976491	Akaikeinfocriterion		2.927779
Sumsquaredresid	32.42021	Schwarzcriterion		3.181111
Loglikelihood	-52.55559	Hannan-Quinn criter.		3.019376
F-statistic	13.16061	Durbin-Watsonstat		0.227081
Prob(F-statistic)	0.000000			

Source: Data Processed With *E-Views9*

The results obtained through multiple linear regression in this study are: Labor Absorption in North Sumatra = 71.16069 + 0.023498 (UMP) + -0.598158 (GDP) + 0.701394 (Investment) + -0.068442 (Inflation) + 31.81903 (Exports).

## 2. Hypothesis Test

### a. Coefficient of Determination

Based on the table 7, the R-square value is 0.659329, based on these results, it is explained that the independent variables together are able to influence the dependent variable about 65%, more than 35% are explained outside the variables used.

### b. T-Statistic Test (Partial Test)

According to table 7, the t-test aims to test the significance of each independent variable, namely UMP, GRDP, Investment, Inflation and Exports on the dependent variable, namely Labor Absorption in North Sumatra. Criteria for determining the decision by comparing t-table with t-count. Based on the above data processing, it is

known that the degrees of freedom (dk) are  $40 - 6 = 34$  with a confidence level of alpha 0.05 so that the t table is 2.03224.

c. f-Statistics Test (Overall Test)

The test results in the research table 7 state that the Fcount value is 13.16061 with a probability value of 0.000000. The Ftable value for the number of observations is 40 from a significance level of 5% and k or the number of all variables is 6, then the value of  $N1 = k - 1 = 6 - 1 = 5$ ,  $N2 = n - k = 40 - 6 = 34$  is 2.49 so that Fcount is greater than Ftable or  $13.16061 > 2.49$  and it can be seen that the probability value is smaller than the 5% significance level or  $0.000000 < 0.05$ . This means that X1 (UMP), X2 (GDP), X3 (Investment), X4 (Inflation), and X5 (Exports) together have a significant effect on the Y variable (labor absorption) at = 5%.

### Estimated Results

The results obtained through multiple linear regression in this study are: UMP, GRDP, Investment, Inflation, and Exports in North Sumatra in 2011-2020 are:

$$T.K = 71.16069 + 0.023498 (\text{UMP}) + -0.598158 (\text{GRDP}) + 0.701394 (\text{Investment}) + -0.068442 (\text{Inflation}) + 31.81903 (\text{Exports}).$$

R-squared: 0.659329

F-stats: 13.16061

Based on the regression in the table, an interpretation of the model is explained, namely: C is 71.16069 explaining if the variables studied, namely UMP, GRDP, Investment, Inflation, and Exports have a value equal to zero, resulting in an increase in Labor Absorption by 71.16069%.

#### 1. The Effect of UMP on Labor Absorption in North Sumatra

The results of the regression analysis obtained the probability value of the variable  $X1 = 0.7863 > 0.05$ , the probability value is greater than 0.05 so the UMP variable with employment in North Sumatra has no significant effect. It can also be explained that the UMP coefficient value of 0.023498 is positive, which means that if the UMP increases by 1%, it causes employment in North Sumatra to increase by 0.023498%.

This is supported by the previous theory, namely according to the opinion of N. Gregory Mankiw, stated that the establishment of a minimum wage has no effect because most of the workers already get wages above the minimum wage. Meanwhile, according to Suparmoko's opinion, most of the workers who have no influence on the determination of the minimum wage are caused by workers who have certain intelligence and education so that they get wages above the minimum wage and this usually happens in cities. The results of previous research from Nashahta Ardhiaty Nurfiat and Surya Dewi Rustariyuni (2018) in their research concluded that the wage variable was positively related to employment in the wooden table furniture industry in the city of Denpasar.

Subsequent research Farah Nadya Hudzaifatul Mukarromah (2018) the results of his research show the UMP variable with absorption of Labor has a positive effect in Indonesia, when wages increase followed by an increase in the number of workers. The relationship between the UMP and employment on the one hand reduces the use of workers for groups of workers who are under the working age group of workers who are minimally educated, skilled, and experienced. On the other hand, an increase in the UMP will be followed by an increase in the number of workers who are educated, have skills and experience.

## **2. The Influence of GRDP on Labor Absorption**

The results of the regression analysis obtained the probability value of the variable  $X_2 = 0.0004 < 0.05$ , the probability value is less than 0.05, which means that the GRDP variable with employment in North Sumatra has a significant effect. It can also be explained that the GRDP coefficient value is -0.598158 which is negative which means that if GRDP increases by 1%, the number of workers in North Sumatra decreases by -0.598158%. GRDP is a description of economic activity in an area, the measurement of GRDP is very important in determining decision making in dealing with various central problems related to economic growth, unemployment and others. So that the resulting GRDP results depend on the potential of human resources in a particular region.

GRDP is also part of economic growth (an increase in output produced), when GRDP increases, it has an impact on increasing job opportunities. GRDP affects employment with the assumption that when GRDP increases the number of sales for all economic units in an area will increase, the amount of sales made will have an impact on the company to increase the number of workers so that production can be increased to



increase sales. The results of this study are in accordance with research from Arin LuthitaAnamathofani (2019) which states that GRDP with employment has a significant effect in the city of Malang.

The GRDP variable with a negative sign on labor absorption indicates the economic condition can be seen from the GRDP or output that is able to be produced by a region. Economic development in the form of The increase in per capita income that occurs over a long period of time is usually accompanied by various processes of socio-economic transformation. One important part of the process is a shift in the production structure or a change in GRDP according to business fields. In connection with the shift in the production structure, the employment structure has also changed. The ability to produce output by a sector of the economy should also take on the role of labor in the production process so that the greater the output produced, the greater the amount of labor needed to produce the output.

### **3. The Effect of Investment on Labor Absorption**

Based on the regression analysis, it is known that the probability value of the X3 variable is  $0.1186 > 0.05$ , the probability value is greater than 0.05, so the investment variable with labor absorption in North Sumatra has no significant effect. It can also be explained that the investment coefficient value of 0.701394 has a positive sign stating that when 1% increase in investment, it will cause an increase of 0.701394% in Labor Absorption in North Sumatra. In addition, high labor wages will have an impact on entrepreneurs preferring capital-intensive investments compared to labor-intensive because in addition to making the production process more effective and efficient, capital-intensive investment will also minimize production costs which are getting higher due to rising wages and a decrease in absorbed workers. This is supported by previous research from Farah Nadya Hudzaifatul Mukarromah (2018) which states that investment with labor absorption has no significant effect in the city of Malang.

The study shows a positive relationship due to the high investment that makes the company will increase its workforce so as to obtain higher output. With this investment, the company sometimes replaces or adds to the old and unusable production equipment, so that the replacement of the production equipment

This can lead to an increase in the number of workers. Investment activities in an economy can push up and down the level of the economy of the country concerned because it is able to increase production and absorb labor.

#### **4. The Effect of Inflation on Labor Absorption**

Based on the regression analysis with the probability value of the variable X4 (inflation) =  $0.4424 > 0.05$ , the probability value is greater than 0.05, which means that the inflation variable with employment in North Sumatra has no significant effect. And it was also explained from the results of the inflation coefficient value  $-0.068442$  that the negative sign stated that when 1% increase in Inflation, it would cause a decrease in Labor Absorption in North Sumatra, namely  $-0.068442\%$ .

When inflation in a region or country is high, it has a negative impact on workers being absorbed, because if high inflation occurs it will result in an increase in input prices which are the burden of the company, immediately increasing production costs, entrepreneurs and the business sector will reduce employment opportunities and absorption of labor. On the other hand, when inflation is low, it will have an impact on employers in increasing their absorption of workers.

From the results of this study, according to research by Melia ElmiLavianty (2016) in his research stated that inflation with labor absorption had a negative effect. Based on the theory explains that high inflation will have an impact on decreasing employment opportunities. This research is in accordance with the theory, when the calculated inflation rate is inflation, it will result in an increase in loan interest rates, an increase in production costs for producers or companies, and a decrease in people's purchasing power. The impact of high interest rates will cause investors to minimize their investment in productive sectors, so that employment opportunities fall and result in an increase in the unemployment rate. When inflation is stable in a region or country, investors will start investing because they feel they are guaranteed. If the cost of production increases, then the producer's expenditure increases, the solution taken by the producer will reduce the number of workers.

When inflation gets higher or continues, producers may stop their production for some time, when uncontrolled, large producers are likely to go bankrupt, usually the middle to lower producers, and high inflation will reduce public demand.

## **5. The Effect of Exports on Labor Absorption**

The result of the probability variable  $X_5 = 0.0000 < 0.05$ , the probability value is smaller than 0.05, which means that the export variable with employment in North Sumatra has a significant effect. It can also be explained that the export coefficient value is 31.81903 with a positive sign stating that if exports increase by 1% it will cause employment in North Sumatra to increase by 31.81903%.

Based on the results of the study which stated the significance of exports and employment absorption because exports are one of the macroeconomic indicators of a country, exports are activities to sell goods or services from within the country to abroad, if there is an increase in the value of exports it means that the amount of domestic production is increasing, and of course to increase production need factors of production and one of them is labor. This research is supported by Betty Silfia Ayu Utami's research (2020) the results obtained between exports and employment have no significant effect.

Based on the positive value of the export coefficient, this can happen when trade transactions both goods and services abroad will demand workers to operate their businesses.

The influence of the independent variable on the dependent variable, which shows the regression results of a significance value of 0.000000, means that simultaneously or jointly it has a significant effect on the dependent variable, namely Labor Absorption in North Sumatra in 2011-2020.

## **E. CONCLUSIONS**

Based on the estimates obtained in the test and concluded as follows: The Insignificance of the UMP on Labor Absorption in North Sumatra. When the t-test is performed, the UMP value is obtained with a probability value greater than the significant value. While the UMP coefficient value is positive, it explains the positive relationship between UMP and employment in North Sumatra, if the UMP increases, there will be an increase in Labor Absorption in North Sumatra and vice versa. The significance of GRDP on employment in North Sumatra. When the t-test is performed, the GRDP is obtained with a probability smaller than the significant value. While the value of the GRDP coefficient is negative. The negative effect of GRDP on employment in North Sumatra. If GRDP increases, there will be a decrease in employment and vice versa. The non-

significance between investment and energy absorption can be seen from the partial test (t-test) where the investment value is obtained with a probability greater than the significant value. While the value of the investment coefficient is positive. The existence of these results has a positive influence between investment on employment in North Sumatra. So that the increase in the value of investment will result in the absorption of labor in North Sumatra to increase, and vice versa.

The non-significance between inflation and energy absorption can be seen from the partial test (t-test) where the inflation value is obtained with a probability greater than the significant value. While the value of the inflation coefficient is negative. Thus there is a negative influence between Inflation on Energy Absorption Work in North Sumatra. So if the inflation rate rises, the absorption of labor in North Sumatra decreases, and vice versa. The significance of exports to employment is obtained based on the partial test of the value of exports with a probability smaller than the significant value. While the value of the Export coefficient is positive. Thus, there is a positive influence between exports and employment in North Sumatra. So that if the value of exports increases, it will result in the absorption of labor in North Sumatra will also increase and vice versa. The value of all independent variables UMP, GRDP, Investment, Inflation, and Exports simultaneously have a significant effect on employment in North Sumatra. Meanwhile,  $H_0$  is rejected,  $H_a$  is accepted. So when there is a change in the value of the UMP, GRDP, Investment, Inflation, and Exports together, it can affect and change the absorption of labor in North Sumatra. From the results obtained, it can be concluded as suggestions by the authors in this study on employment in North Sumatra Province, namely: first: government policies pay more attention to and adjust the setting of minimum wages so as not to harm one party. Second: The government is also expected to pay more attention to and promote its economic support to all sectors including car and motorcycle repairs considering that this sector has a high contribution to GDP so that it plays a major role in job creation or employment. Third: It is hoped that in the future the government will develop more investment to invest predominantly labor-intensive rather than capital-intensive. Fourth: The government must also provide motivation by making decisions to regulate inflation in North Sumatra. Fifth: In promoting or increasing exports, it would be better if the raw materials come from within the country to boost economic growth and increase the use of the number of workers.

## REFERENCES

- Abdurrahman Al-Jibrin, Bin Syaikh Abdullah. Al-Fatawa Asy-Syar'iyah Fi AlMasa'il Al-Ashriyyah Min Fatawa Ulama Al-Balad Al-Haram, Indonesia: Darul Haq, t.t).
- Anamathofani, Luthia Arin. 2019. “Pengaruh Upah Minimum, PDRB, Dan Inflasi Terhadap Penyerapan Tenaga Kerja Di Kota Malang”. Jurnal Ilmiah Ilmu Ekonomi Fakultas Ekonomi Dan Bisnis Malang.
- BPS, <https://sumut.bps.go.id/indicator/3/58/1/perkembangan-inflasi-5-kota-ihk-di-sumatera-utara-dan-nasional-.html>. Diunduh 1 Desember 2020.
- Dewi, Sintya Made Ni Dan Sutrisna, I Ketut. 2015. “Pengaruh Investasi Dan Ekspor Terhadap Penyerapan Tenaga Kerja Melalui Pertumbuhan Ekonomi”. Jurnal EP Universitas Udayana (Unud) Bali Vol 4, No (6):621-636.
- Efendie. Keuangan Negara: Suatu Tinjauan Komprehensif Dan Terpadu. Surabaya: Airlangga University Press, 2017.
- Emilia et.al. 2015. “Analisis Pengaruh Ekspor Ke China Terhadap Pendapatan Perkapita Dan Penyerapan Tenaga Kerja Di Indonesia” Jurnal Paradigm Ekonomika Universitas Jambi, Vol. 10, No. 2.
- Hasibuan, Armayani Ria Reni. *Perekonomian Indonesia*, Medan: FEBI UIN-SU, 2020.
- Imsar. “Analisis Produksi Dan Pendapatan Usahatani Kopi Gayo (Arabika) Kabupaten Bener Meriah (Studi Kasus: Desa Pantan Tengah Kecamatan Permata)”. 2018.
- Kemnakertrans, <https://www.bps.go.id/linkTableDinamis/view/id/917>. diunduh 25 September 2020.
- Mukarromah, Hudzaifatul Nadya Farah. 2018. “Penyerapan Tenaga Kerja Di Indonesia Tahun 2010-2015”. Skripsi, Fakultas Ekonomi Dan Bisnis Universitas Jember.
- Munawaroh, Siti Dan Sugiono. Hukum Investasi. Surabaya: CV. Jakad Publishing, 2019.
- Mustofa, Imam. Fiqih Mu'amalah: Kontemporer. Jakarta: Rajawali Pers, 2016
- Muzlena, Nahla dan Siregar, Syahrituah. “Pengaruh Ekspor Komoditas Utama Terhadap Penyerapan Tenaga Kerja Di Provinsi Kalimantan Selatan” Jurnal E.P. Universitas Lambung Mangkurat Vol 3, No. 2, 2020.
- Oko Berata, I Komang. Ekpor Impor. Jakarta: Raih Asa Sukses (Penebar Swadaya Grup, 2014
- Sakernas, <https://www.bps.go.id/statictable/2016/04/04/1907/penduduk-berumur-15-tahun-ke-atas-menurut-provinsi-dan-jenis-kegiatan-selama-seminggu-yang-lalu-2008---2020.html>. diunduh 4 September 2020.

- Sholeh, Maimun. “Permintaan Dan Penawaran Tenaga Kerja Serta Upah: Teori Serta Beberapa Potretnya di Indonesia”. *Jurnal Ekonomi Dan Pendidikan*. Vol 4, No. (1), 1 April 2007.
- Sudiarti, Sri. 2018. *Fiqh Muamalah Kontemporer*. Medan: FEBI UIN-SU PRESS.
- Susanti, Elis. “Analisis Pengaruh Produk Domestik Regional Bruto(PDRB) Terhadap Tingkat Kesejahteraan Masyarakat Kabupaten Way Kanan Tahun 2010-2015 Perspektif Ekonomi Islam”. Skripsi, Fakultas Ekonomi Dan Bisnis Islam UIN Raden Intan Lampung, 2017.
- Toha, M. *Membuka Usaha Kecil*. Yogyakarta: Kanisius Anggota Ikapi, 2000.
- Yafiz, Muhammad. *Argument Integrasi Islam Dan Ekonomi: Melacak Rasionalitas Islamisasi Ilmu Ekonomi*, Medan: FebiUin-Su Press,2015.