

# The Effect of Private Investment and Provincial Minimum Wage on Labor Absorption and Open Unemployment Rate in North Maluku Province

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## Abstract

Unemployment is a labor problem that has now reached a fairly concerning condition. The problem of employment is undeniably one of the main problems faced in development. Wages are also the main factor that influences labor absorption. An increase in wage levels will increase the company's production costs which will ultimately lead to an increase in prices. The objectives of this study are: (1) To analyze the effect of private investment on labor absorption in North Maluku Province; (2) To analyze the effect of the provincial minimum wage (UMP) on labor absorption in North Maluku Province; (3) To analyze the effect of private investment on the open unemployment rate in North Maluku Province; (4) To analyze the effect of the Provincial Minimum Wage on the open unemployment rate in North Maluku Province; and (5) To analyze the effect of labor absorption on reducing the open unemployment rate in North Maluku Province. The analysis model used in this study is path analysis. The results of the study indicate that the provincial minimum wage (UMP) partially has a significant effect on labor absorption and the open unemployment rate in North Maluku Province. Meanwhile, private investment has an effect on employment opportunities but cannot reduce the unemployment rate. Then, opportunity has a significant influence and is negatively correlated with the open unemployment rate in North Maluku Province.

**Keywords:** Private Investment, Provincial Minimum Wage, Employment Opportunities and Open Unemployment Rate.

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## INTRODUCTION

Unemployment is very complicated problem for every country, no except for Indonesia. Problems around unemployment of course always become main problem social in developing countries like Indonesia. According to Prihanto , Purwaka Hari (2012) who quoted Todaro and Smith, et al. (2004) statement on unemployment in developing countries developing in general dominated by unemployment age young and unemployed educated.

Imbalance between increase resident with provision field work This cause problem Serious like unemployment and poverty . In order to increase employment opportunities, then expenditure the government must be directed to provision of social overhead and development economy in the long term long. Expenditure like that will be create employment and efficiency productivity economy.

Problem employment is not available can undeniably one of the problem main issues faced in development . this job field functioning as vehicle to place human in position central to development . Employment is source income for working workforce . Big or small amount income earned from job field determines prosperity a family . In

addition, employment is also a vehicle for source Power human to express self they as creature maker tools . Work is activity express creativity as well as ability human and is one of the vehicle devotion for cracked Power man concerned . On the other hand , if there is unemployment in a society , things this means less its efficiency utilization of one of the basic capital and its limitations available options . Even If unemployment has reached sufficient level high , it can bother stability economy the community concerned (Hasibuan, 2009).

Wages are also factor main influencing factors absorption workforce . Increase level wages , will raise cost production the company that ultimately cause increase price . Increase price cause , buyer decrease , decrease production and finally decrease request workforce or called scale effect. If level wages increase, entrepreneurs more Like replace workforce with technology capital intensive so request workforce decreased ( Sumarsono , 2003; in (Fadliilah, Diah Nur and Atmanti, 2012). This relevant with Putra's research (2012) on influence mark investment , value wages and values production to absorption workforce in industry furniture in Pedurungan District , Semarang City shows that There is influence of capital, value wages and values production to absorption workforce in industry furniture in Pedurungan District , Semarang City.

Debate about minimum wage often happened , because existence dispute between businessman or perpetrator industry with the workers ,the workers want increase minimum wage that is in favor to him , while the entrepreneurs feel will harm his efforts with existence increase the minimum wage . The debate that emerged concerning to what extent do real wages follow growth productivity and needs to determinant minimum wage , then from that policy law government in the field wages are very important for effort improvement welfare workers (Sumarsono 2003).

Implementation minimum wage , especially for countries that have amount high population will result in height level unemployment . This is happen because of unemployment open happens in generation young people who just finish his education and further will looking for work according to his wishes . In addition, with existence implementation policy minimum wages and the Act about employment , for entrepreneurs will using a lot of contract labor , this this is what will be add problem unemployment .

In addition, Investment is determinant rate growth economy , because besides push increase in output significant , also increases input requests so in the end will increase employment opportunities and welfare public as consequence from increasing income received by the community (Makmun, 2003). Investment cause increase production items that also have an effect to request workforce . This is cause increase field work so that reduce unemployment . Therefore investment impact positive to economy in Indonesia. It is necessary government try help increase investment with collaborate with other countries in the form of Foreign Direct Investment (PMA) as well as improvement investment Domestic Investment (PMDN). According to (Satrio, 2010) the increase investment will increase job opportunities so that level unemployment will decreased . To find out impact investment direct to request labor used coefficient labor and output multiplier to be able to knowing the demand multiplier labor .

Investment in essence is beginning activity development economy . Investment can carried out by private sector , government or cooperation between government and private sector . Investment is a the way that can carried out by the government to improve growth economy and for the long term long can raise standard life its society (Mankiw, 2013). Investment is step sacrifice consumption in the future future ."

Investment is component main in moving wheel economy a country. In theory improvement investment will boost trade volume and production volume further will expand productive and meaningful employment opportunities will increase income per capita at the same time can improve welfare public .

The size investment in a country/ region describe the magnitude activity economy , and its size activity economy describes a fairly complete production process high . Investment is a factor crucial for continuity of development process economy (sustainable development), or growth economy term long . With existence activity production so was created employment opportunities and income public increased , which is furthermore create / improve market demand (Tambunan, 2001).

Capital stock or investment is one of factor important in determining level income national . Activities investment allow a public Keep going continuously increase activity economy and employment opportunities , increasing income national and international level prosperity (Sukirno, 2000). The existence of investments will push creation new capital goods so that will absorb factor new production namely create new jobs or job opportunities that will absorb power which in turn will reduce unemployment (Setiawan, Maulida, & Sandika, 2014).

Based on the research problems stated above, the objectives of this study are as follows: 1. To analyze the effect of private investment on labor absorption in North Maluku Province. 2. To analyze the effect of provincial minimum wage (UMP) on labor absorption in North Maluku Province. 3. To analyze the effect of private investment on the open unemployment rate in North Maluku Province. 4. To analyze the effect of Provincial Minimum Wage on the open unemployment rate in North Maluku Province. 5. To analyze the effect of labor absorption on reducing the open unemployment rate in North Maluku Province.

Zulhanafi, Aimon, Syofyan (2013) with a study entitled Analysis of Factors Affecting Productivity and Unemployment Rate in Indonesia. The results of the study indicate that the variables of productivity, economic growth, investment, government spending, and wages significantly affect the unemployment rate in Indonesia. This means that increasing productivity, economic growth, investment, government spending and decreasing wages will cause a decrease in the unemployment rate.

Research conducted by Prabowo Dwi Kristanto (2014), with the title of his research is "Analysis of the Influence of Economic Growth, Minimum Wages, and Unemployment Rates on the Number of Poor People in Brebes Regency in 1997-2012". The results of his research indicate that minimum wages and open unemployment rates have a significant influence on the number of poor people in Brebes Regency during the period 197-2012. And research conducted by Adtya Barry Kurniawan (2014), with the title of his research "Analysis of the Influence of Economic Growth, Minimum Wages, and Investment on the Number of Unemployed in Gresik Regency". The results of his research are based on the results of the regression equation showing that economic growth, minimum wages, investment have an influence on the number of unemployed in Gresik Regency.

The empirical study of (Fatas A, 1998) stated that the United States government spending has a positive and significant effect on the availability of employment opportunities. Different results from the research of Sun'an and Astuti (2008) in analyzing the influence of investment, government spending, and economic growth on employment opportunities in West Nusa Tenggara, namely fiscal policy through

government spending (APBD) has no effect on the creation of employment opportunities in NTB Province.

Monteiro and Turnovsky (2008), The role of government spending is a determinant of economic growth, using a two-sector endogenous growth model, namely physical capital and human capital. Physical capital in the form of infrastructure. In the long term, economic growth creates welfare. This finding confirms that the government makes productive spending choices.

(Alexiou, 2009), examining the relationship between economic growth and government expenditure in South Eastern Europe (SEE) using panel data produced significant results. More specifically, the evidence produced shows that four out of five variables used in the estimation namely government expenditure on capital formation, development assistance, private investment and trade openness all have positive and significant effects on economic growth.

Another study by (Loto, 2011), examined the effect of government expenditure growth on economic growth in Nigeria over the period 1980 to 2008, with a particular focus on sectoral expenditure. He investigated the effect of government expenditure growth in Nigeria over the period 1980 to 2008, with a particular focus on sectoral expenditure. The five major sectors selected were (security, health, education, transport, and communication and agriculture). The variables were tested using Stationary with Co-Integration and Error-Correction analysis. The results showed that in the short run, expenditure on agriculture was found to be negatively related to economic growth. The impact of education although also negative was not significant. The impact of expenditure on health was also found to be positively related to economic growth. Although expenditure on transport, national security and communication were positively related to economic growth, they were not statistically significant.

(Nasiru, 2012), this study examines the relationship between government spending and economic growth in Nigeria (1961-2010) using the ECM and Granger Causality approaches, the results show that capital spending causes economic growth. The implications of this finding indicate that any reduction in capital spending will have a negative impact on economic growth in Nigeria.

## RESEARCH METHOD

This study uses time *series data* from 2010-2015 and uses path analysis . Path analysis is used to explain the relationship pattern between variables with intervening variables with the aim of determining the direct and indirect effects of a set of independent variables (exogenous) on dependent variables (endogenous) (Riduwan and Sunarto; 2015). With the following equation:

$$1. \quad Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_1$$

$$2. \quad Y_2 = \beta_0 + \beta_4 X_1 + \beta_5 X_2 + \beta_6 Y_1 + \varepsilon_2$$

Note:  $X_1$  = Private Investment

$X_2$  = Provincial Minimum Wage (UMP)

$Y_1$  = Job Opportunities

$Y_2$  = Unemployment

$\beta_1 \dots \beta_6$  = Regression coefficient of independent variables ( $X_i$ )

$\beta_0$  = Intercept / Constant

$\varepsilon_1$  = Error of the first equation

$\varepsilon_2$  = Error of the second equation

1. The first hypothesis equation decision is formulated:

$$H_a : P y1x1 = P y1x2 \neq 0$$

$$H_0 : P y1x1 = P y1x2 = 0$$

Hypothesis decision sentence form:

$H_a$ : Private investment and Provincial Minimum Wage have a positive and significant effect on employment opportunities in North Maluku Province.

$H_0$ : Private investment and Provincial Minimum Wage do not have a positive and insignificant effect on employment opportunities in North Maluku Province.

2. The second hypothesis equation decision is formulated:

$$H_a : P y1x1 = P y1x2 \neq 0$$

$$H_0 : P y1x1 = P y1x2 = 0$$

Hypothesis decision sentence form:

$H_a$ : Private investment and Provincial Minimum Wage have a positive and significant effect on unemployment in North Maluku Province.

$H_0$ : Private investment and Provincial Minimum Wage do not have a positive and insignificant effect on unemployment in North Maluku Province.

$H_a$ : Private investment and Provincial Minimum Wage indirectly have a positive and significant effect on unemployment through employment opportunities in North Maluku Province.

$H_0$ : Private investment and Provincial Minimum Wage indirectly do not have a positive and insignificant effect on unemployment through employment opportunities in North Maluku Province.

Probability value = 0.05

1. Jika nilai probabilitas 0,05 lebih kecil atau sama dengan nilai probabilitas Sig atau  $0,05 \leq Sig$ , maka  $H_0$  diterima dan  $H_a$  ditolak, artinya tidak signifikan.

2. Jika nilai probabilitas 0,05 lebih besar atau sama dengan nilai probabilitas Sig atau  $0,05 \geq Sig$ , maka  $H_0$  ditolak dan  $H_a$  diterima, artinya signifikan.

## Hypothesis Proof Techniques

### Individual Coefficient Testing (t-test)

This test aims to determine whether each independent variable has a significant effect on the dependent variable at a certain level of confidence. The hypothesis used is:

$$H_0 : \beta_i = 0$$

$$H_a : \beta_i \neq 0$$

By determining the degree of confidence of 95% ( $\alpha = 0.05$ ), degree of freedom (Df) =  $n-k-1$ , then the t-table can be searched and used as a reflection of the area of acceptance or rejection of the hypothesis. The t-count value can be obtained using the formula:

$$t = \frac{b_i}{Sb_i}$$

Where :

$b_i$  = regression coefficient of independent variable  $i$ .

$Sb_i$  = standard error of the regression coefficient  $b_i$

Next, the calculated t-value is compared with the t-table value with the following criteria:

$H_0$  is accepted, if  $t\text{-count} < t\text{-table}$ , meaning there is no significant influence of the independent variable on the dependent variable.

$H_a$  is accepted, if  $t\text{-count} > t\text{-table}$ , meaning there is a significant influence of the independent variable on the dependent variable.

### Simultaneous Coefficient Testing (F-test)

This test aims to determine whether all independent variables simultaneously affect the dependent variable at a certain level of confidence. The hypothesis used is:

$$H_0 : \beta_1 = \beta_2 = 0$$

$$H_a : \beta_1 \neq \beta_2 \neq 0$$

By determining the degree of confidence of 90% ( $\alpha = 0.10$ ), degree of freedom (Df) =  $k/(n - k - 1)$ , then the F-table can be searched and used as a reflection of the area of acceptance or rejection of the hypothesis. The F-calculated value is searched using the formula:

$$F = \frac{R^2 / (k)}{(1 - R^2) / (n - k - 1)}$$

Where :

$R^2$  = Explained Sum Squares (ESS)

$1 - R^2$  = Residual Sum Squares (RSS)

$k$  = degrees of freedom (Df) numerator

$nk - 1$  = degrees of freedom (Df) denominator

Next, the F-calculated value is compared with the F-table value using the following criteria:

$H_0$  is accepted, if  $F\text{-count} < F\text{-table}$ , meaning there is no significant influence simultaneously from all independent variables on the dependent variable.

$H_a$  is accepted, if  $F\text{-count} > F\text{-table}$ , meaning there is a significant influence simultaneously from all independent variables on the dependent variable.

### Econometric Criteria (Second-order Test)

These criteria are determined by econometric theory. Testing with these criteria helps in determining whether an estimate has the required properties such as: unbiasedness, consistency, sufficiency, and so on. Therefore, the regression estimation coefficient obtained will be the best and unbiased linear estimator (*Best Linear Unbiased Estimator* = BLUE) if it meets several assumptions known as classical assumptions. In reality, research often finds deviations from classical assumptions, so a test is needed to determine the extent to which classical assumptions are met.

#### 1). Homoscedasticity Assumption Test.

To test the assumption of homoscedasticity, Park's test can be used. In this test, Park uses the following regression:

$$\ln e_i^2 = \alpha + \beta \ln X_i + v_i$$

Where :  $e_i$  = residual

$v_i$  = disturbance element

If  $\beta$  turns out to be statistically significant, then there is heteroscedasticity in the data, but if it turns out to be insignificant then the assumption of homoscedasticity can be accepted which means there are no symptoms of heteroscedasticity.

#### 2). Non-Autocorrelation Assumption Test

The assumption of no autocorrelation can be tested using the Durbin Watson statistic, the formula for which is as follows:

$$d = \frac{\sum_{t=2}^{t=n} (e_t - e_{t-1})^2}{\sum_{t=1}^{t=n} e_t^2}$$

Testing for autocorrelation is carried out by determining the critical values of  $d_U$  and  $d_L$  based on the number of observations and the number of independent variables with the following provisions:

- ❖ If the hypothesis  $H_0$  is that there is no positive serial correlation
  - $d < d_L$  : reject  $H_0$
  - $d > d_U$  : does not reject  $H_0$
  - $d_L < d < d_U$  : testing is inconclusive
- ❖ If the hypothesis  $H_0$  is that there is no negative serial correlation
  - $d < 4 - d_L$  : reject  $H_0$
  - $d > 4 - d_U$  : does not reject  $H_0$
  - $4 - d_U < d < 4 - d_L$  : testing is inconclusive
- ❖ If  $H_0$  is two-tailed, there is no positive or negative serial correlation.
  - $d < d_L$  : reject  $H_0$
  - $d > 4 - d_L$  : reject  $H_0$
  - $d_U < d < 4 - d_U$  : does not reject  $H_0$
  - $d_L < d < d_U$  : testing is inconclusive
  - $4 - d_U < d < 4 - d_L$  : the test cannot be concluded

### 3). Test the assumption of no multicollinearity

Multicollinearity arises when one or more independent variables have a strong correlation with other independent variables. One way to find out which independent variables are related to which other independent variables is to regress each  $X_i$  on the remaining  $X$  variables and calculate the  $R_i^2$  value.

If the F-count exceeds the F-table, it means that there is multicollinearity between  $X_i$  and other  $X$ , conversely if it does not exceed the F-table, it can be said that there is no multicollinearity. Or according to Klein who showed that as long as the  $R_i^2$  value of the regression results between independent variables is not greater than the  $R^2$  of the model, then multicollinearity is not so serious, so the model can still be used, and it is proven that there are no symptoms of multicollinearity.

### Operational Definition

Research variables are the subject of research or what is the focus of a study (Arikunto; 2006). The variables used in this study include:

1. Private investment ( $X_2$ ) is an investment made by the private sector or entrepreneurs with the aim of making a profit in one year and is expressed in rupiah.
2. The Provincial Minimum Wage (UMP) is the amount of wages/salary determined by the regional government for workers in the North Maluku Province, and is expressed in rupiah.
3. Employment Opportunities ( $Y_1$ ) are the number of job vacancies or people who have obtained jobs (in nine business sectors in North Maluku Province).

Based on available employment opportunities or the number of workers seeking work according to BPS in units of people.

4. Unemployment rate (Y2 ) is the number of unemployed people, who are part of the workforce but are not working or are looking for work. The variable for the number of unemployed used is the number of openly unemployed in Indonesia, using data from BPS, namely data on people aged (15 years and over) who are looking for work, preparing a business, not looking for work, and have not started working. The data taken is annual, from 2013 to 2018 and the unit used is people / person.

## RESULTS AND DISCUSSION

### Development of Private Investment in North Maluku Province

Investment is the key word determining the rate of economic growth, because in addition to significantly driving an increase in output, it will also automatically increase the demand for input, which in turn will increase employment opportunities and public welfare. In Neo-Classical theory, it is assumed that the economy continues to achieve full employment and in this state investment will be the same as savings at full employment, therefore the interest rate is a tool that can be used to maintain full employment from time to time (Sukirno, 2000).

Rostow (in Todaro, 2000) stated that every effort to take off requires the mobilization of domestic and foreign savings with the aim of creating sufficient investment, to accelerate economic growth so that in turn it will increase employment opportunities and public welfare as a consequence of the increasing income received by the community. Investment must be seen as the main driving force of economic growth, creating employment opportunities and increasing international competitiveness, not just covering financing shortages.

In North Maluku Province, of course, the creation of job opportunities is closely related to investment. With an increase in investment, economic growth will increase, which in turn creates job opportunities. In table 4.1. it can be seen that there is an increase in GRDP along with the increase in investment value. This means that with the ability of the local government to create a conducive investment climate for the private sector, it will have an impact on business expansion, thereby increasing output growth (GRDP), which can also directly improve the regional economy as a whole.

Table 1. Realization of Private Investment in North Maluku Province  
2017 – 2022

Year	Investment Value (Rp.000)	Percentage
2017	5,573,409.50	14.28
2018	5,592,831.76	14.33
2019	6,210,616.60	15.91
2020	6,297,330.49	16.14
2021	7,206,423.70	18.47
2022	8,144,346.30	20.87
Total	39,024,958.35	100.00

Source: BAPPEDA of North Maluku Province, 2017.

### Development of Provincial Minimum Wage (UMP)

The increase in the minimum wage is something that is highly anticipated by workers/laborers, because the increase in wages will have a positive impact such as

increasing their standard of living. However, the increase in the minimum wage will also have a negative impact on the unemployment rate in North Maluku Province, because employers or companies will feel burdened in providing wages to their workers who must follow the wage standards set by the government, so that there will be an initiative from employers/companies to limit employee recruitment or will use employees who have better quality, thus it will have an impact on the unemployment rate in North Maluku Province.

Table 2 Development of Provincial Minimum Wage (UMP)  
In North Maluku Province, 2017 – 2022

Year	Employment Opportunity (Person)	Percentage (%)
2017	2,200,622	11.13
2018	2,440,746	13.36
2019	2,681,266	15.59
2020	2,775,152	18.31
2021	2,867,457	20.09
2022	2,920,803	21.52
Total	10,786,046	100.00

Source: North Maluku Provincial Manpower Office, processed data.

### Development of Job Opportunities in North Maluku Province

The state of a society's workforce in general can describe the social life of that society. In line with the increasing population, the number of the workforce also continues to increase from year to year, therefore the government must rebuild employment opportunities by preparing all its people by giving attention, skills and capacity to contribute to work and community services. In addition, employment opportunities are also related to the ability of each economic sector to create jobs for the workforce.

Wages are compensation received by a 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 suppressed as efficiently as possible. For workers, wages are a source of income for themselves, their families and a source of community spending. The high and low wages are an important factor that determines the standard of living of the community.

Table 3 Development of Employment Opportunities  
In North Maluku Province, 2017 – 2022

Year	Employment Opportunity (Person)	Percentage (%)
2017	437,870	15.76
2018	443,946	15.98
2019	454,978	16.38
2020	456,017	16.41
2021	482,543	17.36
2022	503,479	18.11
Total	2,778,833	100.00

Source: North Maluku Provincial Manpower Office, processed data.

### Unemployment Development in North Maluku Province

Unemployment is a reality faced not only by developing countries , *but also by developed countries. In general, unemployment* is defined as a situation where someone who is included in the labor force category does not have a job and is actively looking for a job (Nanga, 2001). Someone who is not working, but is actively looking for a job cannot be classified as unemployed. In addition, unemployment is defined as a situation where someone who is included in the labor force wants to get a job but has not been able to get it (Sukirno, 2000).

Unemployment is often a problem in the economy because with unemployment, people's productivity and income will decrease, which can cause social problems. This macroeconomic problem is the most common, especially in developing countries, such as Indonesia. So it is not surprising that every year this country always experiences an increase in "unemployment contributions". Based on the data in Table 4.4. it can be seen that unemployment in North Maluku Province during 2017 - 2022 tends to fluctuate.

Table 4 Development of Open Unemployment Rate  
In North Maluku Province, 2017 – 2022

Year	Unemployment (Person)	Percentage (%)
2017	25,487	17.93
2018	31,058	15.45
2019	21,047	12.54
2020	27,303	17.76
2021	29,997	21.65
2022	28.133	14.67
Total	143,477	100.00

Source: North Maluku Provincial Manpower Office, processed data.

### Path Analysis Calculation Results

Based on the data obtained, then the calculation or data processing is carried out using the SPSS program. The summary of the results of the path analysis is as follows:

Table 5 Summary of Path Analysis Results

Influence between variables	Beta Path Coefficient	t value	F Value	Coefficient of Determination (R <sup>2</sup> )	Information
X1 against Y1	0.004	3.930	27,792	0.778	Significant
X2 against Y1	-4.305	-4.867			Significant
X1 against Y2	-0.052	-1.815	5.146	0.807	Not Significant
X2 against Y2	82,189	2,846			Significant
Y1 against Y2	-11,342	-2.653			Significant

Information:

X1 = Private Investment

Y1 = Employment Opportunities

X2 = Provincial Minimum Wage

Y2 = Unemployment

Based on table 5 above describes that in the first equation regression model with individual (partial) testing, private investment on employment opportunities, namely where in table 4 *the coefficients* t value is obtained of 3.930 with a value (sig) of 0.013 because the sig value <0.05 probability value, then the decision H<sub>0</sub> is rejected and H<sub>a</sub> is accepted, meaning that private investment has a significant effect and is positively

correlated with employment opportunities in North Maluku Province. Then, individual (partial) testing, the provincial minimum wage on employment opportunities, where in table 5 *coefficients* (attachment) the t value is obtained of 4.867 with a value (sig) of 0.006 because the sig value <0.05 probability value, then the decision  $H_0$  is rejected and  $H_a$  is accepted, meaning that the provincial minimum wage has a significant effect and is positively correlated with employment opportunities in North Maluku Province.

For the second equation regression model, individual (partial) testing, private investment on unemployment, namely where in table 4.5. *the coefficients* t value is 1.815 with a value (sig) of 0.084 because the sig value > 0.05 probability value, then the decision  $H_0$  is accepted and  $H_a$  is rejected, meaning that private investment does not have a significant effect and is positively correlated with unemployment in North Maluku Province. Then, individual (partial) testing, the provincial minimum wage on unemployment, where in table 4.5. *coefficients* (attachment) the t value is 2.846 with a value (sig) of 0.01 because the sig value <0.05 probability value, then the decision  $H_0$  is rejected and  $H_a$  is accepted, meaning that private investment has a significant effect and is positively correlated with unemployment in North Maluku Province.

In the second equation regression model with overall testing (simultaneously), private investment and provincial minimum wages (UMP) together on unemployment are as seen in table 5 Anova (attachment) obtained an F value of 5.146 with a value (sig) of 0.008 because the sig value <0.05 probability value, then the decision  $H_0$  is rejected and  $H_a$  is accepted, meaning that government spending, private investment, and workforce education together on unemployment have a significant effect and are positively correlated. Then private investment and provincial minimum wages (UMP) together on employment opportunities are as seen in table 4.5. Anova (attachment) obtained an F value of 27.792 with a value (sig) of 0.008 because the sig value <0.000 probability value, then the decision  $H_0$  is rejected and  $H_a$  is accepted, meaning that government spending, private investment, and workforce education together on employment opportunities have a significant effect and are positively correlated.

### **Classical Assumption Testing**

Testing with this criterion helps in determining whether an estimate has the required properties such as: unbiasedness, consistency, sufficiency, and so on. Therefore, the regression estimation coefficient obtained will be the best and unbiased linear estimator (*Best Linear Unbiased Estimator* = BLUE) if it meets several assumptions known as classical assumptions.

Thus, based on the calculation results in the appendix, it shows that the linear regression equation of employment opportunities does not violate the existing classical assumptions. This is indicated by each value that has met the *Best Linear Unbiased Estimator (BLUE) criteria*, so that the model is appropriate or valid for estimation using the OLS method. The results of testing the classical assumptions of this study are as follows:

### **Autocorrelation**

Based on the test results (attachment 2) it shows that the value of Durbin-Watson (DW-statistic) is 1.163. When compared with the table at the 5% confidence level,  $nk-1$  obtained the value of  $dL = 1.50$  and  $dU = 0.123$  which is between the  $dL$  and  $dU$  values ( $dL < d < dU$ ). This means that the non-autocorrelation test cannot be concluded. However, the Durbin-Watson value above is still between -2 and +2 which means that the regression model does not show any symptoms of autocorrelation.

**Model Summary <sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.898 <sup>a</sup>	.807	.778	.02799	1.163

a. Predictors: (Constant), INV, UMP

b. Dependent Variable: KK

**Multicollinearity**

Multicollinearity arises because one or more independent variables have a strong correlation with other independent variables. A good regression model should not have a correlation between independent variables. Multicollinearity can be identified from (1) the tolerance value and its opposite (2) the variance inflation factor (VIF). These two measures indicate how much of each independent variable is explained by the other independent variables.

Looking at the results of the correlation between independent variables (appendix 2) it appears that none of the variables have a high enough correlation between independent variables. The results of the calculation of the tolerance value also show that none of the independent variables have a tolerance value of less than 10%, which means that there is no correlation between independent variables that have a value of more than 95%. The results of the calculation of the variance inflation factor (VIF) value also show the same thing, none of the independent variables have a VIF value of more than 10. So it can be concluded that there is no multicollinearity between independent variables in the regression model.

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

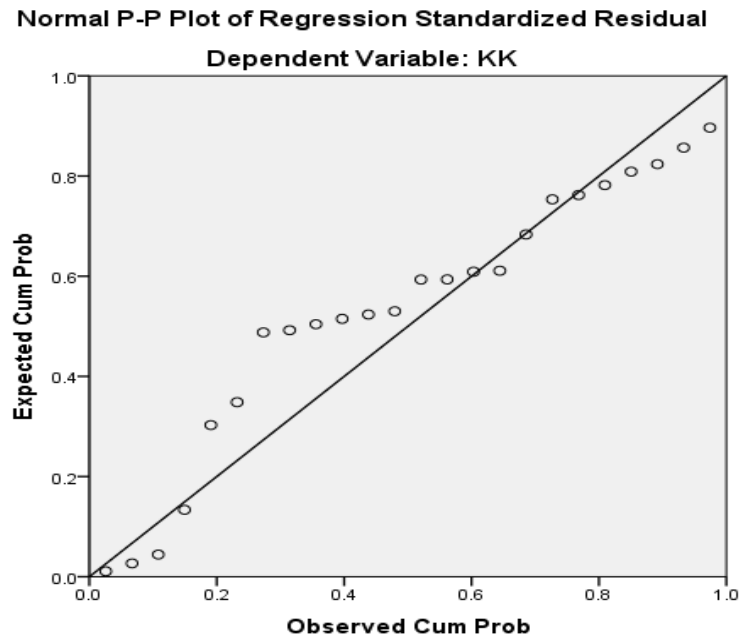
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-4.354	1,068		-4.076	.001		
UMP	.004	.001	1,945	3.930	.013	.062	1,084
INV	4.305	.734	2,702	4,867	.006	.046	1.925
KK	-2.956E-5	.000	1,444	-5.018	.003	.298	1,351

a. Dependent Variable: UNEMPLOYEE

**Normality Test**

Testing the normality of the sample, linearity of the relationship and equality of variance can create a plot between the residual value (ZRESID) and the predicted value (SPRED). The linear regression relationship and its variance can be seen in the probability scatter diagram (Normal Probability Plot) or abbreviated as PP Plot. Based on the plot

diagram below, it shows that the points are still around the linear line so it is concluded that the data is normally distributed.



## Discussion of Research Results

### The Impact of Private Investment on Employment Opportunities in North Maluku Province.

One of the important indicators for analyzing economic development in a country is economic growth, which is measured by the difference in gross domestic product in a certain year with the previous year (Setiawan et al., 2014). More specifically, Todaro (2000) stated that capital accumulation, population growth related to the number of workers and technological progress are the main components of economic growth. Capital accumulation will occur if part of current income is saved and then invested to increase output in the future. Meanwhile, according to Adam Smith (in Kuncoro, 1997), economic growth will determine the speed or slowness of economic growth in a country. This capital is obtained from savings made by the community. With the accumulation of capital generated from savings, economic actors can invest it in the real sector, in an effort to increase their income.

Based on the results of the study, it shows that private investment has a positive and significant effect on employment opportunities in North Maluku Province. This means that if there is an increase in private investment, it will be able to increase employment opportunities in North Maluku Province. However, investment does not affect the creation of employment opportunities in North Maluku Province. This is in line with the theory that explains that investment is the key word determining the rate of economic growth, because in addition to driving a significant increase in output, it will also automatically increase demand for input, which in turn will increase employment opportunities and community welfare as a consequence of the increasing income received by the community (Makmun, 2003). Sulistiawati (2012) with a study entitled: The Effect of Investment on Economic Growth and Labor Absorption and Community Welfare in Provinces in Indonesia. The results of the study show that investment has a significant effect and has a positive relationship with provincial labor absorption in Indonesia. These results provide support for hypothesis two which states that investment

has a significant effect on provincial labor absorption in Indonesia. An increase in investment will be followed by an increase in provincial labor absorption in Indonesia.

### **The Impact of Private Investment on Unemployment in North Maluku Province.**

Investment is a determinant of economic growth rate, because in addition to significantly increasing output, it also increases demand for input so that it will ultimately increase employment opportunities and public welfare as a consequence of the increasing income received by the community (Makmun, 2003). Investment causes an increase in the production of goods which also affects the demand for labor. This causes an increase in employment opportunities, thereby reducing unemployment. The existence of investments will encourage the creation of new capital goods so that it will absorb new production factors, namely creating new jobs or employment opportunities that will absorb labor which in turn will reduce unemployment (Setiawan et al., 2014).

Based on the results of the study, it shows that private investment has a significant effect and is negatively correlated with unemployment in North Maluku Province. This means that if there is an increase in private investment, it will be able to reduce the open unemployment rate in North Maluku Province. The relationship between investment and unemployment can be seen based on the Harrod-Domar theory in Kurniawan (2014:155), Harrod-Domar argues "that investment not only creates demand but also increases production capacity". This means that the greater the production capacity, the greater the workforce will be required, with the assumption of " *full employment* ". This is because investment is a change in the addition of production factors, one of which is labor. That way, the economy as a whole can absorb as much labor as possible, so that labor force participation will also increase. This is in line with research conducted by (Rahmadin & Nasir, 2013) with the results of the study that partially the level of investment has a significant effect on the unemployment rate.

According to Pratiwi (2005), investments that have a *multiplier effect* have an impact on increasing welfare, which is measured by increasing income. This means that if income increases, the number of goods and services that will be consumed will also increase. If the demand for goods and services increases, it will increase job opportunities, this will reduce the unemployment rate. This decrease in unemployment is caused by the absorption of the workforce in investment projects. Investments that have a *multiplier effect* have an impact on increasing welfare, which is measured by increasing income. This means that if income increases, the number of goods and services consumed will also increase. If the demand for goods and services increases, it will increase job opportunities. This will reduce the unemployment rate. This decrease in unemployment is caused by the absorption of the workforce in investment projects.

### **The Impact of Provincial Minimum Wages on Employment Opportunities in North Maluku Province**

Wages are compensation received for a month by workers/employees, either in the form of money or goods paid by the company/office/employer. Minimum Wage is the lowest monthly wage consisting of basic wages including fixed allowances set by the governor as a safety net. The government sets the minimum wage based on decent living needs and by taking into account productivity and economic growth. Wages are an interesting and important issue for companies, because wages have a very large influence on workers. The government has regulated the City/District Minimum Wage

(UMK). In various provinces, it turns out that the determination of minimum wages differs, both in amount, percentage increase each year, determination system and scope. Some provinces set a single minimum wage and some other provinces set sectoral minimum wages. The single minimum wage is rigid, generally having an impact on improving the wages of permanent workers in marginal industries.

Wages are an interesting and important issue for companies, because wages have a very large influence on workers. The government has regulated the City / Regency Minimum Wage (UMK). In various provinces, it turns out that the determination of minimum wages is different, both in amount, percentage increase each year, determination system and scope. Some provinces set a single minimum wage and some other provinces set sectoral minimum wages. The single minimum wage is rigid, generally impacting on improving the wages of permanent workers in marginal industries.

The results of this study indicate that the provincial minimum wage (UMP) has a negative and significant effect on employment opportunities in North Maluku Province. This means that if there is an increase in the Provincial Minimum Wage (UMP), it will increase employment opportunities. According to Kuncoro (in Erni Yulianti, 2006) the quantity of labor demanded will decrease as a result of the increase in wages. If the wage rate increases while the price of other inputs remains the same, it means that the price of labor is relatively expensive compared to other inputs. This situation encourages entrepreneurs to reduce the use of relatively expensive labor with other inputs that are relatively cheaper in order to maintain maximum profits. The results of the study by Hutagalung and Santoso (2013) show that the minimum wage has a significant effect on employment opportunities.

### **The Influence of Provincial Minimum Wages on the Open Unemployment Rate in North Maluku Province**

High wages will cause a decrease in the number of workers and result in increased unemployment. High wages then indicate high production costs. Thus, companies will reduce their production capacity and ultimately reduce economic growth. Wages are one of the factors that affect the unemployment rate. "Wages are compensation received by a unit of labor in the form of the amount of money paid to it" (Mankiw, 2006).

The workforce that sets its minimum wage level at a certain wage level, if all wages offered are below that wage level, a worker will refuse to receive the wage and as a result cause unemployment. If the wage set in an area is too low, it will result in a high number of unemployed people in that area. However, from the employer's perspective, if wages increase and the costs incurred are quite high, it will reduce the efficiency of spending, so that employers will take a policy of reducing the workforce in order to reduce production costs. This will result in increased unemployment. The results of Kristiyana's research (2011) show that the city's minimum wage has a positive effect on unemployment. Kurniawan's research (2013) states that the city's minimum wage has a positive effect on unemployment.

Through a wage policy, the Indonesian government is trying to set a minimum wage that is in accordance with the standard of living. The determination of wage levels by the government in a region will have an impact on the level of unemployment that exists. The higher the wage set by the government in a region will have an impact on the level of unemployment that exists. The higher the wage set by the government, the

more it will result in a decrease in the number of people working in the region. Therefore, the higher the wage set will have an impact on the high level of unemployment that occurs.

The results of the study indicate that the Provincial Minimum Wage (UMP) has a positive and significant effect on the open unemployment rate in North Maluku Province. This means that if there is an increase in the Provincial Minimum Wage (UMP), it will increase the number of unemployed in North Maluku Province. This is because the increase in wages will increase production costs, so that companies / private companies will reduce or not increase the number of workers. This is in line with research conducted by (Syam, 2015) which shows that wages and population growth have a positive and significant effect on unemployment in the city of Makassar.

The determination of wage levels by the government in a region will have an impact on the level of unemployment that exists. The higher the wage set by the government, the more it will result in a decrease in the number of people working in the country. Therefore, "the higher the wage set will have an impact on the high level of unemployment that occurs" (Kaufman, 1999). This can happen because the higher the wage set, the more it will affect the increase in *output costs* that must be incurred by a company. As a result, a company will carry out efficiency in production by reducing the number of its workers

## CONCLUSION

Based on the research results and discussions presented, the conclusions of this research are as follows:

1. Private investment has an impact on employment opportunities in North Maluku Province. This means that investment made by the private sector can absorb labor. This shows that the role of private investment in the economy of North Maluku is very good.
2. The results of the study show that private investment has no effect on the open unemployment rate in North Maluku Province. This means that, if there is an increase in private investment, it cannot reduce the open unemployment rate in North Maluku Province. This is because the investment made by the private sector is more in the mining, trade and service sectors so that it does not have much impact on unemployment.
3. The Provincial Minimum Wage (UMP) has a significant effect on labor absorption in North Maluku Province. This means that if there is an increase in the Provincial Minimum Wage (UMP), it will decrease labor absorption. This is because there will be an increase in production costs so that the private sector will stop or reduce the number of workers.
4. The Provincial Minimum Wage (UMP) has no significant effect and is negatively correlated with the open unemployment rate (TPT) in North Maluku Province. This means that if there is an increase in the Provincial Minimum Wage (UMP), it cannot reduce the number of unemployed. This is because the increase in the Provincial Minimum Wage (UMP) only increases production costs so that the private sector can reduce or not add workers

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