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The Effect of Economic Growth, Minimum Wage, Human Development Index on Open Unemployment Rate in West Nusa Tenggara (2019-2023)

Deni Darma Saputra[1], Baiq Ismiwati [2], Ahmad Zaenal Wafik [3]

[1] University of Matara, Mataram, Nusa Tenggara Barat, Indonesia
[2] University of Matara, Mataram, Nusa Tenggara Barat, Indonesia
[3] University of Matara, Mataram, Nusa Tenggara Barat, Indonesia

ABSTRACT

This study examines the impact of economic growth, minimum wage, and the Human Development Index (HDI) on the open unemployment rate in West Nusa Tenggara Province, Indonesia, from 2019 to 2023. Using a quantitative descriptive approach with panel data regression, the analysis covers 10 districts/cities over a five-year period. The Fixed Effect Model (FEM) was selected based on the results of the Chow and Hausman tests. The findings indicate that economic growth has a negative and significant effect on the open unemployment rate, suggesting that increased economic activity can contribute to job creation. In contrast, the minimum wage and HDI do not show a significant impact on unemployment. The simultaneous F-test, however, reveals that all three variables collectively have a significant influence on the open unemployment rate. The adjusted R-squared value of 0.621 implies that the model explains a substantial portion of the unemployment variation. The results highlight the importance of fostering inclusive economic growth to effectively reduce unemployment, while suggesting that wage and development policies require complementary labor market strategies to be impactful.

Keywords: *Economic Growth, Minimum Wage, Human Development Index, Open Unemployment Rate, Panel Data*

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CORRESPONDING:
Name : Deni Darma Saputra
E-mail: dennydarmasaputra06@gmail.com

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INTRODUCTION

Unemployment is one of the most pressing and complex socio-economic challenges faced by developing countries, including Indonesia. Indonesia, as a developing country with the fourth largest population in the world, has great market potential in terms of labor availability (Reni and Putria 2020). In theory, a large population can be a driver of economic growth on the supply side. However, the reality is that the large population and workforce have not been able to be optimally utilized to encourage economic activity (Wulan 2020). On the contrary, this is actually a challenge for the country in the development process. One of the issues that is quite serious in Indonesia is the high unemployment rate.

According to Putong (2013), unemployment can occur because of limited employment information or information that can only be accessed by a few job seekers and the available jobs are not in accordance with the qualifications that job seekers have. Given the population growth that continues to grow every year, the number of job seekers or labor force will also increase, but it will not be followed by the provision of sufficient employment allocation to absorb job seekers. This condition occurs as a result of the government's lack of providing jobs as a result of the increase in the number of existing population so that the workforce is not fully absorbed, so the consequence is the creation of unemployment (Suhandi, et al., 2020).

The Central Statistics Agency (BPS) stated that the number of labor force in Indonesia in February 2023 reached 138.99 million people, then increased by around 2.81 million people from February 2019. In the last year it has increased to 89 thousand people. The Open Unemployment Rate (TPT) in Indonesia decreased in February 2023 by 5.43 percent. The increase in the Open Unemployment Rate (TPT) can be caused by a decrease in employment in the trade sector by 0.25%, the agricultural sector by 0.37% and the other service sector by 0.19%. Based on education level, the highest Open Unemployment Rate (TPT) is in Vocational High Schools (SMK) at 8.25 percent. This is because vocational school graduates have not been fully absorbed by the job market because the skills they have are still not in accordance with the needs of the job market.

One of the provinces in Indonesia that also has an unemployment problem is West Nusa Tenggara, where the province of West Nusa Tenggara (NTB), is an area that has considerable economic potential, especially in the agriculture, tourism, and

fisheries sectors (Ayu et al. 2024). However, although economic growth in the region has shown quite positive developments in recent years, the problem of unemployment in various districts/cities is still a serious challenge. The following is a table regarding the open unemployment rate in West Nusa Tenggara province.

Data from the Central Statistics Agency shows that the open unemployment rate in NTB Province in 2019 was 3.28%. Then in 2020, the Open Unemployment Rate (TPT) of NTB Province increased by 4.22% due to the COVID-19 pandemic. The Open Unemployment Rate (TPT) in NTB Province has increased due to many industrial companies going out of business, and working residents experiencing Termination of Employment (PHK) due to the COVID-19 pandemic. This can hinder production activities carried out by industrial companies so that entrepreneurs close their businesses and lay off their employees due to a decrease in production so that workers who are laid off and laid off are potential that can increase the number of unemployed in NTB Province, so the NTB Provincial government must be aware of the explosion of unemployment.

Economic growth is one of the indicators to find out whether a region/economic area is running well. According to Ardian (2022), "Economic growth activities are the most important factor in assessing the performance of an economic company, especially for the analysis of economic development results for a country or region. The economic growth of a region that is always good illustrates that the economic activities of the country or region itself are experiencing good development.

High economic growth will have an impact on labor absorption, meaning it will reduce unemployment. On the other hand, if economic growth falls, labor absorption will be minimal and unemployment will increase. Economic growth data on the basis of constant prices in the districts/cities of West Nusa Tenggara Province (NTB) for the 2019-2023 period shows that areas such as West Lombok, Central Lombok, East Lombok, Sumbawa, and Dompu have experienced significant fluctuations in economic growth.

The second factor that affects the open unemployment rate in West Nusa Tenggara Province is the Regency/City Minimum Wage (UMK). According to the Regulation of the Minister of Manpower Number 01 of 1999, efforts to realize a decent income for workers are carried out by setting a minimum wage, taking into account the improvement of workers' welfare without neglecting the increase in productivity, company progress, and the economy. Based on Presidential Regulation No. 78 of

2015 concerning Wages, the regency/city minimum wage is a monthly wage consisting of basic wages and fixed allowances.

The Regency/City Minimum Wage in West Nusa Tenggara Province in 2019 shows a diverse value, with Mataram City MSEs reaching Rp 2.3 million. Meanwhile, the provincial minimum wage (UMP) in NTB in 2019 was only around Rp 1.8 million. The fluctuating increase in the Regency/City Minimum Wage (MSE) can have an impact on the relocation of industrial companies to other regions that have lower MSEs, such as East Java or Central Java, which causes the open unemployment rate in NTB to increase (Aswanto, A. 2021).

The third factor that affects the open unemployment rate is the human development index. According to the *United Nations Development Programme* (UNDP) in the *1991 Human Development Report, human development is a process of increasing people options for humans to live (*BPS, 2020). However, if the increase in HDI is not balanced by the availability of adequate employment, then the number of increasingly competent job seekers can actually increase the open unemployment rate. This happens due to fierce competition for jobs and the mismatch between labor skills and labor market needs.

Based on the above explanation, the problem of open unemployment is a serious issue that requires special attention from the government. In the context of West Nusa Tenggara Province (NTB), the open unemployment rate is influenced by several important factors such as economic growth, Regency/City Minimum Wage and Human Development Index (HDI).

Therefore, the researcher is interested in researching more deeply about the open unemployment rate in West Nusa Tenggara Province in 2019-2023 by taking the title "The Influence of Economic Growth, Regency/City Minimum Wage, and Human Development Index on the Open Unemployment Rate in West Nusa Tenggara Province in 2019-2023. The objectives of this study are:

1. To calculate and analyze the influence of economic growth, Regency/City Minimum Wage, and Human Development Index on

unemployment in NTB Province is partial.

2. To calculate and analyze the influence of economic growth, Regency/City Minimum Wage, and Human Development Index on unemployment in NTB Province simultaneously." This research is expected to provide a comprehensive picture of the

factors that affect open unemployment and become a reference for more effective policy-making.

LITERATURE REVIEW

1. Theoretical Framework

a. Economic Growth Theory

Economic growth refers to the increase in the production of goods and services over time, typically measured by Gross Regional Domestic Product (GRDP). According to Adam Smith (Classical Theory), economic growth results from specialization, capital accumulation, and technological innovation. The Harrod-Domar model emphasizes the importance of savings and investment, stating that higher capital formation leads to greater production and employment. The Solow Neoclassical model also introduces the role of technological progress in sustaining long-term growth. In the context of unemployment, growth is expected to absorb labor and reduce joblessness, but only when it is inclusive and labor-intensive.

b. Minimum Wage Theory

David Ricardo’s subsistence theory suggests that wages should be sufficient for workers' survival. When minimum wages are set too high, they can lead to a reduction in labor demand, especially among small and medium enterprises (SMEs). The Phillips Curve further suggests an inverse relationship between unemployment and wage inflation. Mankiw also explains that high minimum wages may discourage employers from hiring, leading to increased unemployment.

c. Human Development Index (HDI) Theory

The United Nations Development Programme (UNDP) defines human development as the process of expanding people’s choices in education, health, and income. A higher HDI should theoretically improve employment opportunities. However, Freeman’s overeducation theory warns that if educational growth is not matched by labor market demand, it may lead to educated unemployment due to skill mismatches.

d. Unemployment Theory

According to classical economic theory, unemployment is temporary and the labor market will self-adjust to equilibrium through wage flexibility (Say's Law). In contrast, Keynesian theory argues that unemployment results from insufficient aggregate demand and requires government intervention. Structural unemployment theory explains that mismatches between worker skills and job requirements contribute to persistent joblessness, particularly relevant in regions like NTB.

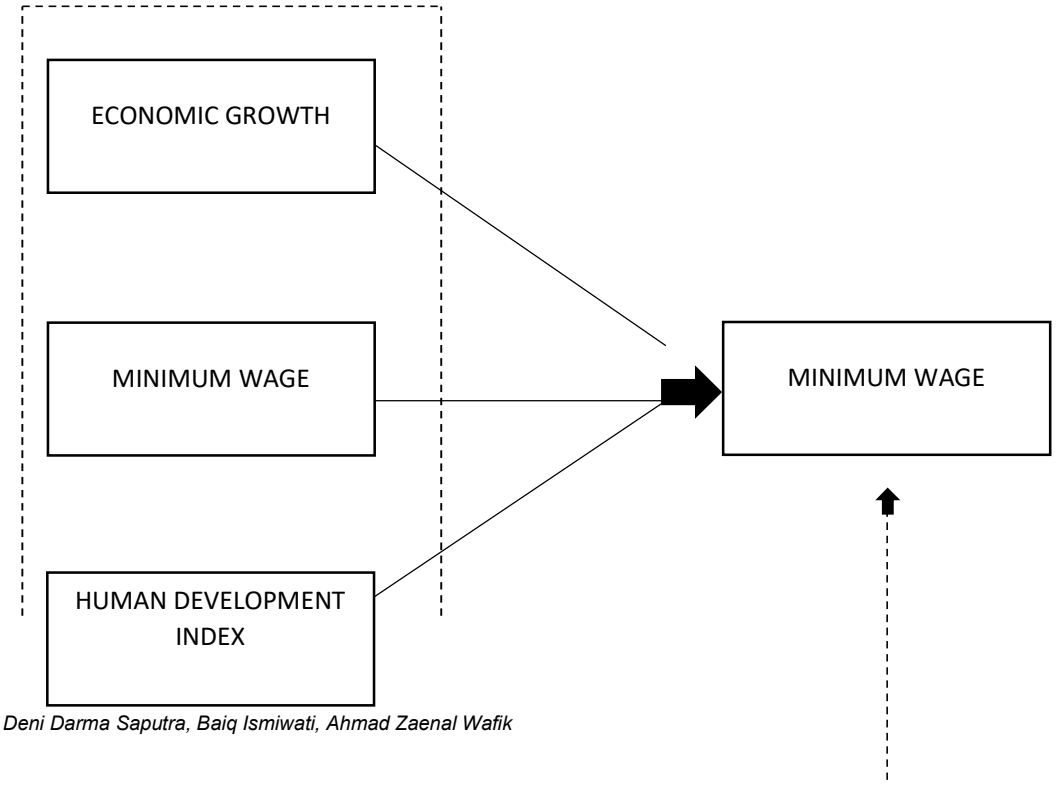
2. **Previous Studies**

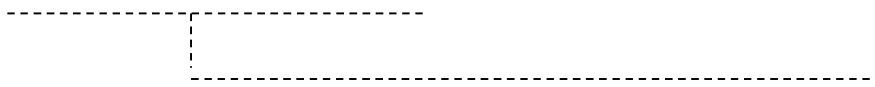
   Several previous studies have examined the relationship between economic growth, minimum wage, HDI, and unemployment in various contexts. For instance:

- Fahmi (2023) analyzed the impact of inflation, HDI, and economic growth on unemployment in Sumatra using panel data, finding significant negative effects from HDI and growth.
- Hafiz (2022) in West Java revealed that UMK positively affected open unemployment, while HDI had an insignificant influence.
- Murniai (2022) explored how economic growth, HDI, and minimum wage affected unemployment in Malang, suggesting indirect effects via investment.

3. **Conceptual Framework**

   The conceptual framework assumes that open unemployment in NTB is influenced by:





- **Economic Growth** (X1): The percentage change in regional GDP, expected to reduce unemployment.
- **Minimum Wage (UMK)** (X2): The government-set minimum income levels for workers, expected to have mixed effects.
- **Human Development Index** (X3): A composite measure of health, education, and income levels.

4. **Hypotheses**

- H1: Economic growth has a negative and significant effect on open unemployment in NTB.
- H2: Minimum wage has a positive and significant effect on open unemployment in NTB.
- H3: HDI has a negative and significant effect on open unemployment in NTB.
- H4: Economic growth, minimum wage, and HDI simultaneously have a significant effect on open unemployment in NTB.

RESEARCH METHOD

This study employs a quantitative descriptive approach using panel data regression analysis to examine the effect of economic growth, minimum wage, and the Human Development Index (HDI) on open unemployment in West Nusa Tenggara (NTB). The study focuses on 10 districts/cities in NTB, observed over a 5-year period from 2019 to 2023.

Types and Sources of Data

The data used in this study are secondary data obtained from the Central Bureau of Statistics (BPS) of NTB Province and the Department of Manpower and Transmigration. The variables include:

- Open Unemployment Rate (TPT): as the dependent variable (Y)

Unemployment is defined as the percentage of the working-age population (15-64 years old) who are unemployed or looking for work considered unemployed. The data used in the study is the total open unemployment rate (percent of the total labor force) in 2019-2023 with the unit used being the percentage (%) obtained from the Central Agency Statistik (BPS) NTB.

- Economic Growth (PDRB): independent variable (X1)
  Economic growth is defined as the percentage change in the real Gross Regional Domestic Product (GDP) of West Nusa Tenggara Province from year to year. This variable is measured using the GDP growth rate on the basis of a given base year's constant prices, expressed in percentage (%). Data was obtained from the official report of the Central Statistics Agency (BPS) of West Nusa Tenggara Province in the 2019-2023 period.
- District/City Minimum Wage (UMK): independent variable (X2)
  Minimum wage is a wage in the form of money that must be received by employees or workers given by employers for work or services that have been done and the amount of wages is determined on the basis of approval and laws and regulations. The data in this study uses minimum wage data in West Nusa Tenggara in 2019-2023 in rupiah units obtained from the West Nusa Tenggara Province DISNAKERTRANS in 2019-2023.
- Human Development Index (HDI): independent variable (X3)
  HDI is a composite indicator that measures human development achievement based on three basic dimensions: health, education, and decent living standards. This variable is operationalized using the HDI value of West Nusa Tenggara Province calculated and published by BPS. HDI is expressed in percent (%), where a higher value indicates a better level of human development. HDI data is taken from the official publication of BPS West Nusa Tenggara in the 2019-2023 period.

Data Collection Techniques

The data were collected through documentation techniques, by compiling annual reports from BPS and regional institutions. The data were cross-checked and processed using Microsoft Excel and further analyzed using EViews 10 software.

Analytical Method

This study uses panel data regression analysis. The data set is a combination of time series (2019–2023) and cross-section (10 districts/cities in NTB). The regression equation is expressed in logarithmic form as follows:

$$LnTPTit = \beta 0 + \beta 1LnPDRBit + \beta 2LnUMKit + \beta 3LnHDIit + \varepsilon it$$

Where:

- TPTit = Open unemployment rate in district/city i at time t
- PDRBit = Economic growth in district/city i at time t
- UMKit = Minimum wage in district/city i at time t
- HDIit = Human development index in district/city i at time t
- εit = Error term

Model Selection

Three common models in panel data analysis were considered:

1. Common Effect Model (CEM)
2. Fixed Effect Model (FEM)
3. Random Effect Model (REM)

To determine the best model, the following statistical tests were performed:

- Chow Test (F-test) to compare CEM and FEM
- Hausman Test to compare FEM and REM
- Lagrange Multiplier (LM) Test to compare CEM and REM

RESULT AND DISCUSSION

A. Regression Model Selection Test

Before performing the panel data regression, it is necessary to test the model specifications to obtain the most appropriate model estimate to be used in the study. The model specification tests used in this study are *the Chow Test* and *the Hausman Test.*

Chow Test

The Chow *test* is performed to test which model is right between *the Common Effect Model* (CEM) or *the Fixed Effect Model* (FEM). If the test results show a probability value less than the significance level of α = 5% (0.05), then H1 is accepted. However, if the test results show a probability value greater than the significance level of α =5% (0.05), then H0 is accepted. The following are the results *of the Chow* Test from the research data using the Eviews application.10

Chow Test Results

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.268382	(9,37)	0.0051
Cross-section Chi-square	29.250581	9	0.0006

Source: Eviews Data Processing Results 10

Based on the results of the Chow Test test, the probability value of the Cross-Section F test was 0.0051 and the Cross-Section Chi-square test was 0.0006, both of which were smaller than the significance level of α = 5% (0.05). This means that the *p-value* is smaller than α (0.05), thus rejecting the null hypothesis (H0) and accepting the alternative hypothesis (H1). The conclusion that can be drawn is that a more appropriate estimation model to analyze the data in this study is *the Fixed Effect Model* (FEM).

Hausman Test

The *thirst* test was used to test between the *appropriate Random Effect Model* (REM) or *Fixed Effect Model* (FEM) used in this study. If the test results show a probability value less than the significance level of α = 5% (0.05), then H1 is accepted. However, if the test results show a probability value greater than the significance level of α =5% (0.05), then H0 is accepted. The tests in this study can be shown in the following table:

Hausman Test *Results*

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.426556	3	0.0380

Source: Eviews Data Processing Results 10

Based on the results of *the Hausman* test , it shows a probability value (*p-value*) of 0.0380, which is smaller than the significance level of α = 5% (0.05). This means that the *p-value* is less than α, so we reject the null hypothesis (H0) and accept the alternative hypothesis (H1). Thus, there is evidence to support that there is a significant difference between the coefficients generated by the *Random Effects and Fixed Effects* models. Therefore, *the Fixed Effect Model* (FEM) model is more appropriate for this study.

B. Hipotesis Test

Hypothesis testing was used to test whether the independent variables (X) in the study had a significant effect on their dependent variables (Y). In the hypothesis test, there are three tests, namely the t-test which is used to find out whether the independent variable (X) has a significant effect on the dependent variable (Y) partially; The F test is used to determine whether the independent variable (X) affects the dependent variable (Y) simultaneously; and the Coefficient of Determination Test (R2) which is used to find out how much independent variables (X) can explain or affect their dependent variables (Y).

t test (Partial)

The results of the t-test conducted using the E-views application in the 2019-2023 period can be seen in the following table. From the test results, it can be seen that the t-calculated value and *P-value* of each variable are then compared with the test criteria to determine the significance of its effect on the Open Unemployment Rate.

The results of the t-test used by the E-views 10 software can be seen in the following table:

Estimated Results of t-test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.41047	10.20010	1.804931	0.0792
GROWTH ECONOMICS	-0.024516	0.010479	-2.339518	0.0248
MINIMUM WAGE REGENCY/CITY	-0.266187	1.035028	-0.257179	0.7985
HUMAN DEVELOPMENT INDEX	-3.156425	3.255241	-0.969644	0.3385

Source: *Eviews Data Processing Results 10*

Based on the results of the t-test a test was carried out to see the influence of each independent variable, namely Economic Growth (GDP Growth Rate), Regency/City Minimum Wage (MSE), and Human Development Index (HDI) on dependent variables, namely the Open Unemployment Rate (TPT) in West Nusa Tenggara Province (NTB) in 2019-2023. So the equation of the *Fixed Effect* estimation model, the proof of the hypothesis that has previously been described above is as follows:

The Effect of Economic Growth on the Open Unemployment Rate of Regencies/Cities

These results show that the t-count (-2.3395) is smaller than the t-table and the p-value (0.0248) is smaller than 0.05, so the null (H_0) hypothesis is rejected and the alternative hypothesis (H_1) is accepted. Thus, Economic Growth has a significant influence on the Open Unemployment Rate in NTB Province in the 2019-2023 period.

The regression coefficient of -0.0245 indicates that every 1% increase in economic growth will decrease the Open Unemployment Rate by 0.0245 percentage points. This means that the higher the economic growth rate of a region, the greater the opportunity for job creation, which will ultimately reduce the number of unemployed. These results are in line with classical and empirical economic theories that posit that positive economic growth drives an increase in labor demand. As the economy grows, various business sectors, both formal and informal, will grow and require more labor, so the number of unemployed tends to decrease.

However, despite its significant impact, the relatively small value of the coefficient suggests that economic growth alone is not enough to significantly reduce unemployment. Other factors, such as the regional economic structure, labor quality, and labor policy, also play an important role in overcoming unemployment in NTB

The Effect of Regency/City Minimum Wage on Regency/City Open Unemployment Rate

The results of the t-test for the MSE variable showed that the t-count (-0.2572) was smaller than the t-table, and the p-value (0.7985) was much greater than 0.05, so that the null hypothesis (H_0) was accepted and the alternative hypothesis (H_1) was rejected. Thus, MSEs do not have a significant effect on the Open Unemployment Rate in NTB Province in the 2019-2023 period.

Although in theory an increase in the minimum wage can increase people's purchasing power and worker welfare, in practice, the relationship between MSEs and unemployment is complex. One of the possible causes of the insignificant influence of MSEs on unemployment in NTB is:

1. Labor Structure Factors: Most of the workforce in NTB may work in the informal sector which is not affected by the minimum wage policy.
2. Labor Productivity: The increase in MSEs may not necessarily increase labor absorption if it is not accompanied by an increase in productivity.
3. Company Policy: Some companies may have implemented higher wage standards than MSEs, so MSE changes do not have a significant impact on labor recruitment decisions.

Thus, although MSEs are important as a policy instrument for worker welfare, the results of this study show that changes in MSEs do not necessarily affect the unemployment rate in NTB.

The Effect of the Human Development Index on the Open Unemployment Rate of Regencies/Cities

The results of the t-test for the HDI variable showed that the t-count (-0.9696) was smaller than the t-table, and the p-value (0.3385) was greater than 0.05, so that the null hypothesis (H_0) was accepted and the alternative hypothesis (H_1) was rejected. In other words, HDI has no significant effect on the Open Unemployment Rate in NTB Province in the 2019-2023 period.

In theory, an increase in HDI that reflects the quality of education, health, and people's purchasing power should be able to improve the quality of the workforce and increase job opportunities. However, the results of this study show that the increase in HDI has not had a direct impact on the reduction of unemployment in NTB. Some of the possible causes are:

1. Workforce Skills Mismatch: Although education is improving, but the skills of graduates may not yet match the needs of the industry.
2. Limited Employment in the Formal Sector: Although HDI is increasing, if employment in the formal sector does not develop, job seekers will still find it difficult to get a job.
3. Labor Mobility: Workers with high HDI may prefer to work outside NTB, so the increase in HDI does not directly reduce unemployment in the region.

These results indicate the need for more effective policies in linking the improvement of the quality of human resources with appropriate job creation, so that HDI not only increases numerically, but also has a real impact on reducing unemployment.

Simultaneous Test (F Test)

The F (simultaneous) test is performed to test whether all the independent variables included in the model have a combined influence on the dependent variables. The F test can be done by comparing Fcal with Ftable. When Fcal > Ftable, H0 is rejected and if Fcal < Ftable, H0 is accepted. The results of the F test through

the Eviews 10 application can be seen in the following table:

Simultaneous Test Results (F Test)

F-statistic	7.692323
Prob(F-statistic)	0.000001

Source: Eviews Data Processing Results 10

Based on the results of the F (simultaneous) test, it can be explained that the F-calculated value is 7.692323 with a probability of 0.000001. This probability is much smaller than the commonly used significance level, e.g. α = 0.05 (5%) or α = 0.01 (1%).

Since Prob(F-statistic) < α, we reject H_0 and accept H_1. This means that simultaneously the independent variables in this model have a significant influence on the dependent variables. In other words, economic growth, Regency/City Minimum Wage, and HDI together contribute to explaining the variation in the unemployment rate in West Nusa Tenggara Province in the 2019–2023 period.

Coefficient of Determination *(Adjusted R^2)*

The determination coefficient (R2) test is performed to test whether R2 is defined as a proportion or percentage of the total variation of the dependent variable (y) described by the regression line (independent variable X). The coefficient of determination is located between 0 ≤ R2 ≤ 1 where the higher the value, the closer the relationship between variable x and variable y. The results of the determination coefficient test are as follows:

Determination Coefficient (R^2) Test Results

R-squared	0.713861
Adjusted R-squared	0.621059

Source: Eviews Data Processing Results 10

The R-squared value of 0.713861 indicates that 71.39% of the variation in the unemployment rate can be explained by economic growth, MSEs, and HDI, while the remaining 28.61% is influenced by other factors not included in the model.
Meanwhile, the Adjusted R-squared value of 0.621059 indicates an adjustment to the number of independent variables in the model. Adjusted R-squared is smaller than R-squared indicates that even if the model has a good ability to explain dependent variables, there is a possibility that some of the independent variables in the model can still be refined.

Overall, these results show that the regression model used has a fairly good explainability in analyzing the factors that affect the unemployment rate in West Nusa Tenggara Province. However, further interpretation is needed to understand the contribution of each variable in the model.

C. Discussion

This study will discuss the results of testing the variables of the Regency/City Minimum Wage (MSE), Human Development Index (HDI), and Economic Growth on the Open Unemployment Rate (TPT) with 10 (ten) districts/cities in West Nusa Tenggara Province in 2019–2023.

The Effect of Economic Growth on Open Unemployment Rates

The results of the study show that economic growth has a negative and significant influence on the open unemployment rate in NTB. These results show that the t-count (-2.3395) is smaller than the t-table and the p-value (0.0248) is smaller than 0.05, so the null (H_0) hypothesis is rejected and the alternative hypothesis (H_1) is accepted. Thus, Economic Growth has a significant influence on the Open Unemployment Rate in NTB Province in the 2019-2023 period.
The regression coefficient of -0.0245 indicates that every 1% increase in economic growth will decrease the Open Unemployment Rate by 0.0245 percentage points. This means that the higher the economic growth rate of a region, the greater the opportunity for job creation, which will ultimately reduce the number of unemployed.
These results support Okun's theory, which states that there is a negative relationship between economic growth and unemployment, where an increase in the economy will encourage job creation and reduce the unemployment rate. However, the

phenomenon of *jobless growth* still occurs in NTB due to the dominance of the tourism and construction sectors which are seasonal and do not absorb local labor in the long term.

This shows that although economic growth can contribute to reducing the unemployment rate, the impact is still not optimal in overcoming the unemployment problem in NTB. One of the factors that causes the low impact of economic growth on unemployment reduction is the low involvement of the labor-intensive industrial sector which is able to absorb a large number of workers. In NTB, the majority of economic growth is still driven by the tourism sector which has seasonal characteristics and is unstable in the long term. Therefore, economic policies in NTB need to be directed at increasing investment in the manufacturing and creative industries sectors which have greater labor absorption.

This research is in line with Ardian et al. (2022) who found that economic growth in Indonesia in general has a negative effect on unemployment. However, these results are not entirely in line with the research of Saptenno and Maatoke (2022) which states that in some areas with the dominance of the service and technology sectors, economic growth does not always significantly reduce unemployment because not all sectors absorb a large number of workers.

The Effect of Regency/City Minimum Wage (MSE) on Open Unemployment Rate

The results of the study show that MSEs do not have a significant effect on the open unemployment rate. The results of the t-test for the MSE variable showed that the t-count (-0.2572) was smaller than the t-table, and the p-value (0.7985) was much greater than 0.05, so that the null hypothesis (H_0) was accepted and the alternative hypothesis (H_1) was rejected. Thus, MSEs do not have a significant effect on the Open Unemployment Rate in NTB Province in the 2019-2023 period.

According to Mankiw (2003), wages can adjust to create a balance between labor supply and demand. Wage levels and the number of workers have been adjusted to balance demand and supply. The most pronounced impact of the minimum wage policy is the higher wage rate, as companies have to comply with government policies. The company will automatically reduce the number of workers. The higher the wage, the fewer companies need labor because the costs incurred are high and vice versa when wages are low then the company will attract a lot of

workers.

Although in theory an increase in the minimum wage can increase people's purchasing power and worker welfare, in practice, the relationship between MSEs and unemployment is complex. One of the possible causes of the insignificant influence of MSEs on unemployment in NTB is:

1. Labor Structure Factors: Most of the workforce in NTB may work in the informal sector which is not affected by the minimum wage policy.
2. Labor Productivity: The increase in MSEs may not necessarily increase labor absorption if it is not accompanied by an increase in productivity.
3. Company Policy: Some companies may have implemented higher wage standards than MSEs, so MSE changes do not have a significant impact on labor recruitment decisions.

This condition may cause the MSE coefficient to be insignificant, as supported by research by Deasy Dwi Ramiayu (2016) who found that the influence of MSEs on the Open Unemployment Rate is not very real when imagined in the dynamics of the informal sector and regional differences.

The Effect of the Human Development Index (HDI) on the Open Unemployment Rate

The results of the study show that HDI does not have a significant effect on the open unemployment rate in NTB. The results of this study show that the t-count (-0.9696) is smaller than the t-table, and the p-value (0.3385) is greater than 0.05, so that the null hypothesis (H_0) is accepted and the alternative hypothesis (H_1) is rejected. In other words, HDI has no significant effect on the Open Unemployment Rate in NTB Province in the 2019-2023 period. In some conditions, an increase in HDI can actually increase open unemployment. This can be explained by the Structural Unemployment Theory, which states that improving the quality of education is not always followed by the creation of suitable jobs, thus causing *skill mismatch*.

According to *the Overeducation* Theory put forward by Richard B. Freeman, an increase in the number of higher education graduates without any adjustment to the needs of the labor market can increase the educated unemployment rate. Many graduates cannot be absorbed in the job market because they do not have the skills that match the demands of the industry. In the context of NTB, this can happen if the

developing economic sector is unable to absorb a workforce with a high level of education, causing open unemployment to increase.

This research is in line with Fahmi (2023) who found that although HDI has a negative effect on unemployment, its impact is highly dependent on the readiness of the labor market to absorb a more educated workforce. However, these results contradict Kristina et al. (2021) who suggest that in areas with better education systems, an increase in HDI can significantly lower unemployment because labor skills are more in line with the needs of the industry.

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the results of research on the influence of economic growth, Regency/City Minimum Wage (MSE), and Human Development Index (HDI) on the Open Unemployment Rate (TPT) in West Nusa Tenggara Province (NTB) for the 2019-2023 period, several conclusions were obtained as follows:

1. The Effect of Economic Growth on the Open Unemployment Rate. The results of the study show that economic growth has a negative and significant effect on the open unemployment rate. This means that the higher the economic growth, the lower the open unemployment rate.

2. The Effect of Regency/City Minimum Wage on Open Unemployment Rate. The results of this study show that MSEs do not have a significant effect on the Open Unemployment Rate in NTB Province in the 2019-2023 period.

3. The Effect of the Human Development Index on the Open Unemployment Rate. The results of this study show that HDI does not have a significant effect on the open unemployment rate in the 2019-2023 period.

4. Simultaneous Effect of Economic Growth, MSEs, and HDI on Open Unemployment Rate. Simultaneously, these three variables have a significant influence on the open unemployment rate in the 2019-2023 period.

B. Suggestion

Further research is recommended to use data with a longer time span in order to see patterns of unemployment trends in the long term and identify new factors that

may emerge. Further studies can consider other variables such as investment, infrastructure, fiscal policy, as well as the role of the informal sector in influencing the unemployment rate. By considering these variables, research can provide more comprehensive policy recommendations. By understanding the factors that affect the open unemployment rate in NTB, it is hoped that this research can be the basis for the formulation of more effective policies in reducing the unemployment rate and improving people's welfare.

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