

## The Influence of Labor Force Participation Rate, Total Population and Minimum Wage on Unemployment in West Nusa Tenggara Province in 2017-2021



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**ABSTRACT:** This study aims to determine the partial or simultaneous effect of Labor Force Participation Rates, Total Population and District/City Minimum Wage on Unemployment in West Nusa Tenggara Province 2017-2021. This research uses a quantitative approach and associative method. Data collection was carried out using the documentation method, literature study and then analyzed by panel data regression analysis with the Fixed Effect Model (FEM) approach using Eviews 10 software. The results of this study indicate that the Labor Force Participation Rate has no significant and positive effect on unemployment. The total population has no significant and negative effect on unemployment while the minimum wage has a significant and positive effect on unemployment.

**KEYWORDS:** Unemployment, Labor Force Participation Rate, Total Population, Minimum Wage, Fixed Effect Model (FEM).

### BACKGROUND

In Indonesia, economic development has the goal of increasing high economic growth and being able to overcome the problems of poverty, unemployment, maintain price stability, balance the balance of payments, increase employment opportunities and improve the standard of living and welfare of its people. Economic growth changes every year, and with this change it will also affect one of the problems being faced. One of these problems is the high unemployment rate which must be addressed immediately (Bastari, 2019).

Unemployment is a macroeconomic problem that affects humans directly and is the most serious problem. If unemployment is not addressed immediately, it will cause social vulnerability and potential poverty. In addition, an increase in population can exacerbate the problem of unemployment (Sukirno, 2006). Setting the minimum wage will affect a person's interest in working because the greater the minimum wage in an area, the greater the level of a person's interest in working and this can reduce unemployment.

Indonesia is an archipelagic country consisting of 34 provinces with the fourth largest population in the world after China, India and America. This large population cannot be matched by meeting the basic needs of society and employment, which will cause various economic and social problems such as unemployment (S. Rubijanto, 2012). One province that has unemployment problems is West Nusa Tenggara Province.

West Nusa Tenggara Province consists of 2 cities and 8 regencies, namely Mataram City, Bima City, West Lombok Regency, Central Lombok Regency, East Lombok Regency, North Lombok Regency, Sumbawa Regency, West Sumbawa Regency, Dompu Regency and Bima Regency. The large and continuously increasing population without being matched by the number of jobs will actually be one of the factors causing unemployment.

The number of unemployed in NTB Province over the past five years (2017-2021) has tended to fluctuate. The lowest number of unemployed occurred in 2017 with 79,449 people. The highest number of unemployed occurred in 2020 of 113,430 people due to the Covid-19 virus pandemic because many companies went bankrupt which eventually led to mass layoffs. The number of unemployed in 2021 has decreased by 82,495 people where this decrease is caused by the increasing number of the workforce absorbed by job opportunities.

Unemployment can be influenced by the labor force because if the high rate of growth in the labor force is not matched by the availability of jobs, then the creation of available jobs is very minimal so that the absorption of labor is not optimal and eventually

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results in unemployment. The Labor Force Participation Rate (TPAK) fluctuates and is unstable every year in the Province of NTB. The highest TPAK in 2021 is 70.57 percent.

Another factor that affects unemployment is the population. Where high population growth can create labor growth which also increases. (Sukirno, 2006), the population in NTB Province in the last five years has continued to increase. The highest number of residents in 2021 is 5,389,998 people.

Another factor that also affects unemployment is wages. Where the higher the number of wages set by the government, it will result in a decrease in the number of people working. But if wages rise, it can be detrimental to the company. (Prawira, 2018) every year the Minimum Wage in NTB Province in the last five years has increased. But the 2020 and 2021 minimum wages remain.

### LITERATURE REVIEWS

Several studies on the effect of unemployment in this section. Rambe Rhivna Cilviyani (2019) knows and analyzes the development of the open unemployment rate in Jambi Province and what factors affect open unemployment in Jambi Province. The results of this study indicate that (1) the average development of open unemployment in Jambi Province is 0.53 percent; (2) The results of the analysis show that GRDP, minimum wages, inflation and investment have a significant effect on open unemployment in Jambi Province. Meanwhile, the labor force participation rate has no significant effect on open unemployment in Jambi Province.

Meanwhile, Dewi Indriani (2019) to find out that the minimum wage has a significant effect on the unemployment rate in Lampung Province and to find out the population has a significant effect on the unemployment rate in Lampung Province. The results of this study indicate that the minimum wage and population have no significant effect on the unemployment rate in Lampung Province because when wages increase, output also increases, so companies will add workers.

Furthermore, Priastiwi and Handayani (2019) find out 4 variables for the Open Unemployment Rate. The results of this study show that population, education, minimum wage and GRDP have a significant effect on the open unemployment rate in Central Java Province. Partially, population has a positive and significant effect, education has a negative and significant effect on the unemployment rate. The minimum wage has a negative and significant effect on the unemployment rate and GRDP has a negative and significant effect on the unemployment rate.

The results of this study the variables of the labor force and GRDP have a negative and insignificant effect on the open unemployment rate, the minimum wage has a positive and significant effect on the open unemployment rate, the HDI has a negative and significant effect on the open unemployment rate. Simultaneously the variables of the labor force, minimum wage rate, GRDP, and HDI have a significant effect on the district/city open unemployment rate in East Java Province.

Furthermore, Pasuria and Triwahyuningtyas (2022) analyze factors that are thought to influence unemployment, namely the workforce, education, minimum wage and GDP. The results of this study indicate that the workforce, education, minimum wage and Gross Domestic Product (GDP) have an effect on unemployment in Indonesia. On the other hand, which are partially different, the labor force, education and minimum wage have a significant effect on unemployment, but GDP has no effect on unemployment in Indonesia.

### METHODOLOGY

The research is quantitative research with an associative approach, namely the formulation of a research problem that asks about the relationship between two or more variables. (Sugiyono, 2019). The type of data in this research is secondary data. This research was conducted at government agencies, namely the Central Statistics Agency for West Nusa Tenggara Province and the Office of Manpower and Transmigration for West Nusa Tenggara Province. This research is located in West Nusa Tenggara Province with 10 Regencies/Cities. The data used in this study are data on the number of unemployed, data on labor force participation rates, population data and minimum wage data. In analyzing the data, this study used panel data regression analysis and the regression model equation used logarithmic (log) form. Econometric equation:

$$\text{Log (Unemployment)} = \alpha + \beta_1 \text{Log (TPAK)} + \beta_2 \text{Log (Population)} + \beta_3 \text{Log (Wages)} + \varepsilon$$

Information:

Log = Logarithm

$\alpha$  = Constant

Unemployed = Number of Unemployed (in Souls)

TPAK = Labor Force Participation Rate (Percent)

Population = Total Population (Thousands/Millions)

Wages = District/City Minimum Wage (Millions of Rupiah)

$\beta$  = intercept/tapping  $\varepsilon$  = error term

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## RESULTS

The results of the study were obtained in the form of data on all variables to be examined, including the number of unemployed as the dependent variable and the labor force participation rate (TPAK), population and minimum wage as independent variables. The data were then processed statistically using Microsoft Excel software and analyzed using the panel data regression analysis method with the help of Eviews10 software. In the regression model estimation method using panel data, three approaches are used, namely the Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM). Furthermore, three panel data model selection tests were carried out. The tests used are the Chow test, Hausman test and Lagrange Multiplier (LM) test. After doing some testing, it is known that the correct model used in this study is the Fixed Effect Model. Panel data regression results using the Fixed Effect Model (FEM) approach. The model was generated with the results of regression analysis. Then the equation obtained is:

$$\text{Log (Unemployment)} = 3.581464 + 1.296032 \log (\text{Tpak}) - 1.003368 \log (\text{Total Population}) + 0.890127 \log (\text{Minimum Wage})$$

Then do the classic assumption test and hypothesis test. The classic assumption test results include normality test results for normally distributed data, then multicollinearity test results, this research model is free from multicollinearity and heteroscedasticity test results show no signs of heteroscedasticity in this study. The results of the hypothesis test on the t test (partial) obtained the prob value. for the labor force participation rate variable of 0.2392, where the prob.  $X_1$  is greater than 0.05 ( $0.2392 > 0.05$ ) or t count  $<$  t table ( $1.198676 < 2.01954$ ). So the variable individual labor force participation rate is not significant in influencing unemployment in the Province of NTB. Prob value. for the population variable, namely 0.3012, where prob. The total population is greater than 0.05 ( $0.3012 > 0.05$ ) or t count  $t <$  t table ( $-1.050252 < 2.01954$ ). So that the individual population variable is not significant in influencing unemployment in the Province of NTB. Prob value. for the Minimum Wage variable is 0.0351, where prob. The minimum wage is less than 0.05 ( $0.0351 < 0.05$ ) or t count  $>$  t table ( $2.197947 > 2.01954$ ). So that the variable Minimum Wage individually has a significant effect on unemployment in the Province of NTB. while the results of the F (Simultaneous) test are the Prob values. (F-Statistics) less than 0.05 ( $0.000000 < 0.05$ ) or the calculated F value is greater than F table ( $35.23885 > 2.833$ ), it can be concluded that the variables Labor Force Participation Rate, Population and Minimum Wage have an effect simultaneously on the variable Unemployment. R-squared value shows the number 0.921546 means that the ability of the independent variable in explaining the dependent variable is 92.15%. So it can be concluded that the relationship between the independent variables Labor Force Participation Rate, Total Population and Minimum Wage can be used to predict unemployment in 10 Regencies/Cities in the NTB Province. then the remaining 7.85% is influenced by other factors that are not included in this research model.

## DISCUSSION

The results of this study indicate that the labor force participation rate has a positive but not significant effect on unemployment in the Province of NTB. The results of this study are in accordance with the results of research conducted by Rambe Rhivna Cilviyani (2019) this is because changes that occur in the labor force participation rate do not always result in changes in the open unemployment rate, because a high labor force participation rate is not necessarily able to guarantee reduced open unemployment. However, the results of this study contradict research conducted by Ayu Setyoningsih (2021).

Furthermore, the results of the study show that population has a negative and insignificant effect on unemployment in the Province of NTB. The results of this study are in accordance with research conducted by Dewi Indriani (2019) this is in accordance with David Emile Derkheim's theory, which states that unemployment and population growth do not have a positive relationship, where if the population increases it will not affect the unemployment rate and the consequences of The high number of population will arise competition among residents to be able to survive. But the results of this study contradict research conducted by Priastiwi and Handayani (2019).

Meanwhile the results of the study show that the minimum wage has a positive and significant effect on unemployment in the Province of NTB. the results of this study are in accordance with research conducted by Sarito Pasuria and Nunuk Triwahyuningtyas (2021) this is in accordance with Keynesian theory which says that setting wages above the balance of demand and supply will make companies reduce demand for labor and reduce labor turnover resulting in unemployment. But this research contradicts research conducted by Priastiwi and Handayani (2019).

## CONCLUSIONS

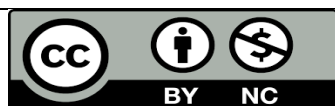
The conclusion from this study is that partially the labor force participation rate has a positive and not significant effect on unemployment in NTB Province, which means that if there is an increase in the labor force participation rate, unemployment will also increase. Furthermore, the population has a negative and insignificant effect on unemployment in the Province of NTB,

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meaning that if there is an increase in the population, unemployment will decrease. Meanwhile, the minimum wage has a positive and significant effect on unemployment in the Province of NTB, which means that if there is an increase in the minimum wage, unemployment will increase. In addition, simultaneously variable labor force participation rate,

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