

Research Article

Determinants Analysis of Labor Force Participation Rate in Bali Province

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Abstract: As a developing country with one of the highest populations in the world, Indonesia possesses an abundant workforce in terms of its working-age population. Among the 38 provinces, Bali has consistently shown the highest labor force participation rate. However, a more detailed view from 2010 to 2024 reveals that the proportion of the working-age population classified as part of the labor force has experienced fluctuations. This study aims to analyze both the simultaneous and partial effects of the unemployment rate, education, and regional minimum wage on the labor force participation rate (LFPR) in Bali Province from 2010 to 2024. The study was conducted in Bali Province, using secondary data published by Statistics Indonesia (BPS). The analysis technique employed in this study is panel data regression. The results of the panel regression test indicate that the most appropriate model is the Fixed Effects Model. The findings show that the variables of unemployment rate, education, and regional minimum wage simultaneously have a significant effect on the labor force participation rate in Bali Province. Partially, the unemployment rate has a negative but insignificant effect, education has a positive and significant effect, and the regional minimum wage has a negative and significant effect on the labor force participation rate in Bali Province. It is recommended that the government and private sector collaborate in formulating appropriate policies to increase labor force participation by improving the quality of education and designing minimum wage policies that align with both labor needs and market capacity to pay wages.

Keywords: Education, Labor Force Participation Rate, Minimum Wage, Unemployment Rate

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1. INTRODUCTION

Economic development involves the participation of all segments of society, both men and women. Without labor, the development process cannot be implemented, making labor a crucial component (Haspa et al., 2023). Labor is one of the key factors that drives economic growth, alongside other production factors such as land, capital, and capability (Asmara & Mohammad Wahed, 2024). The greater the number of workers, the more output can be produced (Hana Pratiwi & Setya Wijaya, 2024). In addition, high population growth can create a broader domestic market. According to David Ricardo's theory, labor as a factor of production plays a vital role in determining national output. Therefore, countries or regions—especially developing countries with large populations—have the potential to drive their economic growth (Ardella et al., 2019).

Job creation is a critical goal of economic development, especially to keep pace with the growth of the labor force (Ardella et al., 2019). A lack of job opportunities leads to unemployment, where the number of people actively working is lower than the unemployed, potentially becoming a burden on national development (Arjuna Sanjaya et al., 2023).

According to Dotsey et al. (2017), low labor force participation has negative implications, such as slower economic growth and an increased dependency ratio. One of the primary goals of economic development is to provide sufficient employment opportunities to match the rapid growth of the labor force (Hornstein & Kudlyak, 2019). In developing countries such as Indonesia, the labor force tends to grow faster due to high population growth, outpacing per capita income growth (Ayuningtyas & Sari, 2022).

To measure the proportion of the labor force relative to the working-age population, the Labor Force Participation Rate (LFPR) is used. According to Statistics Indonesia (2024), the LFPR refers to the percentage of the population aged 15 and above who are in the labor force. This includes those working for pay or profit, the unemployed actively seeking work, and those producing goods for their own consumption (Klasen, 2019).

Based on data from Statistics Indonesia (Appendix 1), the LFPR from 2021 to 2024 was dominated by the provinces of Papua Pegunungan, Bali, and East Nusa Tenggara, with average participation rates of 88.22%, 76.15%, and 75.56%, respectively. Bali consistently recorded the highest average LFPR across four years, considering Papua Pegunungan was only established in 2022 and its data is available only for 2024.

According to Soedarsono et al., in the book *Human Resource Economics* by A.A.I.N. Marhaeni & I.G.A. Manuati Dewi (2004), the LFPR is influenced by various factors, such as wage levels, population size, unemployment rate, economic systems, physical wealth, and education levels. This study focuses on the variables of unemployment, education, and minimum wage, as they are highly relevant to the dynamics of LFPR in Bali Province.

The unemployment rate is an important indicator due to Bali's highly seasonal and externally sensitive labor market, driven by the tourism sector. Education plays a vital role in determining workforce readiness and quality, where a higher education level is expected to enhance participation in the formal labor market. Meanwhile, the minimum wage affects the economic incentive for individuals to enter the labor force, as wage differences between sectors (e.g., tourism and agriculture) influence labor participation decisions. Therefore, these three variables are regarded as the main determinants that explain variations in LFPR across regions in Bali.

A declining LFPR, despite an increase in the working-age population, may indicate a shift of individuals into the non-labor force category (Statistics Indonesia – Bali Province, 2020). The LFPR composition, derived from both employed and unemployed individuals, reflects labor market conditions. Traditional theory suggests that unemployment tends to rise with development (Feng et al., 2015). Even when LFPR is high, a substantial number of unemployed individuals requires attention and policy response.

In 2019, there was a slight increase of 0.17 percentage points, reaching 1.57%. The unemployment rate spiked to its peak of 5.63% in 2020, primarily due to mass layoffs caused by the economic downturn from the COVID-19 pandemic. As the economy recovered, unemployment gradually declined and stood at 1.79% in 2024. Ideally, economic conditions should support higher labor force participation and lower unemployment, reflecting positive economic activity (Sundariani & Murjana, 2022).

Sutranggono et al. (2023) found that the unemployment rate negatively affects LFPR in East Java during 2018–2022. This suggests that those who lose jobs may not immediately find new ones that match their preferences or qualifications. Unemployment reflects the availability of jobs and regional economic conditions. A high unemployment rate may reduce individuals' motivation to join the labor force (discouraged worker effect), lowering LFPR. Conversely, low unemployment may encourage more individuals to seek employment. Given Bali's dependence on tourism, it is vulnerable to global economic shocks that can impact unemployment levels. By analyzing the relationship between unemployment and LFPR, we can better understand how economic conditions affect labor force participation in Bali.

Another influencing factor is education, which can be measured by the average years of schooling (Borgan Bonerri et al., 2018). Education is crucial for enhancing labor productivity by equipping individuals with knowledge, skills, and adaptability for the labor market (Abidin et al., 2024). It not only optimizes human potential but also improves living standards by enabling access to better-paying jobs (Heath & Jayachandran, 2016).

As the second variable, education, measured through average years of schooling, serves as an indicator of human capital quality. Higher education levels are typically associated with increased skills and productivity, encouraging labor force participation. However, extended education may also delay entry into the labor market, as individuals pursue higher studies. Bali's emphasis on the creative economy requires a skilled workforce. By analyzing education levels, this study seeks to understand whether improved education correlates with higher LFPR or contributes to the "overeducation" phenomenon.

Wage levels also influence individuals' willingness to work. The minimum wage positively affects labor supply; higher wages attract more individuals to join the labor market, thereby increasing LFPR (Herman, 2023). The government mandates an annual minimum wage to be paid by employers. Research by Syafira et al. (2023) found that minimum wage positively influences LFPR across 30 regencies/municipalities in North Sumatra. Aji Ramadhan & Setyowati (2023) also found that a 1% increase in the minimum wage raises LFPR in East Java by 14%. These findings align with Sudarsono et al.'s theory in Human Resource Economics (Marhaeni & Manuati, 2004), which states that labor is supplied to the market primarily for wage income.

The third variable, minimum wage, affects individuals' incentive to work. A high minimum wage can attract more people to the labor force, especially from low-income groups. However, excessive minimum wage levels may also lead to reduced employment opportunities, as employers cut back due to higher labor costs. As a tourism destination with a large informal sector, wage levels in Bali often fall below minimum wage standards. Analyzing the impact of the minimum wage on LFPR can help evaluate whether this policy effectively boosts labor participation in the province.

Based on the described variables, it can be concluded that fluctuating labor force participation may be caused by changes in the unemployment rate, which influences people's willingness to enter the labor market. Other contributing factors include low education levels among the working-age population and inadequate minimum wages, which discourage labor market participation. Research by Qaimah (2021) found that education and minimum wage significantly and positively impact LFPR in Aceh Province from 2012 to 2020.

This research is important because the labor force participation rate (LFPR) is a key indicator of the extent to which the working-age population is economically active—either employed or actively seeking work. A high LFPR is correlated with economic growth, as more people contribute to the production of goods and services. By analyzing LFPR in Bali Province, this study provides insight into how effectively human resources are utilized to support economic development. Based on the aforementioned phenomena, this study is titled "Determinants Analysis of Labor Force Participation Rate in Bali Province."

2. METHOD

This study uses a quantitative descriptive approach with the aim of analyzing the effect of unemployment, education, and minimum wages on the labor force participation rate (TPAK) in Bali Province during the period 2010–2024. The selection of Bali Province was motivated by the relatively high labor force participation rate compared to other provinces. The data used is panel data that combines time series aspects (2010–2024) and cross sections (nine districts/cities), with secondary data sources obtained from the Central Statistics Agency (BPS). The independent variables in this study are the unemployment rate, average length of schooling as a proxy for education, and minimum wages, while the dependent variable is TPAK which is measured in percentage (%) of the total working age population ≥ 15 years (Sugiyono, 2020).

The data analysis techniques used include descriptive analysis and panel data regression. Panel data regression was chosen because it is able to capture characteristics between individuals and over time. Researchers used three estimation approaches, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), with the Chow, Hausman, and Lagrange Multiplier (LM) tests as the basis for selecting the best model. Logarithmic transformation was performed on the data to overcome heteroscedasticity and differences in scale between variables. Classical assumption tests such as normality,

multicollinearity, and heteroscedasticity were also carried out to ensure the validity of the regression model built (Ghozali & Ratmono, 2017).

Hypothesis testing is carried out through the F test (simultaneous), t test (partial), and coefficient of determination (R^2) to see the significance of the influence of independent variables on the dependent variable, both collectively and individually. The F test is used to assess whether all independent variables simultaneously affect TPAK, while the t test evaluates the influence of each independent variable separately. The R^2 value is used to measure how much variation in TPAK can be explained by the three independent variables analyzed. This research was conducted through a literature study with a quantitative approach and statistical analysis to produce accurate and objective conclusions (Haspa et al., 2023; Wasono et al., 2020; Aini et al., 2022).

3. RESULTS AND DISCUSSION

Analysis Results

In this study, the analysis was conducted using the Panel Data Regression Test.

Panel Data Regression Test

Table 1. Results of Panel Data Regression of Common Effect Model

— Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	89.61829	1.460597	61.35731	0.0000
X1	-0.515408	0.186215	-2.767817	0.0065
X2	-1.814756	0.204150	-8.889350	0.0000
X3	1.57E-06	4.87E-07	3.219349	0.0016
R-squared	0.455768	Mean dependent var	76.81593	
Adjusted R-squared	0.443304	S.D. dependent var	4.542597	
S.E. of regression	3.389325	Akaike info criterion	5.308320	
Sum squared resid	1504.865	Schwarz criterion	5.394402	
Log likelihood	-354.3116	Hannan-Quinn criter.	5.343302	
F-statistic	36.56865	Durbin-Watson stat	0.850775	
Prob(F-statistic)	0.000000			

Source: Eviews Processed Data 12, 2025

Table 2. Panel Data Regression Results Fixed Effect Model

— Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61.80273	6.512187	9.490319	0.0000
X1	-0.128366	0.149971	-0.855936	0.3937
X2	2.412106	1.008042	2.392862	0.0182
X3	-2.08E-06	9.01E-07	-2.314474	0.0223
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.717035	Mean dependent var	76.81593	
Adjusted R-squared	0.691729	S.D. dependent var	4.542597	
S.E. of regression	2.522148	Akaike info criterion	4.772786	
Sum squared resid	782.4312	Schwarz criterion	5.031033	
Log likelihood	-310.1631	Hannan-Quinn criter.	4.877730	
F-statistic	28.33477	Durbin-Watson stat	1.519149	
Prob(F-statistic)	0.000000			

Source: Eviews Processed Data 12, 2025

Table 3. Results of Panel Data Regression Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	85.78540	2.710320	31.65139	0.0000
X1	-0.195592	0.148471	-1.317373	0.1900
X2	-1.298647	0.403429	-3.219021	0.0016
X3	1.00E-06	4.78E-07	2.100659	0.0376
Effects Specification				
			S.D.	Rho
Cross-section random			1.825463	0.3438
Idiosyncratic random			2.522148	0.6562
Weighted Statistics				
R-squared	0.082165	Mean dependent var		25.81014
Adjusted R-squared	0.061146	S.D. dependent var		2.791106
S.E. of regression	2.704427	Sum squared resid		958.1243
F-statistic	3.909068	Durbin-Watson stat		1.280790
Prob(F-statistic)	0.010332			
Unweighted Statistics				
R-squared	0.403320	Mean dependent var		76.81593
Sum squared resid	1649.889	Durbin-Watson stat		0.743781

Source: Eviews Processed Data 12, 2025

After the regression results using the common and fixed models are obtained, the next step is to conduct a test to determine which estimation model is more appropriate between the common or fixed model. In determining between the two models, the Chow Test is used as a test for selecting a panel data regression model.

1. Chow Test (Common Effect Model vs Fixed Effect Model)

The chow test is a test to determine between the common effect or fixed effect model that is more appropriate to use in estimating panel data. The hypothesis in the chow test in the study is as follows:

- If the probability chi-square < 0.05 then the fixed model is selected
- If the chi-square probability is > 0.05 then the common model is selected

If the test results determine that the common effect model is used, then it is necessary to conduct a Lagrange Multiplier Test (LM-Test) to determine between the common and random models. However, if the results of the Chow test determine that the fixed effect model is used, then it is necessary to conduct a further test, namely the Hausman Test, to determine the fixed or random model used.

Table 4. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	14.196041	(8,123)	0.0000
Cross-section Chi-square	88.297119	8	0.0000

Source: Eviews Processed Data 12, 2025

The results in table 4 show the probability of the cross-section chi-square of 0.00 is smaller than 0.05. So according to the decision criteria, this model uses the FEM model. Because the Chow Test selected uses the FEM model, it is necessary to conduct further testing with the Hausman test.

2. Hausman test

The Hausman test is used to compare whether the fixed effect model or random effect model is more appropriate. The criteria that will be used in drawing conclusions from the Hausman test are as follows:

- If the random cross-section probability value > 0.05 , it means that H_0 is accepted, so the random effect model is used.
- If the random cross-section probability value is < 0.05 , it means that H_0 is rejected, so the fixed effect model is used.

The results of the Hausman Test are presented in Table 5.

Table 5. 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	22.619372	3	0.0000

Source: Eviews Processed Data 12, 2025

The results in table 5 show the probability of the cross-section chi-square of 0.00 is smaller than 0.05. So according to the decision criteria, this model uses the FEM model. Because the hausman test selected uses the FEM model, there is no need to conduct further testing of the LM test, and the model used in this study is the Fixed Effect Model.

Fixed Effect Model Regression Analysis

In panel data regression, the fixed effect model has been determined, so the regression test results are presented as follows:

Based on the test results of Table 6, this study uses a panel regression method with fixed effects to analyze the unemployment rate (X_1), education (X_2), and regional minimum wage (X_3) on the labor force participation rate (Y) in Bali Province in the period 2010–2024. There are a total of 135 observations (balanced panel) from 9 districts/cities.

Table 6. Regression Test Results

— Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61.80273	6.512187	9.490319	0.0000
X1	-0.128366	0.149971	-0.855936	0.3937
X2	2.412106	1.008042	2.392862	0.0182
X3	-2.08E-06	9.01E-07	-2.314474	0.0223
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.717035	Mean dependent var	76.81593	
Adjusted R-squared	0.691729	S.D. dependent var	4.542597	
S.E. of regression	2.522148	Akaike info criterion	4.772786	
Sum squared resid	782.4312	Schwarz criterion	5.031033	
Log likelihood	-310.1631	Hannan-Quinn criter.	4.877730	
F-statistic	28.33477	Durbin-Watson stat	1.519149	
Prob(F-statistic)	0.000000			

Source: Eviews 12 Processed Data (2025)

Based on the results of the regression test in Table 6, the following regression equation was obtained:

$$Y = 61.80 - 0.128366 \cdot X_1 + 2.412106 \cdot X_2 - 0.000002 \cdot X_3$$

Interpretation of Coefficients:

- The constant value of 61.80 means that without the variables X_1 , X_2 , and X_3 , the TPAK variable in Bali Province would be 61.80 percent.

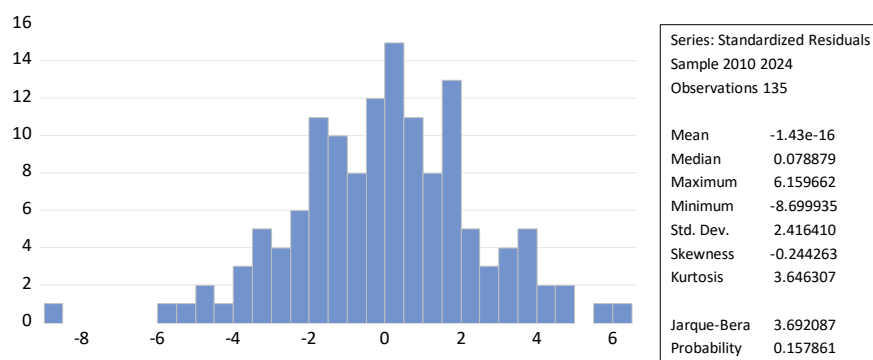
2. The beta coefficient value of variable X1 is -0.13, if the value of other variables is constant and variable X1 increases by one unit, then the TPAK variable (Y) will decrease by 0.13 percent, and vice versa, assuming ceteris paribus.
3. The beta coefficient value of variable X2 is 2.41, if the value of other variables is constant and variable X2 increases by one unit, then the TPAK variable (Y) will increase by 2.41 percent assuming ceteris paribus.
4. The beta coefficient value of variable X3 is -0.000002, if the value of other variables is constant and variable X3 increases by one unit, then the TPAK variable (Y) will decrease by 0.000002 percent assuming ceteris paribus.

Classical Assumption Test

1. Normality Test

The normality test aims to test whether the residuals of the regression model created are normally distributed or not. A good regression model has a residual distribution that is normal or close to normal. If it is not normal, then the predictions made with the model will not be good, or can provide deviant prediction results (bias)(Basuki & Yuliadi, 2015). The results of the normality test are presented in Table 7.

Table 7. Normality Test Results



Source: Processed data views 12, 2025

Based on the test results in Table 7, it shows that the probability is 0.1578, which is greater than 0.05, so the data is normally distributed.

2. Multicollinearity Test

Table 8. Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	42.40858	900.0082	NA
X1	0.022491	3.967649	1.070412
X2	1.016150	1410.747	7.665915
X3	8.11E-13	75.20408	7.728191

Source: Processed data views 12, 2025

Based on the test results in Table 4.9, it shows that the Centered VIF value for each independent variable, namely unemployment (X1) is 1.070412, education (X2) is 7.665915, and regional minimum wage (X3) is 7.728191, all of which are below the threshold of 10, so that the data is free from multicollinearity elements.

3. Heteroscedasticity Test

Table 9. Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.344002	Prob. F(3,131)	0.2630
Obs*R-squared	4.031051	Prob. Chi-Square(3)	0.2581
Scaled explained SS	4.620488	Prob. Chi-Square(3)	0.2018

Source: Processed data evIEWS 12, 2025

Based on the test results, the probability obtained is $0.2630 > 0.05$. Thus, it can be concluded that the model does not contain heteroscedasticity problems, so that the residual variance is constant (homoscedasticity).

Hypothesis Testing

1. Coefficient of Determination Test

Table 10. Results of the Determination Coefficient Test

R-squared	0.717035
Adjusted R-squared	0.691729
S.E. of regression	2.522148
Sum squared resid	782.4312
Log likelihood	-310.1631
F-statistic	28.33477
Prob(F-statistic)	0.000000

Source: Processed data evIEWS 12, 2025

Based on the results of the determination coefficient test, the R-squared value is 0.7170. This shows that the independent variables, namely the unemployment rate (X_1), education (X_2), and regional minimum wage (X_3), are able to explain the variation in the dependent variable, namely the Labor Force Participation Rate (Y) by 71.70 percent. Meanwhile, the remaining 28.30 percent is explained by other variables outside this research model. In addition, the Adjusted R-squared value of 0.6917 indicates that after being adjusted for the number of independent variables in the model, the model's explanatory ability remains at 69.17 percent. Thus, this regression model has a sufficient level of explanation in explaining the influence of independent variables on the Labor Force Participation Rate.

2. Simultaneous Test (F Test)

Table 11. F Test Results

R-squared	0.717035
Adjusted R-squared	0.691729
S.E. of regression	2.522148
Sum squared resid	782.4312
Log likelihood	-310.1631
F-statistic	28.33477
Prob(F-statistic)	0.000000

Source: EvIEWS Processed Data 12,2025

Thus, the regression model used is appropriate to explain the influence of the three independent variables on the dependent variable together.

3. Partial Test (t-Test)

Table 12. t-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61.80273	6.512187	9.490319	0.0000
X1	-0.128366	0.149971	-0.855936	0.3937
X2	2.412106	1.008042	2.392862	0.0182
X3	-2.08E-06	9.01E-07	-2.314474	0.0223

Source: Eviews Processed Data 12, 2025

Based on the t-test results presented in Table 12, the following are the analysis results for each independent variable:

- Variable X₁ (Unemployment Rate): The coefficient is -0.1283, with a t-statistic value of -0.8559 and a probability of 0.3937. Because the probability value is greater than 0.05 ($0.3937 > 0.05$), then the variable X₁ has a negative but insignificant effect on the Labor Force Participation Rate (Y).
- Variable X₂ (Education): The coefficient is 2.4121, with a t-statistic value of 2.3928 and a probability of 0.0182. Because the probability value is less than 0.05 ($0.0182 < 0.05$), then the variable X₂ has a significant positive effect on the Labor Force Participation Rate (Y).
- Variable X₃ (Regional Minimum Wage): Coefficient of 0.000002, with a t-statistic value of -2.3144 and a probability of 0.0223. Because the probability value is less than 0.05 ($0.0223 < 0.05$), then variable X₃ has a negative and significant effect on the Labor Force Participation Rate (Y).

Discussion

Based on the results of the partial test (t-test), the following analysis describes the influence of the independent variables on the dependent variable:

The Effect of Unemployment Rate on Labor Force Participation Rate (LFPR)

The regression analysis shows that the coefficient for the unemployment rate (X₁) is -0.1284, which means that a one percent increase in the unemployment rate reduces the LFPR by 0.1284 percent, assuming other variables remain constant. The significance value for X₁ is 0.3937, which is greater than 0.05, indicating that the unemployment rate does not have a statistically significant effect on the LFPR. Thus, the hypothesis stating that the unemployment rate affects the LFPR is rejected.

This finding is consistent with the results of Sutranggono et al. (2023), which found that while the unemployment rate had a negative effect, it was statistically insignificant in explaining the LFPR in East Java from 2018 to 2022. This condition is known as the discouraged worker hypothesis, where an increase in the unemployment rate leads to lower labor force participation due to individuals becoming discouraged after prolonged job searching and ceasing their efforts. Therefore, it can be concluded that the unemployment rate has a slightly negative but statistically insignificant effect on the LFPR in Bali Province.

The Effect of Average Years of Schooling on Labor Force Participation Rate

The regression results indicate that the coefficient for education (X₂) is 2.4121, meaning that a one-year increase in education raises the LFPR by 2.41 percent, assuming other variables remain constant. The significance value for X₂ is 0.0182, which is less than 0.05, indicating that education has a statistically significant effect on the LFPR. Hence, the hypothesis that education affects labor force participation is accepted. It can be concluded that the higher an individual's education level, the greater their contribution to increasing LFPR.

This aligns with human capital theory, which posits that individuals can increase their earnings through education by enhancing both technical and non-technical skills required in the labor market. Education is considered an investment that yields returns over time in the form of higher income, making it positively related to labor force participation through individuals' motivation to earn more.

Research by Yuniike Tambunan & Arka (2024) found that an increase in average years of schooling is associated with a rise in labor force participation. This finding is also consistent with Laun & Palme (2018) in their article "The Recent Rise of Labor Force Participation of Older Workers in Sweden", which found that higher levels of educational attainment, particularly in higher education, lead to increased labor force participation. This occurs because better-educated individuals have skills and knowledge more aligned with labor market demands. Moreover, higher education increases confidence and awareness of career opportunities, encouraging more people to enter the workforce.

The Effect of Regional Minimum Wage on Labor Force Participation Rate

The regression analysis shows that the coefficient for the regional minimum wage (RMW) (X_3) is -0.000002, meaning that each one-unit increase in RMW decreases the LFPR by 0.000002 percent, assuming other variables remain constant. The significance value for X_3 is 0.0223, which is less than 0.05, indicating that RMW has a statistically significant effect on LFPR. Therefore, the hypothesis stating that RMW positively affects labor force participation is not supported, as the result reveals a statistically significant negative effect.

This negative relationship may be attributed to stagnant minimum wages during the 2020–2022 period, contributing to a decline in LFPR, likely due to widespread layoffs (PHK) and workers exiting the labor force. It can be concluded that an increase in the regional minimum wage set by the government negatively affects the LFPR.

The negative relationship between RMW and LFPR is supported by research from Ikhwan & Siradjuddin (2017), who found that minimum wages had a negative and significant effect on LFPR in Makassar. They explained this as being partly due to a reduction in the labor force during periods of wage increases. Similarly, Boffy-Ramirez (2019) found that minimum wage hikes led to a decrease in LFPR, a result that was statistically significant in the short term. This was explained by the fact that when minimum wages fall below individuals' "reservation wages", some choose to exit the labor force and stop seeking work. Additionally, a labor surplus caused by rising wages may lead to some individuals not being absorbed by the labor market and therefore excluded from the LFPR.

4. CONCLUSION

- a) The unemployment rate has a negative and insignificant effect on the Labor Force Participation Rate (LFPR). Each one-unit increase in the unemployment rate leads to a decrease in the LFPR. This indicates the presence of the discouraged worker hypothesis, in which increasing competition for jobs causes individuals to remain unemployed for a longer period.
- b) Education has a positive and significant effect on the Labor Force Participation Rate. An increase in the number of years of education leads to higher LFPR, as individuals gain more skills and knowledge, resulting in greater productivity. Higher productivity, coupled with the awareness of fulfilling personal needs, encourages individuals to participate in the labor market.
- c) The Regional Minimum Wage (RMW) has a negative and significant effect on the Labor Force Participation Rate. An increase in the minimum wage leads to a decrease in LFPR, as higher wage levels reduce employers' demand for labor. As a result, the

rise in RMW leads to a decline in labor demand and subsequently lowers labor force participation.

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