

The Effects of Minimum Wage, Labor Force, and Economic Growth on Local Revenue of District/City in Bali Province from 2017 To 2021

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ABSTRACT: What is known as Regional Original Revenue (PAD) is the main source of income for local governments. revenues of a region that reflects the level of regional independence. The larger the Original Local Government Revenue is, the more it indicates the region is able to implement fiscal decentralization and reduce dependence on the central government. Covid-19 has resulted in impacts on its economy in Bali. This study involved data from 9 regencies and cities in Bali, with a total of 45 data points obtained from the years 2017 to 2021, using panel regression analysis. The results of the panel data regression analysis showed that the chosen model was Fixed Effect Model (FEM). Based on the research results, it was found that simultaneously, minimum wage (UMR), labor force, and economic growth significantly influenced the Original Local Government Revenue (PAD). The partial results indicate that minimum wage and economic growth have a positive and significant impact on regional original revenue. On the other hand, the labor force has a negative and insignificant impact on regional revenue, specifically in the case of Bali province.

Keywords: *The Influence of Minimum Wage, Labor Force, Economic Growth on Local Revenue , Bali*

I. INTRODUCTION

In measuring the level of financial independence, the main indicator observed is the amount of Local Revenue (PAD) obtained within a region. The larger the PAD revenue obtained by the local government, the region can be considered independent. Local Revenue is one of the regional income sources that reflects the level of regional independence. The larger the PAD, the more it indicates that the region is capable of implementing fiscal decentralization and reducing dependency on the central government (Santosa, 2003). According to Ersita and Elim (2016), Local Revenue (PAD) is the financial source obtained from the respective region. The increase in Local Revenue is crucial for the Regional Government to be able to finance all the needs and requirements of the region itself, thus reducing the dependence of the Regional Government on the Central Government and ultimately achieving regional self-sufficiency (Muhtarom, 2015). Maryati and Endrawati (2010) as cited by Kusumawati and Wiksuana (2018) state that the improvement in Local Revenue (PAD) should have an impact on the regional economy.

According to Sumarsono as cited in the journal by Devanto and Putu (2011), the annual increase in the minimum wage at the district and city levels is intended to improve the welfare of Local Revenue (PAD). However, on the other hand, it has a negative impact on employment absorption because setting a minimum wage will reduce the demand for labor in the formal sector. The informal sector serves as an outlet for the surplus labor available. Therefore, the informal sector lacks wage regulations, resulting in a decrease in acceptable wage levels for workers. If the share of employment in the informal sector is lower, then the impact on income distribution will worsen instead.

According to Dumairy (1997), those classified as the labor force are individuals within the working age range. They are considered part of the labor force if they engage in work with the intention of earning or assisting in earning Local Revenue or profits, and if they have worked for at least 1 (one) continuous hour in the past week. This is how an economic system can occur, where the production of goods and services takes place if there is demand, thus creating a need for the utilization of labor. (Mulyadi, 2003).

Economic growth is one of the prerequisites for the success of economic development in a country, particularly in terms of its prosperity. This can serve as a reflection of the implemented development policy, which reflects the tangible impact of the policy that has been implemented. Economic growth provides insights

into why a country's growth varies over time, and this will influence the government in making policies (Pranata and Darma, 2014). To prevent declining economic growth and high unemployment rates, the government formulates policies to stimulate job creation (Beard et al., 2018). Government policies, including fiscal and monetary policies, play a crucial role in the economic growth of a country (Kotaskova et al., 2018).

II. CONCEPTUAL MODEL AND HIPOTESIS

2.1 CONCEPTUAL MODEL

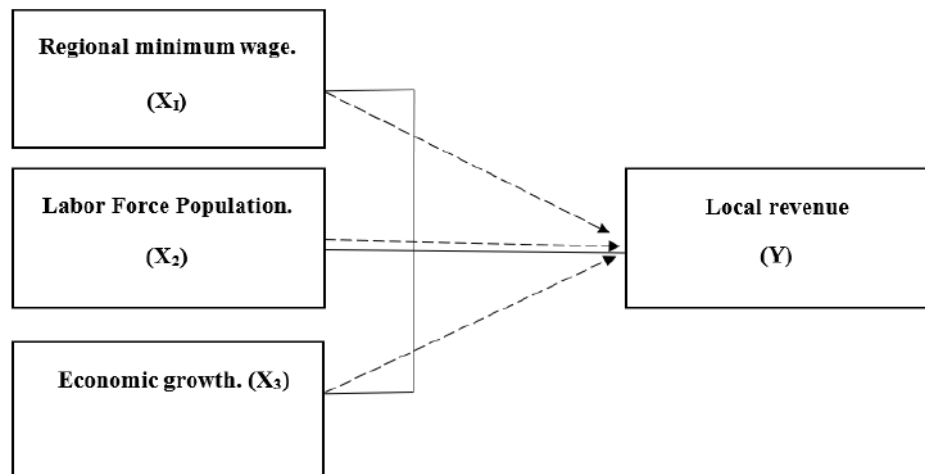


Figure. 1 Conceptual Model

2.2 Hypothesis

Based on the previously presented information contained in the literature and conceptual framework, several hypotheses can be derived as potential solutions to the underlying issues, including::

1. Minimum wage, labor force, and economic growth have a simultaneous effect on Local Revenue (PAD) of Districts/Cities in Bali Province.
2. Minimum wage, labor force, and economic growth have a positive partial effect on Local Revenue (PAD) of Districts/Cities in Bali Province.

III. RESEARCH METHODS

The data analysis technique used to address the research problem in this study is quantitative analysis using the assistance of the EViews software program. The analysis method employed in this research includes:

3.1 Panel Data Regression Analysis

The combination of time series data and cross-sectional data is referred to as panel data analysis. Therefore,, by using panel data in this study, it is expected to depict the regional minimum wage, labor force, and economic growth's impact on local revenue within a specific time period. Using separate time series or cross-sectional data alone cannot provide maximum information. The time series data used in this research ranges from 2017 to 2021, The total number of data used is 45, obtained from all the cities and regencies in Bali, which amount to 9, from 2017 to 2021.

3.2 Classical Assumption Test

In this study, classical assumption tests related to regression equations are used to ensure that the data used in hypothesis testing are free from classical assumptions and obtain a reliable model for further analysis. To obtain accurate estimation results of the regression model that are Best Linear Unbiased Estimator (BLUE), the model in this study must meet the classical assumptions. The tests that will be conducted include tests for normality, autocorrelation, multicollinearity, and heteroscedasticity.

3.3 Simultaneous Significance Test of Regression Coefficients

According to Ghozali (2012: 98), the Simultaneous Test (F-test) is conducted to determine the significance of the independent variables. To test the partial significance of the regression coefficients or the combined effect of the independent variables, namely Minimum Wage (X₁), Labor Force (X₂), and Economic Growth (X₃), on the dependent variable, Local Revenue (PAD) (Y), the F-test is used.

3.4 Partial Significance Test of Regression Coefficients

The purpose or definition of partial regression coefficient analysis is to test the relationship between independent variables and the dependent variable using a statistical test called the T-test.

3.5 Dominant Variable

The dominant variable refers to the technique of analysis used to answer the third research objective, which is to determine which variable is more dominant among the variables of regional minimum wage, labor force, and economic growth in relation to local revenue. This can be identified by examining the largest standardized beta coefficients.

IV. RESULTS AND DISCUSSION

4.1 Panel Data Regression Analysis

Table. 1 Results Panel Data Regression Analysis

Variabel		Metode Estimasi		
		CEM	FEM	REM
LOG Regional Minimum Wage	Coefficient	5.913726	1.257666	1.569857
	Std. Error	1.969491	0.484092	0.481568
	t-statistic	3.002668	2.597990	3.259889
	Prob.	0.0045	0.0139	0.0022
LOG Labor Force	Coefficient	0.287231	-0.096259	-0.054604
	Std. Error	0.181989	0.053688	0.052690
	t-statistic	1.578284	-1.792924	-1.036323
	Prob.	0.1222	0.0822	0.3061
Economic Growth	Coefficient	0.081702	0.031254	0.035126
	Std. Error	0.033876	0.007934	0.007910
	t-statistic	2.411808	3.939043	4.440962
	Prob.	0.0204	0.0004	0.0001
R-squared		0.317689	0.972342	0.196600
Adjusted R-squared		0.267764	0.963122	0.137814
F-statistic		6.363315	105.4658	3.344364
Prob. (F-statistic)		0.001214	0.000000	0.028229

4.1.1 The Results of The Chow Test

Table. 2 Results Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	97.635101	(8,33)	0.0000
Cross-section Chi-square	144.249843	8	0.0000

The results obtained from conducting the Chow test indicate a value of 0.0000 for the probability of the Cross-section Chi-square, which is smaller than the predetermined significance level of 5 percent. Therefore, the result shows that H1 is accepted, and the appropriate model for estimation is the Fixed Effect Model.

4.1.2 Hausman Test

Table. 3 Results Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	46.824415	3	0.0000

It shows that the Chi-Square distribution value calculated using EViews 12 is 46.824415 with a probability of 0.0000 (≤ 5 percent). Therefore, H1 is accepted, indicating that the appropriate estimation model is the Fixed Effect model.

4.2 Classical Assumption Test

4.2.1 Normalitas Test

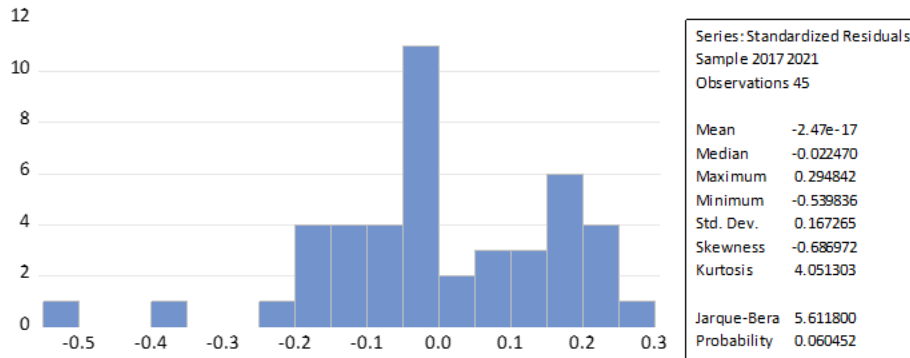


Figure. 2 Result Normalitas Test

Based on the normality test, specifically the Jarque-Bera test, it can be determined that the data used follows a normal distribution. The test results indicate that there are no abnormalities in the data, as the final probability value of 5.611800 is greater than 0.05. Based on this, the decision is made to accept the null hypothesis (H0) stating that the data is normally distributed, while rejecting the alternative hypothesis (H1). Therefore, in this study, the data is considered to be normally distributed and satisfies the necessary statistical assumptions for further analysis.

4.2.2 Multikolinieritas Test

Table. 4 Results Multikolinieritas Test

	LOGUMR	LOGTK	PE
LOGUMR	1.000000	0.456758	0.727967
LOGTK	0.456758	1.000000	0.239494
PE	0.727967	0.239494	1.000000

Based on the analysis results and the information displayed in the table, there is no multicollinearity detected. The data used is deemed appropriate, after analyzing the data, it was found that the VIF values are below 10 and the tolerance values are above 0.10. This indicates that there is no multicollinearity issue among the variables included in the analysis. The VIF values below 10 suggest that the variables are not highly correlated with each other, while the tolerance values above 0.10 indicate that each variable provides unique information in the regression model. Therefore, the variables can be considered independent and contribute individually to the analysis, enhancing the reliability of the results..

4.2.3 Heteroskedastisitas Test

Tabel. 5 Results Heteroskedastisitas Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.424696	3.377862	-1.902001	0.0642
LOGUMR	0.465894	0.236856	1.966993	0.0560
LOGTK	-0.024149	0.021887	-1.103354	0.2763
PE	0.004983	0.004074	1.223138	0.2283
Root MSE	0.098794	R-squared		0.088838
Mean dependent var	0.129011	Adjusted R-squared		0.022167
S.D. dependent var	0.104668	S.E. of regression		0.103502
Akaike info criterion	-1.613774	Sum squared resid		0.439215
Schwarz criterion	-1.453182	Log likelihood		40.30991
Hannan-Quinn criter.	-1.553907	F-statistic		1.332491
Durbin-Watson stat	1.714389	Prob(F-statistic)		0.276973

Based on the probability values, each independent variable has a probability value > 0.05 . Therefore, it can be concluded that there is no heteroscedasticity present.

4.3 Simultaneous Significance Test of Regression Coefficients

Based on the data analysis results obtained from the independent variables, namely regional minimum wage, household consumption, and local revenue, it is found that they have a significant impact on the dependent variable, which is the economic growth of Bali Province. The equation obtained is as follows:

$$\widehat{\text{Log} Y} = 2.434439 + 1.257666\text{Log}x_1 - 0.096259\text{Log}x_2 + 0.031254x_3$$

S(β)	=	(6.986807)	(0.484092)	(0.053688)	(0.007934)
t	=	(0.348434)	(2.597990)	(-1.792924)	(3.939043)
Sig.	=	(0.7297)	(0.0139)	(0.0822)	(0.0004)
R ²	=	0.972342	F = 105.4658	Sig = 0.000000	

Table. 6 Results of t-Test

R-squared	0.972342
Adjusted R-squared	0.963122
S.E. of regression	0.193141
F-statistic	105.4658
Prob(F-statistic)	0.000000

The phenomenon of the influence of independent variables on the dependent variable can be observed and examined by looking at the results of the statistical value used, namely the F statistic using the Fixed Effect Model (FEM), which is 105.4658. This value is greater than the critical value in the F-table, which is 2.83. This means that H₀ is rejected and H₁ is accepted, which is consistent with the results obtained based on the probability value of 0.000000. Since the probability value of 0.000000 < α = 0.05 (5%), it can be said that H₀ is rejected, which means it can be concluded that the variables Minimum Wage (X₁), labor force (X₂), and economic growth (X₃) jointly or simultaneously have a significant effect on the district/city's Regional Revenue (PAD) in Bali Province from 2017-2021, with a determination coefficient R² = 0.972342. The data presented clearly demonstrates that 97 percent of the variability in the dependent variable is attributable to the predetermined independent variables, carefully chosen by the researcher. However, it should be noted and remembered that the remaining 3 percent of the variation is due to other factors that fall within the limitations of the research methodology conducted by the researcher.

4.4 Partial Significance Test of Regression Coefficients

Table. 7 Results of F- Test

Variabel <i>Independent</i>	Coefficient	Standardized Coefficient Beta	T-Statistic	Statistical Probability	Description
LOG Minimum Regional Wage	1.257666	0,749	2.597990	0.0139	H ₀ rejected
LOG Labor Force	-0.096259	-0,097	-1.792924	0.0822	H ₀ accepted
Economic Growth	0.031254	0,503	3.939043	0.0004	H ₀ rejected

a) These findings indicate that the null hypothesis (H₀) should be rejected, and the alternative hypothesis (H₁) can be accepted. In this context, the regression coefficient of 1.257666 suggests that each unit increase in the regional minimum wage in Bali Province is positively and significantly associated with an increase in Regional Revenue (PAD). In other words, an increase in the regional minimum wage tends to have a positive and significant impact on the local revenue in Bali Province.

b) This indicates In this case, the accepted hypothesis is H₁, while the other hypothesis does not represent the data. In this context, the regression coefficient of -0.096259 suggests that the labor force has a negative and insignificant effect on the Regional Revenue (PAD) in Bali Province. In other words, there is no significant relationship between the labor force and regional income in Bali Province.

c) The findings indicate that In this case, the accepted hypothesis is H₁, while the other hypothesis does not represent the data.. In this context, the regression coefficient obtained is 0.031254. Based on the conducted test, it is evident and provides an overview that economic growth has a positive and significant impact on regional income in Bali. This implies that an increase in economic growth has a significant level of significance and also has a positive impact on income, in Bali.

4.5 Dominant Variable

The standardized coefficient beta values for the regional minimum wage, labor force, and economic growth are 0.749, -0.097, and 0.503, respectively. This indicates that among the three dependent variables, the regional minimum wage has the most dominant influence.

V. CONCLUSION

1. Based on the analysis using panel data regression, it can be concluded that the Minimum Regional Wage, labor force, and economic growth variables have a significant simultaneous effect of regional income in Bali. These findings indicate that all three independent variables, namely the Minimum Regional Wage, labor force, and economic growth, collectively influence the level of regional income. Therefore, policies related to increasing the Minimum Regional Wage, boosting the labor force, and stimulating economic growth have the potential to enhance the regional income in Bali.
2. Based on the conducted test, it is evident and provides an overview that economic growth has a significant and positive impact on income in Bali. It illustrates that economic growth itself has a tangible effect on Bali's income, positively and with a significant level of significance.
3. The Minimum Regional Wage, on a partial level, has a positive impact and also a significant influence on the economic growth in the Bali region. If there is an increase in the minimum regional wage, it can contribute significantly to the provincial-level regional income in Bali.
4. The labor force, on a partial level, has a negative and insignificant effect on the regional income of districts/cities in Bali Province. An increase in the labor force can lead to a decrease in the regional income of Bali Province.
5. Partial economic growth in Bali has a positive and significant impact on regional income in Bali. Additionally, economic growth plays a role in contributing to the increase in income in the Bali region.
6. The results indicate that the dominant variable is the Minimum Regional Wage, as it has a coefficient value of 1.257666, which is higher compared to the labor force and economic growth.

Please note that the translation may have slight variations in phrasing to ensure accuracy and clarity.

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