DETERMINANTS OF COMMUNITY WELFARE IN NON-SARBAGITA REGIONS IN BALI PROVINCE

e-ISSN: 3047-6151

Ni Putu Eka Putri Adnyani

Universitas Udayana

Putu Ayu Pramitha Purwanti

Universitas Udayana Korespondensi penulis: <u>adnyanio6o2@gmail.com</u>

Abstract

Community welfare refers to the fulfillment of citizens' needs across economic, educational, and health dimensions, enabling individuals to live decently and develop their potential. In this study, community welfare is measured using the Human Development Index (HDI). This study aims to analyze the influence of GRDP per capita, minimum wage, population size, and average years of schooling on the welfare of communities in non-Sarbagita regions in Bali Province. The study employs secondary data, comprising 50 observations. The analytical methods used include descriptive statistics and panel data regression analysis. The findings reveal that (1) GRDP per capita, minimum wage, population size, and average years of schooling simultaneously have a significant effect on community welfare in the non-Sarbagita regions of Bali Province; and (2) each of these variables also has a positive and significant partial effect on community welfare in these areas.

Keywords: GRDP per Capita, Minimum Wage, Population Size, Average Years of Schooling, Community Welfare, Human Development Index (HDI)

INTRODUCTION

Developing countries generally face two major challenges (Tambunan, 2001). First, low levels of human development which hinder the achievement of community welfare. Second, income disparity and inequality between high- and low-income groups (Saskara & Sanjaya, 2022). The primary goal of development is to improve the standard and quality of living, foster an environment that enhances self-esteem, and expand the freedom to make life choices (Mulia, 2022). To achieve these goals, development must be comprehensive; partial development efforts may generate new problems and hinder overall progress (Mulia, 2019).

The ultimate goal of development is to achieve community welfare, which serves as a key indicator of a decent standard of living. Welfare can be assessed through aspects such as health, quality of life, economic conditions, and happiness levels (Mulia & Saputra, 2020). One of the key indicators for measuring community welfare is the Human Development Index (HDI). A high HDI reflects the government's success and commitment to regional development (Rahmah et al., 2023). HDI evaluates how well development outcomes contribute to real improvements in people's lives, particularly in health, education, income, and other welfare dimensions. It incorporates three UNDP-standardized dimensions: (a) longevity and healthy life, (b) knowledge, and (c) decent

standard of living. These represent key components of human development aimed at improving community welfare. Human development emphasizes inclusive participation and equal access for all individuals (BPS, 2024).

As of 2023, according to the United Nations Development Programme (UNDP), Indonesia ranked 112th out of 193 countries, with an HDI score of 0.713—still below the global average of 0.739 (UNDP, 2023). Improving HDI at the provincial level is therefore essential to increasing Indonesia's overall HDI (Rahmah et al., 2023).

Bali is one of the Indonesian provinces that has shown progress in improving HDI. The province is divided into metropolitan (Sarbagita: Denpasar, Badung, Gianyar, and Tabanan) and non-metropolitan regions, as outlined in Presidential Regulation No. 51 of 2014. The Sarbagita area functions as the economic growth center in Bali, offering better access to education, healthcare, and job opportunities (BPS Bali Province, 2024).

In 2023, Karangasem Regency had the lowest HDI score (68.91), while Denpasar City recorded the highest (84.73), showing a significant gap of 15.82 points. Other non-Sarbagita regions—Jembrana, Klungkung, Bangli, and Buleleng—also lag behind Sarbagita in terms of HDI. This indicates that development in non-Sarbagita regions has not been optimized.

Economic growth is a vital factor in enhancing community welfare. It is commonly measured by Gross Regional Domestic Product (GRDP) (Siregar et al., 2023). GRDP reflects a region's economic output and income, which can be reinvested into human development—particularly in education and healthcare—to boost productivity (Zulham et al., 2017). GRDP levels vary depending on available resources and production factors, leading to differences among regions (Avigna et al., 2022).

GRDP per capita reflects average individual income and their ability to meet basic needs (Hidayat & Woyanti, 2021). Higher GRDP per capita generally implies better community welfare (Waidah & Pernanda, 2020).

Economic growth should ideally be accompanied by rising employment opportunities and fair wages (Dwirainaningsih, 2017). Wage policies are crucial in ensuring workers can meet basic needs and contribute productively (Simanjuntak, 2002). Increases in the minimum wage can raise living standards and positively influence HDI (Imelda et al., 2021; Maretania & Yasa, 2023).

In 2023, the average minimum wage in non-Sarbagita regions was IDR 2.72 million, a 16.24% increase from 2019. However, many workers still earn below this threshold. Wage increases not only motivate workers but also raise productivity and purchasing power (Goldsmith et al., 2018; Faizin, 2021).

Population size also influences community welfare. As both subjects and objects of development, the population serves as both the driver and beneficiary of progress (Wardhana et al., 2020). A large population can contribute to economic growth through labor and entrepreneurship (Anwar & Fatmawati, 2018), but it may also pose challenges—such as food insecurity, limited employment, and constrained access to education and housing (Damanik et al., 2021).

For instance, in 2023, Buleleng had a population of 808,870—up 22.21% from 2019—while Klungkung, though the smallest, saw a 16.53% increase. Population growth continues across all non-Sarbagita regions. This can be either an asset or a burden, depending on how well human resources are developed and managed (Arini et al., 2018; Sipayung, 2022).

Without improvements in education, health, and job creation, rapid population growth can worsen poverty and hinder development (Sari, 2021; Yosada & Dinata, 2023; Wardhana et al., 2020).

Education plays a pivotal role in building quality human resources (Syairoji et al., 2024). Knowledge enhances productivity and competitiveness, which in turn supports welfare (Alifah & Imaningsih, 2022). The average years of schooling is an important indicator of educational attainment in a region.

Given these issues, this study is titled: Determinants of Community Welfare in Non-Sarbagita Regions of Bali Province.

METHOD

This study adopts a quantitative approach with an associative design to analyze the influence of GRDP per capita, minimum wage, population size, and average years of schooling on community welfare in non-Sarbagita regions of Bali Province. The research covers five regencies: Jembrana, Klungkung, Bangli, Karangasem, and Buleleng—areas with relatively lower welfare levels compared to Sarbagita.

The study utilizes secondary panel data spanning ten years (2014–2023), sourced from Statistics Indonesia (BPS) and other official institutions (Sugiyono, 2024). The objects of the study are indicators influencing community welfare, with HDI used as the welfare proxy. All variables are defined operationally to ensure alignment between theoretical concepts and empirical data.

Data collection methods include non-participant observation and literature review. The analysis techniques employed are descriptive statistics and panel data regression using common effect, fixed effect, and random effect models. Model selection is based on Chow, Hausman, and Lagrange Multiplier tests (Widarjono, 2007; Sugiyono, 2024).

Before regression estimation, classical assumption tests—normality, multicollinearity, and heteroskedasticity are conducted to validate the model. An F-test is used to examine the simultaneous effect of all independent variables, while the t-test assesses partial effects. The findings will identify dominant factors affecting community welfare in non-Sarbagita regions and serve as recommendations for more equitable regional development planning (Ghozali & Ratmono, 2017; Wirawan, 2017).

RESULTS AND DISCUSSION Descriptive Statistical Analysis Results

Table 1. Results of Descriptive Statistical Analysis

	GRDP per Capita	Minimum wage	Total populatio n	Average Length of Schoolin g	Public welfare
Mean	25810.37	2187952	375400.8	7.168400	69.85420
Median	27375.26	2240273	277850.0	7.165000	70.08000
Maximum	35393.38	2738698	808870.0	8.650000	74.04000
Minimum	15690.46	1542600	174800.0	5.390000	64.01000
Std. Dev.	5290.827	396297.6	194794.4	0.841751	2.574655

Skewness	-0.349542	-0.301760	0.951621	-	-0.379383
Kurtosis	2.103823	1.687163	2.649449	0.242400 2.598785	2.340734
Jarque-Bera Probability	2.691358 0.260363	4·349534 0.113635	7.802528 0.020216	0.825009 0.661990	2.104910 0.349080
Sum Sum Sq. Dev.	1290518 1.37E+09	1.09E+08 7.70E+12	18770040 1.86E+12	358.4200 34.71867	3492.710 324,8136
Observatio ns	50	50	50	50	50

Source: Processed Secondary Data, 2025

Table 1 shows that the number of observations in this study is 50. The number of observations was obtained from panel data with time series data from 2014-2023 (10 years) and cross-section data from 5 districts included in the non-Sarbagita area.

In the GRDP per capita variable (X1), the lowest (minimum) value was 15,690.46 thousand rupiah occupied by Bangli Regency in 2014, while the highest (maximum) value was 35,393.38 thousand rupiah occupied by Buleleng Regency in 2019. The average value for the GRDP per capita variable was 25,810.37 thousand rupiah with a standard deviation of 5,290.827 thousand rupiah. This shows that the data distribution is even because the standard deviation value is smaller than the average value so that the average value can describe the entire GRDP per capita variable data.

In the minimum wage variable (X2), the lowest (minimum) value is 1,542,600 which is occupied by Jembrana Regency in 2014, while the highest (maximum) value is 2,738,698 which is occupied by Jembrana Regency in 2023. The average value for the minimum wage variable is 2,187,952 with a standard deviation of 396,297.6. This shows that the data is evenly distributed because the standard deviation value is smaller than the average value so that the average value can describe the entire minimum wage variable data.

In the population variable (X3), the lowest (minimum) value is 174,800 people occupied by Klungkung Regency in 2014, while the highest (maximum) value is 808,870 people occupied by Buleleng Regency in 2023. The average value for the population variable is 375,400.8 people with a standard deviation of 194,794.4 people. This shows that the data distribution is even because the standard deviation value is smaller than the average value so that the average value can describe the entire population variable data.

In the variable average length of schooling (X4), the lowest (minimum) value is 5.39 years occupied by Karangasem Regency in 2014, while the highest (maximum) value is 8.65 years occupied by Jembrana Regency in 2023. The average value for the variable average length of schooling is 7.1684 years with a standard deviation of 0.841751 years. This shows that the data is evenly distributed because the standard deviation value is smaller than the average value so that the average value can describe the overall data of the variable average length of schooling.

In the community welfare variable (Y), the lowest (minimum) value of 64.01 points was occupied by Karangasem Regency in 2014, while the highest (maximum) value of 74.04 points was occupied by Jembrana Regency in 2023. The average value for the

community welfare variable is 69.85420 points with a standard deviation of 2.574655 points. This shows that the data distribution is even because the standard deviation value is smaller than the average value so that the average value can describe the overall data of the community welfare variable.

Best Model Selection Test Results

1) Chow Test

Table 2. Chow Test Results

	Tubic 2: Chow	1 CSC INCSUITS	
Effects Test	Statistics	df	Prob.
Cuasa sastian F	27.75.000	(4.44)	0.000
Cross-section F	27.750909	(4.41)	0.0000
Cross-section Chi-square	65.516619	4	0.0000

Source: Processed Secondary Data, 2025

Based on the results of the Chow test in table 2, the cross-section chi square probability value was obtained as 0.0000 < 0.05, so Ho was rejected and H1 was accepted, which means that the fixed effect model was selected as the best model to use.

2) Hausman test

Table 3. Hausman Test Results

Test Summa	ary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random section	cross-	111.003637	4	0.0000

Source: Processed Secondary Data, 2025

Based on the results of the Hausman test in table 3, the random cross-section probability value was obtained as 0.0000 < 0.05, so Ho was rejected and H1 was accepted, which means that the fixed effect model was selected as the best model to use.

3) Lagrange Multiplier Test

Table 4. Lagrange Multiplier Test Results

	Tubic T. Lugit	ange marapher re	.st resures
	Hypothesis Test		
	Cross-section	Time	Both
Breusch-	30.20137	0.060635	30.26201
Pagan	(0.0000)	(0.8055)	(0.0000)

Source: Processed Secondary Data, 2025

Based on the results of the Hausman test in the table4, the Breusch-Pagan cross-section probability value is 0.0000 < 0.05, so Ho is rejected and H1 is accepted, which means that the random effect model is selected as the best model to use.

From the results of the three model selection tests, namely the Chow Test, Hausman Test, and Lagranger Multiplier Test, it can be concluded that the best model for this study is the model obtainedbased on the fixed effect model.

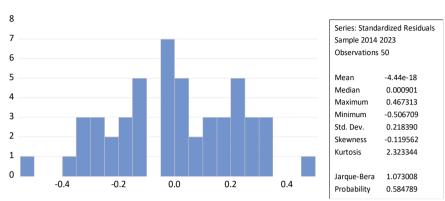
Classical Assumption Test Results

1) Normality Test

The normality test is performed to determine whether the residual values are normally distributed. A good regression model has normally distributed residuals. The normality test can be performed using Jarque-Bera.

- a. If the Jarque-Bera probability value > 0.05, then the data distribution is considered normal.
- b. If the Jarque-Bera probability value is < 0.05, then the data distribution is considered non-normal.

Figure 1. Normality Test Results



Source: Processed Secondary Data, 2025

Based on Figure 1, the results of the normality test show a Jarque-Bera value of 1.073008 with a probability of 0.584789 > 0.05. Therefore, it can be concluded that the data in this study are normally distributed and pass the normality test.

2) Multicollinearity Test

Table 5. Multicollinearity Test Results

3.1		3.2	X1	3.3	X2	3.4	X3	3.5	X4
3.6	X1	3.7	1,000,000	3.8	0.060469	3.9	0.258308	3.10	0.458374
3.11	X2	3.12	0.060469	3.13	1,000,000	3.14	0.165614	3.15	0.505385
3.16	Х3	3.17	0.258308	3.18	0.165614	3.19	1,000,000	3.20	-0.242207
3.21	X4	3.22	0.458374	3.23	0.505385	3.24	-0.242207	3.25	1,000,000

Source: Processed Secondary Data, 2025

Based on table 5, it can be seen that the correlation coefficient of GRDP per capita (X1) and minimum wage (X2) is 0.060469 < 0.90, the correlation coefficient of GRDP per capita (X1) and population (X3) is 0.258308 < 0.90, the correlation coefficient of GRDP per capita (X1) and average length of schooling (X4) is 0.4584 < 0.90, the correlation coefficient of minimum wage (X2) and population (X3) is 0.165614 < 0.90, the correlation coefficient of minimum wage (X2) and average length of schooling (X4) is 0.505385 < 0.90, and the correlation coefficient of population (X3) and average length of schooling (X4) is -0.2422 < 0.90. Therefore, it can be concluded that the data in this study is free from multicollinearity or passes the multicollinearity test.

3) Heteroscedasticity Test

Table 6. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.141289	0.842498	-0.167703	0.8676
GRDP per Capita	-7.33E-06	1.26E-05	-0.580283	0.5649
Minimum wage	-1.48E-07	1.77E-07	-0.837578	0.4071
Total population	1.24E-06	9.81E-07	1.263922	0.2134
Average Length Schooling	of 0.051261	0.118640	0.432072	0.6680

Source: Processed Secondary Data, 2025

Based on Table 6, it can be seen that each independent variable has a probability value greater than 0.05. Therefore, it can be concluded that the data in this study does not exhibit heteroscedasticity.

Panel Data Regression Analysis Results

Table 7. Results of Panel Data Regression Analysis of Determinants of Community Welfare in Non-Sarbagita Areas in Bali Province (Fixed Effect Model)

					· - <i>)</i>
Variable		Coefficient	Std. Error	t-Statistic	Prob.
C		51.24923	1.622640	31.58386	0.0000
GRDP per Capita		0.0000912	0.0000243	3.746581	0.0006
Minimum wage		0.00000187	0.000000341	5.488509	0.0000
Total population		0.00000410	0.00000189	2.172206	0.0357
Average Length Schooling	of	1.480243	0.228499	6.478108	0.0000

Source: Processed Secondary Data, 2025

The constant of 51.249 means that if the variables GRDP per Capita (X1), Minimum Wage (X2), Population (X3), and Average Years of Schooling (X4) are zero, then the Community Welfare variable (X4) will be worth 51.249 points. The coefficient value of the GRDP per capita variable (X1) of 0.0000912 means that if the GRDP per capita increases by 1,000 thousand rupiah (1 million rupiah), then the average community welfare will increase by 0.0912 points. The coefficient value of the Minimum Wage variable (X2) of 0.00000187 means that if the minimum wage increases by 100,000 rupiah, then the average community welfare will increase by 0.187 points. The coefficient value of the Population Number variable (X3) of 0.00000410 means that if the population increases by 100,000 people, the average welfare of the community will increase by 0.41 points. The coefficient value of the Average Length of Schooling variable (X4) of 1.480243 means that if the average length of schooling increases by 1 year, the average welfare of the community will increase by 1.48243 points.

Analysis of the Coefficient of Determination

Table 8. Results of the Determination Coefficient Analysis

R-squared	0.992805	•
Adjusted R-squared	0.991401	_

Source: Processed Secondary Data, 2025

Based on Table 8, the coefficient of determination (R2) test results are 0.991401, or 99.14 percent. This means that 99.14 percent of the total variation (rise and fall) in community welfare can be explained or simultaneously influenced by GRDP per capita, minimum wage, population, and average length of schooling. The remaining 0.86 percent is influenced by other factors not included in the model.

Simultaneous Effect Test (F-Test)

-
707.1840
0.000000

Source: Processed Secondary Data, 2025

a. Hypothesis Formulation

Ho: $\beta_1 = \beta_2 = \beta_3 = 0$, meaning that GRDP per capita, minimum wage, and population do not have a significant simultaneous effect on the welfare of the community in the non-Sarbagita area of Bali Province.

H1: $\beta j \ge 0$ (j = 1, 2, 3), meaning that GRDP per capita, minimum wage, and population have a significant simultaneous effect on the welfare of the community in the non-Sarbagita area of Bali Province.

b. Determining the Real Level

The significance level, $\alpha = 5\% = 0.05$ and degrees of freedom (df) = (v1, v2) with v1 = k and v2 = n-(k+1) to determine the Ftable value. So, df = (3, (50-(4+1)) = (3, 45) and Ftable = F0.05(3, 45) is 2.812

c. Testing Criteria

If Fcount \leq 2.812 or the significance value of Fcount $> \alpha$, then Ho is accepted.

If Fcount > 2.812 or the significance value of Fcount ≤, then Ho is rejected.

d. Calculating Test Statistics

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

Information:

F = calculated F value

R₂ = coefficient of determination

n = number of observations

k = number of independent variables in the regression model

e. Making Conclusions

Based on table 7, it can be seen that the F count value is 707.1840. This shows that the F count of 707.1840 > F table of 2.812 with a probability value of 0.000000 < 0.05, so Ho is rejected and H1 is accepted. This means that GRDP per capita, minimum wage, and population have a significant simultaneous effect on the welfare of the community in the non-Sarbagita area of Bali Province.

Partial Effect Test (t-Test)

A t-test was conducted to partially test the significance of the regression coefficient or the influence of the independent variables, namely GRDP per capita, minimum wage, population, and average length of schooling, on the dependent variable, namely community welfare. The partial test results in this study are presented in Table 7.

a. The Influence of GRDP per Capita (X1) on Community Welfare in the Non-Sarbagita Region of Bali Province

1. Hypothesis Formulation

Ho: $\beta_1 \le 0$, meaning that GRDP per capita (X1) does not have a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

H1: β 1 > 0, meaning that GRDP per capita (X1) has a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

2. Determining the Real Level

The significance level, $\alpha = 5\% = 0.05$ and degrees of freedom df = n-(k+1) to determine the ttable value. So, df = 50-(4+1) = 45 and ttable = t(0.05;45) = 1.67943

3. Testing Criteria

If tcount \leq 1.67943 or the probability value > α , then Ho is accepted.

If tcount \geq 1.67943 or probability value \leq α , then Ho is rejected

4. Calculating Test Statistics

$$t_i = \frac{b_i - \beta_i}{S\beta_i}$$

Information:

ti = calculated t value

bi = The i-th partial regression coefficient of the sample regression

Sβ_i= Standard error of bi

βi = The i-th partial regression coefficient of the population regression

5. Making Conclusions

Based on table 7, the results of the t-statistic test for the GRDP per capita variable (X1) have a coefficient value of 0.0000912. The calculated t value of 3.746581 \geq ttable of 1.67943 and the probability value of 0.0006 is smaller than α = 0.05 (0.0006 < 0.05), so Ho is rejected and H1 is accepted. This means that GRDP per capita (X1) has a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province (Y).

b. The Effect of Minimum Wage (X2) on Community Welfare in Non-Sarbagita Areas of Bali Province

1. Hypothesis Formulation

Ho: $\beta_1 \le 0$, meaning that the minimum wage (X2) does not have a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

H1: β 1 > 0, meaning that the minimum wage (X2) has a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

2. Determining the Real Level

The significance level, $\alpha = 5\% = 0.05$ and degrees of freedom df = n-(k+1) to determine the ttable value. So, df = 50-(4+1) = 45 and ttable = t(0.05;45) = 1.67943

3. Testing Criteria

If tcount \leq 1.67943 or the probability value > α , then Ho is accepted.

If tcount \geq 1.67943 or probability value $\leq \alpha$, then Ho is rejected

4. Calculating Test Statistics

$$t_i = \frac{b_i - \beta_i}{S\beta_i}$$

Information:

ti = calculated t value

bi = The i-th partial regression coefficient of the sample regression

 $S\beta_i$ = Standard error of bi

βi = The i-th partial regression coefficient of the population regression

5. Making Conclusions

Based on table 7, the results of the t-statistic test for the minimum wage variable (X2) have a coefficient value of 0.00000187. The calculated t value of $5.488509 \ge$ ttable of 1.67943 and the probability value of 0.0000 is smaller than $\alpha = 0.05$ (0.0000 < 0.05), so Ho is rejected and H1 is accepted. This means that the

minimum wage (X_2) has a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province (Y).

c. The Influence of Population (X3) on Community Welfare in the Non-Sarbagita Region of Bali Province

1. Hypothesis Formulation

Ho: β_3 = 0, meaning that the number of working age population (X₃) does not have a partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

H1: β 3 \neq 0, meaning that the number of working age population (X3) has a partial influence on the welfare of the community in the non-Sarbagita area of Bali Province.

2. Determining the Real Level

The significance level, $\alpha = 5\% = 0.05$ and degrees of freedom df = n-(k+1) to determine the ttable value. So, df = 50-(4+1) = 45 and ttable = t(0.05;45) = 2.01410

3. Testing Criteria

If tcount \leq 2.01410 or the probability value $> \alpha$, then Ho is accepted.

If tcount \geq 2.01410 or probability value \leq α , then Ho is rejected.

4. Calculating Test Statistics

$$t_i = \frac{b_i - \beta_i}{S\beta_i}$$

Information:

ti = calculated t value

bi = The i-th partial regression coefficient of the sample regression

 $S\beta_i$ = Standard error of bi

βi = The i-th partial regression coefficient of the population regression

5. Making Conclusions

Based on table 7, the results of the t-statistic test for the population variable (X₃) have a coefficient value of 0.00000410. The calculated t value of 2.172206 \geq ttable of 2.01410 and the probability value of 0.0357 is smaller than α = 0.05 (0.0357 < 0.05), so Ho is rejected and H₁ is accepted. This means that the population (X₃) has a partial and significant effect on the welfare of the community in the non-Sarbagita area of Bali Province (Y).

d. The Effect of Average Length of Schooling (X4) on Community Welfare in the Non-Sarbagita Region of Bali Province

1. Hypothesis Formulation

Ho: $\beta_1 \le 0$, meaning that the average length of schooling (X4) does not have a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

H1: β 1 > 0, meaning that the average length of schooling (X4) has a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province.

2. Determining the Real Level

The significance level, $\alpha = 5\% = 0.05$ and degrees of freedom df = n-(k+1) to determine the ttable value. So, df = 50-(4+1) = 45 and ttable = t(0.05;45) = 1.67943

3. Testing Criteria

If tcount \leq 1.67943 or the probability value $> \alpha$, then Ho is accepted.

If tcount \geq 1.67943 or probability value \leq α , then Ho is rejected

4. Calculating Test Statistics

$$t_i = \frac{b_i - \beta_i}{S\beta_i}$$

Information:

ti = calculated t value

bi = The i-th partial regression coefficient of the sample regression

Sβi = Standard error of bi

βi = The i-th partial regression coefficient of the population regression

5. Making Conclusions

Based on table 7, the results of the t-statistic test for the variable average length of schooling (X4) have a coefficient value of 1.480243. The calculated t value of 6.478108 \geq ttable of 1.67943 and the probability value of 0.0000 is smaller than α = 0.05 (0.0000 < 0.05), so Ho is rejected and H1 is accepted. This means that the average length of schooling (X4) has a positive and significant partial effect on the welfare of the community in the non-Sarbagita area of Bali Province (Y).

Discussion of Research Results

The Simultaneous Effect of GRDP per Capita, Minimum Wage, Population, and Average Length of Schooling on the Welfare of the Non-Sarbagita Region of Bali Province

The hypothesis of this study is that GRDP per capita, minimum wage, population, and average length of schooling have a significant simultaneous effect on the welfare of the non-Sarbagita region community in Bali Province. Based on the results of this study, it was found that simultaneously the variables GRDP per capita, minimum wage, population, and average length of schooling have a significant effect on the welfare of the non-Sarbagita region community in Bali Province. This is evidenced by the F-statistic value of 707.1840 which is greater than the F-table of 2.81 with a probability of 0.000000. It can be concluded that Ho is rejected and H1 is accepted. This means that GRDP per capita, minimum wage, population, and average length of schooling can affect the welfare of the non-Sarbagita region community in Bali Province.

The Influence of GRDP per Capita (X1) on Community Welfare (Y) in Non-Sarbagita Regions of Bali Province

Based on the results of this study, it was found that partially the GRDP per capita variable has a regression coefficient of 0.0000912 and a probability of 0.0006 <0.05, which means Ho is rejected and H1 is accepted. It can be concluded that GRDP per capita has a positive and significant effect on the welfare of people in non-Sarbagita areas. An increase in GRDP per capita of 1 million rupiah will increase the welfare of people in non-Sarbagita areas by 0.0912 points, assuming other variables are constant. The higher the GRDP per capita value in non-Sarbagita areas, the more the welfare of people in non-Sarbagita areas will increase.

According to Mankiw (2021), GDP per capita indicates the average income and expenditure per individual in the economy and measures the average individual's economic well-being. GDP, by its very nature, does not necessarily help people live better lives. GDP cannot measure health or the quality of education, but a higher GDP can provide better educational facilities and healthcare services. This can be concluded to also apply to Gross Regional Domestic Product (GRDP).

The results of this study align with those of Ergi Armanda Wiliyan and Maulidyah (2024), who found that GRDP per capita had a positive and significant impact on the Human Development Index (HDI) in East Kalimantan Province. Increasing GRDP per

capita generated by a region can generate investment in human development in the form of education, health, and other social benefits. This will encourage communities to achieve a decent standard of living and improve their well-being. These results also align with research by Rizal Amrullan (2022), who found that GRDP per capita had a positive and significant impact on community well-being in four regencies/cities on Madura Island.

The Effect of Minimum Wage (X2) on Community Welfare (Y) in the Non-Sarbagita Region of Bali Province

Based on the results of this study, it was found that partially the minimum wage variable has a regression coefficient of 0.00000187 and a probability of 0.0000 < 0.05, which means Ho is rejected and H1 is accepted. It can be concluded that the minimum wage has a positive and significant effect on the welfare of people in the non-Sarbagita area. An increase in the minimum wage of 100,000 rupiah will increase the welfare of people in the non-Sarbagita area by 0.187 points, assuming other variables are constant. The higher the minimum wage value in the non-Sarbagita area, the more the welfare of people in the non-Sarbagita area will increase.

The welfare of society cannot be separated from the income earned by the community, especially in the form of wages for workers. The minimum wage determines the community's ability to meet basic needs, such as food, clothing, shelter, education, and health. Increasing the minimum wage can encourage the creation of a more decent life for the community. This has also been regulated in Law No. 13 of 2003 Article 88 paragraph (1) which states that "Every worker/laborer has the right to receive income that meets a decent living for humanity."

The results of this study align with research conducted by Wasi Nuroso Rian Hidayat and Winny Perwithosuci (2024), which found that the minimum wage has a positive and significant impact on the Human Development Index. This is because when the minimum wage increases, people's purchasing power can also increase, which will lead to a higher level of well-being. Furthermore, the minimum wage earned by the community will provide adequate education for future generations. These results also align with research conducted by Lintang Sania, Mohammad Balafif, and Nurul Imamah (2021), which found that the Regional Minimum Wage (UMR) has a positive and significant impact on the Human Development Index.

The Influence of Population Number (X3) on Community Welfare (Y) in the Non-Sarbagita Region of Bali Province

Based on the results of this study, it was found that partially the population variable has a regression coefficient of 0.00000410 and a probability of 0.0357 <0.05, which means Ho is rejected and H1 is accepted. It can be concluded that the population has a significant influence on the welfare of the community in the non-Sarbagita area. In this study, it was found that the population has a positive and significant effect. An increase in the population of 100,000 people will increase the welfare of the community in the non-Sarbagita area by 0.410 points, assuming other variables are constant. The higher the population in the non-Sarbagita area, the more the welfare of the community in the non-Sarbagita area will increase.

The population is both the object of development and the beneficiary of its fruits. A large population, coupled with good education, health, and economic well-being, will lead to increased public welfare. Ultimately, the population is the ultimate goal of development, which produces prosperity.

The non-Sarbagita region has a population that continues to increase every year. Although the population continues to grow, this condition is balanced by a growing number of productive residents. Based on BPS data, in 2023, the number of productive residents in Buleleng Regency reached 78.24% of the total population, Karangasem Regency had a productive population of 77.29% of the total population. Bangli Regency had a productive population of 79.77% of the total population. Klungkung Regency had a productive population of 79.30% of the total population. Jembrana Regency had a productive population of 79.02% of the total population.

The productive-age population is a major contributor to economic activity. The larger the population, the greater the opportunity to accelerate economic growth and public welfare. A high productive population means increased productivity and consumption. A population with high productivity will enjoy greater prosperity, as evidenced by increases in income and consumption.

The results of this study align with those of Yuli Wantri Simarmata and Deden Dinar Iskandar (2022), who found that population size has a positive and significant effect on the Human Development Index. This contrasts with research by Elsa Nova Aryanti (2023), who found that population size has a negative and significant effect on the Human Development Index (HDI). According to her, uncontrolled population growth, population density, and uneven distribution will lead to numerous problems.

The Effect of Average Length of Schooling (X4) on Community Welfare (Y) in the Non-Sarbagita Region of Bali Province

Based on the results of this study, it was found that partially the average length of schooling variable has a regression coefficient of 1.480243 and a probability of 0.0000 <0.05, which means Ho is rejected and H1 is accepted. It can be concluded that the average length of schooling has a positive and significant effect on the welfare of the community in the non-Sarbagita area. An increase in the average length of schooling by 1 year will increase the welfare of the community in the non-Sarbagita area by 1.480243 points, assuming other variables are constant. The higher the average length of schooling in the non-Sarbagita area, the more the welfare of the community in the non-Sarbagita area will increase.

The increase in average years of schooling indicates that more people are pursuing formal education for longer periods. This contributes to improving the quality of human resources (HR), both in terms of knowledge, skills, and better future employment opportunities. Individuals with higher levels of education tend to have broader access to jobs and more decent incomes. This directly impacts living standards and well-being.

The results of this study align with Theodore Schultz's theory on investment in human capital. In his opinion, education is a form of investment in development, with the ultimate goal of development being the well-being of society. Schultz has also demonstrated that development in the education sector directly contributes to a country's economic growth.

The results of this study also align with research conducted by Ryana Syafira, Rifki Khoidrun, and Indanazulfa Qurrota A'yun (2024), which found that average years of schooling had a positive and significant effect on the Human Development Index in Papua Province. An increase in the average years of schooling indicates a good quality of public education, leading to an increase in the Human Development Index. A person's higher education can reflect the quality of their thoughts and actions.

CONCLUSION

Based on the results and discussion explained in the previous chapter, the conclusions that can be drawn from this research are as follows.

- 1) GRDP per capita, minimum wage, population, and average length of schooling simultaneously have a significant influence on the welfare of the non-Sarbagita community in Bali Province.
- 2) GRDP per capita, minimum wage, population, and average length of schooling partially have a positive and significant effect on the welfare of the non-Sarbagita community in Bali Province.

REFERENCE LIST

- Adioetomo, S. M. (2010). Dasar-dasar Demografi edisi 2. Jakarta: Salemba Empat
- Alatartseva, E., & Barysheva, G. (2015). Well-being: Subjective and Objective Aspects. Procedia - Social and Behavioral Sciences, 166, 36–42. https://doi.org/10.1016/j.sbspro.2014.12.479
- Albert, M. & Hahnel, R. (2017). Quiet Revolution in Welfare Economics. Princeton University Press.
- Alifah, S. N., & Imaningsih, N. (2022). Analisis PDRB, Tingkat Pengangguran, Belanja Modal dan Rata-Rata Lama Sekolah terhadap IPM di Kabupaten Bangkalan. *Jurnal Dinamika Ekonomi Pembangunan*, 5(2), 127–137. https://doi.org/10.33005/jdep.v5i2.404
- Allen Sanjaya, I. (2022). Pengaruh Upah Minimum Dan Investasi Terhadap Ketimpangan Distribusi Pendapatan Dan Kesejahteraan Masyarakat Kabupatenkota Di Provinsi Bali. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 10(12), 4705 4737.
- Anwar, K., & Fatmawati. (2018). Pengaruh jumlah penduduk usia produktif, kemiskinan dan inflasi terhadap pertumbuhan ekonomi di kabupaten bireuen. *Jurnal Ekonomi Regional Unimal*, 1(1), 15-22.
- Arini, G. A., Chaidir, T., Satarudin, S., & Sriningsih, S. (2018). Pengaruh Variabel Demografi Terhadap Pertumbuhan Ekonomi Provinsi Nusa Tenggara Barat Tahapan Menuju Bonus Demografi. *Journal of Economics and Business*, 4(1), 67–77. https://doi.org/10.29303/ekonobis.v4i1.21
- Aryanti, E. N. (2023). Analisis Indeks Pembangunan Manusia di Provinsi Jawa Timur Thahun 2015-2021. *Jurnal Ilmu Ekonomi (JIE)*, 7(02), 223–234.
- Avigna, I. K. M., Apriadi, A. M., & Princess, P. (2022). Analysis of the effect of hdi, grdp, and minimum wages on poverty in central java for the period of 2011-2020. *Jurnal Ekonomi Trisakti*, 2(1), 157-166.
- Badan Pusat Statistik. (2024). Indeks Pembangunan Manusia 2023 Volume 18.
- Badan Pusat Statistik. (N.D.). Istilah Statistik. Diakses pada Februari 2, 2025 dari ; https://sensus.bps.go.id/metadata statistik/index/sp2022?page=3&per-page=10
- Badan Pusat Statistik Provinsi Bali. (2024). Indeks Pembangunan Manusia Provinsi Bali Volume 6.
- Badan Pusat Statistik Provinsi Bali. (N.D.). Indeks Pembangunan Manusia Provinsi Bali Menurut Kabupaten/Kota 2021-2023. Diakses pada Juli 10, 2024 dari ; https://bali.bps.go.id/indicator/26/30/1/indeks-pembangunan-manusia-provinsi-bali-menurut-kabupaten-kota.html

- Badan Pusat Statistik Provinsi Bali. (2024). Indikator Kesejahteraan Rakyat Provinsi Bali 2024 Volume 9.
- Badan Pusat Statistik Provinsi Bali. (N.D.). Upah Minimum Kabupaten/Kota Provinsi Bali, 2023-2024. Diakses pada Januari 17, 2025 dari ; https://bali.bps.go.id/id/statistics-table/2/NjEjMg==/upah-minimum-kabupaten-kota-di-provinsi-bali.html
- Badan Pusat Statistik Provinsi Sulawesi Barat. (N.D.). Indeks Pembangunan Manusia (IPM) menurut Jenis Kelamin, 2022-2023. Diakses pada Januari 17, 2025 dari ; https://sulbar.bps.go.id/id/statistics-table/2/MTg1lzl=/indeks-pembangunan-manusia--ipm--menurut-jenis-kelamin.html
- Badan Pusat Statistik Kabupaten Penajam Paser Utara. (2024). Produk Domestik Regional Bruto Kabupaten Penajam Paser Utara Menurut Pengeluaran 2019-2023.
- Badrudin, R. (2012). Pengaruh Pertumbuhan Ekonomi Terhadap IPM Menggunakan Data Kabupaten dan Kota di Provinsi Jawa Tengah.
- Baltagi, B. H. (2008). Econometric Analysis Of Panel Data. John Wiley & Sons Ltd., Chichester.
- Bonerri, K. B. (2018). Pengaruh Pendidikan Dan Upah Terhadap Tingkat Partisipasi Angkatan Kerja (Tpak) Di Kota Manado. *Jurnal Berkala Ilmiah Efisiensi*, 18(01).
- Christiani, N. V., & Nainupu, A. E. (2021). Pengaruh akses terhadap internet, listrik dan PDRB per kapita terhadap tingkat kemiskinan di Nusa Tenggara Timur tahun 2015-2019. Jurnal Statistika Terapan (ISSN 2807-6214), 1(1), 37-52.
- Damanik, D., Purba, E., & Hutabarat, A. S. (2021). The Effect of Population and Human Development Index on Economic Growth Pematangsiantar City. Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 4(3), 3658-3668.
- Dwirainaningsih, Y. (2017). Pengaruh Upah Minimum Terhadap Terhadap Penyerapan Tenaga Kerja dan Kesejahteraan Masyarakat di Kota Pekalongan. *Journal of Development Economics*, 12, 1–14.
- Fadhilah, S. N. M., Indriyani, F., & Suharsono, S. (2022). Pengaruh Inflasi, Pertumbuh Ekonomi, Jumlah Penduduk Terhadap Kesejahteraan Dengan ZIS Sebagai Variabel Moderasi. Al Maal: Journal of Islamic Economics and Banking, 3(2), 154-166.
- Faizin, M. (2021). Pengaruh Upah Minimum, Kemiskinan dan Pengangguran pada IPM di Kabupaten/Kota Provinsi Jawa Timur. *Jurnal Samudra Ekonomi Dan Bisnis*, 12(2), 214–227. https://doi.org/10.33059/jseb.v12i2.3027
- Garner-Black, B. A. (1999). *Black's Law Dictionary 7th Edition.* United States of America: West Publishing Company.
- Ghozali, I., & Ratmono. (2017). Analisis Multivariat dan Ekonometrika dengan Eviews 10 Edisi 2. Badan Penerbit Universitas Diponegoro.
- Goldsmith, A. H., Veum, J. R., & Darity, W. (2018). The impact of psychological and human capital on wages. *Economic Inquiry*, 35(4), 815–829. https://doi.org/10.1111/j.1465-7295.1997.tb01966.x
- Herman, H. (2021). Impact of inflation and city minimum wages on human development index in Indonesia. *Husnayain Business Review*, 1(1), 1-10.
- Hidayat, S., & Woyanti, N. (2021). Pengaruh PDRB Per Kapita, Belanja Daerah, Rasio Ketergantungan, Kemiskinan, Dan Teknologi Terhadap Ipm Di Indonesia. *Jurnal Ekonomi, Bisnis Dan Akuntansi (JEBA)*, 23(4), 122–137.
- Idris, A. (2018). Pengantar Ekonomi Sumber Daya Manusia. Yogyakarta: Deepublish.
- Imelda, R., Balafif, M., & Wahyuni, S. T. (2021). Pengaruh Pendidikan, Produk Domestik Regional Bruto (PDRB), dan Upah Minimum terhadap Indeks Pembangunan

- Manusia (IPM) Kabupaten Sidoarjo Tahun 1998-2017. *Bharanomics*, 1(2), 67–74. https://doi.org/10.46821/bharanomics.v1i2.155
- Khadijah, S., Saharudddin, S., Anwar, K., & Murtala, M. (2022). Pengaruh Pertumbuhan Ekonomi Dan Jumlah Penduduk Terhadap Indeks Pembangunan Manusia Di Kabupaten Simalungun. *Jurnal Aplikasi Ilmu Ekonomi*, 1(1), 74. https://doi.org/10.29103/jaie.v1i1.8899
- Kiha, E. K., Seran, S., & Lau, H. T. (2021). Pengaruh jumlah penduduk, pengangguran, dan kemiskinan terhadap indeks pembangunan manusia (ipm) di kabupaten belu. *Jurnal Ekonomi, Sosial & Humaniora*, 2(07), 60-84.
- Mankiw, N, G. (2021). Principles Of Economics: Ninth Edition (Ed. 9). Singapore: Chengange Learning Asia Pte Ltd.
- Maretania, Y., & Yasa, I. (2023). Determinan Kesejahteraan Masyarakat Kabupaten/Kota Di Provinsi Bali. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 12(3).
- Mulia, R. A. (2019). Influence Of Public Policy, Participation Of Community And Education Level To Public Welfare In Padang Pariaman District. Jurnal EL-RIYASAH, 10(1), 37–56.
- Mulia, R. A. (2022). Pengaruh Tingkat Kemiskinan dan Produk Domestik Regional Bruto Terhadap Kesejahteraan Masyarakat. *Jurnal Ilmiah Ekotrans & Erudisi*, 2(1), 22-33.
- Mulia, R. A., & Saputra, N. (2020). Analisis faktor-faktor yang mempengaruhi kesejahteraan masyarakat Kota Padang. *Jurnal el-riyasah*, 11(1), 67-83.
- Mulyadi, S. (2008). Ekonomi Sumber Daya Manusia Dalam Perspektif Pembangunan. Jakarta: PT RajaGrafindo Persada.
- Novianthi, N. K. L., Dewi, P. M., Marhaeni, A. A. I. ., & Yuliarmi, N. N. (2021). The Effect Analysis of the Role of the Tourism and Investment Sector on Job Opportunities and HDI in Non-Sarbagita Areas in Bali Province. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), 577–585.
- Nuroso, W., & Hidayat, R. (2024). Analisis Pengaruh PDRB Perkapita, Upah Minimum, Penyerapan Tenaga Kerja, Jumlah Penduduk Miskin Terhadap Indeks Pembangunan Manusia di Propinsi Jawa Barat Tahun 2017-2020. Ekonomikawan: Jurnal Ilmu Ekonomi Dan Studi Pembangunan, 24(1), 89–101. https://doi.org/10.30596/ekonomikawan.v24i1.18551
- Permadi, E., & Chrystanto, E. (2021). Analisa Pengaruh Jumlah Penduduk, Produk Domestik Regional Bruto (PDRB), dan Upah Minimum Kabupaten/Kota terhadap Tingkat Pengangguran Terbuka di Kabupaten/Kota di Provinsi Jawa Timur Tahun 2012-2018. OECONOMICUS Journal of Economics, 5(2), 86–95. https://doi.org/10.15642/oje.2021.5.2.86-95
- Putong, I. (2000). Pengantar Ekonomi Mikro dan Makro. Jakarta: Ghalia Indonesia.
- Rahmah, N. A., Lukman, L., Pratiwi, R., & Sufiawan, N. A. (2023). Pengaruh Jumlah Penduduk Miskin, Pengeluaran Pemerintah Bidang Pendidikan dan Kesehatan Terhadap IPM di Kota Payakumbuh. *Jurnal Ekonomi Pembangunan STIE Muhammadiyah Palopo*, 9(1), 222-234.
- Sania, L., Balafif, M., & Imamah, N. (2021). Pengaruh PDRB, Tingkat Pengangguran Terbuka dan UMR Terhadap Indeks Pembangunan Manusia di Kabupaten dan Kota Provinsi Jawa Timur. *Bharanomics*, 2(1), 33–46. https://doi.org/10.46821/bharanomics.v2i1.189
- Sari, Y. A. (2021). Pengaruh Upah Minimum Tingkat Pengangguran Terbuka Dan Jumlah Penduduk Terhadap Kemiskinan Di Provinsi Jawa Tengah. Equilibrium: Jurnal Ilmiah

- Ekonomi, Manajemen Dan Akuntansi, 10(2), 121–130. https://doi.org/10.35906/je001.v10i2.785
- Simanjuntak, P. (2002). Pengantar Ekonomi Sumber Daya Manusia. Jakarta: Lembaga Penerbit UI.
- Sipayung, S. L. (2022). Implementasi Program Kampung KB Dalam Meningkatkan Kesejahteraan Masyarakat Selama Masa Pandemi. 11(3), 284–292.
- Siregar, T. H., Lubis, F. A., & Inayah, N. (2023). Analisis Pengaruh Produk Domestik Regional Bruto (PDRB), Upah Minimum Regional (UMR) dan Tingkat Pengangguran Terbuka (TPT) Terhadap Kesejahteraan Dalam Perspektif Ekonomi Islam di Provinsi Sumatera Utara. Ekonomi Bisnis Manajemen dan Akuntansi (EBMA), 4(1), 1290-1303.
- Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Alfabeta, Cv. . (2024). Metode Penelitian Kuantitatif. Bandung: Alfabeta.
- Sumarsono, S. (2014). Teori dan Kebijakan Publik Sumber Daya Manusia. Yogyakarta: Graha
- Suparmono, S. (2018). Pengantar Ekonomi Makro. Yogyakarta: UPP STIM YKPN
- Suradi, S. (2007). Pembangunan manusia, kemiskinan dan kesejahteraan sosial kajian tentang kebijakan pembangunan kesejahteraan sosial di Nusa Tenggara Barat. Sosio Konsepsia, 1-11. Tambunan, Tulus TH. 2001. Perekonomian Indonesia. Jakarta: Ghalia Indonesia.
- Syafira, R., Khoirudin, R., & A'yun, I. Q. (2024). Pengaruh Dana Otonomi Khusus, Pengeluaran Perkapita, Umur Harapan Hidup Saat Lahir, Harapan Lama Sekolah, dan Rata-Rata Lama Sekolah Terhadap Indeks Pembangunan Manusia di Provinsi Papua Tahun 2014-2022. *Jurnal Simki Economic*, 7(1), 96–105. https://doi.org/10.29407/jse.v7i1.486
- Syairoji, A., Rusdiana, R., & Malihah, L. (2024). Pengaruh Pertumbuhan Ekonomi dan Rata Rata Lama Sekolah terhadap Indeks Pembangunan Manusia di Kabupaten Banjar. Jurnal Litbang Kota Pekalongan, 22(2), 80–87. https://doi.org/10.54911/litbang.v22i2.333
- Todaro, M. P. (2000). Pembangunan Ekonomi di Dunia Ketiga, Jilid 1 dan 2. Jakarta: Erlangga
- UNDP. (N.D). Human Development Insight. Diakses pada Maret 12, 2025 dari ; https://hdr.undp.org/data-center/country-insights#/ranks
- Waidah, D. F., & Pernanda, O. (2020). Analisis Pengaruh Kepadatan Penduduk Terhadap Pdrb Per Kapita Di Kabupaten Karimun Tahun 2013-2017. 1(1), 13–25.
- Wardhana, A., Kharisma, B., & Noven, S. A. (2020). Population Dynamics and Economic Growth in Indonesia. *Buletin Studi Ekonomi*, 25(1), 22–40.
- Widarjono, A. (2007). Ekonometrika Teori Dan Aplikasi Untuk Ekonomi Dan Bisnis. Ekonisia Fe Uii.
- Wirawan, N. (2017). Cara Mudah Memahami Statistik 2 (Statistik Inferensia) Untuk ekonomi dan Bisnis, Edisi Keempat. Denpasar: Penerbit Keraras Emas.
- Zulham, T., Seftarita, C., & Muliza. (2017). Analisis Pengaruh Belanja Pendidikan, Belanja Kesehatan, Tingkat Kemiskinan dan PDRB terhadap IPM di Provinsi Aceh. Jurnal Perspektif Ekonomi Darussalam, 3(1), 51–69.