

## **ANALYSIS OF POVERTY DETERMINANTS IN REGENCIES/CITY OF BALI PROVINCE**

**Komang Rizky Ramadiputra**

Bachelor of Economics at the Faculty of Economics and Business, Udayana University  
[omangrizkyidn@gmail.com](mailto:omangrizkyidn@gmail.com)

**Made Dwi Setyadhi Mustika**

Bachelor of Economics at the Faculty of Economics and Business, Udayana University  
[dwisetyadi@unud.ac.id](mailto:dwisetyadi@unud.ac.id)

### **Abstract**

Poverty is a complex issue influenced by economic and social factors, affecting individuals' ability to fulfill basic needs, participate in society, and maintain health. This study analyzes the impact of consumption, education, health, and population growth on poverty in Bali Province. The research comprises 72 observations from eight regencies and one city over the period 2016–2023. Data is collected through non-behavioral observation methods, including the review of books, articles, journals, and official documents from institutions such as the Central Bureau of Statistics. Quantitative analysis is employed to process the data. The findings reveal that consumption and education have a negative and significant effect on poverty, indicating that higher consumption and better education levels contribute to poverty reduction. Conversely, health has a positive and significant effect, suggesting that increased health indicators correlate with higher poverty levels. Meanwhile, population growth negatively influences poverty but lacks statistical significance. These findings underscore the importance of policies that promote local product empowerment, expand access to education, address the needs of the elderly, and ensure equitable income distribution. Such measures are essential to enhancing economic stability and mitigating the factors that contribute to poverty.

**Keyword :** Poverty, Consumption, Education, Health, Population Growth

### **INTRODUCTION**

Poverty is a major issue faced by developing countries. According to Yanti & Ayuningsasi (2024: 745), poverty is a condition of deprivation experienced by individuals or households, making them unable to meet decent living needs. Poverty is considered a social disease that must be addressed immediately in every region of developing countries like Indonesia to support national development (Budiarta & Kartiaka, 2021: 4174). Efforts to alleviate poverty should start at the regional level, including in Bali Province, as the reduction of poverty levels is also used as an indicator of both regional and national development success. The importance of poverty alleviation is a global concern, as reflected in the Sustainable Development Goals (SDGs), where "No Poverty" is declared as the first goal. The entire world agrees on eliminating poverty in all its forms (Ishartono & Raharjo, 2016). Reducing poverty can also enhance economic growth and regional development (Kaur, 2016).

**Table 1. Percentage of Poor Population in Regency/City of Bali Province in 2016 - 2023**

No.	Regency / City	2016	2017	2018	2019	2020	2021	2022	2023
1	Jembrana	5,33	5,38	5,20	4,88	4,51	5,06	5,30	4,96
2	Tabanan	4,92	4,92	4,46	4,21	4,27	5,12	5,18	4,70
3	Badung	2,06	2,06	1,98	1,78	2,02	2,62	2,53	2,30
4	Gianyar	4,44	4,46	4,19	3,88	4,08	4,85	4,70	4,47
5	Klungkung	6,35	6,29	5,86	5,40	4,87	5,64	6,07	5,61
6	Bangli	5,22	5,23	4,89	4,44	4,19	5,09	5,28	5,28
7	Karangasem	6,61	6,55	6,28	6,25	5,91	6,78	6,98	6,56
8	Buleleng	5,79	5,74	5,36	5,19	5,32	6,12	6,21	5,85
9	Denpasar	2,15	2,27	2,24	2,10	2,14	2,96	2,97	2,68
<b>Bali Province</b>		<b>4,25</b>	<b>4,25</b>	<b>4,01</b>	<b>3,79</b>	<b>3,78</b>	<b>4,53</b>	<b>4,57</b>	<b>4,25</b>

Source : BPS Bali Province, 2023

From Table 1, it can be observed that the poverty rate in the regencies/city of Bali Province has fluctuated over the past eight years. The percentage of the poor population experienced a decline between 2018 and 2020 but saw a significant increase in 2021 and 2022 before decreasing again in 2023. In 2023, the poverty rate stood at 4.25 percent, which is 0.32 percent lower than in 2022. Compared to 2022, the decrease of 0.32 percent indicates a positive development. However, the poverty rate remains higher than the pre-pandemic levels in 2019 and 2020, which recorded 3.79 percent and 3.78 percent, respectively.

Poverty can also be measured through societal consumption patterns, as consumption reflects a social value where individuals who can afford consumption are perceived as capable of meeting their needs and are categorized as prosperous. In contrast, those unable to consume are seen as struggling to meet their needs and are categorized as less prosperous. Consumption refers to activities undertaken to fulfill individual or group needs, involving the use of goods and services to support life. The types of goods required depend on the income earned. Each person has unique needs in life, and they strive to fulfill them in various ways (Gunawan & Carissa, 2021: 79). In traditional societies, consumption is generally carried out to fulfill daily necessities. Meanwhile, in modern societies, consumption is aimed not only at sustaining life but also at obtaining satisfaction and enhancing self-esteem. Consumption expenditure is inherent in every individual from birth to death, meaning that people engage in consumption throughout their lives. In fact, consumption serves as both the starting point and the ultimate goal of all economic activities.

**Table 2. Average Monthly Per Capita Consumption (Million Rupiah) in Bali Province by Regency/City for the Years 2016 – 2023**

No.	Regency / City	2016	2017	2018	2019	2020	2021	2022	2023
1	Jembrana	0,84	0,92	0,98	0,95	1,09	1,11	1,13	1,21
2	Tabanan	1,06	1,10	1,25	1,20	1,30	1,30	1,10	1,65
3	Badung	1,36	2,05	1,84	1,84	1,91	1,81	1,74	2,20
4	Gianyar	1,12	1,21	1,25	1,44	1,50	1,61	1,73	1,91
5	Klungkung	0,77	0,80	1,12	1,12	1,19	0,97	1,28	1,36

6	Bangli	0,88	1,00	1,06	0,98	1,11	1,09	1,20	1,42
7	Karangasem	0,68	0,73	0,77	0,77	0,88	0,80	0,83	1,00
8	Buleleng	0,77	0,81	0,95	0,93	0,97	0,96	0,97	1,15
9	Denpasar	1,56	1,97	1,95	2,00	2,25	2,13	1,98	2,34
<b>Bali Province</b>		<b>1,10</b>	<b>1,33</b>	<b>1,37</b>	<b>1,39</b>	<b>1,51</b>	<b>1,47</b>	<b>1,44</b>	<b>1,74</b>

Source : BPS Bali Province, 2023

From Table 2, it can be observed that the average per capita consumption of residents in Bali Province from 2016 to 2023 has shown a fluctuating trend, rising and falling over the years. In 2023, the average per capita consumption reached its highest level in the past eight years, amounting to 1.74 million rupiah. Compared to the previous year, 2022, the average consumption in Bali Province increased by 0.30 million rupiah, while compared to 2017, it rose by 0.64 million rupiah. This data indicates an increase in household spending in Bali, which could include expenditures on food, daily necessities, religious activities, entertainment, and other expenses. The figure of 1.74 million rupiah in 2023 marks the highest consumption level within the eight-year period since 2016.

Poverty is largely caused by low-quality education (Pemayun & Sudarsana, 2023: 2416). Education is one of the contributing factors to poverty, as it plays a role in improving human resource quality (Iswara et al., 2016). According to Pokharel (2015), education helps reduce poverty, while poverty itself can limit access to education. Education plays a crucial role in enhancing human well-being (Arman, 2020: 65). It is often considered a key factor in building a better future. The higher a person's level of education, the greater their skills, which in turn improves work productivity. Education enhances public knowledge, as the participation of educated and skilled individuals is essential for development.

**Table 3. The Literacy Rate (Percentage) of Bali Province by Regency/City from 2016 - 2023**

No.	Regency / City	2016	2017	2018	2019	2020	2021	2022	2023
1	Jembrana	93,74	93,80	93,08	95,40	95,26	95,76	96,09	96,44
2	Tabanan	93,88	94,00	93,08	93,32	94,93	93,19	96,89	96,76
3	Badung	93,27	93,30	92,35	99,81	97,71	98,61	97,62	97,41
4	Gianyar	93,27	93,30	92,35	94,00	95,36	96,01	94,39	95,39
5	Klungkung	85,82	85,80	86,82	87,81	91,57	88,85	89,92	90,77
6	Bangli	81,74	81,80	84,91	89,06	90,43	89,16	89,92	90,77
7	Karangasem	81,74	81,80	84,91	85,01	89,05	84,08	87,09	85,85
8	Buleleng	89,41	89,50	90,80	91,40	92,13	92,74	95,31	94,99
9	Denpasar	98,68	98,70	98,02	99,31	99,00	99,30	99,38	99,47
<b>Bali Province</b>		<b>92,82</b>	<b>92,90</b>	<b>92,98</b>	<b>94,53</b>	<b>94,80</b>	<b>95,00</b>	<b>95,53</b>	<b>95,61</b>

Source : BPS Bali Province, 2023

The level of education in Bali Province can be considered good. According to Table 3, in 2023, the literacy rate in Bali Province was 95.61 percent, showing a consistent increase over the years. The table also indicates that the literacy rate has risen without any decline over the past eight years, from 92.82 percent in 2016 to 95.61 percent in 2023, reflecting an increase of 2.79 percent. This improvement in literacy

rates is expected to have a positive impact on the people of Bali across various sectors, including the economy and overall well-being.

In addition to the influence of education on poverty, health status is also an important factor in determining poverty rates. Health status is one of the key determinants of human resource quality, playing a role in driving a nation's development (Kelani et al., 2019: 2). A healthy population increases productivity and boosts household income (Aurelya, 2022: 85). Good health and well-being provide an optimal life and bring prosperity to people of all ages and genders (Maryanti et al., 2022: 165). Leker (2015) states that health is one of the main factors in improving human resource quality, and one of the indicators of a region's health is Life Expectancy (LE).

**Table 4. Life Expectancy (Years) of Bali Province by Regency/City 2016 - 2023**

No.	Regency / City	2016	2017	2018	2019	2020	2021	2022	2023
1	Jembrana	71,57	71,70	71,91	72,21	72,35	72,46	72,82	73,20
2	Tabanan	72,89	73,03	73,23	73,53	73,65	73,75	74,10	74,48
3	Badung	74,42	74,53	74,71	74,99	75,10	75,18	75,51	75,88
4	Gianyar	72,95	73,06	73,26	73,56	73,68	73,78	74,13	74,52
5	Klungkung	70,28	70,45	70,70	71,06	71,25	71,41	71,83	72,28
6	Bangli	69,69	69,83	70,05	70,37	70,52	70,62	70,97	71,33
7	Karangasem	69,66	69,85	70,05	70,35	70,47	70,56	70,89	71,25
8	Buleleng	70,97	71,14	71,36	71,68	71,83	71,95	72,32	72,70
9	Denpasar	74,04	74,17	74,38	74,68	74,82	74,93	75,30	75,69
<b>Bali Province</b>		<b>71,41</b>	<b>71,46</b>	<b>71,68</b>	<b>71,99</b>	<b>72,13</b>	<b>72,24</b>	<b>72,60</b>	<b>72,98</b>

Source : BPS Bali Province, 2023

Table 4 shows that the Life Expectancy (LE) of the population in Bali Province has increased every year without any decline in the past seven years. The LE in this province increased by 1.57 years when comparing 2016 and 2023. According to the Statistical Profile Publication Report from the Central Statistics Agency, the average LE of Bali Province in 2023 was recorded at 72.98 years. This ratio indicates an increase compared to the previous year, signifying positive progress in the health and well-being sectors. Badung Regency recorded the highest LE in 2023, at 75.88 years, followed by Denpasar City and Gianyar Regency, with 75.69 years and 74.52 years, respectively. Meanwhile, Karangasem Regency recorded the lowest LE at 71.25 years, maintaining the same position for the past five years.

Equally important as health levels, population growth is also a factor that needs to be considered. Population growth is a phenomenon that describes changes in the number of people in a particular area, measured as a percentage or rate of change compared to the previous population over a specific period. Population growth reflects the dynamic balance between factors that increase and decrease the population size. High population growth is a continuously evolving issue worldwide and presents challenges for any country (Loiboo et al., 2022: 21). Among development experts, there is a consensus that high population growth not only negatively impacts

food supply but also poses obstacles to savings development, foreign exchange reserves, and human resource development (Boari et al., 2024). High population growth is an increasingly significant concern globally and presents challenges for the economies of various countries.

**Table 5. Population Growth (Percentage) of Bali Province 2016 – 2023**

No.	Regency / City	2016	2017	2018	2019	2020	2021	2022	2023
1	Jembrana	0,63	0,59	0,70	0,68	1,88	2,05	1,93	0,67
2	Tabanan	0,60	0,57	0,66	0,64	0,90	1,07	0,95	0,32
3	Badung	2,21	2,14	2,40	2,36	0,09	0,26	0,14	0,91
4	Gianyar	0,91	0,86	0,99	0,97	0,90	1,07	0,95	0,56
5	Klungkung	0,57	0,40	0,56	0,55	1,89	2,06	1,94	0,29
6	Bangli	0,54	0,58	0,62	0,60	1,79	1,97	1,85	0,34
7	Karangasem	0,51	0,49	0,57	0,55	2,12	2,29	2,17	0,51
8	Buleleng	0,60	0,54	0,65	0,63	2,33	2,51	2,38	0,71
9	Denpasar	1,90	1,89	2,09	2,06	-0,81	0,24	0,12	1,05
<b>Bali Province</b>		<b>1,13</b>	<b>1,10</b>	<b>1,24</b>	<b>1,21</b>	<b>1,01</b>	<b>1,40</b>	<b>1,29</b>	<b>0,67</b>

Source : BPS Bali Province, 2023

In Table 5, the population growth rate in Bali Province from 2016 to 2023 was mostly above one percent, except in 2023, when the population growth rate was recorded at 0.67 percent, making it the lowest since 2016. The highest population growth occurred in 2021, reaching 1.4 percent, before declining over the following two years. The only recorded decline in population growth during the 2016–2023 period occurred in Denpasar City in 2020, with a rate of -0.81 percent. Fluctuations in the population growth rate naturally impact various sectors.

## RESEARCH METHODS

The research design used in this study is a quantitative research design based on the philosophy of positivism. This quantitative research adopts an associative explanatory approach, which aims to explain the relationship or influence between variables. The research location was chosen in regencies/city in the Province of Bali because there is still a significant disparity in the percentage of poor populations between regencies/city in this region. The object of this research is poverty in regencies/city in the Province of Bali, which is influenced by factors such as consumption, education, health, and population growth. Poverty in this study is measured by the percentage of the poor population, consumption in this study is measured by the average per capita consumption per month, education in this study is measured by the literacy rate, health in this study is measured by life expectancy, and population growth in this study is measured by the percentage of population growth.

The model used in this research is a regression with panel data. In this study, the cross-section data consists of nine regencies/city in the Province of Bali, while the time-series data spans eight years, from 2016 to 2023. Thus, there are nine cross-sections

and eight time periods, resulting in a total of 72 observations. The type of data used in this study includes both quantitative and qualitative data derived from secondary sources. The data collection method employed in this research is a non-behavioral observation method.

Model used in the panel data analysis is:

$$Y = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \mu \dots \dots \dots (1)$$

- Information :
- Y : Poverty
  - X<sub>1i</sub> : Consumption
  - X<sub>2i</sub> : Education
  - X<sub>3i</sub> : Health
  - X<sub>4i</sub> : Population Growth
  - β<sub>0</sub> : Constanta
  - β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub>, β<sub>4</sub> : Regresion Coefition
  - μ : eror

**RESULT AND DISCUSSION**

The data on consumption, education, health, population growth, and poverty that have been collected are then analyzed using descriptive statistics. Table 6 presents the results of the descriptive statistical test of the data in this study.

**Tabel 6. Deskriptif Statistic**

	Poverty (Percent)	Consumption (Milion Rupiah)	Education (Percent)	Health (Year)	Population Growth (Percent)
Mean	4,63	1,28	92,45	72,55	1,07
Median	4,98	1,12	93,28	72,40	0,70
Maximum	6,98	2.34	99,81	75,88	2,51
Minimum	1,78	0,68	81,74	69,66	-0,81
Std. Dev.	1,43	0,43	4,89	1,76	0,76
Observation	72	72	72	72	72

Source: data processed with eviews 13, 2025

The poverty variable has an average value of 4.63 percent with a standard deviation of 1.43 percent. The lowest poverty rate (minimum) is 1.78 percent, recorded in Badung Regency in 2019, while the highest poverty rate (maximum) is 6.98 percent in Karangasem Regency in 2022. The consumption variable has an average value of 1.28 million rupiahs with a standard deviation of 0.43 million rupiahs. The lowest consumption level (minimum) is 0.68 million rupiahs, recorded in Karangasem Regency in 2016, while the highest consumption level (maximum) is 2.34 million rupiahs in Denpasar City in 2023. The education variable has an average value of 92.45 percent with a standard deviation of 4.89 percent. The lowest education level (minimum) is 81.74 percent, recorded in Bangli Regency in 2016, while the highest education level (maximum) is 99.81 percent in Badung Regency in 2019. The health variable has an average value of 72.55 years with a standard deviation of 1.76 years. The lowest health

level (minimum) is 69.66 years, recorded in Karangasem Regency in 2016, while the highest health level (maximum) is 75.88 years in Badung Regency in 2023. The population growth variable has an average value of 1.07 percent with a standard deviation of 0.76 percent. The lowest population growth rate (minimum) is -0.81 percent, recorded in Denpasar City in 2020, while the highest population growth rate (maximum) is 2.51 percent in Buleleng Regency in 2021.

### Panel Data Regression Model Selection

This study applies panel data analysis. The purpose of this analysis is to determine the appropriate model, whether it follows the common effect, fixed effect, or random effect model. The result of the Chow test in this study can be seen in Table 3.

**Tabel 7. Chow Teset Result**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	28.265574	(8,59)	0.0000
Cross-section Chi-square	113.427994	8	0.0000

Source: data processed with eviews 13, 2025

Based on the results in Table 7, it is known that the probability value of the Cross-section Chi-square is 0.00, which is smaller than the significance level of 0.05. Therefore,  $H_0$  is rejected, and  $H_1$  is accepted. Thus, the best technique between the common effects and fixed effects for conducting panel data regression analysis in this study is the Fixed Effects Model (FEM) approach. The result of the Hausman test in this study are presented in Table 8.

**Tabel 8. Hausman Test Result**

Effects Test	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section Chi-square	62.976087	4	0.0000

Source: data processed with eviews 13, 2025

In Table 8, the probability value of the Cross-Section Chi-square is 0.0000, which is smaller than 0.05. Therefore,  $H_0$  is rejected, and  $H_1$  is accepted. Thus, the best technique for conducting panel data regression analysis in this study is the Fixed Effects Model (FEM) approach.

### Classical Assumption Test

#### a) Multicollinearity Test

**Table 9. Multicollinearity Test Results**

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	67.04118	9148.006	NA
CONSUMPTION	0.167599	41.78070	4.270702
EDUCATION	0.001609	1882.190	5.194213
HEALTH	0.023343	16776.50	9.774916

POPULATION GROWTH	0.013112	3.082856	1.025412
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Source: data processed with eviews 13, 2025

Based on the results obtained in Table 9, the centered VIF value for the Consumption variable is 4.270, the value for the Education variable is 5.194, the value for the Health variable is 9.774, and the value for the Population Growth variable is 1.025. Based on these results, it can be concluded that each independent variable has a centered VIF value below 10, indicating that the regression model is free from multicollinearity.

#### b) Heteroscedasticity Test (Glejser Test)

**Table 10. Heteroskedasticity (Glejser) Test Results**

F-statistic	2.442251	Prob. F(4,57)	0.0551
Obs*R-squared	9.162139	Prob. Chi-Square(4)	0.0572
Scaled explained SS	8.986173	Prob. Chi-Square(4)	0.0614

Source: data processed with eviews 13, 2025

Based on Table 10, the probability value of Obs \*R-squared is 0.0572, which is greater than 0.05. This indicates that the model does not contain heteroscedasticity.

#### Panel Data Regression Analysis

**Table 11. Panel Regression Test Results (Fixed Effect Model)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-22.11299	9.964825	-2.219105	0.0303
CONSUMPTION	-0.765873	0.375880	-2.037547	0.0461
EDUCATION	-0.060797	0.030336	-2.004094	0.0497
HEALTH	0.460698	0.163070	2.825163	0.0064
POPULATION GROWTH	-0.071403	0.058585	-1.218779	0.2278
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.949718	Mean dependent var	4.633611	
Adjusted R-squared	0.939491	S.D. dependent var	1.431480	
S.E. of regression	0.352123	Akaike info criterion	0.912308	
Sum squared resid	7.315429	Schwarz criterion	1.323372	
Log likelihood	-19.84308	Hannan-Quinn criter.	1.075954	
F-statistic	92.86560	Durbin-Watson stat	1.438373	
Prob(F-statistic)	0.000000			

Source: data processed with eviews 13, 2025

Based on the analysis results obtained using Eviews 13 software, the following regression equation was obtained.

$$Y = -22,12 - 0,76X_1 - 0,06X_2 + 0,46X_3 - 0,07X_4 + \mu \dots\dots\dots(2)$$

Based on data analysis, the F-test results show that the F-statistic value is greater than the F-table value, with F-statistic (92.86560) > F-table (2.509), meaning that  $H_0$  is



rejected and  $H_1$  is accepted with a significance level of  $0.0000 < 0.05$ . This indicates that consumption, education, health, and population growth simultaneously have a significant effect on poverty in the regencies/city of Bali Province. The coefficient of determination ( $R^2$ ) shows that the variables of consumption, education, health, and population growth explain the variation (fluctuations) in the poverty rate in the regencies/city of Bali Province by 0.9497 or 94.97 percent, while the remaining 5.03 percent of poverty in these regencies/city is influenced by other variables not included in this study.

**1. The effect of consumption ( $X_1$ ) on the percentage of poor population ( $Y$ ) in regencies/city in Bali Province**

- a)  $H_0 : \beta_1 = 0$ , Which means that consumption does not have a partial effect on poverty in the regencies/city of Bali Province.  
 $H_1 : \beta_1 \neq 0$ , Which means that consumption has a partial and significant effect on poverty in the regencies/city of Bali Province.
- b) Real Level,  $\alpha = 5$  percent or 95 percent confidence level.
- c) Testing Criteria  
 If the significance value  $> 0.05$  or  $t_{count} < t_{table}$ , then  $H_0$  is accepted.  
 If the significance value  $< 0.05$  or  $t_{count} > t_{table}$ , then  $H_0$  is rejected.
- d) Calculating statistical values  
 Based on the calculation results using Eviews 13 software presented in table 11, the coefficient value obtained is -0.765 and has a significance value of 0.0461.
- e) Conclusion  
 The obtained result shows that the calculated  $t_{count}$  is greater than the  $t_{table}$  value, namely  $-2.037 > -1.996$ , with a significance level of  $0.0461 < 0.05$ . Therefore,  $H_0$  is rejected, and  $H_1$  is accepted, which means that partially, the consumption has a negative and significant effect on poverty in the regencies/city of Bali Province.

**2. The effect of education ( $X_2$ ) on the percentage of poor population ( $Y$ ) in regencies/city in Bali Province**

- a)  $H_0 : \beta_2 = 0$ , Which means that education does not have a partial effect on poverty in the regencies/city of Bali Province.  
 $H_1 : \beta_2 \neq 0$ , Which means that education has a partial and significant effect on poverty in the regencies/city of Bali Province.
- b) Real Level,  $\alpha = 5$  percent or 95 percent confidence level.
- c) Testing Criteria  
 If the significance value  $> 0.05$  or  $t_{count} < t_{table}$ , then  $H_0$  is accepted.  
 If the significance value  $< 0.05$  or  $t_{count} > t_{table}$ , then  $H_0$  is rejected.
- d) Calculating statistical values  
 Based on the calculation results using Eviews 13 software presented in table 11, the coefficient value obtained is -0.060 and has a significance value of 0.0497.
- e) Conclusion  
 The obtained result shows that the calculated  $t_{count}$  is greater than the  $t_{table}$  value, namely  $-2.004 > -1.996$ , with a significance level of  $0.0497 < 0.05$ . Therefore,  $H_0$  is

rejected, and  $H_1$  is accepted, which means that partially, education has a negative and significant effect on poverty in the regencies/city of Bali Province.

### **3. The effect of Health ( $X_3$ ) on the percentage of poor population (Y) in regencies/city in Bali Province**

- a)  $H_0 : \beta_3 = 0$ , Which means that health does not have a partial effect on poverty in the regencies/city of Bali Province.

$H_1: \beta_3 \neq 0$ , Which means that health has a partial and significant effect on poverty in the regencies/city of Bali Province.

- b) Real Level,  $\alpha = 5$  percent or 95 percent confidence level.

- c) Testing Criteria

If the significance value  $> 0.05$  or  $t_{count} < t_{table}$ , then  $H_0$  is accepted.

If the significance value  $< 0.05$  or  $t_{count} > t_{table}$ , then  $H_0$  is rejected.

- d) Calculating statistical values

Based on the calculation results using Eviews 13 software presented in table 11, the coefficient value obtained is 0.460 and has a significance value of 0.0064.

- e) Conclusion

The obtained result shows that the calculated  $t_{count}$  is greater than the  $t_{table}$  value, namely  $2.825 > 1.996$ , with a significance level of  $0.0064 < 0.05$ . Therefore,  $H_0$  is rejected, and  $H_1$  is accepted, which means that partially, health has a positive and significant effect on poverty in the regencies/city of Bali Province.

### **4. The effect of Population Growth ( $X_4$ ) on the percentage of poor population (Y) in regencies/city in Bali Province**

- a)  $H_0 : \beta_4 = 0$ , Which means that population growth does not have a partial effect on poverty in the regencies/city of Bali Province.

$H_1 : \beta_4 \neq 0$ , Which means that population growth has a partial and significant effect on poverty in the regencies/city of Bali Province.

- b) Real Level,  $\alpha = 5$  percent or 95 percent confidence level.

- c) Testing Criteria

If the significance value  $> 0.05$  or  $t_{count} < t_{table}$ , then  $H_0$  is accepted.

If the significance value  $< 0.05$  or  $t_{count} > t_{table}$ , then  $H_0$  is rejected.

- d) Calculating statistical values

Based on the calculation results using Eviews 13 software presented in table 11, the coefficient value obtained is -0.071 and has a significance value of 0.2278.

- e) Conclusion

The obtained result shows that the calculated  $t_{count}$  is less than the  $t_{table}$  value, namely  $-1.218 < -1.996$ , with a significance level of  $0.2278 > 0.05$ . Therefore,  $H_0$  is accepted, and  $H_1$  is rejected, which means that population growth does not have a partial effect on poverty in the regencies/city of Bali Province.

## **Discussion of Research Results**

### **1. The Influence of Consumption on the Percentage of Poor Population in regencies/city in Bali Province**

The t-test results for the consumption variable indicate that consumption has a negative and significant effect on poverty in regencies/city in Bali Province, as shown

by the  $t_{\text{count}}$  value  $(-2,037) > t_{\text{table}} (-1,996)$  with a significance level of  $0,0461 < 0,05$ . The coefficient value ( $\beta_1 = -0,76$ ) suggests that an increase of 1 million rupiahs in consumption levels will reduce poverty by 0,76% in regencies/city in Bali Province. These findings align with the study by Maulidah & Soejoto (2015), which concluded that consumption negatively and significantly affects poverty in East Java Province, as well as the research by Asyraf dkk. (2023), which found a similar effect in West Sulawesi Province. When consumption increases, more people can meet their basic needs, leading to a decline in poverty rates. Higher household consumption stimulates economic activity, creates new job opportunities, and increases income levels, ultimately reducing poverty. This indicates that increased consumption expenditure helps fulfill essential needs and improves overall welfare.

Public consumption can be focused on local products because it can drive regional economic growth. Increasing the consumption of local goods and small businesses can create a multiplier effect on the economy. This can enhance the competitiveness of local markets and open up more economic opportunities for impoverished communities to participate in the economy. If consumption is directed toward goods that improve living conditions and health, such as nutritious food, access to healthcare services, and medications, there will be an increase in societal well-being. Society can also be directed to allocate part of their income toward education and skill training that enhances their competitiveness in the job market. This will help them obtain higher-paying jobs further, and with that, it is expected to improve their economic conditions and prevent or reduce poverty in each regency/city in Bali Province.

## **2. The Influence of Education on the Percentage of Poor Population in regencies/city in Bali Province**

The t-test results for the education variable show that the level of education has a negative effect on poverty in the regencies/city of Bali Province, as indicated by the  $t_{\text{count}}$  value  $(-2,004) > t_{\text{table}} (-1,996)$  with a significance level of 0.0497, which is smaller than the 0.05 significance threshold, and a negative coefficient value of  $\beta_2 = -0.06$ . This means that for every 1 percent increase in the level of education, the poverty rate in the regencies/city of Bali Province will decrease by 0.06 percent. This result is consistent with the study conducted by Balqis et al. (2025). The research by Boari et al. (2024) also states that education has a negative and significant effect on poverty in Indonesia. Advances in education serve as a foundation for improving the quality of human resources, which in turn contributes to poverty alleviation. Education is considered an investment in human resource development to achieve a more prosperous life (Lee, 2019). According to Todaro (2006), individuals with higher education levels tend to have greater opportunities to escape poverty.

Reducing unequal educational opportunities and increasing access for all levels of society in Bali Province, especially for those living in remote areas or from

underprivileged families, can be a way to maximize educational development. Without equitable access and consistent educational improvements, social and economic inequality will only worsen. The provision and equal distribution of educational infrastructure in remote areas, such as building more schools, ensuring accessibility to transportation and technology, and addressing facilities and infrastructure to bridge the gap between urban and rural areas, are efforts that can be undertaken to continuously support educational development in Bali Province.

### **3. The Influence of Health on the Percentage of Poor Population in regencies/city in Bali Province**

The t-test results for the health variable show that the level of health, measured by life expectancy (LE), has a positive and significant effect on poverty in the regencies/city of Bali Province. This is indicated by the  $t_{count}$  value (2.825) >  $t_{table}$  (1.996) with a significance level of 0.0064, which is smaller than the 0.05 significance threshold, and a positive coefficient value of  $\beta_3 = 0.46$ . This means that for every one-year increase in health levels, the poverty rate in the regencies/city of Bali Province will increase by 0.46 percent. This result is consistent with the study conducted by Sari & Nuraini (2020), which states that health, as measured by life expectancy (LE), has a positive and significant effect on poverty in Java Island. A similar finding was also reported by Ika et al. (2022), who stated that health, through life expectancy (LE), has a positive and significant effect on poverty levels in Tana Toraja Regency. This phenomenon can occur if increasing life expectancy leads to a rise in the elderly population, who are often dependent. This aligns with the perspective of Baran & Sweezy (1966), who stated that the more elderly individuals who do not work and depend on family or state assistance, the higher the dependency ratio, which can increase the economic burden and potentially raise poverty levels. Elderly individuals who remain dependent on those around them or lack income are indeed vulnerable to poverty in old age. This could be due to the relatively low number of elderly people receiving protection through old-age social security systems, such as pensions and severance pay (Suryadi, 2018).

Strengthening the social security system or pension funds that cover the lower-middle-class population, including the elderly who are unemployed or have low incomes, is essential. With adequate social security, the elderly can have a more stable source of income that can be used for health and basic needs. Training in new skills can also be a solution to enhance their competitiveness in the job market. Providing opportunities for the elderly to work in capacities that match their abilities, such as part-time jobs or light work from home, can help them remain financially independent. To support these training and skill development programs, raising awareness among families and communities about the importance of properly caring for the elderly mentally, physically, and socially is also necessary. A caring family environment makes it easier for the elderly to receive the support and attention they need. Moreover, improving access to quality healthcare services enables them to receive proper

preventive care and treatment. Through these programs, the increase in life expectancy (LE), which leads to a growing elderly population in regencies/city across Bali Province, is expected to have a positive impact on overall community well-being.

#### **4. The Influence of population growth on the Percentage of Poor Population in regencies/city in Bali Province**

The t-test results for the population growth variable show that the rate of population growth does not affect poverty in the regencies/city of Bali Province. This is indicated by the  $t_{count}$  value  $(-1.218) < t_{table} (-1.996)$  with a significance level of 0.2278, which is greater than the 0.05 significance threshold, and a negative coefficient value of  $\beta_4 = -0.07$ , but it is not significant. Therefore, changes in population growth do not influence poverty in the regencies/city of Bali Province. This result aligns with the study conducted by Rudianto et al. (2021), which states that population growth does not significantly affect poverty in East Java. Similarly, Agustina et al. (2018) found that an increase in population does not significantly impact poverty in Aceh Province. This may be because the primary focus is not just on the number of people but also on their quality, particularly human resources (HR). In other words, even if the population increases, as long as there is an improvement in the quality of human resources, population growth will not have a negative impact (Nabibah & Hanifa, 2022). This aligns with Becker's (1975) labor market theory, which states that if people possess skills that match market demands, then even with population growth, they will still have access to decent employment.

Well-managed population growth, accompanied by policies that support equal opportunities, education, healthcare, and community empowerment, can be a key factor in reducing poverty. Measures to promote equitable development include ensuring fair resource distribution through fiscal policies and equal income distribution across regencies/city in Bali Province so that no community group, particularly those in rural and remote areas, is left behind in poverty. The government can ensure balanced infrastructure development in both rural and urban areas, especially in impoverished regions. Good infrastructure facilitates access to essential services, improving the overall quality of life. Equal access in rural or non-urban areas can also alleviate urban challenges caused by population density and competition. By ensuring equitable infrastructure development, population growth in Bali's regencies and city is expected not to contribute to increased poverty in these areas.

## **CONCLUSION**

Based on the discussion presented in the previous chapter, the conclusions are as follows. Consumption, Education, Health, and Population Growth simultaneously have a significant influence on poverty in Bali Province. Partially, Consumption and Education have a negative and significant effect on the poverty level in the regencies/city of Bali Province from 2016 to 2023. This means that the higher the levels of consumption and education, the lower the poverty rate in Bali Province. Meanwhile,

Health has a positive and significant partial effect on poverty levels in the regencies/city of Bali Province from 2016 to 2023. This indicates that an increase in Life Expectancy (LE), which serves as a health indicator, leads to an increase in poverty in Bali Province. On the other hand, Population Growth does not have a significant partial effect on poverty levels in the regencies/city of Bali Province from 2016 to 2023. This suggests that an increase in population growth does not significantly reduce poverty in Bali Province.

The Bali Provincial Government is expected to focus community consumption on local products, as this can drive regional economic growth, create a multiplier effect, enhance local market competitiveness, and open economic opportunities for the poor in Bali Province. The government is also expected to reduce educational inequality by increasing access for all social groups, especially in remote areas and low-income families. Furthermore, the government is encouraged to strengthen the social security system to cover lower-middle-class communities, including unemployed or low-income elderly individuals, while providing training for light part-time job opportunities from home to help seniors remain financially independent. This should be accompanied by improved healthcare access to support their productivity. Additionally, the government is expected to manage equitable development through fair resource distribution, which can be achieved via fiscal policies and evenly distributed income across all regencies/city, particularly in rural and remote areas, to minimize population migration to urban centers. It should be noted that synergy between the government and the community is essential to support these methods, making them more effective.

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