

An Empirical Analysis Of The Impact Of Investment, Labor And Education On Economic Growth (Case Study Of Nine Regencies/Cities In Bali Province, 2013 - 2019)

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Abstract: This study aims to analyze the effect of Investment, Labor, and Education on economic growth in the regencies/cities in Bali from 2013 to 2019. This study combines the three growth theories from Harrold-Domar, Solow, and Romer, using economic growth as the dependent variable and investment, labor, and education level as independent variables. The data used in this study is panel data (time-series data for six years from 2013 to 2018, and cross-section data of 9 data representing districts/cities in Bali). The method of analysis of this research uses the panel data regression with a fixed-effect model. Panel data regression analysis is used to determine the effect of independent variables on economic growth. The empirical results of the determinants of economic growth show that the Labor variable is significant to the actual level of five percent and has a negative effect on economic growth. Meanwhile, the variables of investment and education have an un-significant influence on Economic growth.

Index Terms: Economics Growth, Labor, Investment, Education, Province Bali, Theory Economic Growth of Harold-Domar, Theory Economic Growth of Solow, Theory Economic Growth of Romer.

1 INTRODUCTION

Economic development is a process that causes an increase in the real income per capita of a country's population, in the long run, accompanied by improvements to the institutional system (Arsyad, 2010). The success of development by a country or region can be seen from the development of existing economic indicators, whether it has increased or decreased. Gross Domestic Product (GDP) is included in one indicator of a country's development. Traditionally, development has meant increasing GDP continuously. According to economists in Arsyad (2004), economic growth is defined as an increase in GDP regardless of whether the increase is more significant or less than the rate of population growth or whether changes in economic structure occur or not.

be separated from factors that caused a fundamental shift in the world economy. One of the factors that significantly impacted the Chinese monetary authority devaluing the Yuan triggered financial turmoil on global financial markets. Economic development is not only on the central government or nationally but also on every region's agenda. Regional economic development is a process in which local governments and their communities manage existing resources and form a partnership pattern between local governments and the private sector to create jobs and stimulate economic activities in the region (Arsyad, 2010). Regional economic development also plays an essential role in the success or failure of national economic development as a whole. That is part of the implementation of national economic development, each province in Indonesia. Bali Province is a province that has abundant resources. Bali Province is an island in Indonesia with natural beauty and all cultural tourism, so that it has an appeal in the tourism sector. The tourism sector in the Bali province is expected to become a mainstay sector, so that the province of Bali must be able to achieve high economic growth, meet economic planning targets, and be able to overcome development problems that occur so that it is hoped that it will have the ultimate goal of improving the welfare of the community.

Table 1

Gross Domestic Product at Constant Price and Economics Growth, 2014-2019

Year's	GDP (Billion Rupiah's)	Growth (%)
2014	8.564.866,6	5,01
2015	8.982.517,2	4,88
2016	9.434.613,4	5,03
2017	9.912703,6	5,07
2018	10.425.316,3	5,17
2019	15.833.943,0	5,02

Source: Statistics of Indonesia, 2020, processed.

The data presented in Table 1 illustrates the fluctuating development of Indonesia's GDP growth in 2014-2019. In 2014, Indonesia's economic growth declined from 5.01 percent in 2015 to 4.88 percent, then increased to 5.17 in 2018. The economic decline in 2015 was due to pressures that could not

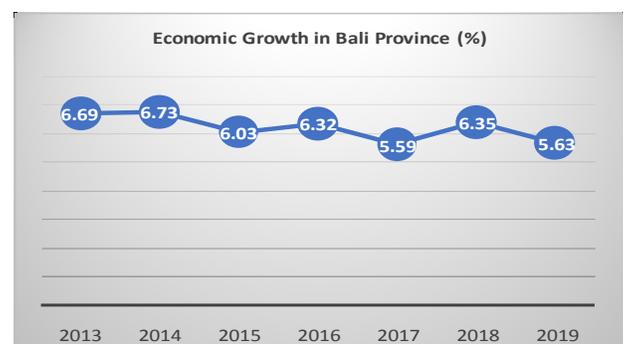


Figure 1

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Percentage of Economics Growth in Bali Province, 2013-2019

Source: Statistics of Indonesia, 2020, processed.

Based on Figure 1, it can be seen that the economic growth in Bali Province has fluctuated. In 2013, the economic growth of Bali Province was 6.69 percent, down to 6.32 in 2016. Bali's economic performance in 2018 has accelerated by growing by 6.35 percent, higher than the economic growth in 2017, which was 5.59 percent. Bali's economic performance is also higher than the national economic growth in 2018 of 5.17 percent. Economic Development in the Province of Bali results from the contribution of the GRDP of 9 districts/cities in Bali.

Table 2

Economic Growth by Regency / Municipality in Bali Province, 2015-2019 (%)

Regency/ Municipality	2015	2016	2017	2018	2019
Jembrana	6.19	5.96	5.31	5.59	5.56
Tabana	6.19	6.14	5.38	5.73	5.60
Bandung	6.24	6.81	6.11	6.74	5.83
Gianyar	6.30	6.31	5.50	6.03	5.64
Klungkung	6.11	6.28	5.34	5.50	5.44
Bangli	6.16	6.24	5.35	5.50	5.47
Karangasem	6.00	5.92	5.08	5.48	5.50
Buleleng	6.07	6.02	5.40	5.62	5.55
Kota Denpasar	6.14	6.51	6.08	6.43	5.84

Source: Statistics of Indonesia, 2020, processed.

Based on the data in Table 2, the lowest economic growth in 2015 was Karangasem Regency at 6 percent, and the highest economic growth was Gianyar Regency at 6.30 percent. Meanwhile, in 2019 the highest economic growth was Denpasar City at 5.84 percent, and Klungkung Regency had the lowest economic growth compared to regencies/cities in Bali Province, namely 5.44 percent. One important variable that drives economic growth is an investment. According to Harrod-Domar, to grow requires investment which is a net addition to the capital stock (Todaro and Smith, 2011). Sodik and Nuryadin (2005) state that investment is agreed to be one of the keywords in any economic concept discussion. The discourse on economic growth, new job creation, and poverty reduction ultimately place investment as the main driver, considering that the economy driven by consumption is admittedly very fragile. Investment can be influenced by foreign and domestic investment. Investment, especially in the regions, consists of government investment and private investment. Investments from the private sector are investors from abroad (PMA) and investors from within the country (PMDN). Meanwhile, government investment is made to provide public goods. The increase in economic growth in the Province of Bali, of course, cannot be separated from the role of investment invested in the region. Investment or investment by domestic investors (PMDN) and investment by foreign parties (PMA) in Central Java Province, both seen from the actual investment value that occurs is shown in Table 3.

Table 3

Realization of Domestic Capital Investment and Foreign Capital Investment in Bali Province 2013-2018 (Million Rupiah's)

Year's	Domestic Capital Investment	Foreign Capital Investment
2013	7.793.114	3.634.974
2014	3.846.438	5.076.836
2015	6.887.022	6.864.894

2016	12.057.640	3.989.976
2017	11.267.739	6.190.356
2018	16.293.534	2.338.595

Source: Statistics of Indonesia, 2020, processed.

Based on Table 3, foreign investment (PMA) and domestic investment (PMDN) fluctuated during the 2013-2017 period. The realization of PMDN in Bali Province decreased in 2013 by 7,793,114 million rupiahs to 3,846,438 million rupiahs in 2014. In 2016 the realization of PMDN increased to 12,057,640 million rupiahs and decreased to 11,267,739 million rupiahs in 2017. Meanwhile, for the realization of FDI based on Table 1.3, it can be seen that FDI increased from 3,634,974 million rupiahs in 2013 to 6,864,894 million rupiahs in 2015. Furthermore, in 2017 it decreased to 6,190,356 million rupiahs. Besides investment, one of the factors that influence economic growth is human resources. An increasing population can be both a driving force and a barrier to economic growth from time to time. An increasing population will increase the number of workers, and this increase will allow an area to increase production. However, on the other hand, the destructive consequences of the increasing population that are not matched by employment opportunities will cause economic growth to be inconsistent with increased welfare.

Table 4

Population of Economically in Bali Province, 2013-2019

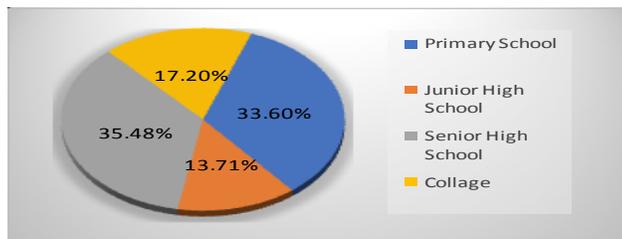
Year's	Working	Unemployment	Total of Economically Active
2013	2.242.076	41.820	2.283.896
2014	2.272.632	44.126	2.316.758
2015	2.324.805	47.210	2.372.015
2016	1.106.749	46.484	2.463.039
2017	2.398.307	36.143	2.434.450
2018	2.525.707	35.811	2.561.518
2019	2.469.006	39.288	2.508.294

Source: Statistics of Indonesia, 2020, processed.

Table 4 shows that the number of people working fluctuates. That is evidenced by the decline in the number of people working in 2016, from 2,324,805 people in 2015 to 1,106,749 people in 2016, after which there was an increase to 2,398,307 people in 2017. Meanwhile, the number of people currently looking for work experienced a decline in 2017, from 46,484 people in 2016 to 36,143 people in 2017. This indicates that in 2017 the Province of Bali succeeded in providing new job opportunities to absorb new workers. Another important indicator of economic growth is the level of education. Education is one of the necessary human capital that must be fulfilled to achieve sustainable economic development. The education sector plays a significant role in shaping a country's ability to absorb modern technology and develop production capacity and sustainable development (Todaro, 2006). Residents with high school and higher education graduates (high school and university graduates) are assumed to have high skills and knowledge to absorb modern technology and increase production capacity. Figure 2 Percentages of Population Who Work Base on Educational in Bali Province, 2019

Source: Statistics of Indonesia, 2020, processed.

Figure 2 explains that the number of people with the highest percentage in 2019 is high school graduates, amounting to



35.48 percent. Meanwhile, the percentage of residents who have completed tertiary education in Bali Province is 17.20 percent. Figure 2 shows that Bali's population understands the importance of completing higher education so that the number of highly educated people continues to increase every year. Based on the background previously described, the economic growth that the Province of Bali has achieved cannot be separated from the contribution role of the PDRB of the Regency / City in the Province of Bali. Meanwhile, the PDRB of districts/cities in Bali Province is influenced by several factors such as investment, labor, and the population's education level in each region. Therefore, the author would like to research the effect of investment, labor, and education levels on economic growth in regencies/cities in Bali Province with the title: "AN EMPIRICAL ANALYSIS OF THE IMPACT OF INVESTMENT, LABOR, EDUCATION ON ECONOMIC GROWTH (Case Study of Nine Regencies/Cities in Bali Province, 2013 - 2019)".

2 LITERATURE REVIEW

2.1 Theory of Economic Growth Harold-Domar

This Harrod-Domar theory is an extension of the Keynesian analysis of national economic activity and labor issues. Keynes's analysis is considered incomplete because it does not address long-term economic problems. Meanwhile, the Harrod-Domar theory analyzes the conditions necessary for the economy to grow and develop in the long run. In other words, this theory seeks to show the conditions needed for the economy to grow and develop steadily (Arsyad, 2010). In economics, it is known as the capital-output ratio, which is 3 to 1. The capital-output ratio (c) and the national saving-ratio, s, are a percentage or a fixed share of the national output which is always saving, and the amount of new investment (investment) is determined by the total savings amount (S), so we can compile an economic growth model as follows:

1. Savings (S) is a portion of a specified amount, or s, of national income (Y). Therefore, this relationship could be written in the form of a simple equation:

$$S = sY \dots\dots\dots (2.1)$$

2. Net investment (I) is defined as the change in capital stock, (K), which can be represented by ΔK so that the second simple equation can be written as follows:

$$I = \Delta K \dots\dots\dots (2.2)$$

However, since the amount of the stock of capital, K, has a direct relationship with the amount of national income or output, Y, as indicated by the capital-output ratio, c, then:

$$\frac{K}{Y} = c$$

or

$$\frac{\Delta K}{\Delta Y} = c$$

Finally:

$$\Delta K = cY \dots\dots\dots (2.3)$$

3. Finally, because net national saving (S) must equal net investment (I), the next equation can be written as follows:

$$S = I \dots\dots\dots (2.4)$$

From Equation (2.1) it is known that S = sY and from Equations (2.2) and (2.3), we also know that:

$$I = \Delta K = c\Delta Y$$

Thus, we can write down the "identity" of savings equal to investment in Equation (2.4) as follows:

$$S = sY = c\Delta Y = \Delta K = I \dots\dots\dots (2.5)$$

Or it can be summarized as

$$sY = k\Delta Y \dots\dots\dots (2.6)$$

Further, when both sides of Equation (2.6) are divided first by Y and then by k, then obtained:

$$\frac{\Delta Y}{Y} = \frac{s}{c} \dots\dots\dots (2.7)$$

Equation (2.7) or ΔY / Y is the rate of change or GDP growth rate (percentage change in GDP).

Equation (2.7), a simplified version of the equation in the Harrod-Domar theory of economic growth, clearly states that the GDP growth rate (ΔY / Y) is determined collectively by the national saving ratio, s, and the national capital-output ratio, c. To grow rapidly, every economy must save and invest as much of its GDP as possible. The more that can be saved and then invested, the faster the economic growth rate will be. However, the actual growth rate attainable at each rate of saving and investment the amount of additional output that can be obtained from an additional unit of investment can be measured by the inverse of the capital-output ratio, c, because this reverse ratio, which is 1/c, is the ratio. Output-capital or output-investment ratio. Furthermore, by multiplying the new investment rate s=I/Y, by the productivity level, 1/c, we will get a growth rate at which national income or GDP will increase (Todaro and Smith, 2011).

2.2 Theory of Economics Growth Solow

The Solow growth model is designed to show how growth in the capital stock, growth in the labor force, and technological progress interact in the economy and how they affect a country's overall output of goods and services (Mankiw, 2006). In this model, long-run economic growth is determined exogenously, or in other words, determined outside the model. This model predicts that in the end, there will be a convergence in the economy towards a steady-state growth condition that depends only on technological developments and the growth of the workforce. In this case, steady-state conditions indicate long-run equilibrium in the economy (Mankiw, 2006). The primary assumption used in the Solow model is that capital experiences diminishing returns. If labor supply is considered constant, the impact of capital accumulation on additional output will always be less than the previous edition, reflecting the decreasing marginal product of capital. Suppose it is assumed that there is no technological development or growth in the workforce. In that case, the diminishing return to capital indicates that at one point, the increase in the amount of capital (through savings and investment) was only sufficient to cover the amount of capital that was depreciated due to depreciation. The economy will

stop growing because it is assumed that there is no technological development or labor growth (Mankiw, 2006). According to Arsyad (2010), in this Solow-Swan theory, the capital-output ratio (COR) has a dynamic character, meaning producing a certain level of output, a balanced combination of capital and labor is needed. If the use of capital is high, labor will be lowly. Conversely, if the use of capital is low, the use of labor will be high. Another point of thought is that in the production function, there is a technology that is documented in production factors such as capital and labor, as seen in the model below:

$$Y = F(K, AL) \dots \dots \dots (2.8)$$

$$Y = F(AK, L) \dots \dots \dots (2.9)$$

Equation (2.8) shows that technology is attached to the labor variable, which will impact the application of production patterns in a more labor-intensive country. Equation (2.8) is referred to as purely labor augmenting, while equation (2.9) shows that technology is inherent in the capital, which impacts production patterns that tend to be more capital intensive. This equation (2.9) is referred to as purely capital augmenting.

This Neo-Classical growth theory has many variations, but in general, they are based on the production function developed by Charles Cobb and Paul Douglas, which is now known as the Cobb-Douglas production function. This function can be written in the following way (Arsyad, 2004):

$$Q_t = T_t \cdot K_t^\alpha \cdot L_t^\beta \dots \dots \dots (2.10)$$

Where:

Q_t = level of production in year t

T_t = Technology level in year t

K_t = Total stock of capital goods in year t

L_t = Number of workers in year t

α = Increase in output by increasing one unit of capital

β = Increase in output by adding one unit of labor

2.3 New Theory of Economics Growth

This theory provides a theoretical framework for analyzing endogenous growth, and economic growth is the result of the economic system. According to Romer (in Todaro, 2006), this theory assumes that economic growth is determined more by the production system, not from outside the system. Technological progress is endogenous, and growth is part of economic actors' decisions to invest in knowledge. The role of capital is more significant than just a share of income if the growing capital is physical capital and human capital.

Capital accumulation is the primary source of economic growth. The definition of capital is expanded to include models of science and human capital. Technological change is not something that comes from outside the model, or exogenous but technology is part of economic growth. In endogenous growth theory, the role of investment in physical capital and human capital also determines long-term economic growth (Mankiw, 2006).

The endogenous growth model is slightly different from the Solow model, and the endogenous growth model modifies the aggregate production function (Siregar, 2006):

$$Y = A f(K, H, L) \dots \dots \dots (2.11)$$

Where:

Y = output

A = technology

K = capital

L = labor

H = human capital

In Equation (2.11), H is the human resource that accumulates education and training. According to Mankiw (in Siregar, 2006), a country that pays more attention to education for its people will produce better economic growth than a country that does not. In other words, investment in human resources through educational advancement will result in higher national income or economic growth.

2.4 HYPOTHESIS

The hypothesis is a statement that is put forward, and the truth is still weak. Hypotheses are also seen as temporary conclusions. Following the research framework above, the hypothesis in this study is formulated as follows:

1. It is suspected that investment has a positive and significant impact on the economic growth of regencies/cities in Bali Province.
2. It is suspected that the workforce has a positive and significant influence on the economic growth of the regencies/cities in Bali Province.
3. It is assumed that education has a positive and significant impact on the economic growth of regencies/cities in Bali Province.

3 RESEARCH METHOD

The method used to analyze the data in this study is to use the panel data regression model. This model uses cross-section data units (cross-section) and time-series data sets. Panel Data Model is the most appropriate model to use because it uses the time series of economic growth in 9 districts and cities in Bali Province, which is then cross-sectioned with time-series data for the economic growth of 9 districts and cities in Bali Province. The analysis tool is Eviews 11 software to estimate the significance of economic growth determinants using Panel Data. In this study, the authors used regression analysis obtained from previous studies. The variables used in this study represent Economic Growth, namely Y , Investment, I , Labor, namely TK variables, and Education Level, namely TP , so that the following equation is obtained:

$$Y_{it} = \beta_0 + \beta_1 \ln(I_{it}) + \beta_2 \ln(TK_{it}) + \beta_3 \ln(TP_{it}) + \varepsilon_{ijt}$$

Where:

β_0 = intercept

Y = economic growth

I = Investment

TK = labor

TP = education

ε_{ijt} = random error.

In this study, a linear model was used using the OLS method. The problem with using this approach is that the OLS approach can produce estimated values that fall outside the designated Economic Growth range. The estimation deviation can be ignored because this study's focus is not to forecast but to test hypotheses. Moreover, using a range of values for the estimated variables will be required in OLS if this approach is used to be compared with other approaches (Thorpe, 2005).

4 RESULT

The estimation results on the variable coefficients of the

regression equation were carried out using Eviews 11 software. Regression analysis was used to estimate the effect of investment, labor, and education levels on economic growth in 9 regencies/cities in Bali Province within five years (2013-2019) then the model assessment test is conducted first. This estimation uses panel data as described in the research method. The decision to use the panel data model (fix effect model) is based on the sample's condition in this study.

Table 5
Result of Estimate Variable Growth Economics With Fixed Effect Model

Variable	Coefficient	t-statistic (signif)
konstanta	8,089793	5,514714 (0,00000)
LnI	-0,008310	-1,898865 (0,0632)
LnTK	-0,491634	-4,157819 (0,0001)
LnTP	-0,029876	-1,482123 (0,1445)
R-square	0,550832	
F-Statistic (signif)	5,685745 (0,000007)	
Number of significant variables	1 of 3 variabel (33,33%)	
N	63	

Source: secondary data 2020, processed.

In this study, the Fixed Effect Model is the model chosen to use the panel data method. This selection is based on a series of tests and assumptions that each user as a research sample, namely the value of economic growth, is heterogeneous. Using the Fixed Effect Model allows the intercept value to vary for each individual, and this difference in value is assumed to be the difference between individual units.

Table 6
Result of Classical Assumptions Test

Variable	Coefficient	Signif
Durbin Watson (Dw)	1,944940	
Jarque – Bera	2,560113	0,278022
R-square	79.2959	
R-square auxiliary regression 1 ($\ln I = f(\ln TK, \ln TP)$)	0,350295	
R-square auxiliary regression 2 $\ln TK = f(\ln I, \ln TP)$	0,361579	
R-square auxiliary regression 3 $\ln TP = f(\ln I, \ln TK)$	0,237695	

Source: secondary data 2020, processed.

The normality test aims to test whether the confounding or residual variables have a normal distribution in the regression model. Judging from the Jarque-Bera value of 2.560113 less than 5.99 and a probability value of 0.278022, which is more than $\alpha = 0.05$, the data accept the null hypothesis will be concluded that the data is normally distributed. The multicollinear test is used to determine whether there is a perfect intercorrelation between the regression equation's independent variables. In this study, to test the presence or absence of multicollinearity, it can be seen from the comparison between the R-square partial regression (auxiliary regression) with the main regression R-square value. As shown in the table, the estimation results of auxiliary regression show that the R-square value for all estimates,

compared to the R-square fixed effect model (R^2 * value of 0.550832), has a smaller value so that there is no multicollinearity in this model. The autocorrelation test aims to test the presence or absence of confounding errors in a certain period with errors in the regression model's previous period. Decision-making does not have autocorrelation using the Durbin Watson Test Bound. Based on the fixed-effect model research results, the Durbin Watson (d) value is 1.944940. The Durbin Watson test shows that the dL and du values with the number of independent variables 3 and n 63 are dl (1.4943), du (1.6932), 4-du. (2.3068), and 4-dl (2.5057). The d fixed-effect model's value is 1.960, so the decision-making is that the data accept H_0 , and there is no autocorrelation. The heteroscedasticity test aims to test whether there is an inequality of variance from the residuals of one observation to another in the regression model. If the residual variance from one observation to another is constant, then the homoscedasticity and if it is different is called heteroskedasticity. The GLS (General Least Square) method, in essence, gives weight to the variation of the data used, so it can be said that by using GLS, the heteroscedasticity problem can be overcome. The treatment is given cross-section weights and white cross-section standard errors and covariance in estimating the model so that the assumption of heteroscedasticity can be ignored. The coefficient of determination (R^2) measures how far the model explains the dependent variable's variation. The coefficient of determination is between zero and one. From the regression results shown in the table, it can be seen that the coefficient of determination or R^2 is 55.51 percent of the variation in economic growth in 9 districts/cities in Bali Province, which can be explained by the independent variables (Investment, Labor, Education Level). In contrast, the rest is explained by variables outside the model. The F test aims to test whether there is a joint influence, namely investment, labor, education level, economic growth in 9 districts/cities of Bali Province. Based on the estimation results, it is known that the F-statistic probability value with a real level of 0.05 is equal to 0.000007. Moreover, the F-table value's value is 2.760767 while the F-statistic is 5,685745. Thus $F\text{-statistic} > F\text{-table}$ means that H_0 is rejected so that the independent variables jointly affect the dependent variable. The T statistical test basically shows how far each independent variable's influence is in explaining the variation in the dependent variable. The T-test (t-test) is seen from the comparison between the T-statistic value and the T-table of 2.000995 and the probability value of T-statistic with a real level of 0.05. The estimation results show that the Labor variable has the value of $t\text{-statistic} > t\text{-table}$ and prob. $T\text{-statistic} < \text{degree of significance of } 0.05$ so that it rejects H_0 and accepts H_1 , which means that the variable has a significant impact on economic growth. Meanwhile, the variables of investment and education level have $t\text{-statistic value} < t\text{-table}$ and prob. $t\text{-statistic} > \text{degree of significance}$ so that it accepts H_0 and rejects H_1 , which means that the variable has no significant impact on economic growth.

5 HYPOTHESIS TESTING

The Labor Coefficient (LnTK) shows a negative and significant effect at the significance level of 0.05. That means that any increase in the number of workers (LnTK) will reduce the value of economic growth in 9 districts/cities in Bali. To maximize production results is to improve the quality of labor. A good quality workforce will undoubtedly give good work results.

However, the economic growth condition of Bali Province in the fourth quarter of 2017 experienced a slowdown, namely growing in the range of 5.80% -6.20% (YoY). On the demand side, the slowdown is due to lower government consumption performance. Meanwhile, from the supply side, the slowdown was due to a slowdown in Bali's economic performance in the fourth quarter of 2017, due to the slowdown in the performance of several main business fields, including the agricultural business field and the business field providing dining accommodation. The slowdown in the business sector will cause an increase in labor and will reduce economic growth. The estimation results show that the investment variable (LnI) has a negative effect on economic growth, but it is not significant at the significant level of 0.05. The insignificance of the Investment variable (LnI) indicates that investment is, in fact, not a factor that influences changes in the value of economic growth in 9 districts/cities in Bali. Even though there was an increase in investment, it did not significantly affect economic growth. The use of investment for development is often not well-targeted. It cannot increase economic growth and indicates that there is still a lack of investor confidence in investing in Bali Province. That is also by research (Handayani, 2011) that investment has a negative and insignificant effect on economic growth. The estimation results show that the education variable (LnTP) has a negative effect on economic growth, but it is not significant at the significant level of 0.05. The insignificance of the Education Level variable (LnTP) indicates that the Higher Education Level is, in fact, not a factor that influences changes in the value of economic growth in 9 districts/cities in Bali.

6 CONCLUSION AND SUGGESTION

6.1 Conclusion

From the results of research and discussion related to the effect of investment, labor, and education levels on economic growth in 9 districts/cities in Bali, the following conclusions can be drawn:

1. The estimation results show that the Labor variable is significant to the real level of five percent and has a negative effect on economic growth in 9 districts/cities in Bali.
2. The estimation results show that the investment variable is not significant to the real level of five percent and has a negative effect on economic growth in 9 regencies/cities in Bali.
3. The Higher Education Level estimation results show that this variable is not significant and has a negative effect on economic growth in 9 regencies/cities in Bali.

6.2 Suggestion

Based on the research conclusions, some conditions have not been optimal in economic growth in 9 districts/cities in Bali. Furthermore, in order to obtain optimal results in order to support the economy as a whole, some efforts must be made by various related parties, including the following: This study detected factors that have a significant effect on economic growth in 9 districts/cities in Bali. To increase economic growth in nine districts/cities in Central Java, to increase the effectiveness of budget allocations requires the government's participation in regulating and managing the expenditure

budget so that it can be more efficient, right on target to encourage increased economic growth. For further research, the authors suggest doing more in-depth research on Bali's nine districts/cities' economic growth. It is because the data required is still relatively limited. Also, the government must improve the system.

REFERENCES

- [1] Arsyad, L. .2010. *Ekonomi Pembangunan*. Yogyakarta: UPP STIM YKPN.
- [2] Baltagi, B.H. 2005. "Econometric Analysis of Panel Data". John Wiley & Sons, Ltd, England.
- [3] Badan Pusat Statistik. 2020. "Database". www.bps.go.id. Diakses 18 Juli 2020.
- [4] Badan Pusat Statistik Provinsi Bali. 2020. "Database". www.bali.bps.go.id. Diakses 18 Juli 2020.
- [5] Gujarati, Damodar dan Dawn C. Porter. 2010. *Dasar-Dasar Ekonometrika (Buku 1)*. (Terj.) Eugenia Mardanugraha, dkk. Jakarta: Salemba Empat.
- [6] Gujarati, Damodar dan Dawn C. Porter. 2012. *Dasar-Daar Ekonometrika (Buku 2)*. (Terj.) Raden Carlos Mangunson. Jakarta: Salemba Empat.
- [7] Gujarati, Damodar. 2007. *Dasar-Daar Ekonometrika II*. (Terj.) Julius A. Mulyadi, dan Yelvi Andri. Jakarta: Penerbit Erlangga.
- [8] Handayani, Tri. 2011 —*Faktor-faktor yang Mempengaruhi Pertumbuhan Ekonomi di Indonesia Periode 1999-2008*. Yogyakarta
- [9] Makrifah, S. A. (2010). *Analisis Pengelolaan Keuangan Daerah dan Dampaknya terhadap Pembangunan Ekonomi Provinsi Jawa Timur*. Tesis, Institut Pertanian Bogor, Indonesia.
- [10] Mankiw, N.G., 2003, *Macroeconomics*, 4th Edition, Edisi Indonesia, Jakarta: Erlangga.
- [11] Sodik, Jamzani Dan Didi Nuryanin.2005. *Investasi Dan Pertumbuhan Ekonomi Regional (Studi Kasus Pada 26 Propinsi Di Indonesia, Pra Dan Pasca Otonomi)*. Jurnal Ekonomi Pembangunan Upn "Veteran" Yogyakarta, Volume 10 Halaman 157-170.
- [12] Paseki, Meilen Greri, Amaran Naukoko, Patrick Wauran.2014. *Pengaruh Dana Alokasi Umum Dan Belanja Langsung Terhadap Pertumbuhan Ekonomi Dan Dampaknya Terhadap Kemiskinan Di Kota Manado Tahun 2004-2012*. Jurnal Berkala Ilmiah Efisiensi, Volume 14 No.3
- [13] Putra. E. P. 2015. *Dampak Program Bantuan Sosial terhadap Pertumbuhan Ekonomi dan Kemiskinan Kabupaten Tertinggal di Indonesia*, Tesis. Institut Pertanian Bogor, Indonesia.
- [14] Sukirno, Sadono. 2005. *Makro Ekonomi Teori Pengantar* .Raja Grafindo Perkasa: Jakarta.
- [15] Suryati, D. 2015. *Pengaruh Belanja Daerah Berdasarkan Klasifikasi Ekonomi terhadap Pengentasan Kemiskinan dan Indeks Pembangunan Manusia di Kabupaten/Kota Provinsi Nusa Tenggara Barat Tahun 2007-2012*. Media Bina Ilmiah, 9 (7), 20-27.
- [16] Todaro, Michael, P. dan Stephen C.Smith.2003.*Pembangunan Ekonomi Di Dunia Ketiga*, Edisi Kedelapan. Jakarta: Erlangga