World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(Research Article)

Check for updates

How government expenditures and economic growth works on labor absorption

Gede Santanu * and Kadek Dian Jati Wardani

Bali State Polytechnic, Bali, Indonesia.

World Journal of Advanced Research and Reviews, 2023, 18(03), 487–493

Publication history: Received on 28 April 2023; revised on 07 June 2023; accepted on 10 June 2023

Article DOI: https://doi.org/10.30574/wjarr.2023.18.3.1076

Abstract

This study aims to analyse the effect of government expenditures and economic growth on employment in districts/cities of Bali Province using secondary data for 2012-2019. Data collection used non-participant observation and was analysed using multiple linear regression. The results of the study show that government expenditures and economic growth simultaneously have a significant effect on employment. Partially, government expenditures and economic growth have a positive and significant impact on employment. There needs to be synergy between the central and regional governments for policy formulation in allocating government expenditures funds to increase economic growth and expand employment opportunities.

Keywords: Government Expenditures; Economic Growth; Labor Absorption; Expenditure; Economic Development

1. Introduction

Regional economic development is defined as an activity in which local governments and communities manage existing resources to achieve the main goal of increasing and expanding employment opportunities for people in the area (Ganie, 2017). One of the objectives of economic development is the provision of sufficient employment opportunities to catch up with the growth of the labor force which grows faster than the growth of employment opportunities (Prativi et al., 2020). The availability of high employment opportunities will affect people's income, thus increasing people's purchasing power and welfare. Indonesia is one of the countries included in the category of developing countries. Employment issues cannot be separated from the development of human resources and employment. Absorption of labor is an important issue in regional development. Labor can be used as a measure of the success of the development of a region, meaning that employment supports the success of regional development (Ganie, 2017)

The problem of employment absorption is part of the problem of employment. Employment is basically how to use the workforce which increases every year with an increasing growth rate, so that a balance arises in the labor market (Simanjuntak et al., 2017). The labor force that is absorbed will indirectly help run the economic sector and participate in driving other sectors. The imbalance between the growth of the labor force and absorption of labor will lead to disparities in development between regions. One of the mechanisms to reduce inequality is to seek to increase human capital so as to increase their future income (Opeyemi, 2020)

The complexity of the workforce problem is not only in the quantity of labor that is able to be absorbed by the economy, but how is the ability of the economy to provide quality job opportunities that are able to provide hope and optimism for life for workers who are absorbed and work in the sector (Meilianna, 2020). Labor absorption is influenced by two factors, namely external factors, and internal factors. External factors include the rate of economic growth, population, inflation rate, unemployment, interest rates and government expenditures. While the internal factors are the level of wages, labor productivity, capital, and non-wage expenditure. A large population will become a potential or capital for regional economic development because it provides an abundance of labor so that it can create added value for regional

* Corresponding author: Gede Santanu

production (Ganie, 2017). Population growth must be balanced with the expansion of employment opportunities so that the existing workforce can be absorbed.

Labor absorption is also influenced by the amount of government expenditures. Through government expenditures can increase the output produced by an economic sector. Besides that, it can also increase people's income because government expenditures will be a source of public revenue so that it will encourage aggregate demand. An increase in aggregate demand will encourage producers to increase their production output. For this reason, producers need additional production inputs, one of which is labor so that with increased government expenditures it will increase employment.

Economic growth also has a major effect on employment. If all quality workers are actively involved in the economy, it will increase the output of goods and services, which in turn drives economic growth (Seran, 2017). National and regional economic growth is closely related to the expansion of employment opportunities because the factor of labor production is an important factor for economic growth, besides being influenced by capital, nature and technology (Coccia, 2018). Economic growth is successful if it can reduce income inequality, increase employment, and improve social welfare (Kurniasih, 2017). The policy on regional autonomy issued by the government can provide a positive boost to economic growth where if the rate of economic growth is negative, then economic activity shows a decline, if economic growth is positive then economic activity can be said to show an increase (Rasyid, 2017)

The economy is based on the micro and macro scope. The microscope uses an approach by focusing on more specific things such as companies, demand and supply, production and prices. The macro scope uses an overall approach to comprehensively discuss matters related to job availability, unemployment rates, and matters concerning inflation and deflation of a country.

The determinants of employment opportunities are analyzed using an approach in the macro scope because they are considered capable of explaining the direction of changes in the country's economy that have an impact on society. The rapid wheel of the economy of a region reflects high production activity, high production capacity requires high factors of production including labor. So many companies are adding new workers. The quality of economic growth will be affected by the high population growth rate. Therefore, the higher the population will reduce the opportunity for people to work. High productivity and quality human resources will encourage high levels of employment opportunities, and conversely low-quality human resources will find it difficult to get the job they want. An increase in wages that is not accompanied by an increase in production capacity will cause the company to reduce the number of employees, this will reduce the level of employment. The greater the age structure of the population that is classified as young, the lower the employment opportunities and vice versa (Sukirno & Damayanti, 2019).

Economic growth is a country's long-term economic problem towards a better condition for a certain period and can also be associated with an increase in the production capacity of an economy which is manifested in the form of an increase in national income (Andriansyah et al., 2021). Economic growth is an indicator to see the success of national or regional development (Feldstein, 2017). Economic growth is the development of a country's economy which can be measured using several approaches that are often used, namely the Gross Regional Domestic Product (GRDP). The growth rate is calculated as the percentage change in Gross Domestic Product (GDP) per capita (Kurniawan & Managi, 2018)

According to the view of the Classical Growth Theory, there are four factors that affect economic growth, namely population, stock of capital goods, land area, and natural wealth and the level of technology used. Classical economists focused their attention on the effects of population growth. In analyzing the problem of economic growth, Harrod-Domar's theory aims to explain the conditions that must be met so that an economy can achieve steady growth in the long term. The Harrod-Domar analysis uses examples, namely: Capital goods have reached full capacity, Savings have been proportional to national income, Capital-production ratio (capital output ratio) has a fixed value and The economy consists of two sectors (Kristyanto & Kaluge, 2018).

According to the Neo-Classical theory developed by Abramovits and Solow, economic growth depends on the development of factors of production. The important factor that realizes economic growth is not an increase in capital and an increase in labor. The most important factors are technological progress and the increase in the skills and expertise of the workforce. Basically economic growth is a long-term macroeconomic problem where in every period a country's people will try to increase their ability to produce goods and services. This growth is a growth rate that is formed from various kinds of economic sectors that do not directly describe the level of economic change that has occurred. High economic growth is due to an increase in the number of younger and potential human resources (Resosudarmo & Abdurohman, 2018). The higher the economic growth of an area, the greater the potential source of income (Aslan et al., 2019). Economic growth has a positive and significant effect on employment (Rusniati et al., 2018). In addition, according to Hartono et al. (2018), GRDP has a positive and significant influence on employment, every increase in GDP there will be an increase in employment.

- H1: Government Expenditure and Economic Growth have a simultaneous effect on the of Labor Absorption.
- H2: Government Expenditures and Economic Growth have a partial positive effect on Labor Absorption.

2. Material and methods

This study uses an associative quantitative approach. The location of this research is the Province of Bali. In this study, the dependent variable is Labor Absorption (Y) and the independent variables are Government Expenditures (X1) and Economic Growth (X2). To meet the needs of analysis, pooling data is used which is a combination of time series and cross section data for 8 (eight) years in regencies/cities in the Province of Bali.

This research was conducted in the Province of Bali using a combination of time series data for 8 (eight) years and cross sections of 9 (nine) regencies/cities in the Province of Bali resulting in 72 (seventy-two) observations. The technique used in this study is a quantitative analysis technique, namely an objective analysis based on data in the form of numbers. The analytical tool used is multiple linear analysis using panel data.

3. Results and discussion

The methods used to estimate the regression model with panel data are the Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM) methods. Of the three models that have been estimated, to determine the most appropriate/appropriate model based on the characteristics of the data to answer the research objectives, the F Test (Chow Test), Hausman Test and Langrangge Multiplier (LM) Test are carried out with the following explanation.

Tabel 1 Chow Test

Effects Test	Statistic	d.f	Prob.
Cross – section F	191.473944	(8,60)	0.0000
Cross – section Chi- Square	236.035502	8	0.0000

Secondary Data, 2023

Decision making is based on the chow test, namely if the probability value is less than alpha = 0.05 (prob <0.05), then the right panel data regression method to choose is the Fixed Effect Model (FEM), otherwise if the probability value is more than alpha = 0.05 (prob > 0.05), then the right panel data regression method to choose is the Common Effect Model (CEM) (Fajri et al., 2016). Based on the test results in Table 1, the value of the probability value of the cross-section F is 0.000 <0.05, so the right panel data regression method to choose is the Fixed Effect Model (FEM). Furthermore, to choose between the Fixed Effect Model (FEM) and Random Effect Model (REM) methods, the Hausman test was carried out with the following results.

Table 2 Hausman Test

Test Summary	Chi-Sq Statistic	Chi-Sq d.f	Prob.
Cross – section random	260.331739	3	0.0000

Secondary Data, 2023

Based on the test results in Table 3, the cross-section probability value is 0.000 <0.05, so the right panel data regression method to choose is the Fixed Effect Model (FEM). Because the Fixed Effect Model (FEM) model has been selected twice, the Langrange Multiplier (LM) test is not necessary, because the Fixed Effect Model (FEM) model in this study is the best model to answer the research objectives.

3.1. Fixed Effect Model (FEM) Estimation Results

This panel data model assumes that differences between individuals can be accommodated from differences in intercepts. To estimate the panel data in the Fixed Effect Model using the dummy variable technique because it is assumed that the slope coefficient is constant, but the intercept is not constant. This estimation model is often also called the Least Squares Dummy Variable (LDSV) technique. In this panel data regression analysis model, the dependent variable here is Labor Absorption (Y) while the independent variables are population (X1), government expenditures (X2) and economic growth (X3). After making estimates using the E-Views 10 software program in managing the data, the following results are obtained.

$$Y = \beta 0 + \beta 1 X1it + \beta 2 X2it + \beta 3 X3it + \mu$$

$$Y = -0{,}00204 + 0{,}248102\ X1 + 0{,}0124204\ X2 + 0{,}010809\ X3$$

The results of panel data regression analysis using the Least Squares Dummy Variable (LDSV) method with the help of the E-Views analysis tool can be interpreted that the variable population (X1), government expenditures (X2) and economic growth (X3) have a positive effect on the variable employment absorption (Y) in districts/cities of Bali Province.

3.2. Simultaneous Regression Coefficient Significance Test (Test F)

The F test is used to test whether there is a significant effect between the independent variables jointly on the dependent variable with the feasibility of the model produced using the model feasibility test at the α level of 5 percent. If the significance value of the F test <0.05 then the model used in this study is feasible and can be used for subsequent analysis, and vice versa. The results of the F test can be seen in Table 3 below.

Table 3 F test (ANNOVA)

Information	Value
F Statistic	14413.66
Probabilitas F Statistic	0.000

Secondary Data, 2023

The calculated F-value is 14413.66 with a significance value of P-value 0.000 which is less than α = 0.05, this means that the model used in this study is feasible. This result means that the three independent variables can predict or explain the phenomenon of Labor Absorption. This means that simultaneously the government expenditures (X1) and economic growth (X2) have a significant effect on labor absorption.

3.3. Partial Regression Coefficient Significance Test (t test)

Testing the effect partially between the independent variable and the dependent variable is used t-test. The results of the analysis of this t test can be seen in Table 4 as follows.

Table 4 t-test

Variable	Regression Coefficient	T-value	Prob.	Description
government expenditures (X1) → labor absorption (Y)	0.124204	3.986411	0.0002	Positive
economic growth (X3) → labor absorption (Y)	0.010809	2.468570	0.0164	Positive

Secondary Data, 2023

3.4. Government Expenditures on Labor Absorption

Based on the results of the analysis, it shows that the value of the regression coefficient X1 or government expenditures is 0.124 with a t-count value of 3.986 which is positive with a significance level of 0.000 <0.050. This means that government expenditures has a positive and significant effect on employment in the districts/cities of Bali Province. Government expenditures is a direct or indirect policy in regulating the course of the economy. Through government expenditures, the output produced by an economic sector will be even greater. Besides that, allocated government expenditures will encourage producers to increase their production output. In increasing production output, producers will need additional production inputs, one of which is by increasing the number of workers. When there is an increase in government expenditures, the absorption of labor also increases along with the increase in the number of factors of production

According to the opinion expressed by Ziyadaturrofiqoh et al. (2018) government expenditures can contribute to economic movement through the absorption of labor and capital goods in the education, health and infrastructure sectors which are budgeted for development spending or direct spending. The results of this study are in line with the research of Novaria et al. (2016), government expenditures has a significant positive effect on the absorption of an educated workforce as well as the absorption of uneducated and unskilled workers. The positive influence of government expenditures is felt by uneducated and untrained workers. In line with the research by Rasid Desky et al. (2020), government expenditures has a positive effect on employment.

3.5. Economic Growth on Labor Absorption

Based on the results of the analysis, it shows that the value of the regression coefficient X2 or Economic Growth is 0.011 with a t-count value of 2.46857 having a positive value with a significance level of 0.016 <0.050. This shows that economic growth has a positive and significant effect on employment in the districts/cities of the Province of Bali. Economic growth is a very important indicator in advancing development and driving the economy in a region. Good economic growth is a reflection of the successful development of a region. Increased economic growth will drive other sectors so that from the production side it will require additional workers.

The course of economic growth is due to mechanization and division of labor, further division of labor will increase worker productivity. When productivity increases, the income earned will be more so that it can meet the needs of life. Through absorption of labor, it can drive economic growth so that it runs well and has a positive impact on improving people's welfare. The results of this study are in line with research by Susilawati et al. (2020), economic growth has a positive and significant effect on employment. This indicates that increased economic growth has a significant effect on increasing employment. In line with the research by Dayıoğlu & Aydın (2020), the rate of economic growth has a positive and significant effect on employment, this means that the higher the economic growth in a sector, the higher the growth in employment opportunities in that sector. According to Rusniati et al. (2018) economic growth has a positive and significant effect on employment.

The coefficient of determination (R^2) is used to determine and measure the model's ability to explain the variation of the independent variables. The researcher uses the R2 value when evaluating which is the best regression model. The results of the test for the coefficient of determination can be seen in Table 5 below.

Table 5 Determination Coefficient

R Square	Adjusted R Square
0.999622	0.999552

Secondary Data, 2023

The test results in Table 8 give the result where the R2 value is 0.999. This means that 99.9 percent of changes in the variation in district/city labor absorption in the Province of Bali in 2012-2019 can be significantly influenced by the variable government expenditures (X1) and economic growth (X2), while the remaining 0.1 percent is explained by factors -Other factors.

4. Conclusion

The results of the study show that simultaneously government expenditures and economic growth have a significant effect on employment. Meanwhile, partially government expenditures also have a positive and significant effect on employment. Likewise, economic growth has a positive and significant effect on employment. Absorption of labor is the number of jobs that have been filled by the large number of working people. People with good quality can be more easily absorbed in various sectors of the economy to carry out the development process as a structural change effort aimed at increasing productivity which will ultimately increase per capita income and achieve social welfare.

Government expenditures will always increase in line with the increase in government activities to accelerate the pace of economic growth. This increase will encourage the production of goods and services which will result in an additional workforce. Based on the results of the research found, the implications that can be utilized are that it is hoped that people will be easily absorbed in the labor market with the skills and abilities they have, in this case employment will increase with the number of people who are more productive so that people's income levels increase, and people's prosperity increases tall.

The government is expected to be able to maintain a balance between population growth and labor force growth by improving the quality of human resources so that they are able to compete in the world of work so as to get decent jobs and provide adequate employment opportunities for the community so as to increase employment evenly in each region. Government budget allocations need to be directed towards the development of infrastructure projects and other public facilities for potential sectors capable of creating productivity and absorbing labor. Using a budget that is distributed to the right funding posts, it can also increase economic growth which will also absorb labor. Increasing the effectiveness of government expenditures which has an impact on increasing economic growth can support employment.

Compliance with ethical standards

Acknowledgments

The researchers acknowledge and appreciates all the mothers who participated in this study

Disclosure of conflict of interest

All authors contributed positively to the writing of this manuscript and there no conflict of interest as agreed to the content of this research.

References

[1] Andriansyah, Nurwanda, A., & Rifai, B. (2021). Structural Change and Regional Economic Growth in Indonesia. Bulletin of Indonesian Economic Studies, 1(1), 1. https://doi.org/https://doi.org/10.1080/00074918.2021.1914320

[2] Aslan, A., Darma, D. C., & Wijaya, A. (2019). Have Village Funds Impact Growth Economy and Poverty Rate. International Journal of Scientific & Technology Research, 8(10), 2601–2605.

[3] Coccia, M. (2018). Measurement of Economic Growth and Convergence: A New Approach. SSRN Electronic Journal, 1(May), 1. https://doi.org/10.2139/ssrn.2951291

[4] Dayıoğlu, T., & Aydın, Y. (2020). Relationship between Economic Growth, Unemployment, Inflation and Current Account Balance: Theory and Case of Turkey. Intech Open, 2(2), 1. https://doi.org/10.5772/intechopen.93833

[5] Fajri, M., Delis, A., & Amzar, Y. V. (2016). The Impact of Fiscal Autonomy, Economic Growth, and Regional Openness on Regional Inequality in Sumatra. Journal of Applied Quantitative Economics, 9(2), 89–176. https://doi.org/https://doi.org/10.24843/JEKT.2017.v09.i02.p02

[6] Feldstein, M. (2017). Underestimating the real growth of GDP, personal income, and productivity.

[7] Journal of Economic Perspectives, 31(2), 145–164. https://doi.org/10.1257/jep.31.2.145

[8] Ganie, D. (2017). Analysis of the Influence of Wages, Education Level, Total Population and GRDP on Labor Absorption in Berau District, East Kalimantan. Executive Journal, 14(2), 332-354.

[9] Hartono, R., Busari, A., & Awaluddin, M. (2018). The effect of gross regional domestic product (GDP

[10]) and the city minimum wage (umk) on employment. Innovation, 14(1), 36–43.

[11] Kristyanto, V. S., & Kaluge, D. (2018). Increasing Economic Inclusivity Through Human Capital Investment Financing. Journal of Applied Quantitative Economics, 11(2), 182–189. https://doi.org/https://doi.org/10.24843/JEKT.2018.v11.i02.p04

[12] Kurniasih, E. P. (2017). Effect of Economic Growth on Income Inequality, Labor Absorption, and Welfare. Economic Journal of Emerging Markets, 9(2), 181-188.

[13] Kurniawan, R., & Managi, S. (2018). Economic Growth and Sustainable Development in Indonesia: An Assessment. Bulletin of Indonesian Economic Studies, 54(3), 339–361. https://doi.org/https://doi.org/10.1080/00074918.2018.1450962

[14] Meilianna, R. (2020). Labor Absorption, Inflation Volatility, and Inflation Targeting Framework (ITF): The Case of Three Economic Sectors in Indonesia. Journal of Indonesian Social Sciences and Humanities, 10(1), 60–70.

[15] Novaria, E., Marwa, T., Susetyo, D., & Azwardi. (2016). Government Expenditure, Economic Growth and Manpower Absorption Analysis of Regencies and Cities in South Sumatra, Indonesia. Russian Journal of Agricultural and Socio-Economic Sciences, 60(12), 47–63. https://doi.org/10.18551/rjoas.2016-12.07

[16] Opeyemi, A.F. (2020). Impact Of Foreign Direct Investment and Inflation on Economic Growth of Five Randomly Selected Countries in Africa. Journal of Economics and International Finance, 12(2), 65–73.

[17] Prativi, S. A. I., Nyoman, Y. N., & Marhaeni, A. A. I. N. (2020). The Effect of Locally-Generated Revenue, Investment, and Education on Labor Absorption and Per Capita Income in Regencies/Cities of Bali Province, Indonesia. Russian Journal of Agricultural and Soci-Economic Sciences, 99(3), 103–110.

[18] Rasid Desky, T., Ruslan, D., & Author, C. (2020). Effect of Government Investment, Export and Shopping Towards Economic Growth through Absorption Labor as Intervening Variables in North Sumatra Province. International Journal of Research and Review (Ijrrjournal.Com), 7(1), 1.

[19] Rashid, M. (2017). East Java Province Revenue Convergence: City/Regency Panel Approach 2000-2013 Period. Journal of Applied Quantitative Economics, 10(02), 110. https://doi.org/https://doi.org/10.24843/JEKT.2017.v10.i02.p05

[20] Resosudarmo, B.P., & Abdurohman. (2018). Is Being Stuck with a Five Percent Growth Rate a New Normal for Indonesia? Bulletin of Indonesian Economic Studies, 54(2), 141–164.

[21] Rusniati, R., Sudarti, S., & Agustin, A. F. (2018). Analysis of the Influence of Economic Growth and Minimum Wage on Labor Absorption in Malang Regency. Falah: Journal of Islamic Economics, 3(4), 34–42.

[22] Sari, N., Yulmardi, Y., & Bhakti, A. (2016). The Influence of Economic Growth, Population Growth and Labor Productivity on Labor Absorption in Jambi City. E-Journal of Resource and Environmental Economics, 5(1), 33–41.

[23] Seran, S. (2017). The Relationship Between Education, Unemployment, and Economic Growth and Poverty. Journal of Applied Quantitative Economics, 10(1), 59–71.

[24] Simanjuntak, J., Ratnawati, T., & Rahmiyati, N. (2017). Economic Growth as Mediation of Regional Own Source Revenue, Investment and Asset Management on Labor Absorption and Social Welfare in Regencies/Cities in Riau Islands Province. International Journal of Economics and Finance, 9(8), 127-137.

[25] Sukirno, N. I., & Damayanti, A. (2019). The Impact of Education on Productivity and Wages: Empirical Evidence of Market Monopsony in the Indonesian Manufacturing Industry. Journal of Applied Quantitative Economics, 12(2), 223–239. https://doi.org/https://doi.org/10.24843/JEKT.2019.v12.i02.p10