



Analysis Of Factors Affecting Economic Growth In Banten Province

Riko Dwi Saputra ¹⁾; Muhammad Rusdi ²⁾

Development Economics, Bengkulu University

Email: 1) rikodwisaputra0510@gmail.com ;²⁾ rusdi.muhammad62@gmail.com

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ABSTRACT

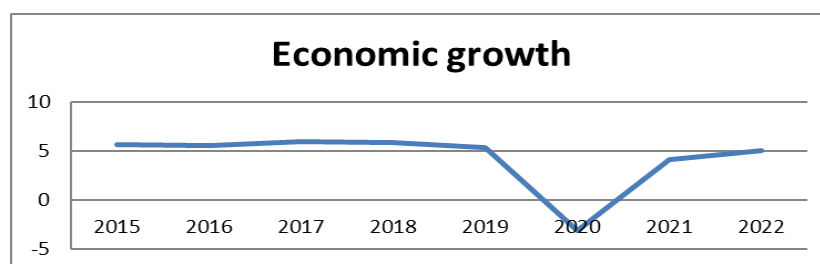
This study aims to identify the factors that drive economic growth in Banten Province. The scope of this survey covers 8 districts in Banten Province. The data used are secondary data and cross sectional data.

The results of the study indicated that there was a positive and significant relationship between the variables of labor force and government expenditure and economic growth, while unemployment had a significant negative effect on economic growth. The results showed that the variables of labor force, government expenditure and unemployment had a significant effect on economic growth in Banten Province.

INTRODUCTION

Indonesia's economy is influenced by many factors, both domestic and foreign. Economic growth occurs through increased economic productivity which ultimately results in increased national income. Economic growth is a sign of success in the economic development process. The hope is that economic growth can have a positive effect on the creation of jobs and can improve the welfare of the community, including reducing poverty levels.

Banten Province is a province that was established in the 2000s, this province is the result of the reform process. If the level of prosperity or welfare is low, this is because Banten Province is the youngest province, starting from the division of West Java Province.



Source: <https://bps.go.id> (data processed 2023)

In the process of regional development, it is necessary to identify the potential and problems of each region. By paying attention, problems can be anticipated by making optimal use of existing potential. The goal of regional development is high economic growth. Economic growth has been considered a macroeconomic problem for a long time. From one period to the next, a country's ability to produce goods and services will increase. This is due to the constant improvement in quantity and quality of factors of production. Investment increases the quantity of capital goods. Use of technology is ever-evolving. The unemployment rate will decrease. Additionally, the workforce continues to grow due to population growth, and work experience and education help improve their skills. Therefore, economic growth will be able to reduce poverty and unemployment, while generating the necessary resources for human development and environmental protection. When growth is positive, the economy is growing. On the contrary, if the growth rate is negative, the economy will shrink. The main objective of this study is to identify factors affecting economic growth in Banten province, as well as explain the relationship between these factors and economic growth.

LITERATURE REVIEW

Economic Growth

Economic growth is progress in activities that focus on increasing the goods and services that are produced by the community and improving the well-being of the people. Another meaning of economic growth is the process of improving economic production efficiency in the form of increasing national income. According to Todaro and Smith in (Rori et al., 2016), economic growth is a periodic improvement in the state of a country's economy over a certain period of time. Economic growth continues to increase economic output over time to ensure increases in national income and production. Furthermore, according to Boediono (Fajri, 2016), it is believed that economic growth, especially per capita growth, requires a long-term process, but what is emphasized in the analysis is the process associated with economic change. Other factors related to economic growth can be considered the first step in a leap forward (Rostow in (Rori et al., 2016)). Some factors promoting economic growth: (Todaro, 2016)1).

1. Capital accumulation includes any form of new investment including assets such as land, financial equipment and human resources. The process of capital accumulation occurs when a portion of current income is saved, then invested to increase future output. Investing in human resource development will lead to improving the quality of human capital, which in turn can help increase output.
2. Increase in population and labor force. Traditionally, population and employment growth have been seen as positive factors in supporting economic growth. This means that the larger the working population, the higher the productivity, while the larger the population, the greater the domestic market potential.
3. Technology development. Technological development occurs due to the adoption of new technological methods and improvement of traditional methods used to perform certain tasks.

Labor Force

In general, Labor is defined as the population within the working age range (15-64 years) or the number of individuals in a country who have the capacity to contribute to the production of goods and services when there is a demand for labor and available employment opportunities. Thus, the entire population aged 15 years and above is considered the labor force. This provision has been regulated in Law No. 25/1997 on Manpower, which took effect on October 1,

1998. According to Prok, K. (2015), productive land and private investment have no impact on economic growth, while labor has a positive impact on economic growth. According to Koiri, M., Syapsan, S. and Kornita, S.E. (2020), FDI, DDI, labor and exports have a considerable impact on economic growth as measured by the value of gross regional product (GRP). Similarly, the global financial crisis, although short-lived, appears to have had an impact on the GRP of Riau Province. However, government capital expenditure is not expected to have a significant impact on GDP growth.

Government Spending

Public expenditure reflects policy actions taken by the government. When the government makes a decision to adopt a policy that involves the purchase of goods and services, public expenditure reflects the costs incurred by the government to implement the policy (Mangkoesebroto, 1993; 169). The evolution of public expenditure was developed by Rostow and Musgrave who linked the development of government expenditure to different stages of economic development, such as the early stage, middle stage, and advanced stage, can provide an overview of how public expenditure strategies change over time in accordance with ongoing economic development. According to Berkat, V.M. and Lumentah, N. (2022), government spending, household consumption, and net exports affect economic growth in Mimika district, but investment does not affect international economic growth.

Unemployment

According to Mankiw (2018), unemployment is someone who is looking for a job that he previously did and was dismissed. There are two types of unemployment. First, people can work but have not found a job within 4 weeks. Second, the cause of unemployment is that the amount of labor offered in the market is greater than the amount of labor expected at that time (Ninie, 2022). According to Nugroho, R.E. (2017), the provincial minimum wage / UMP, the number of unemployed (JP), foreign-owned companies (PMA) and nationally-owned companies (PMDN) had a significant effect on the economic growth rate of Banten Province in the period 1999-2013. According to Erdkhadifa, R. (2022), education and investment variables have a significant positive impact, while HDI, poverty rate, and unemployment rate variables were found to have a significant negative impact on economic growth.

METHODS

The subjects of this study are eight regions in Banten province, namely Cilegon city, Lebak, Tangerang, Pandeglang, Serang city, Tangerang city, South Tangerang city and Serang. In this study, the focus variable is economic growth, using data on the growth rate in Banten districts, while the independent variables considered are labor force, government expenditure, and unemployment rate. In this study, the data used is secondary data in the form of time series and cross-section, also called panel data by combining 8 districts in Banten for 8 years with time series from 2015-2022. This research uses the best method, namely the model especially the common impact model (CEM) which has been applied such as the Chow test, Hausman test and Lagrange test using E-views 12.

The data sources for each variable used are the labor force (x1), government spending (x2), unemployment (x3) and economic growth (y) taken from the central statistics agency (bps).

the basic modeling used in this study is as follows:

$$y_{it} = b_0 + b_1x_{1it} + b_2x_{2it} + b_3x_{3it} + e_{it}$$

Information:

β = intercept coefficient

x1 = labor force

x2 = government spending

x3 = unemployment

i = district in banten

t = unit time series 2015-2022

eit = error terms

RESULTS

Chow test

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effect Test	Statistic	d.f.	Prob.
Cross-section F	0.922948	(7,53)	0.4965
Cross-section Chi-square	7.361448	7	0.3922

The prob value is 0.3922 > 0.05, so the CEM model is chosen.

Hausman test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.909545	3	0.2714

The prob value is 0.2714 > 0.05, so the selected model is the REM model.

LM test

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	0.610838 (0.4345)	118.1448 (0.0000)	118.7556 (0.0000)
Honda	-0.781561 (0.7828)	10.86944 (0.0000)	7.133209 (0.0000)
King-Wu	-0.781561 (0.7828)	10.86944 (0.0000)	7.133209 (0.0000)
Standardized Honda	-0.183545 (0.5728)	11.79005 (0.0000)	5.595643 (0.0000)
Standardized King-Wu	-0.183545 (0.5728)	11.79005 (0.0000)	5.595643 (0.0000)
Gourieroux et al.	--	--	118.1448 (0.0000)

The probability value is 0.4345 > 0.05 so the CEM model is chosen.

Based on the test results, the model in this study is the Common Effect Model (CEM).

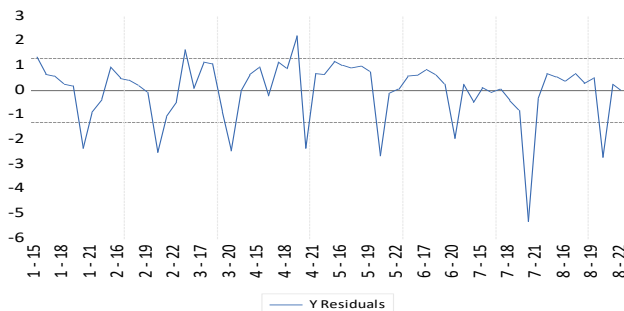
Uji asumsi klasik

The model that has been chosen is the Common Effect Model (CEM), therefore, it is necessary to test for classical assumptions, namely tests for multicollinearity and heteroscedasticity.

	X1	X2	X3
X1	1.000000	0.836408	-0.125772
X2	0.836408	1.000000	-0.045127
X3	-0.125772	-0.045127	1.000000

The correlation coefficient value of x1 and x2 is $0.836408 < 0.85$, x1 and x3 are $-0.125772 < 0.85$, x2 and x3 are $-0.045127 < 0.85$, so from the above results it can be concluded that these variables are free from the multicollinearity test.

heterokedastisidas test



From the graph that has been displayed, there are no values that exceed the limits (500 and -500). Therefore, it can be concluded that there are no signs of heteroscedasticity or that the results of the heteroscedasticity test do not indicate a heteroscedasticity problem.

Hypothesis testing

By applying the hypothesis test, we can determine whether there is a significant influence between the dependent variable and the independent variable. In the context of this study, the significance level α was set at 0.05.

Test f

R-squared	0.457045
Adjusted R-squared	0.429897
S.E. of regression	1.293843
Sum squared resid	100.4418
Log likelihood	-105.234
F-statistic	16.83546
Prrob(F-statistic)	0.000000

The value of F count $16.83546 > F$ table of 2.75548 with a sig value of $0.000000 < 0.05$ so that it can be decided that H_0 is rejected and H_a is accepted, meaning that the variable labor force, government spending, unemployment has a significant influence on Banten's economic growth.

Coefficient of determination test

The adjusted R-squared value is 0.429897 or 42.9897%. This value indicates that the independent variables which include labor force variables, government spending and unemployment rates have the ability to explain the economic growth variable in Banten by

42.9897%, while 57.0103% includes other factors that are not included in the scope of the study, such as technology, and investment.

Test_t

Dependent Variable: Y
 Method: Panel Least Squares
 Date: 10/02/23 Time: 01:35
 Sample: 2015 2022
 Periods included: 8
 Cross-sections included: 8
 Total panel (balanced) observations: 64

Variabel	Coefficient	Std.Error	t.Statistik	Prob.
C	8.190623	0.853479	9.596748	0.0000
X1	3.30E-06	6.60E-07	5.010153	0,0000
X2	9.20E-07	2.21E-07	4.340145	0,0001
X3	-0.468218	0.081328	-5.757178	0,0000

1. From the results of the t test above on the labor force variable (X1), the t value is 5.010153 > t table, namely 1.99897 with a sig value of 0.0000 < 0.05, then Ho is rejected and Ha is accepted, meaning that the labor force variable affects economic growth in Banten.
2. From the results of the t test on the government expenditure variable (X2), the t value is 4.340145 > t table, namely 1.99897 with a sig value of 0.0001 < 0.05, so Ho is rejected and Ha is accepted. Which means that the government spending variable has an effect on economic growth in Banten.
3. Based on the results of the t test on the unemployment variable (X3), the t value is 5.757178 > t table, namely 1.99897 with a sig value of 0.0000 < 0.05, then Ho is rejected and Ha is accepted, meaning that the unemployment variable affects economic growth in Banten.

From data processing, the regression equation is obtained, namely:

$$Y = 8.190623 + 0.00000330 \cdot x_1 + 0.000000920 \cdot x_2 - 0.468218 \cdot x_3$$

1. The constant value obtained is 8.190623, meaning that if economic growth is constant (zero) then the variable labor force, government spending, and unemployment is 8.190623.
2. The regression coefficient of the labor force (x1) is positive at 0.00000330, meaning that if the labor force variable (x1) increases by 1 thousand people, the economic growth variable (y) will increase by 0.00000330.
3. The regression coefficient for the government expenditure variable (x2) has a positive value around 0.000000920, which means that if government spending (x2) increases by 1 thousand rupiah, economic growth (y) will increase by around 0.000000920.
4. The regression coefficient for the unemployment variable (x3) is -0.468218, which means that if the unemployment variable (x3) increases by 1 thousand people, economic growth (y) will decrease by 0.468218.

DISCUSSION

In this study, there are four variables, consisting of one dependent variable of Economic Growth as well as three independent variables of labor force, government spending, and unemployment. The statistical tool in the study is eviews 12. Based on panel data analysis regression testing with the common effect model (CEM). Simultaneously (F test) variable X, namely

the labor force, government spending, and unemployment, has a significant effect on economic growth in Banten.

The effect of labor force on economic growth in Banten 2015-2022

Based on the regression results in the t test, the Prob value is $0.0000 < 0.05$, which means that the labor force has a significant effect. The labor force variable has a positive relationship with a significant effect on Economic Growth of $0.00000330/3.330E-06$. If the labor force increases by 1 thousand people, economic growth will increase by 0.00000330 . This supports the hypothesis that the labor force has an influence on economic growth in Banten.

The effect of government spending on economic growth in Banten 2015-2022

Based on the results of the t test regression, the Prob value is $0.0001 < 0.05$, which means that government spending has a significant effect. Government spending has a significant positive relationship affecting economic growth with a ratio of $0.000000920/9.20E-07$. So it can be understood that if government spending increases by 1 thousand dollars, economic growth will increase by 0.000000920 . This is in accordance with the hypothesis which states that government spending affects Banten's economic growth.

The effect of unemployment on economic growth in Banten 2015-2022

Based on the regression results in the t test with a Prob value of $0.0000 < 0.05$, which means that unemployment has a significant effect. The labor force has a significant negative relationship affecting economic growth -0.468218 . If the unemployment rate increases by 1 thousand people, the economic growth rate will decrease by 0.468162 . This is consistent with the hypothesis which states that the unemployment rate has an impact on economic growth in Banten.

CONCLUSION

The findings of the study, showing the analysis of the factors that affect the economic growth of Banten province for the period 2015 - 2022, namely the dynamics of population, public expenditure and unemployment. Government spending, labor force, and unemployment have a significant impact on the economy.

The real evidence is in the calculation which shows the calculated f value of $16.83546 >$ the f table value at the 95 test level, namely 2.75548 , meaning that labor, government spending, and unemployment simultaneously have a significant effect on economic growth (*ceteris paribus*).

SUGGESTION

Other researchers who are interested in researching this topic are expected to add variables that have not been included in this study, so that this research can be more complete in the future.

REFERENSI

- Berkat, V. M., & Lumentah, N. (2022). Analysis of factors affecting economic growth in Mimika Regency. *Journal of Economics and Regional Science*, 2(1), 50-67.
- Darlin, E. (2017). Analysis of Factors Affecting Indonesia's Economic Growth in 1979-2008. *Journal of Business Lentera*, 1(2), 51-77.

- Erdkhadifa, R. (2022). Factors Affecting Economic Growth in East Java with a Spatial Regression Approach. *IQTISHADUNA: Scientific Journal of Our Economy*, 11(2), 122-140.
- Effendy, Y., Andriawan, A., Rawati, M., Hawari, R., & Al-Amin, A. A. (2023). Analysis of Factors Affecting Islamic Economic Growth in West Sumatra. *Scientific Journal of Economics, Management and Sharia (JIEMAS)*, 2(2), 121-128.
- Hidayat, M., Sari, L., & Aqualdo, N. (2011). Analysis of factors affecting economic growth in Pekanbaru city. *Journal of Social Economic Development*, 2(4), 48-63.
- Khoiri, M., Syapsan, S., & Kornita, S. E. (2020). Analysis of factors affecting economic growth in Riau Province in 2000-2018. *SOROT*, 15(2), 87-104.
- Manurung, W., Fajar, M., & Noviar, N. (2022). Determinants of Economic Growth in Banten Province. *Journal of Regional Development Policy*, 6(2), 36-44.
- Mohamed Kamal, A. L., & AboElsoud, M. E. (2023). Modeling economic growth factors in Egypt: A quantile regression approach. *Heliyon*, 9(2), e13143. <https://doi.org/10.1016/j.heliyon.2023.e13143>
- Niken, K., Haile, M. A., & Berecha, A. (2023). Heliyon on the nexus of inflation, unemployment, and economic growth in Ethiopia. *Heliyon*, 9(4), e15271. <https://doi.org/10.1016/j.heliyon.2023.e15271>
- Novriansyah, M. A. (2018). The effect of unemployment and poverty on economic growth in Gorontalo province. *Gorontalo Development Review*, 1(1), 59-73.
- Nurhuda, H. I. (2019). Analysis of Factors Affecting Economic Growth in Madiun Prefecture in 2014-2017 (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Nugroho, R. E. (2017). Analysis of Factors Affecting Economic Growth in Banten Province. *JIEMS (Journal of Industrial Engineering and Management Systems)*, 10(1).
- Pambudi, E. W., & Miyasto, M. (2013). Analysis of Economic Growth and Influencing Factors (Regency / City in Central Java Province. *Diponegoro Journal of Economics*, 2(2), 51-61.
- Prok, K. (2015). Factors affecting economic growth in North Sulawesi during the period of regional autonomy 2001-2013. *Journal of Efficiency Scientific Periodical*, 15(3).
- Rofii, A. M., & Ardyan, P. S. (2017). Analysis of the effect of inflation, foreign investment and labor on economic growth in East Java. *Journal of Economics & Business*, 2(1), 303-316.
- Rozmar, E. M., Junaidi, J., & Bhakti, A. (2017). The Effect of Population Growth, Labor Force Participation Rate, and Dependency Burden Ratio on Economic Growth in Jambi Province. *e-Journal of Resource and Environmental Economics*, 6(2), 97-106.
- Sarlitawati, N. P. F., & Budhi, M. K. S. (2022). Analysis of Factors Affecting Regency / City Economic Growth in Bali Province 2015-2019. *E-Journal of Economics and Business, Udayana University*, 11(12).
- Syahputra, R. (2017). Analysis of factors affecting economic growth in Indonesia. *Samudra Ekonomika Journal*, 1(2), 183-191.
- Temsumrit, N. (2023). Heliyon Can aging population affect economic growth through the channel of government spending? *Heliyon*, 9(9), e19521. <https://doi.org/10.1016/j.heliyon.2023.e19521>
- Yelfina, N., & Marwan, M. (2022). Analysis of Factors Affecting Economic Growth in West Sumatra in 2015-2019. *Ecogen Journal*, 5(3), 425-436.
- Yeisa, W., & Rani, L. N. (2020). Analysis of Factors Affecting Economic Growth in Oki. *Journal of Sharia Economics Theory and Applied*, 7(6), 1128-1145.
- Yulianti, R., Khairuna, K., & Ibrahim, N. (2023). Analysis of Open Unemployment Rate and Import Export on Indonesia's Economic Growth Before and During the Covid-19 Pandemic. *Journal of Economic Science (JECS)*, 9(1), 9-26.