

The Effect of Inflation and Government Spending on Economic Growth in The West Sumatra Province

Lili Salfina¹, Nurtati², Syofria Meidona³, Yully Elvina⁴, Dorris Yadewani⁵

^{1,2,3} Faculty of Economics, University of West Sumatra, Indonesia

: ¹lilisalfina1@gmail.com, ²syofriameidona@gmail.com, ³yullyelvina1@gmail.com, dorris290@gmail.com

DOI: <https://doi.org/10.54099/hbr.v3i2.702>

Abstract

Purpose –This study aims to determine the effect of inflation and government spending on economic growth in West Sumatra Province in 1993- 2020. **Methodology/approach** – This type of research is quantitative with multiple linear regression analysis using secondary data. Data collection techniques are carried out by collecting and retrieving data through the website of the Central Bureau of Statistics for West Sumatra Province, namely sumbar.bps.go.id. the sample in this study was 28 years old starting from 1993-2020. **Findings** – It there was a partial and simultaneous effect of inflation and government spending on economic growth in West Sumatra Province from 1993-2020. The inflation has a negative and significant influence on economic growth. The government expenditure variable has a negative and significant effect on economic growth. a coefficient of determination of 50.9% means that 50.9% of the independent variables are able to explain the dependent variable, while the remaining 49.1% is explained by other variables not examined in this study.

Keywords: Economic Growth, inflation, government spending

INTRODUCTION

Indonesia is one of the developing countries experiencing problems of economic growth. The problem of economic growth can be seen as a macroeconomic problem in the long run. Economic growth is a process of changing a country's economy to a better state within a certain period of time. A country is said to be in good economic condition or cannot be measured based on the level of welfare of its people. Where the level of social welfare is related to the economic growth of a country (Herman, 2021, 2022; Iskanto, 2016, 2023; Iskanto & Juariyah, 2023; Saputri et al., 2021). If a country's economic growth increases, the welfare of society in terms of the economy also increases. Therefore, the higher the level of economic growth in a country, the higher the level of welfare of its people. The existence of economic growth is an indicator that measures the success of economic development that has been achieved by the economic sector in a certain period of time. Economic growth shows the extent to which economic activity can increase people's income in a certain period of time, because economic activity is a process of using production factors to produce output, so that later it will provide a remuneration for production factors owned by the community as owners of production factors Utami in (Putri, R. P., Heriberta, H., & Emilia, 2018). Economic growth indicates an increase in the potential of a country's GDP or output.

A country's economic growth can be calculated based on indicators of GDP development from year to year (Samuelson in (Putri, R. P., Heriberta, H., & Emilia, 2018). Based on existing theories it is explained that economic growth is influenced by many factors such as inflation, government spending, unemployment, poverty, labor and so on. The size of this influence will have an impact on the economic growth of a region. In this study, the authors only examine a number of factors that influence economic growth, namely inflation and government spending. The first factor affecting economic growth is inflation. Inflation is a condition where prices increase continuously. According to Aji and Mukri in (Kurniawan, Y. A., Mardani, R. M., & Priyono, 2021) inflation is a condition in which a price experiences a continuous increase over a long period of time, resulting in a decrease in the exchange rate of money in proportion to the increase in price. If the company faces increasing demand, the company will increase its production by providing higher salaries/wages to its workers, so that of course it will increase production costs, which in turn will also have an impact on increasing the price of these goods. Continuous inflation will have a negative impact on a country's economic growth.

In addition to inflation, government spending is also thought to have a significant influence on economic growth. Government spending is part of fiscal policy, namely a policy carried out by the government to regulate the

course of the economy by determining the amount of government revenue and spending each year which is reflected in the state expenditure revenue budget (APBN) for the national and regional expenditure revenue budget (APBD) for the regions. or regionally with the aim of stabilizing prices, output levels, employment opportunities, and encouraging economic growth (Putri, R. P., Heriberta, H., & Emilia, 2018) If government spending is high, the rate of economic growth will also increase. Economic growth is also very important in an area, because high economic growth can advance the area. Economic growth carried out in smaller areas such as that carried out in West Sumatra Province is able to provide results that support economic growth for the country. West Sumatra is a province in Indonesia which is located on the island of Sumatra with the capital city of Padang. West Sumatra has an area of 42,012.89 km² which is directly adjacent to four provinces namely North Sumatra, Riau, Jambi and Bengkulu. West Sumatra in 2020 has a population of 5,534,472 people. West Sumatra has quite large and diverse natural resource potential. These natural resources come from various fields such as agriculture, plantations, fisheries, tourism, small and medium industries, mining, services and trade. The potential of West Sumatra from these various fields has quite an impact on economic growth in West Sumatra. In addition, inflation can also be caused by increases in production costs, such as fuel hikes and wage increases, which cause production costs to rise, which will encourage producers to increase the price of goods sold. The demand for an item has increased, such as during Eid, Christmas and other holidays also drives inflation. So the price of goods has increased because of the large demand for these goods. If this goes on for a long time it can cause inflation. The lowest inflation occurred in 2015, which was 0.85%. This indicates that the economic situation of West Sumatra is starting to improve because the government is starting to succeed in controlling the inflation problem.

Data on government spending for West Sumatra Province in the table above has increased from year to year, occasionally decreasing. The lowest government spending occurred in 1993, namely Rp. 879,213,360. The decline in the level of government spending was the main cause of the economic slowdown. The highest government spending occurred in 2019, amounting to IDR 31,103,493,490. The realization of government spending in 2019 was higher than the previous year due to a reallocation of funds by the government to deal with the impact of the Covid-19 case. So that the realization of government expenditure funds is prioritized for the Covid-19 case in efforts to prevent and deal with people affected by Covid-19. Government policies in the infrastructure sector show that there have been many developments to increase economic growth and connectivity for both Micro, Small and Medium Enterprises (MSMEs) and the tourism sector. Some of the infrastructure built in West Sumatra Province is such as the Revitalization of Rumah Gadang (SRG) in South Solok Regency, the Development of a People's Market in Pariaman City and the Construction of the Padang-Sicincin Toll Road which is part of the Trans Sumatra toll road. These developments were carried out by the government with the aim of being able to add to the attractiveness of domestic and foreign tourists, especially it is also expected to improve the economy for the community. However, from several policies carried out by the government, there are still projects that have not been completed until now. So that the community has not been able to feel the benefits of this development. The construction of the Padang-Sicincin toll road is one of the government policies that has not been completed until now. In addition, other forms of infrastructure were damaged, such as many damaged roads and collapsed bridges. Access roads to tourist attractions still need to be renewed, such as repairing potholes and widening narrow road areas, making it easier for four-wheeled vehicles when there is a dispute, so that tourists will feel safe and not worry when having a dispute on a narrow road.

Data on economic growth in West Sumatra Province for the last 28 years has fluctuated, where the highest economic growth occurred in 1995, namely 8.93%. Economic growth has increased indicating that economic activity is starting to develop, more and more jobs and increasing people's income. However, in 1998 economic growth experienced a significant decline of -6.49%. This was accompanied by a monetary economic crisis, where at that time the rupiah exchange rate decreased against the United States (US) dollar, so that people's economic activities became hampered. Inflation and government spending are one of the factors that can affect the rate of economic growth. From the data above we can see that inflation has an impact on economic growth. Where at a time when inflation has increased quite high, it can affect the rate of economic growth. High inflation rates can reduce the rate of economic growth. So that when inflation occurs, people will find it difficult to make ends meet because the prices of goods, especially basic goods, have increased. Vice versa, when inflation decreases, economic growth increases. This shows that the price of basic goods is back to normal and stable. Then the realization of government spending has a significant relationship to economic growth. Where based on the theory when government spending has increased it can increase the rate of economic growth. But in this study the realization of government spending shows a negative relationship to economic growth. Where when government spending increases, it can reduce economic growth and vice versa when government spending decreases, economic growth increases. Based on the background description of the problem above, the research objective is to examine inflation and government spending on economic growth.

LITERATURE REVIEW

Economic growth

Economic growth is interpreted as a process of how to increase income without having to relate it to the volume of population growth, the rate of population growth in general is also often associated with economic development (Kurniawan, Y. A., Mardani, R. M., & Priyono, 2021). That is, economic growth Economic growth is able to reflect the condition of the people's welfare, if economic growth is high then the level of people's welfare is also high, and vice versa if economic growth is low then the level of people's welfare is also low.

Inflation

Inflation is conceptualized as a process of rising prices that prevail in an economy.(Sukirno, 2016). Then,inflation is also described as a process of general price increases that originate in the disruption of the balance between the flow of money and the flow of goods.(Samsudin, A., Nirawati, L., Rifqi, M. K., Fortuna, A. T., & Puspita, 2023). This phenomenon occurs an increase in the price of goods and services that occurs due to the imbalance of available goods and services with existing demand, so that the price of goods and services increases

Government Spending

The government has a policy to regulate the course of the economy by determining the amount of government revenue and expenditure each year as seen in the state budget (APBN) for the national and regional budget (APBD) for the region. ((Zahari, 2017). This means that government expenditures are routine expenditures or expenditures of regional apparatus and development expenditures or public service expenditures

Hypothesis

H1: The inflation variable is thought to have an effect on the economic growth variable in West Sumatra Province in 1993-2020

H2: The government spending variable is thought to have an effect on the economic growth variable in West Sumatra Province in 1993-2020

H3: Inflation and government expenditure variables are thought to have an effect on the economic growth variable in West Sumatra Province in 1993-2020

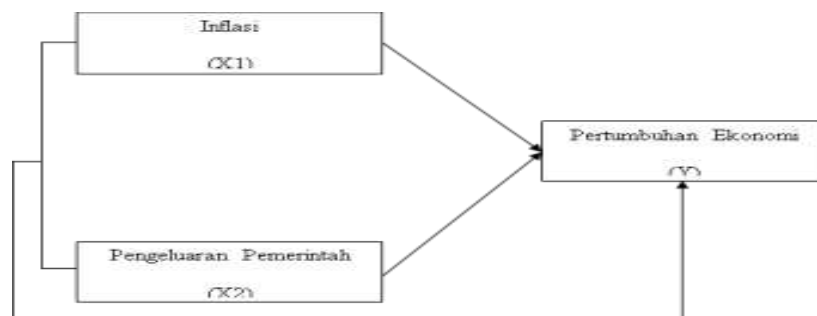


Figure 1. Research Framework

METHOD

The object studied in this study is the Province of West Sumatra by looking at data related to inflation and government spending as well as economic growth data. This type of research is quantitative research and the data used is secondary data with data collection methods, namely taking and collecting data through the West Sumatra Province Central Statistics Agency (BPS) website (West Sumatra Provincial Government Expenditure Data., 2022) and also using related book sources and journals as references in this research. The population is the entire research object, if someone wants to examine all the elements in the research area, then this is a population research (Arikunto, 2003). While the sample is part of the characteristics possessed by the population (Sugiyono, 2019). So the population and sample in this study totaled 28 years with *datatime series* or time series starting from 1993-2020. A good framework of thought will explain theoretically the relationship between the variables to be studied. The framework of thought is a conceptual model of how theory deals with various factors that have been defined as

important problems according to (Sugiyono, 2008).

RESULT AND DISCUSSION

Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the influence or relationship of the independent variables to the dependent variable linearly (Ghozali Imam, 2001). Based on the classical assumption test that has been done previously, it can be concluded that the data used in this study are normally distributed, and free from multicollinearity, heteroscedasticity, and autocorrelation problems so that they meet the requirements to perform multiple linear regression analysis. The multiple linear regression test in this study aims to determine the effect of the Inflation and Government Expenditure variables on Economic Growth in West Sumatra Province in 1993-2020. Following are the results of multiple linear regression analysis:

Table 1. Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.432	5.802		3.349	.003
	Inflation	-.145	.027	-.763	-5.427	.000
	Log_Government Spending	-1.892	.836	-.318	-2.263	.033

a. Dependent Variable: Pertumbuhan Ekonomi

Source: Results of Secondary Data Processing, 2022

Based on table 1 the results of the multiple linear regression analysis above obtained the coefficients for the independent variables $X_1 = -0.145$ and $X_2 = -1.892$ with a constant of 19.432 so that the regression equation can be made as follows: $Y = 19.432 - 0.145 X_1 - 1.892 X_2$ Based on the multiple linear regression equation above, it can be analyzed as follows: 1. A constant value (Y) is obtained for 19.432 ($\alpha = 19.432$), this means that if inflation and government spending have a constant value or equal to zero (0) then the magnitude economic growth value is 19.432. The regression coefficient X_1 for inflation is -0.145. This shows that the effect of inflation on economic growth is negative. So that for every 1 percent increase in inflation, economic growth will decrease by 14.5%, assuming the other independent variables are held constant. The regression coefficient X_2 of government spending is -1.892 percent. This shows that the effect of government spending on economic growth is negative. So that for every increase in government expenditure of 1 million rupiah, economic growth will decrease by 189.2%, assuming the other independent variables are held constant.

T test results

Based on table 1 above, the t test above can obtain the research results on partial hypothesis testing as follows: the results of the study of the inflation variable (X_1) show that the regression coefficient X_1 is -0.145 and a significance value of 0.000 is less than 0.05 ($0.000 < 0.05$). Thus it can be concluded that H_1 is accepted, meaning that the inflation variable (X_1) has a negative and significant influence on economic growth in West Sumatra Province in 1993-2020. Inflation data for the last 28 years has fluctuated, meaning that when inflation has increased, economic growth will have decreased, vice versa. The research results of the government expenditure variable (X_2) obtained a regression coefficient of X_2 -1.892 and a significance value of 0.033 less than 0.05 ($0.033 < 0.05$). So it can be concluded that H_2 is accepted, meaning that the government expenditure variable (X_2) has a negative and significant effect on economic growth in West Sumatra Province in 1993-2020. Government spending data for the last 28 years has increased from year to year but has occasionally decreased, meaning that when government spending increases will cause economic growth to decline, and vice versa.

F test results

The amount of data in this study is 28 and the number of variables is 3. The following results of the f test for this study can be seen in the following table

Table 2. West Sumatra Province F (Simultaneous) Test 2010-2020

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	130.481	2	65.240	15.008	.000 ^a
	Residual	108.677	25	4.347		
	Total	239.157	27			

a. Predictors: (Constant), Log_Pengeluaran Pemerintah, Inflasi

b. Dependent Variable: Pertumbuhan Ekonomi

Source: Results of Secondary Data Processing, 2022

Based on table 2 of the F test or simultaneous test above, it can be seen that the significance value for the regression model is 0.000 less than 0.05 ($0.000 < 0.05$), so it can be concluded that simultaneously or simultaneously the inflation and expenditure variables the government had a significant influence on economic growth in West Sumatra Province in 1993-2020. This is in accordance with the hypothesis which states that the variable. Inflation and government spending had an effect on economic growth in West Sumatra Province in 1993-2020, so H3 was accepted.

Determination Coefficient Analysis (*Adjusted R Square*)

Analysis of the coefficient of determination is used to determine how much the regression model is capable of explaining variations in the dependent variable. The results of testing the coefficient of determination show the percentage of the dependent variable that is explained by the independent variable. The greater the value of the coefficient of determination, the greater the portion of the influence of the independent variables on the dependent variable. The following table shows the results of the analysis of the coefficient of determination:

Table 3. Test of the Coefficient of Determination of West Sumatra Province

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.739 ^a	.546	.509	2.08496	1.148

a. Predictors: (Constant), Log_Pengeluaran Pemerintah, Inflasi

b. Dependent Variable: Pertumbuhan Ekonomi

Based on table 3 above, it can be seen that the value of the coefficient of determination or *Adjusted R-square* of 0.509 or equal to 50.9%. This means that 50.9% of the economic growth variable is influenced by inflation and government expenditure variables. While the remaining 49.1% is influenced by other variables not examined in this study.

DISCUSSION

The Influence of Inflation on Economic Growth

Based on the results of the research that has been done, it shows that inflation has a negative and significant effect on economic growth in West Sumatra Province in 1993-2020. This can be seen based on the results of the t test or partial test where the inflation regression coefficient is -0.145 with a significance value of 0.000 less than 0.05. The results of this study are in accordance with the hypothesis which states that there is an effect of inflation on economic growth in West Sumatra Province in 1993-2020. This means that if inflation increases, it will cause a decrease in economic growth, and vice versa when inflation decreases, economic growth will increase. Inflation is a factor that plays a large role in influencing economic growth. The higher the inflation rate that occurs, it can hamper the process of economic development and cause people's economic activities to be hampered, so that in the end it can reduce the rate of economic growth.

When inflation occurs, people have to spend more money to obtain or obtain the goods they want. And at that time there was also a sluggishness in the company so that it had an impact on decreasing the company's income and labor income. But on the other hand, inflation can be an incentive for companies, which is in accordance with the law of supply, namely when prices increase, supply will also increase. So the company will increase total production which indicates economic growth. However, this only occurs at low inflation rates. This research is in line with research from (Asnidar, 2018) with the research title The Influence of the Human Development Index (IPM) and Inflation on Economic Growth in East Aceh District, where the results obtained stated that inflation had a negative effect on economic growth. Apart from that, research from Erika Feronika Br Simanungkalit (2020) with the title Effects of Inflation on Economic Growth in Indonesia, where the results obtained also state that inflation

has a negative effect on economic growth.

The Influence of Government Expenditure on Economic Growth

Based on the results of the research that has been done, it shows that government spending has a negative and significant effect on economic growth in West Sumatra Province in 1993-2020. This can be seen based on the results of the t test where the regression coefficient value of government spending is -1.892 with a significance value of $0.033 < 0.05$. The results of this study are in accordance with the hypothesis which states that there is an effect of government spending on economic growth in West Sumatra Province in 1993-2020. This means that any increase in government spending will reduce economic growth in West Sumatra Province in 1993-2020, when government spending decreases, economic growth will decrease. In theory, it is known that the relationship between government spending and economic growth is very significant, where when government spending increases, economic growth will also increase and vice versa if government spending decreases, economic growth will also decrease. But in this study the relationship between government spending and economic growth is inversely proportional. So that the regional government must prioritize spending on the human resource development sector and poverty alleviation for the less fortunate, and therefore can increase economic growth in West Sumatra Province. This research is in line with research from (Fachrizal, F., Zamzami, Z., & Safri, 2021; Koyongian, C. L., Kindangen, P., & Kawung, 2019) with the title Analysis of the Influence of Government Expenditures, Investment and the Labor Force on North Sumatra's Economic Growth in 2001-2018, where the results of his research state that government spending has a negative effect on North Sumatra's economic growth.

The Influence of Inflation and Government Expenditure on Economic Growth

Based on the results of the tests that have been carried out, the results show that there is a simultaneous positive and significant effect of inflation and government spending on economic growth in West Sumatra Province in 1993-2020. This can be seen based on the results of the f test or simultaneous test where a significance value of 0.000 is less than 0.05. Inflation and government spending are one of the factors that can affect the rate of economic growth. From the data above we can see that inflation has a significant impact on economic growth. Where at a time when inflation has increased quite high, it can affect the rate of economic growth. Inflation and government spending together affect economic growth.

High inflation rates can reduce the rate of economic growth. So that when inflation occurs, people will find it difficult to make ends meet because the prices of goods, especially basic goods, have increased. Vice versa, when inflation decreases, economic growth increases. This shows that the price of basic goods is back to normal and stable. Then the realization of government spending has a significant relationship to economic growth. Where based on the theory when government spending has increased it can increase the rate of economic growth. But in this study the realization of government spending shows a negative relationship to economic growth. Where when government spending increases, it can reduce economic growth and vice versa when government spending decreases, economic growth increases. The results of this study are in line with research by (Putri, R. P., Heriberta, H., & Emilia, 2018) with the research title The Effects of Inflation, Foreign Direct Investment and Government Spending on Indonesia's Economic Growth. Where the results of his research obtained results which stated that simultaneously the variables of inflation, foreign direct investment and government spending had an effect and were significant on Indonesia's economic growth.

CONCLUSION

Based on the research and testing as well as discussion of the variables that have been carried out, it can be concluded that There was a negative and significant effect of inflation on economic growth in West Sumatra Province in 1993-2020, which was identified by increasing inflation as reducing economic growth. This shows the implementation of a comprehensive fiscal and monetary policy, so as to increase economic growth in the province of West Sumatra. There was a negative and significant effect of government expenditure on economic growth in the Province of West Sumatra in 1993-2020, which was identified by an increase in government expenditure which would result in a decrease in economic growth. This shows that the implementation of policies in the government expenditure sector has not been able to increase economic growth in the province of West Sumatra. There was a simultaneous positive and significant effect of inflation and government spending on economic growth in West Sumatra Province in 1993-2020. This shows that the implementation of policies in the field of inflation and the government spending sector is what the West Sumatra provincial government is trying to do stabilize inflation and government spending in order to create increased economic growth.

References

- Arikunto, S. (2003). *Menejemen Pengajaran*. Rineka Cipta.
- Asnidar, A. (2018). Influence of Human Development Index (HPI) and Inflation on Economic Growth in East Aceh District. *Journal Samudra Ekonomika*, 2(1), 1–12.

- Fachrizal, F., Zamzami, Z., & Safri, M. (2021). Analisis pengaruh jumlah tenaga kerja, tingkat pendidikan dan investasi terhadap pertumbuhan ekonomi melalui kesempatan kerja di Provinsi Jambi. (202),. *Paradigma*, 16(1), 167-190.
- Ghozali Imam. (2001). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Badan Penerbit Universitas Diponegoro.
- Herman, H. (2021). Impact of Inflation and City Minimum Wages on Human Development Index in Indonesia. *Husnayain Business Review*, 1(1), Article 1. <https://doi.org/10.54099/hbr.v1i1.5>
- Herman, H. (2022). Impact Of Percapita Expenditure And Inflation On Poverty In Pekanbaru City: (Before And After The Covid-19 Pandemic). *International Journal of Islamic Business and Management Review*, 2(1), Article 1. <https://doi.org/10.54099/ijibmr.v2i1.167>
- Iskamto, D. (2016). Industri Keuangan Bank Syariah Nasional Dalam Masyarakat Ekonomi ASEAN. *Jurnal Ekonomi dan Bisnis Islam (JEBI)*, 1(1), 16–27.
- Iskamto, D. (2023). Organizational Culture and Its Impact on Employee Performance. *International Journal of Management and Digital Business*, 2(1), Article 1. <https://doi.org/10.54099/ijmdb.v2i1.584>
- Iskamto, D., & Juariyah, L. (2023). Blockchain Technology Challenge in the Future: : Data Security and Efficiency. *International Journal of Law Policy and Governance*, 2(2), Article 2. <https://doi.org/10.54099/ijlpg.v2i2.708>
- Koyongian, C. L., Kindangen, P., & Kawung, G. M. (2019). Pengaruh Pengeluaran Pemerintah, Investasi, Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Di Kota Manado. ., *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 18(7).
- Kurniawan, Y. A., Mardani, R. M., & Priyono, A. A. (2021). Effect of Inflation And Unemployment Against Economic Growth in Bali Province. *Research Scientific Journal Management*, 10(10).
- Putri, R. P., Heriberta, H., & Emilia, E. (2018). The effect of inflation, foreign direct investment and government spending on Indonesia's economic growth. *Paradigm Journal Economic*, 13(2), 95–105.
- Samsudin, A., Nirawati, L., Rifqi, M. K., Fortuna, A. T., & Puspita, H. D. (2023). Pengaruh Inflasi dan Suku Bunga terhadap Perubahan Nilai Kurs Negara Asia Tenggara dengan Acuan Kurs Rupiah Tahun 2014-2021. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 4(6), 1469–1479.
- Saputri, D., Miswardi, & Nasfi, N. (2021). The Economic Impact of Murabahah Financing On PT. PNM Mekar Syariah In Increasing The Welfare Of Pre-Prospered Women. *ADPEBI International Journal of Business and Social Science*, 1(1), Article 1. <https://doi.org/10.54099/aijbs.v1i1.38>
- West Sumatra Provincial Government Expenditure Data., (2022).
- Sugiyono. (2008). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D* (Bandung:Alfabeta, 2008), hlm 6. 54. Alfabeta.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV. Alfabeta.
- Sukirno, S. (2016). *Makroekonomi Teori Pengantar*. Rajawali Pers.
- Zahari, M. (2017). Pengaruh pengeluaran pemerintah terhadap pertumbuhan ekonomi di Provinsi Jambi. *EKONOMIS: Journal of Economics and Business*, 1(1), 180–196.