

Analysis of the Effect of Government Expenditure, Government Revenue, Money Supply and Interest Rates on Indonesia's Economic Growth

Richwan Gunawan Simbolon¹, Bambang Agoes Hermanto^{2*}

Fakultas Ekonomi dan Bisnis, Universitas Bengkulu

Corresponding Author: Bambang Agoes Hermanto

bambang.hermanto@unib.ac.id

ARTICLE INFO

Keywords: Government Spending, Government Revenue, Money Supply, Interest Rate, and Economic Growth

Received : 18, October

Revised : 20, November

Accepted: 22, December

©2024 Simbolon, Hermanto: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

The objective of this study is to analyze the impact of government expenditure, government revenue, money supply, and interest rates on Indonesia's economic growth during the period 1990-2023. This research utilizes secondary data obtained from the Central Statistics Agency (BPS) and Bank Indonesia (BI). The analytical technique employed in this study is the Error Correction Model (ECM). The dependent variable in this research is economic growth, while the independent variables include government expenditure, government revenue, money supply, and interest rates. The findings reveal that the variables significantly affecting Indonesia's economic growth in the long and short term are government revenue, government expenditure, and interest rates. Therefore, it is crucial to adjust policies regulating government expenditure, interest rates, and government revenue to promote economic development.

INTRODUCTION

Economic growth is one of the most important indicators of a country's progress. Factors such as government spending, government revenue, money supply, and interest rates have a significant role in determining the direction and speed of economic growth. In regulating government spending and government revenue, the government conducts fiscal policy, while for regulating the money supply and interest rates the government conducts monetary policy. (Cazacu, 2015) in his research concluded that fiscal and monetary policy act as vital instruments in maintaining a country's macroeconomic stability. Both function as a buffer mechanism against various external and internal shocks that have the potential to disrupt economic balance.

Government spending, which includes investments in infrastructure, education, and healthcare, can stimulate economic activity by creating jobs and increasing productivity. Government revenue, which comes from taxes and other sources, also plays a crucial role in determining the government's ability to reinvest in the economy. The money supply, which is regulated by Bank Indonesia, can affect inflation and people's purchasing power. Interest rates, which determine the cost of borrowing, can influence investment and consumption decisions which in turn affect economic growth.

Indonesia, as the largest economy in Southeast Asia, has experienced various phases of economic growth from 1990 to 2023. This period includes pivotal times such as the Asian financial crisis in the late 1990s, post-crisis economic recovery, to facing the challenges of the global pandemic and recent economic dynamics.



Source: BPS Data Processed, 2024.

Figure 1. Indonesia's Economic Growth Rate 1990-2023

In the early 1990s, Indonesia enjoyed steady economic growth, driven by sectors such as mining and manufacturing. However, the Asian financial crisis in 1997-1998 dealt a heavy blow, causing a significant economic contraction. Nonetheless, with economic reforms and international support, Indonesia managed to recover and return to a growth path. Entering 2001, Indonesia continued to show economic resilience with consistent growth. Sectors such as services, construction, and agriculture became the main drivers of growth. Increased foreign and domestic investment, as well as supportive government policies, contributed to the economic expansion.

However, Indonesia's economic growth slowed down in 2020 by - 2.07, and in 2023 the annual economic growth rate was 5.05%, down from 5.31% in the previous year. The manufacturing sector is the largest contributor to GDP, accounting for 46.5% of total GDP. Mining and quarrying contributed 12%, construction 10%, and electricity, gas, and water supply 0.75%. The services sector makes up 38% of total GDP, with trade, hotels, and restaurants; transportation and communications; finance, real estate, and business services; and government services as the main sub-sectors. Agriculture, although only accounting for 15% of GDP, remains an important sector, especially in providing employment and as a source of income for the majority of Indonesia's population.

Factors such as government spending, government revenue, money supply, and interest rates play a role in determining the direction and pace of economic growth. Government revenue, otherwise known as state revenue, is all revenue derived from tax revenue, non-tax revenue (PNBP), and grant revenue from within and outside the country. This revenue is used to finance economic activities with the ultimate goal of people's welfare. In previous research conducted by (Rantebua et al., 2020) found that government revenue has a positive and significant effect on economic growth.

Government expenditure is the total cost incurred by the government for various public purposes and services. This includes spending on infrastructure, education, health, defense, and social services. Research conducted by (Anitasari & Soleh, 2021; Rambe & Febriani, 2020) found that government spending has a positive effect on economic growth while research conducted by (Andriyani & Nurmauliani, 2020) found that government spending has a positive effect on economic growth. (Andriyani & Nurmauliza, 2018) found that government spending has a negative effect on economic growth.

The money supply can be defined as the total amount of money in the hands of the public in an economy at a certain time. (Aristina et al., 2018; Pasaribu et al., 2023) who conducted research on the money supply, found that the money supply had a positive and significant effect on economic growth. In research conducted by (Sujidno & Febriani, 2023) found that the money supply has a negative effect on economic growth.

The BI Rate is the benchmark interest rate set by Bank Indonesia (BI). Simply put, it is the benchmark interest rate used by banks in Indonesia in carrying out their activities. Research conducted by (Anggraini & Sunoto, 2023) found that interest rates have a positive effect on economic growth, while research conducted by (Anggraini & Sunoto, 2023) found that interest rates have a positive effect on economic growth. (Aristina et al., 2018) found the opposite where interest rates have a negative impact on economic growth. This study aims to analyze the effect of government spending, government revenue, money supply and interest rates on Indonesia's economic growth. By understanding these dynamics, this research is expected to help policy makers in formulating effective strategies and policies to achieve sustainable economic growth. In addition, the results of this study are also expected to provide new insights for policy makers, academics, and economic practitioners to improve the welfare of the Indonesian people.

LITERATURE REVIEW

Economic Growth Theory

Neo-Keynesian theory is a further development of the economic theory originally proposed by John Maynard Keynes. It attempts to unify the views of Keynesian theory with some elements of classical theory. Economic growth can be defined as a continuous process in a country's economy that leads to an increase in the quality of life and welfare of its people within a certain period of time. (Sujidno & Febriani, 2023).. Economic growth is the basis for improving welfare, which is the real impact of the government's development policies implemented in various forms of policy (Rambe & Febriani, 2023). (Rambe & Febriani, 2020).. This process reflects positive changes in various aspects of the economy, such as increased production, income, and consumption.

Neo-Keynesian theory believes that the government has an important role in stabilizing the economy. The government can intervene through fiscal (government revenue and expenditure) and monetary (regulation of money supply) policies to address problems such as unemployment and inflation. Neo-Keynesian theory emphasizes the importance of aggregate demand in driving economic growth. An increase in aggregate demand can trigger an increase in production and employment. This theory also considers the role of people's expectations of future economic conditions. Positive expectations can encourage investment and consumption, while negative expectations can inhibit economic growth.

Theory of Government Revenue and Expenditure

Keynesian theory, developed in the 1930s, emphasizes the important role of aggregate demand in determining economic output and the level of employment. According to Keynes, instability in aggregate demand can lead to economic fluctuations and unemployment. Therefore, he emphasized that the government should use fiscal policy i.e. government spending and revenue to influence aggregate demand and stabilize the economy.

Keynes argued that in situations where the private sector is unable to sustain aggregate demand, the government should step in by increasing spending. This can include investments in infrastructure, education, and health services, which not only create jobs but also increase long-term productivity. Well-targeted government spending can stimulate economic growth by attracting private investment and increasing household consumption through multiplier effects. On the other hand, Keynes also highlighted the importance of government revenue, especially taxes, in regulating the economy. In periods of strong economic growth, the government may increase taxes to reduce inflation and prevent the economy from overheating. Conversely, in times of recession, tax cuts may increase household purchasing power and encourage consumption, which in turn may stimulate production and employment.

Theory of Money Supply and Interest Rates

Irving Fisher's theory, known as the quantity theory of money, is one of the fundamental concepts in monetary economics that is still relevant today. The theory, first proposed by American economist Irving Fisher, links the amount of money circulating in society to the general price level of goods and services, as well as interest rates. According to Fisher, there is a direct relationship between the money supply (M) and the price level (P), which is explained through the equation $MV = PT$. In this equation, M is the amount of money in circulation, V is the velocity of money turnover, P is the price level, and T is the volume of transactions on goods and services.

Fisher emphasized that an increase in the money supply can lead to inflation, which is a general increase in the price of goods. This happens because with more money in people's hands, the demand for goods and services increases, which in turn pushes up prices. Conversely, a decrease in the money supply can lead to deflation, or a decrease in the prices of goods. In addition, Fisher's theory also discusses the effect of interest rates on economic decisions, particularly investment. Low interest rates tend to encourage people to invest rather than save cash. In the long run, interest rates are influenced by factors such as productivity, economic growth, and consumer preferences.

METHODOLOGY

In this study, the author used time series data from 1990 to 2023. The data sources come from BPS Indonesia, World Bank, and Bank Indonesia (BI).

Operational Definition

1. Economic growth (Y) is the rate of change in economic activity from year to year, usually expressed as a percentage. It can be measured by comparing GRDP in the previous period with GRDP in the current year. Economic growth data can be obtained from the world bank.
2. Government revenue (X1) is all revenue received by the government from various sources to finance government activities and programs in a certain period. Government revenue data can be obtained from the APBD report.

3. Government expenditure (X2) is all funds spent by the government to finance programs, projects and public services in a certain period. Government expenditure data can be obtained from the APBD report.
4. Total Money in Circulation (X3) is the total amount of money circulating in the economy at any given time, including cash and deposits that can be used for transactions. The amount of money in circulation (JUB) used is the amount of money at large, namely M2. The amount of M2 includes cash, demand deposits, quasi-money and securities other than shares. Money supply data can be obtained from Bank Indonesia.
5. Interest rate bi rate (X4) is the benchmark interest rate set by Bank Indonesia as an instrument in monetary policy to control inflation and economic stability. Interest rate data can be obtained from Bank Indonesia.

The analysis was conducted using quantitative methods using the Error Correction Model (ECM) to identify the long and short-term effects of independent variables on the dependent variable. Data is analyzed using the Eviews12 program, with several data processing methods such as Stationary Test, Cointegration Test, and Error Correction Model (ECM). The following is the long-term Economic Growth estimation model in the form of equations used in this study:

$$PE = \beta_0 + \beta_1 GREV_t + \beta_2 GEXP_t + \beta_3 JUB_t + \beta_4 BIRATE_t + e$$

Description:

PE	: Economic growth (%)
GREV	: Government Revenue (Billion)
GEXP	: Government Expenditure (Billion)
JUB	: Money in circulation (billion)
BIRATE	: Interest Rate (%)
β	: Long Term Regression Coefficient

Meanwhile, the short-term estimation of economic growth using the ECM equation in the study is as follows:

$$\Delta PE = \beta_0 + \beta_1 \Delta GREV_t + \beta_2 \Delta GEXP_t + \beta_3 \Delta JUB_t + \beta_4 \Delta BIRATE_t + \beta_5 \Delta ECT_{t-1} + e$$

Description:

ΔPE	: Economic growth (%)
$\Delta GREV$: Government Revenue (Billion)
$\Delta GEXP$: Government Expenditure (Billion)
ΔJUB	: Money in circulation (billion)
$\Delta BIRATE$: Interest Rate (%)
β	: Short-Term Regression Coefficient
ECT	: Error Correction Terms
Δ (Delta)	: Difference

RESEARCH RESULT

Unit Root Test (Stationary Test)

A stationary test is a method in statistical analysis used to determine whether time series data has stationary properties, i.e. the mean, variance, and covariance are constant over time. Stationary data is important for trend analysis and accurate statistical modeling. There are several methods to conduct stationary tests, one of which is the Augmented Dickey-Fuller (ADF) test. The ADF test tests that the data has a unit root (not stationary). If the p value of the ADF test result is less than the specified significance level (usually 5%), then the data is considered stationary.

Table 1. Stationarity Test Results of 2st Level of Differentiation

Variables	ADF T-statistic	Critical value MacKinnon 5%	ADF Probability	Description
Economic Growth	-5.754663	-2.967767	0.0000	stationary
Government Revenue	-5.712798	-2.971853	0.0001	stationary
Government Expenditure	-9.689553	-2.960411	0.0000	stationary
Amount of Money on the Street	-8.089231	-2.960411	0.0000	stationary
Interest rate	-4.616453	-2.998064	0.0014	stationary

Source: Data Processed, 2024.

Based on the results of stationary testing, the amount in circulation has not been stationary at the level and first difference, with all p values > 0.05. Therefore, stationary testing is carried out at the second difference. The test results show that economic growth, government revenue, government expenditure, money supply and interest rates are stationary at the second difference, with all p values <0.05. Thus, the test can proceed to the cointegration test stage.

Cointegration Test

A cointegration test is a method in time series analysis used to determine whether two or more variables have a stable long-term relationship. The Johansen test is more complex and can test more than two variables at once. This test uses a vector autoregressive (VAR) model to determine the number of cointegrating vectors.

Table 2. Johansen Cointegration Test Results

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.739526	100.6275	69.81889	0.0000
At most 1 *	0.551687	57.57937	47.85613	0.0047
At most 2 *	0.485968	31.90696	29.79707	0.0282
At most 3	0.275828	10.61193	15.49471	0.2365
At most 4	0.008857	0.284673	3.841465	0.5937

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Data Processed, 2024.

In table 2, based on the results of the Johansen cointegration test, it is known that the probability value in the None, At most 1, At most 2 rows is <0.05, which means that there is a cointegration equation, which means that it has a long-term equilibrium.

Error Correction Models (ECM)

ECM is a mathematical model that takes into account the short-run and long-run relationships between interrelated variables. The model allows for correcting short-run imbalances in the relationship between variables by adding an error correction component. The main objective of ECM is to analyze and understand the relationship between dependent and independent variables in the short run as well as the long run.

Table 3. Regression Results of Long-Term Relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.25162	1.544659	7.931603	0.0000
GREV	9.95E-06	3.84E-06	2.591980	0.0148
GEXP	-1.55E-05	6.23E-06	-2.493341	0.0186
JUB	1.88E-06	1.64E-06	1.146545	0.2609
BIRATE	-0.492442	0.086571	-5.688302	0.0000
R-squared	0.583534	Mean dependent var		4.710000
Adjusted R-squared	0.526090	S.D. dependent var		3.663649
S.E. of regression	2.522096	Akaike info criterion		4.823110
Sum squared resid	184.4680	Schwarz criterion		5.047575
Log likelihood	-76.99287	Hannan-Quinn criter.		4.899659
F-statistic	10.15839	Durbin-Watson stat		1.001475
Prob(F-statistic)	0.000029			

Source: Data Processed, 2024.

Based on the long-term regression results in table 3, it is known that the variables that significantly (prob <0.05) affect economic growth in Indonesia in the range of 1990-2023 are the variables of government revenue, government expenditure and interest rates. In table 3 it can also be seen that the prob F-stat is 0.000029 which means that simultaneously the independent variables can affect economic growth in Indonesia in the long term. In addition, the R-Square value in the long-term regression is 0.583, which means that 58.3 percent of the dependent variables in this study can explain the economic growth variable, while 51.7 percent is explained by variables not in this study.

Table 4. Regression Results of Short-Term Relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.407982	0.553935	-0.736517	0.4678
D(GREV)	1.35E-05	2.75E-06	4.892042	0.0000
D(GEXP)	-1.59E-05	5.34E-06	-2.974217	0.0061
D(BIRATE)	-0.498880	0.059470	-8.388766	0.0000
D(JUB)	1.73E-06	1.78E-06	0.972694	0.3393
ECT(-1)	-0.579771	0.157328	-3.685113	0.0010
R-squared	0.828427	Mean dependent var		-0.065758
Adjusted R-squared	0.796654	S.D. dependent var		4.456038
S.E. of regression	2.009402	Akaike info criterion		4.396517
Sum squared resid	109.0178	Schwarz criterion		4.668610
Log likelihood	-66.54254	Hannan-Quinn criter.		4.488068
F-statistic	26.07342	Durbin-Watson stat		1.816060
Prob(F-statistic)	0.000000			

Source: Data Processed, 2024.

Based on the regression results obtained, the ECT coefficient has a value of -0.579771. In terms of significance, the Prob. ECT value of 0.0010 indicates that this variable is significant at the $\alpha=5\%$ significance level. This indicates that the ECM model used in this study is valid and appropriate.

From the short-term regression results in Table 4, the variables that significantly (prob < 0.05) affect economic growth in Indonesia in the period 1990 - 2023 are government revenue, government expenditure and interest rates, with each probability value < 0.05. In addition, the prob F-stat value of 0.0000 indicates that simultaneously, the variables of government revenue, government expenditure and interest rates affect economic growth in the long run. The R-Square value of 0.828 indicates that 82.8 percent of the variability in economic growth can be explained by these variables, while 17.2 percent is explained by other variables not included in this study.

DISCUSSION

Sustainable economic growth is a key objective for every country. To achieve this, effective coordination between fiscal and monetary policies is crucial. Fiscal policy, which deals with government spending and government revenue, and monetary policy, which regulates the money supply and interest rate, should support each other to create a stable economic environment conducive to growth. This coordination can be done through various means, such as adjustments to the timing and scale of interventions, clear and consistent communication between policymakers, as well as an in-depth understanding of current economic dynamics. The government should ensure that its fiscal policy supports the monetary policy pursued by the central bank, and vice versa. This will create a conducive environment for economic growth that is not only rapid but also stable and inclusive. Thus, this policy coordination will not only help in coping with short-term fluctuations but also in achieving long-term economic progress.

The results showed that government revenue in the long and short term had a positive and significant effect on economic growth in Indonesia. This means that when Indonesia's government revenue increases, economic growth in Indonesia will grow. The results of this study are in accordance with Keynes' theory and previous research conducted by (Rantebua et al., 2020). This is because an increase in government revenue can reflect increased economic activity and efficiency in tax collection, which in turn can increase the government's ability to invest in infrastructure and public services. These investments are important to create a conducive environment for economic growth, such as improving roads and transportation, providing quality education, and ensuring public health. In addition, higher government revenue also provides greater fiscal space for the government to implement policies that can stimulate economic growth, such as subsidies for certain sectors or incentives for foreign and domestic investment.

Government spending in the short and long term has a negative and significant effect on economic growth in Indonesia. This indicates that if government spending increases, economic growth in Indonesia will decrease. Government spending has a negative effect on economic growth in Indonesia because there has been inefficiency in Indonesian government spending. Where this is in line with research (Sujidno & Febriani, 2023). According to Keynesian theory, government spending aimed at public investment such as infrastructure, education, and health can stimulate economic growth. This is because these investments can increase the productive capacity of the economy and improve the quality of human resources. However, if government spending is inefficient or corrupt, it can have negative effects, such as an increase in public debt without a significant increase in economic output. Over the period 1990-2023, Indonesia experienced several moments when government spending did not deliver the expected results. For example, during the Asian financial crisis in the late 1990s, large government spending to bail out the banking sector did not immediately result in economic recovery.

Instead, it added to the country's debt burden and slowed economic growth as the funds did not go directly to productive sectors. In 2020, the COVID-19 pandemic caused a drastic drop in Indonesia's economic growth to minus 2.07 percent. The government responded by increasing spending, especially on social protection and ministry/agency spending. While the intention was to stimulate the economy, the long-term impact of this spending remains to be evaluated, especially given the potential increase in public debt and the effectiveness of such spending in creating sustainable economic growth.

Interest rates have a negative and significant effect on economic growth in Indonesia both in the short term and in the long term. This means that when interest rates increase, economic growth in Indonesia will decline. The results of this study are in accordance with previous research (Aristina et al., 2018). An increase in interest rates can hinder economic growth because it increases the cost of capital, reduces aggregate demand, and can cause a negative economic cycle. As mentioned, high interest rates will increase the cost of capital for companies so that companies will tend to reduce investment. Low investment will hinder the expansion of production capacity, technology development, and the creation of new jobs. In addition, the increase in interest rates causes people to prefer to save rather than consume, which can reduce demand for goods and services. This will cause production to slow down and ultimately hinder economic growth.

Money supply does not significantly affect the economy in Indonesia. This is in line with previous research (Sujidno & Febriani, 2023). Although Irving Fisher's theory states that an increase in the money supply will encourage economic growth, in the 1990-2023 time span the money supply does not seem to have a significant effect on Indonesia's economic growth. According to David Hume's theory of money neutrality, the money supply in an economy only affects nominal economic variables such as exchange rates, wages, and prices of goods and services. Changes in money supply do not affect real economic variables, such as consumption, employment, and real gross domestic product (GDP). This can be attributed to several factors. First, macroeconomic stability is maintained. Bank Indonesia as the central bank has implemented prudent monetary policy to maintain exchange rate stability and inflation. This stability is important to create a conducive investment climate and boost economic growth. In December 2023, economic liquidity or broad money (M2) grew by 3.5% (yoy), but this did not automatically drive higher economic growth. Second, Indonesia's diverse economic structure. Indonesia has an economy dominated by the agriculture, mining and services sectors. Fluctuations in the money supply may not have an immediate impact on these sectors, especially if the changes are not followed by increased productivity or innovation.

CONCLUSIONS AND RECOMMENDATIONS

This study has found that government revenue, government expenditure, and interest rates are significant factors affecting Indonesia's economic growth, both in the short and long term. Government revenue, which reflects the country's fiscal capacity, government expenditure, which shows the allocation of state resources, and interest rates, which affect investment and consumption, all play an important role in determining the direction and speed of economic growth.

ADVANCED RESEARCH

The government should improve the coordination between policies on government revenue, government spending, and interest rates as this is crucial to create conditions that support sustainable economic growth. Further research is needed to understand in depth how the interaction between these variables specifically affect economic growth in Indonesia. This will help in formulating more targeted and effective policies.

ACKNOWLEDGMENT

I would like to express my sincerest gratitude to my supervisor, Dr. Bambang Agoes Hermanto, for his invaluable guidance and support throughout the completion of this thesis. I am also grateful to Bengkulu University for providing me with a supportive academic environment.

REFERENCES

- Adegboyo, O. S., Keji, S. A., & Fasina, O. T. (2021). The impact of government policies on Nigeria economic growth (case of fiscal, monetary and trade policies). *Future Business Journal*, 7(1), 1-14.
- Agustina, F., Khairunnissa, A., Pratama, A. F., & Febriani, R. E. (2024). Analysis Of Government Expenditure On Gross Regional Domestic Product In Eastern Kalimantan. *Journal of Research in Social Science and Humanities*, 4(1), 122-126. <https://doi.org/10.47679/jrss.v4i1.102>
- Aisyah, S., Suarmanayasa, I. N., Efendi, Widiastuti, B. R., & Harsono, I. (2024). The Impact Of Fiscal Policy On Economic Growth: A Case Study Of Indonesia. *Management Studies and Entrepreneurship Journal (MSEJ)*, 5(2), 3773-3782.
- Anggraini, D. J., & Sunoto, S. (2023). The Influence Of The Proportion Of Electronic Money, Money Supply, Exchange Rate And Bi Rate On Economic Growth In Indonesia In 2010-2020. *Journal of Economics*, 12(4), 976-983.
- Ani, S. (2023). Analysis of Determinants of Human Development Index in Bengkulu Province. *Economics & Business*, 22(1), 83-92. <https://doi.org/10.32722/eb.v22i1.5795>
- Anitasari, M., & Soleh, A. (2021). The Effect Of Government Spending On Economic Growth In The Province Of Bengkulu. *Ekombis Review*, 117-127.
- Aristina, K., Juliprijanto, W., Panji, & Prasetyanto, P. K. (2018). Analysis of Monetary Policy and Fiscal Policy on Economic Growth in Indonesia in 2005-2018. *Journal of Economic Directory*, 1(1), 403-414.

- Awogbemi, D. T. O. (2022). The impact of monetary policy on Nigeria's economic growth. *Innovations*, 70, 1076-1084. <https://doi.org/10.54666/2334-000-001-016>
- Cazacu, A.-M. (2015). Fiscal-Monetary Policy Interaction. SVAR Evidence From a CEE Country. *European Scientific Journal*, April (Special Edition), 1857-7881.
- Dekle, R., & Pradhan, M. (1997). Financial Liberalization and Money Demand in ASEAN Countries: Implications for Monetary Policy.
- Mauliza, N., & Andriyani, D. (2018). The Effect of Unemployment Rate and Government Expenditure on Economic Growth in North Aceh Regency in 2007-2016. *Journal of Regional Economics Unimal*, 1(1), 8. <https://doi.org/10.29103/jeru.v1i1.981>
- Mehar, M. A. (2023). Role of monetary policy in economic growth and development: from theory to empirical evidence. *Asian Journal of Economics and Banking*, 7(1), 99-120. <https://doi.org/10.1108/ajeb-12-2021-0148>
- Nurlina, & Zurjani. (2020). The Impact of Fiscal and Monetary Policy in the Indonesian Economy. *Quantitative Economics Journal*, 2(3), 126-136. <https://doi.org/10.24114/qej.v2i3.17434>
- Olakojo, S. A., Onanuga, A. T., & Onanuga, O. T. (2021). Cyclical fluctuations of economic growth and monetary policy in Nigeria: does fiscal policy also matter? *Journal of Contemporary African Studies*, 39(1), 34-55.
- Pasaribu, E., & Septriani, S. (2021). Testing Wagner's Law Versus Keynesian Hypothesis: An Indonesian Regional Approach. *Convergence: The Journal of Economic Development*, 2(2), 181-193. <https://doi.org/10.33369/convergence-jep.v2i2.14174>
- Pasaribu, E., Ekaputri, R. A., & Yefriza, Y. (2023). Effectiveness of Monetary Policy in Indonesia. *Integrated Journal of Business and Economics*, 7(2), 445. <https://doi.org/10.33019/ijbe.v7i2.645>
- Pasaribu, E., Febriani, R. E., & Septriani. (2020). The Effectiveness of Indonesia's Monetary Policy Transmission of the Exchange Rate Path during the Covid-19 Pandemic. *Pareto*, 3(3(2)), 35-50.
- Rambe, R. A., & Febriani, R. E. (2020). The Role of Government Expenditure and Taxes on Economic Growth of Regencies and Cities in Sumatra. *PARETO: Journal of Economics and Public Policy*, 3(1), 57-76.
- Rantebua, S., Rosnawintang, R., & Suriadi, L. O. (2020). Analysis of the Effect of Fiscal Policy on Indonesia's Economic Growth. *Journal of Economic Development Progress (JPEP)*, 5(1), 1-11. <https://doi.org/10.33772/jpep.v5i1.11671>
- Sari, T., & Wibowo, M. G. (2023). The Effect of Economic Growth, Inflation and Interest Rates on the Resilience of Islamic Banks in Indonesia Through the Npf and Roa Tests during the Covid 19 Pandemic. *JSEF: Journal of Sharia Economics and Finance*, 2(1), 1-11. <https://doi.org/10.31943/jsef.v2i1.26>
- Setiawan, H. (2018). Analysis of the Impact of Fiscal and Monetary Policy on Macroeconomic Performance in Indonesia with Structural Vector Autoregression (Svar) Model. *Journal of Applied Economics*, 3(2), 95-109. <https://doi.org/10.20473/jiet.v3i2.9169>

- Siswajanthy, F., Aliyah Shiva, K., Salsabila, N., Afifany Susanta Putri, S., Maharani Iskandar Putri, S., Legal Studies, P., & Pakuan Bogor, U. (2024). Analysis of the Impact of Fiscal Policy on Economic Growth: A Case Study of Indonesia. *Analysis of the Impact of Fiscal Policy on Economic Growth: A Case Study of Indonesia*, 8, 5-8.
- Sujidno, R., & Febriani, R. E. (2023). The Effect of Corruption, Government Expenditure and Money Supply (M2) on Economic Growth in ASEAN. *Journal of Social Economics and Humanities*, 9(2), 205-220. <https://doi.org/10.29303/jseh.v9i2.202>
- Tendengu, S., Kapingura, F. M., & Tsegaye, A. (2022). Fiscal Policy and Economic Growth in South Africa. *Economies*, 10(9).
- Winarto, H., Poernomo, A., & Prabawa, A. (2021). Analysis of the Impact of Monetary Policy on Economic Growth in Indonesia. *J-MAS (Journal of Management and Science)*, 6(1), 34. <https://doi.org/10.33087/jmas.v6i1.216>