



The impact of fiscal spending and financing by Sharia banks on economic growth in Indonesia

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ABSTRACT

Economic activity can be increased by tax, fiscal spending stimulus and financing by Sharia banks. This study aims to analyze the roles of tax, fiscal spending and financing by sharia banks in driving Indonesia's economic growth. Tax, Fiscal Spending, Financing and Economic Growth are the variables used in this study. The data used is secondary data for the 2014-2023 period. This study uses the Error Correction Model (ECM) method. The results show that Tax and Fiscal Spending influence Economic Growth. On the other hand, the Financing of the banking sector does not influence Economic Growth.

Aktivitas ekonomi dapat ditingkatkan melalui pajak, stimulus belanja fiskal, dan pembiayaan oleh bank syariah. Studi ini bertujuan untuk menganalisis peran pajak, pengeluaran fiskal, dan pembiayaan oleh bank syariah dalam mendorong pertumbuhan ekonomi Indonesia. Pajak, pengeluaran fiskal, pembiayaan, dan pertumbuhan ekonomi adalah variabel yang digunakan dalam studi ini. Data yang digunakan adalah data sekunder untuk periode 2014-2023. Studi ini menggunakan metode Error Correction Model (ECM). Hasilnya menunjukkan bahwa pajak dan pengeluaran fiskal mempengaruhi pertumbuhan ekonomi. Di sisi lain, pembiayaan sektor perbankan tidak mempengaruhi pertumbuhan ekonomi.

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1. Introduction

Economic growth is the development of economic activity in a society that increases the production of goods and services, ultimately increasing the prosperity and welfare of the society (Mankiw, 2009b; Sasana, 2019). Economic growth as an increase in the value of Gross Domestic Product or Gross National Product without considering whether the growth is higher or lower than

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population growth or whether there is a change in the economic structure. According to Mankiw, economic growth is one variable that measures a country's progress. A country with a stable economy can be considered advanced; conversely, a slumping economy cannot be considered advanced (Mankiw, 2009).

Economic growth in Indonesia has fluctuated throughout its development and was even negative in 2020 due to the COVID-19 pandemic, which resulted in restrictions on movement, business closures, reduced production, and decreased public consumption (Kumar et al., 2020; Pinzaru et al., 2020). Restrictions on movement affect consumer behavior, which prioritizes buying necessities and reduces purchases of non-essential goods and services, which causes demand for goods and services to decrease. Many factors influence the rate of economic growth in Indonesia, one of which is government policy (Solihin et al., 2021; Hanipah et al., 2023). The government should be able to formulate appropriate policies to increase the rate of economic growth and anticipate challenges that will be faced in the future (Sima et al., 2023; Solihin et al., 2021; Hanipah et al., 2023; Surjaningsih et al., 2012).

Keynesian theory states that when the government increases its spending, it can contribute positively to increased economic production, thus leading to higher economic growth. In this case, fiscal policy regulates government spending. (Arawatari et al., 2023; Nguyen et al., 2022). On the other hand, government tax collection can have a negative effect. Excessively high taxes can reduce people's purchasing power and hinder consumption, which in turn lowers aggregate demand in the economy. This can slow down economic growth because people have less money to spend. (Fang, 2024; Nguyen, H. T. et al., 2022). This indicates that fiscal policy can contribute positively or negatively to the economy, depending on the policy tools applied (Erős, 2010). This aligns with the Solow-Swan theory, which states that government spending can contribute to economic growth (Aniket, 2018).

The banking sector also plays a vital role in influencing economic growth. The banking system is a foundation for economic development through financing policies channeling to the economic sector (Banu, 2013; Ho et al., 2022). Through the financing policies provided, the banking system has characteristics like government spending, especially its ability to increase demand, thereby stimulating national income or output (Anggraini, 2019).

Previous research has examined the separate effects of taxes, fiscal spending, and bank financing on economic growth. This study expands the literature by providing a comprehensive analysis of how taxes, government fiscal spending, and bank financing interact to drive growth in the specific context of Indonesia. In addition, with a focus on post-pandemic economic recovery, this research provides timely insights into how these factors can be leveraged to sustain and accelerate economic growth in developing countries. This study makes a unique contribution to the field by addressing the gaps in the literature on how taxes, fiscal expenditures, and bank financing collectively influence economic growth. Based on this, the research aims to determine the impact of taxes, fiscal policies, and bank financing in driving economic growth.

2. Research Method

Data

This study uses the quantitative approach and causal relationship, where the relationship between each variable is causal, as evidenced by independent variables as variables that influence and dependent variables as variables that are influenced. The independent variables in this study are Tax (X1), Fiscal Spending (X2), and Financing by Sharia Bank (X3), while the dependent variable is Gross Domestic Product (Y). Taxes in this study can be measured by the total state revenue obtained

from various types of taxes, such as income tax (PPH), value-added tax (PPN), luxury goods tax, and other taxes. Fiscal spending refers to government spending used to influence the economy through fiscal policy. Financing by sharia Bank is measured by the total financing disbursed by Sharia banking to economic sectors. GDP measures the total value of goods and services produced by a country over a specific period. The research period is from 2014 to 2023, with data sources from the Financial Services Authority (OJK), the Indonesian Ministry of Finance (Kemenkeu RI), and Statistics Indonesia (BPS).

Data Analysis

This study uses the Error Correction Model (ECM) method, a framework used to evaluate the long-term and short-term impacts of each independent variable on the dependent variable. ECM aims to correct short-term imbalances to achieve long-term balance and can also explain the relationship between the dependent variable and the independent variable at present and in the past. Simply put, ECM is a time series data analysis method applied to variables with dependencies, often called cointegration.

Long-Run Equation

$$Y = \beta_0 + \beta_1(X1) + \beta_2(X2) + \beta_3(X3) + \epsilon$$

Short-Run Equation

$$D(Y) = \beta_0 + \beta_1D(X1) + \beta_2D(X2) + \beta_3D(X3) + ECT(-1)$$

Information:

- Y = Gross Domestic Product (GDP)
- β_0 = Constant
- $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Coefficients of each variable
- $D(X_{1,2,3})$ = Change in the independent variable from period $t - 1$ to t
- X1 = Tax
- X2 = Fiscal Spending
- X3 = Financing
- ECT = Error Correction Term

Several assumptions must be met in determining the linear regression model through the ECM approach: the stationarity test, the Degree of Integration Test, the Cointegration Test, and the Classical Assumptions.

3. Result and Discussion

Stationarity Test

The stationarity test determines whether the dependent and independent variables used are stationary. In this study, this test uses the Augmented Dickey-Fuller (ADF) method with an alpha value of 5%. Data is called stationary if the ADF T-statistic value is smaller than the MacKinnon critical value or if the ADF T-statistic value is smaller than the alpha value ($\alpha = 0.05$). The following table shows the results of the stationarity test.

Table 1. The Results of the Data Stationarity Test

Variable	Level		First Difference		Second Difference	
	Prob.	Information	Prob.	Information	Prob.	Information

Tax	0.0425	Stationary	0.0000	Stationary	0.0000	Stationary
Fiscal Spending	0.0164	Stationary	0.0000	Stationary	0.0000	Stationary
Financing	1.0000	Non-stationary	0.1737	Non-stationary	0.0000	Stationary
GDP	0.8885	Non-stationary	0.0000	Stationary	0.0000	Stationary

Tax and Fiscal Spending variables are stationary at the level. Financing and GDP variables show probability values of 1.000 and 0.8885, respectively, which are greater than the Alpha value of 0.05, so both variables are not stationary. On the other hand, at the first difference level, only the Financing variable is not stationary. Testing with the second difference shows that all variables are stationary.

Cointegration Test

This study requires a cointegration test to determine whether a long-term equilibrium relationship exists between dependent and independent variables. The method used is the Residual Based Test, carried out with the ADF statistical test, which makes observations on the residual cointegration of stationary data at the level. A cointegration regression equation is first needed using Ordinary Least Squares (OLS) to determine the ADF value.

Table 2. Estimation Results of Cointegration Regression OLS

Independent Variable	Coefficient	Std. Error	t-statistic	Prob.	Adjusted R ²
C	1958.655	33.38869	58.66223	0.0000	0.921491
Tax	0.268156	0.081247	3.300496	0.0022	
Fiscal Spending	-0.121005	0.050091	-2.415688	0.0209	
Financing	0.037562	0.002668	14.07785	0.0000	

The residual value will be obtained from the regression equation in Table 2. Then, this residual value will be tested using the ADF test to determine whether the residual value is stationary. The results of the ADF test can be seen in Table 3 below:

Table 3. Cointegration Test Results

Variable	Prob.	Information
ADF	0.0373	Cointegration

The ADF probability value is $0.0373 < \alpha$ value of 0.05, so it has been stationary at the level. The results of the cointegration test state that there is a long-term equilibrium (cointegration) in GDP, but it is not yet possible to see what variables play a role in the dynamic short-run adjustment toward long-term equilibrium. Therefore, ECM is used to see the short-term behavior of the model that affects GDP by estimating the Error Correction Term (ECT) dynamics. In short-term estimation forecasting, the coefficient of the ECT variable needs to be considered. The ECT coefficient (-1) must be negative and significant; otherwise, the short-term equation cannot be used.

Long-Term Estimation

This long-term estimation test uses the Ordinary Least Square (OLS) method to determine the relationship between dependent and independent variables over the long term.

Table 4. Classical Assumption Test of Long-Term Model

Classical Assumption	Tax	Fiscal Spending	Financing	Information
Multicollinearity	6.398984	5.629080	1.812351	No multicollinearity
Normality	0.617584			Normally distributed
Heteroscedasticity	0.0761			No heteroscedasticity
Autocorrelation	0.0585			No autocorrelation

The classical assumption test meets the requirements of the Best Linear Unbiased Estimator (BLUE) and does not deviate from the classical assumption. It is carried out through the multicollinearity, normality, heteroscedasticity, and autocorrelation tests.

Table 5. Long-Term Estimation Results

Independent Variable	Coefficient	Std. Error	t-statistic	Prob.	Adjusted R ²
C	928.7817	181.3177	5.122401	0.0000	0.957518
Tax	158.7306	34.35225	4.620676	0.0000	
Fiscal Spending	-0.086047	0.027153	-3.168930	0.0031	
Financing	2.281013	0.122827	18.57097	0.0000	

The constant value of the Tax variable (X1) is 158.7306, and the probability is 0.0000, which means that tax has a positive and significant impact on driving economic growth in the long term. This means that for every one-unit increase in the Tax variable, the GDP variable will increase by 158.7306, assuming that other independent variables are considered constant.

The constant value of the Fiscal Spending variable (X2) is -0.086047, and the probability is 0.0031, which means that there is a negative and significant impact on driving economic growth in the long term. This means that for every one-unit increase in the Fiscal Spending variable, the GDP variable will decrease by 0.086047, assuming that other independent variables are considered constant.

The constant value of Financing variable (X3) is 2.281013, and the probability is 0.0000, meaning that there is a positive and significant influence on the value of GDP in the long term. This means that for every one-unit increase in the financing variable, the GDP variable will increase by 2.281013, assuming other independent variables are held constant. The R-square value of 0.957518 or 95.7518% indicates that the long-term GDP value is influenced by 95.7518% by the independent variables (taxes, fiscal spending, and financing) contained in this study, and as much as 4.2482% is influenced by other variables outside the study.

ECM Estimation Results

The Error Correction Model (ECM) analysis tool determines the factors (tax, fiscal spending, and financing) influencing the GDP value of 2014–2023. The following is a table of the results of the ECM model estimation:

Table 6. ECM Estimation Results

Variable	Coefficient	t-Statistic	Prob.
C	13.75953	1.012292	0.3185
D(Tax)	95.55418	4.369280	0.0001
D(Fiscal Spending)	-0.049453	-2.952310	0.0057
D(Financing)	1.299136	1.105166	0.2768
(ECT (-1))	-0.536375	-3.896788	0.0004
R-squared	0.499764	F-statistic	8.491973
Adjusted R-squared	0.440912	Prob (F-statistic)	0.000073

The constant value of the Tax variable (X1) is 95.55418, and the probability is 0.0001, which means there is a positive and significant influence of the tax role in driving short-term economic growth. This means that for every one-unit increase in the Tax variable, the GDP variable will increase by 98.66068, assuming that other independent variables are considered constant.

The constant value of the Fiscal Spending variable (X2) is -0.049453, and the probability is 0.0057, meaning that there is a negative and significant influence of the fiscal spending in driving short-term economic growth. This means that for every one-unit increase in the Fiscal Spending variable, the GDP variable will decrease by -0.049453, assuming that other independent variables are considered constant.

The constant value of the Financing variable (X3) is 1.299136, and the probability is 0.2768, meaning that there is a positive and insignificant influence on the role of banking in driving economic growth in the short term. This means that for every one-unit increase in the Financing variable, the GDP variable will increase by 1.299136, assuming that other independent variables are considered constant.

Based on the short-term equation, The ECM method produces ECT coefficients that measure the dependent variable of each period deviating from equilibrium. The ECT imbalance correction coefficient as an absolute value explains how quickly it takes to get the equilibrium value. The ECT coefficient value of 0.536375 means that the difference between GDP and its equilibrium value is 0.536375, which will be adjusted within one period. This ECM model is valid if the ECT sign is negative and statistically significant.

The Adjusted R-square value of 0.440912 or 44.0912% shows that the short-term GDP value is influenced by 44.0912% by the independent variables (taxes, government expenditure, and financing) in this study, and as much as 55.9088% is influenced by other variables outside the study.

Table 7. Classical Assumption Test of ECM Model

Classical Assumption	Tax	Fiscal Spending	Financing	ECT (-1)	Information
Multicollinearity	5.382095	5.241275	1.050234	1.164159	No multicollinearity
Normality	0.256484				Normally distributed
Heteroscedasticity	0.4085				No heteroscedasticity
Autocorrelation	0.4771				No autocorrelation

Discussion

In Indonesia, taxes play an important role in boosting a country's economy through infrastructure development, providing public services, and maintaining economic stability. Through fiscal policy, the government can use taxes to regulate the economy. Two tax policies can be implemented: contractionary and expansionary. The contractionary tax policy is designed to reduce aggregate economic demand by increasing taxes and reducing government spending to suppress excessive economic growth. Meanwhile, the expansionary tax policy stimulates economic growth by lowering taxes and increasing government spending (Adudu et al., 2015).

This aligns with the findings of this study, which state that tax values have a significant positive effect on the role of banking in driving economic growth both in the long and short term. This supports the Keynesian Aggregate Output theory that changes in taxes, both increases and decreases, will affect disposable income, which will impact consumption levels and GDP growth. In other words, tax policy changes can be one factor that influences aggregate demand and economic output.

Keynesian Aggregate Output Theory states that tax is one element that forms Gross Domestic Product (GDP) (Keynes, 1936). In Indonesia, tax is the largest source of state revenue paid by citizens or business entities to the government based on the law without receiving direct compensation. Taxes will be used to finance various state needs. According to Keynesian theory, a tax change, either an increase or a decrease, will affect disposable income (Keynes, 1936). If an expansionary tax policy is implemented, disposable income will increase. This will affect the increase in the level of consumption of per capita income, which will provide a multiplier effect on the economy.

This is in line with the findings of this study, which states that tax values have a significant positive effect on the role of banking in driving economic growth in both the long and short term. This supports the Keynesian Aggregate Output theory that changes in taxes, both increases and decreases, will affect disposable income, which will impact consumption levels and GDP growth. In other words, tax policy changes can be one factor affecting aggregate demand and economic output.

Keynesian Aggregate Output Theory states that tax is one element that forms Gross Domestic Product (GDP) (Keynes, 1936a; Mankiw, 2009b). In Indonesia, tax is the largest source of state revenue paid by citizens or business entities to the government based on the law without receiving direct compensation. Taxes will be used to finance various state needs. According to Keynes' theory, a change, either an increase or decrease in taxes, will affect disposable income (Keynes, 1936). If an expansionary tax policy is implemented, disposable income will increase. This will affect the increase in the level of consumption over per capita income, which will provide a multiplier effect on the economy. The study found that fiscal spending in both the long and short term significantly negatively affects GDP. Research conducted by (Huwaida et al., 2023) also showed the same results.

Sharia banks are essential in increasing economic growth and stimulating real sector growth (Abduh et al., 2012b; Ledhem et al., 2020b; Ledhem et al., 2022b). A country's economic performance will be positively correlated with Sharia banks' positive performance. Sharia banking can be the primary source of growth in the real sector of the economy. Sharia banks contribute to economic growth through capital accumulation by collecting funds from the community and then channeling them back to the community or to real sectors for business development through credit or productive financing to increase investment and accelerate economic growth.

In line with this study's results, the financing variable affects economic growth in the long term. The increase in financing channeled by Sharia Banks can stimulate increased consumption,

investment, and production of goods and services (Mulyadi et al., 2022). Providing funding to individuals and companies will encourage them to access capital, which is used for business expansion, increased productivity, and job creation, ultimately driving economic growth.

In addition, the ongoing effect of increased production and consumption can create a positive growth cycle in the long term. The more consumption is driven by financing, the more demand for goods and services encourages producers to increase production and investment. This creates a circle that reinforces economic growth.

The findings of this study confirm the Finance-led Growth Hypothesis theory, which argues that the financial sector drives economic growth (Alhassan et al., 2023). This is also in line with research on the Influence of Islamic Bank Financing and Labor on West Java's GRDP conducted by (Dermawan et al., 2022), which shows that Islamic bank financing has a significant influence on West Java's GRDP. Research conducted by (Arum et al., 2021a) also shows that mudarabah financing significantly influences economic growth in the long term.

4. Conclusion

The research results show that taxes significantly positively affect the role of banking in driving economic growth in the long term and the short term. Government spending has a substantial adverse impact on the role of banking in driving economic growth in the long and short term. Financing has a significant positive effect on the role of banking in driving economic growth in the long term. Meanwhile, in the short term, financing has a positive but insignificant impact on the role of banking in driving economic growth. To enhance economic growth and create a conducive environment for the development of related sectors, the government should formulate fiscal policies that are not only effective but also practical. These policies should focus on optimizing government spending to ensure that resources are allocated efficiently, thereby minimizing negative impacts on growth. In addition, Islamic banking institutions are encouraged to innovate and develop products and services that meet the needs of the community while remaining aligned with the goals of economic growth.

5. References

- Abduh, M., & Azmi Omar, M. (2012). Islamic banking and economic growth: the Indonesian experience. *International Journal of Islamic and Middle Eastern Finance and Management*, 5(1), 35–47. <https://doi.org/10.1108/17538391211216811>
- Adudu, S., & Simon, M. (2015). The Impact of Tax Policy on Economic Growth in Nigeria. *Journal of Economics and Sustainable Development*, Vol. 6, No. 8.124-129. www.iiste.org
- Alhassan, A., Adamu, M. S., & Safiyanu, S. S. (2023). Finance-led growth hypothesis for Asia: an insight from new data. *Journal of the Asia Pasific Economy*, 28(2), 599–618. <https://doi.org/10.1080/13547860.2021.1912883>
- Anggraini, M. (2019). Islamic banking development and economic growth: a case of Indonesia Article History. *Asian Journal of Islamic Management (AJIM)*, 1(1), 51–65. <https://doi.org/10.1108/AJIM.vol1.iss1.art5>
- Aniket, K. (2018). *Solow-Swan growth model and the fortunes of the commons*.

- Arawatari, R., Hori, T., & Mino, K. (2023). Government expenditure and economic growth: A heterogeneous-agents approach. *Journal of Macroeconomics, Elsevier*, 75(C). <https://doi.org/10.1016/j.jmacro.2022.103486>
- Arum, Y. S., & Himmati, R. (2021). Analisis pengaruh dana pihak ketiga dan pembiayaan perbankan syariah terhadap pertumbuhan ekonomi Indonesia tahun 2011-2021. *Journal of Accounting and Digital Finance*, 1(2), 72–84. <https://doi.org/10.53088/jadfi.v1i2.209>
- Banu, I. M. (2013). The Impact of Credit on Economic Growth in the Global Crisis Context. *Procedia Economics and Finance*, 6, 25–30. [https://doi.org/10.1016/s2212-5671\(13\)00109-3](https://doi.org/10.1016/s2212-5671(13)00109-3)
- Dermawan, R. F. N., Syarief, M. E., & Kristianingsih, K. (2022). Pengaruh Pembiayaan Bank Syariah, dan Tenaga Kerja Terhadap PDRB Jawa Barat. *Indonesian Journal of Economics and Management*, 2(2), 368–378. <https://doi.org/10.35313/ijem.v2i2.3696>
- Erős, A. (2010). Long Run Growth Effects of Fiscal Policy-a Case Study of Hungary. *Theory Methodology Practice (TMP)*, 5(1), 11–17.
- Fang, W. (2024). Negative Impact of Income Tax on Economic Growth. *SHS Web of Conferences*, 188, 02003. <https://doi.org/10.1051/shsconf/202418802003>
- Hanipah, Sugiartini, P., & Maula, I. M. (2023). Analysis of the Impact of Government Fiscal and Monetary Policies on Economic Growth in Indonesia: Government Economic Approach. *Journal of Social Research*, 2(11), 3867–3871. <http://ijsr.internationaljournalallabs.com/index.php/ijsr>
- Ho, S.-H., & Saadaoui, J. (2022). Bank credit and economic growth: a dynamic threshold panel model for ASEAN countries. *International Economics, Elsevier*, 170 (C). 158-128 <https://doi.org/10.1016/j.inteco.2022.03.001>
- Huwaida, N., Ufairah, U., & Wahyudi, R. (2023). Pengaruh Pengeluaran Pemerintah dan Pembiayaan Bank Syariah terhadap Tingkat Pertumbuhan Ekonomi Indonesia Pada Tahun 2016-2020. *AKSES: Jurnal Ekonomi Dan Bisnis*, 18(1).
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money* (2007th ed.). United Kingdom: Palgrave Macmillan.
- Kumar, A., Luthra, S., Mangla, S. K., & Kazançoğlu, Y. (2020). COVID-19 impact on sustainable production and operations management. *Sustainable Operations and Computers*, 1, 1–7. <https://doi.org/10.1016/j.susoc.2020.06.001>
- Ledhem, M. A., & Mekidiche, M. (2020). Economic growth and financial performance of Islamic banks: a CAMELS approach. *Islamic Economic Studies*, 28(1), 47–62. <https://doi.org/10.1108/ies-05-2020-0016>
- Ledhem, M. A., & Mekidiche, M. (2022). Islamic finance and economic growth: the Turkish experiment. *ISRA International Journal of Islamic Finance*, 14(1), 4–19. <https://doi.org/10.1108/IJIF-12-2020-0255>
- Mankiw, N. G. (2009). *Macroeconomics (Seventh Edition)* (Seventh). Worth Publisher.

- Mulyadi, S., & Suryanto, A. (2022). Sharia Banking Contribution to Indonesia's Economic Growth During Pandemic. *Iqtishaduna*, 13(2), 29–42. <https://doi.org/10.20414/iqtishaduna.v13i2.5450>
- Nguyen, H. T., & Darsono, S. N. A. C. (2022). The Impacts of Tax Revenue and Investment on the Economic Growth in Southeast Asian Countries. *Journal of Accounting and Investment*, 23(1), 128–146. <https://doi.org/10.18196/jai.v23i1.13270>
- Nguyen, M. L. T., & Bui, N. T. (2022). Government expenditure and economic growth: does the role of corruption control matter? *Heliyon*, 8(10). <https://doi.org/10.1016/j.heliyon.2022.e10822>
- Pinzaru, F., Zbucnea, A., & Anghel, L. (2020). *The Impact of the COVID-19 Pandemic on Business. A Preliminary Overview*. Retrieved from <https://www.researchgate.net/publication/345733364>
- Sasana, H. (2019). Economics Development Analysis Journal Fiscal Decentralization and Regional Economic Growth Article Info. *Economics Development Analysis Journal*, 8(1). Retrieved from <http://journal.unnes.ac.id/sju/index.php/edaj>
- Sima, M., Liang, P., & Qingjie, Z. (2023). The impact of fiscal decentralization on economic growth: A comparative analysis of selected African and OECD countries. *Heliyon*, 9(9). <https://doi.org/10.1016/j.heliyon.2023.e19520>
- Solihin, A., Wardana, W., W., Fiddin, E., & Sukartini, N., M. . (2021). Do government policies drive economic growth convergence? Evidence from East Java, Indonesia. *Cogent Economics and Finance*, 9(1). <https://doi.org/10.1080/23322039.2021.1992875>
- Surjaningsih, N., Utari, G. A. D., & Trisnanto, B. (2012). The Impact of Fiscal Policy on the Output and Inflation. *Buletin Ekonomi Moneter Dan Perbankan*, 14(4), 367–396. <https://doi.org/10.21098/bemp.v14i4.409>