ANALYSIS OF THE DETERMINANTS OF GOVERNMENT EXPENDITURE IN INDONESIA

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Abstract

This study aims to identify the influence of economic growth, the Human Development Index (HDI), the Economic Complexity Index (ECI), imports, state debt, and corruption on government spending in Indonesia during the period 1995–2024. Using the Autoregressive Distributed Lag (ARDL) method, this study evaluates the short-term and long-term relationships between these variables. The study results show that economic growth and state debt have a positive and significant effect in the short and long term. The ECI has a significant negative effect on spending, indicating that economic complexity is correlated with fiscal efficiency. The HDI has a positive effect in the short term, but is not significant in the long term. Meanwhile, imports do not show a consistently significant effect. Corruption has a negative impact in the short term, but turns positive and significant in the long term. These findings emphasize the importance of strengthening economic growth, sustainable debt management, improving the quality of human resources, and reforming budget governance to improve the effectiveness of state spending.

Keywords: Government Expenditure, ARDL, Economic Growth, HDI, ECI, Imports, National Debt, Corruption

INTRODUCTION

National economic development essentially aims to improve the quality of life of the people through sustainable economic growth, poverty alleviation, and the provision of equitable public services. In carrying out its role as a driver of development, the government utilizes two economic policy instruments: monetary policy and fiscal policy. Fiscal policy, which encompasses the management of state revenues and expenditures, plays a crucial role in directing the economy, particularly through the allocation of state spending to strategic sectors such as infrastructure, education, health, and social security.

Government spending reflects the state's commitment to supporting economic and social development. According to Bawinti, Kawung, and Lutungan (2018), government spending is a crucial driver of economic growth, particularly when the private sector's role is weakening. In line with modern Keynesian perspectives, government spending is considered a crucial instrument for increasing aggregate demand, particularly in times of economic slowdown (Santoso, 2023). Through expansionary fiscal policy, the government can create jobs, build infrastructure, improve the quality of education and healthcare, and reduce social disparities (Monika Andrasari, 2024). Indonesia, the world's largest archipelagic country with over 17,000 islands and a population of 277.5 million by 2023 (BPS, 2024), faces complex challenges in meeting development needs. The government is required to finance various essential sectors, which naturally drives an increase in state spending from year to year. Based on data from BPS and the 2024 State Budget Financial Note, the trend in Indonesian government spending has continued to increase significantly over the past decade, in line with increasing domestic and global challenges, including the impact of the COVID-19 pandemic.

Table 1
State Revenue and Expenditure 2014-2023

Year	State Revenue (Rp Trillion)	Expenditure Government (Rp Trillion)	Budget Surplus/ Deficit (Rp Trillion)	National Debt (Rp Trillion)
2014	1,550.5	1,777.2	-226.7	255.7
2015	1,508.0	1,806.5	-298.5	380.9
2016	1,555.9	1,864.3	-308.3	403.0
2017	1,666.4	2,007.4	-341.0	429.1
2018	1,943.7	2,213.1	-269.4	372.0
2019	1,960.6	2,309.3	-348.7	437.5
2020	1,647.8	2,595.5	-947.7	1,229.6
2021	2,011.3	2,786.4	-775.1	870.5
2022	2,635.8	3,096.3	-460.4	696.0
2023	2,783.9	3,121.2	-337.3	404.0

Source: Financial Notes and State Budget 2014-2023, BPS (2024)

Table 1.1 shows that although government spending continues to increase from IDR 1,777.2 trillion in 2014 to IDR 3,121.2 trillion in 2023, state revenues are unable to keep pace with this surge. In 2023, the budget deficit was recorded at IDR 337.3 trillion, or approximately 2.3% of GDP. This situation forced the government to cover the budget

shortfall by increasing state debt by IDR 404 trillion. This situation raises concerns about fiscal sustainability and the effectiveness of public budget use.

Besides the budget deficit, the efficiency and equity of government spending are equally important issues. One of the main factors influencing the dynamics of government spending is economic growth. In theory, positive economic growth can increase state revenues and expand fiscal capacity. This aligns with Wagner's Law, which states that as a country develops, demand for public services also increases, driving an expansion of government spending.

In 2023, Indonesia's economic growth was recorded at 5.05%, a slight decrease from 5.31% the previous year, influenced by external pressures and weakening global demand post-pandemic. Empirical results regarding the relationship between economic growth and government spending over the past decade have shown mixed findings. Several recent studies, such as those by Santoso (2023) and Agustina (2022), indicate a positive and significant relationship. However, other studies, such as Prasetyo (2021), reveal that this effect can vary depending on the category of government spending studied and domestic and global economic dynamics.

Another equally crucial factor is the Human Development Index (HDI), which reflects the quality of education, health, and purchasing power. In 2023, Indonesia's HDI increased to 74.39 from 73.77 the previous year. This increase indicates improvement, but also increases the budget burden, particularly on the education and health sectors. However, research by Mongan (2019) indicates that increased spending in the health sector does not necessarily translate directly to an increase in the HDI, especially if the allocation of spending is not well-targeted.

Furthermore, economic structure and complexity also influence the direction of spending policy. Indonesia's Economic Complexity Index (ECI) in 2023 was -0.085 (ranked 65th out of 132 countries according to the OEC), reflecting its high dependence on primary commodity exports. Achieving economic transformation based on value-added industries requires fiscal intervention through spending that supports research, innovation, and education (Kurniawan & Aziz, 2022).

Trade activities, particularly imports, also impact fiscal policy. In 2023, Indonesia's imports reached USD 223.3 billion, an increase compared to the previous year. While reflecting industrial and investment growth, dependence on imports risks fiscal pressure due to exchange rate fluctuations and high cost burdens. Siregar and Rahmanta (2018) stated that increased imports are positively correlated with government spending. However, this finding is not always consistent, as several studies (Firdaus & Wulandari, 2009) indicate that a surge in imports can actually reduce domestic productive spending.

In terms of financing, state debt plays a crucial role in maintaining fiscal sustainability. By the end of 2023, Indonesia's total debt was recorded at IDR 8,190 trillion, equivalent to 38.5% of Gross Domestic Product (GDP), an increase compared to the previous year. This increase in debt was largely used to cover the budget deficit and fund economic recovery programs and social subsidies. Findings from Santoso (2023) indicate that debt accumulation without efficient budget management has the potential to narrow fiscal space and reduce the effectiveness of government spending in the long term.

The aspect of governance cannot be ignored in analyzing state expenditure. The decline in Indonesia's Corruption Perception Index (CPI) score from 38 in 2022 to 34 in 2023

(Transparency International) reflects growing public concern about corrupt practices. High levels of corruption are known to reduce budget efficiency and weaken the effectiveness of government program implementation. Recent research by Santoso (2023) shows that corruption contributes to long-term inefficiency in state spending, particularly in the education and infrastructure sectors. On the other hand, Ramadhani (2023) suggests that in certain contexts, increased public spending can occur as a political response to low public trust caused by corruption, although such spending is not always directed productively.

Although several studies have examined the influence of economic factors on government spending, most are limited to analyzing a few variables separately. For example, some studies only highlight the relationship between economic growth and public spending (Agustina, 2022; Santoso, 2023; Shofura, 2023), or the link between national debt and government spending (Praycilia, 2021). Furthermore, many of these studies still use static approaches such as linear regression and ECM, which fail to capture the dynamics of short-term and long-term relationships simultaneously (Firdaus & Wulandari, 2020; Prasetyo, 2021). Research that explicitly incorporates new variables such as the Economic Complexity Index (ECI) or corruption in long-term analysis is still very limited (Ramadhani, 2023; Hoeriyah, 2021). In fact, dynamic methods such as Autoregressive Distributed Lag (ARDL), which are able to accommodate variables with different levels of integration and estimate short-term and long-term relationships simultaneously, are very relevant but are still rarely used in similar research contexts.

Based on the background description above, the existence of literature gaps and inconsistencies from previous findings (research gap), the researcher is interested in conducting research entitled "Analysis of Determinants of Government Expenditure in Indonesia". This study aims to simultaneously analyze the influence of economic growth, HDI, ECI, imports, state debt, and corruption on government expenditure in Indonesia in the period 1995–2024 using the ARDL method.

REVIEW OF LITERATURE

Government Spending

Government spending is a crucial component of fiscal policy, used by the state to carry out its allocation, distribution, and economic stabilization functions. In a modern economic system, the state serves not only as a regulator but also as an active actor in the provision of public goods and services, infrastructure development, and social protection. Therefore, government spending is a key indicator in assessing the state's role in economic development and public welfare. From a macroeconomic perspective, the government can utilize fiscal instruments such as government spending to stimulate economic growth, particularly in times of private sector weakness or crisis. According to the economic approach developed by John Maynard Keynes, increased government spending can increase aggregate demand, create jobs, and stimulate national income growth. Therefore, fiscal intervention in the form of increased public spending is essential to address economic imbalances (Eldemerdash & Ahmed, 2019). According to Bawinti, Kawung & Lutungan (2018), government spending plays a vital role in economic development, particularly when the private sector is unable to drive growth. The government can stimulate the economy through government spending allocated to strategic sectors. In line with this, Eriyanti (2018)

emphasized that the greater the state revenue, the wider the government's fiscal space to increase its spending.

Economic Growth

Economic growth refers to an increase in an economy's capacity to produce goods and services sustainably, as reflected in rising national income over a given period. In general, economic growth indicates an increase in aggregate output and productivity that occurs year after year. According to Pelinescu (2015), economic growth reflects a continuous process that enables a country to generate higher income and output over time. This is generally measured through changes in real Gross Domestic Product (GDP). Contemporary studies, such as Agustina (2022) and Santoso (2023), emphasize that economic growth is influenced not only by production factors but also by the effectiveness of fiscal policy, public investment, and improvements in the quality of human resources. Government spending plays a crucial role in stimulating economic activity across various sectors, both directly through spending on goods and services and indirectly through multiplier effects on consumption and investment. Budget allocations for the procurement of goods and services, particularly those related to infrastructure development, education, and health, can stimulate the production sector and create new aggregate demand within the economy (Santoso, 2023).

Human Development Index

Human development is a development approach that places the population at the center of attention, with the primary goal of expanding the range of options that can improve the quality of life. According to Statistics Indonesia (BPS) (2014), human development aims to encourage comprehensive community empowerment, not merely to increase income. The HDI value of a country or region reflects the extent to which human development achievements have approached ideal targets, such as a life expectancy approaching 85 years, equitable access to basic education, and the ability to meet a decent standard of living. The higher the HDI value of a region (closer to 100), the better the level of welfare and success of human development achieved. The relationship between the Human Development Index (HDI) and government spending is interconnected and complex. The HDI is a key indicator in assessing the quality of life and success of human development in a region, and serves as a benchmark in measuring a country's development ranking. On the other hand, government spending plays a crucial role in supporting the improvement of the HDI, particularly through budget allocations in strategic sectors such as education, health, and social infrastructure. Increased government spending in these areas can expand access to public services, improve the quality of human resources, and ultimately drive economic growth. Conversely, achieving a high HDI can also positively contribute to the effectiveness of government spending. Quality human development enables the optimization of production factors, such as a skilled workforce and a healthy society, which impacts economic efficiency and national productivity. Thus, human development and government spending are two mutually supportive components in the effort to achieve sustainable and inclusive development.

Economic Complexity Index

Government spending is a crucial component of fiscal policy, which countries use to carry out their allocation, distribution, and economic stabilization functions. Within the Economic Complexity Index (ECI) system, it is an indicator used to measure the sophistication and diversity of a country's economic structure. This index reflects a country's ability to produce and export a wide variety of products, particularly those rarely produced

by other countries. Therefore, the greater the diversity and added value of a country's products, the higher its ECI score. The basic concept of the ECI is based on the assumption that countries with high levels of economic complexity are capable of producing unique goods that require a complex knowledge base and production capabilities. According to Hidalgo and Hausmann, in studies further developed by The Growth Lab at Harvard University (2020), the ECI not only reflects export diversity but also reflects a country's overall level of technological advancement and economic productivity. Government spending has a positive and significant effect on economic complexity. This is because government spending can support economic complexity through several factors, such as the provision of public goods, such as public schools, public order, and an efficient legal system, as well as beneficial externalities. Countries with a high ECI typically have government policies that support innovation, industrialization, and investment in productive sectors. Conversely, countries with a low ECI tend to rely on raw commodity exports and require greater government intervention to encourage economic diversification.

Import

Import is an economic activity involving the entry of goods and services from abroad into a country, carried out by the government, private sector, or individuals. According to the Central Statistics Agency (BPS), imports include all goods or services obtained from abroad through international trade transactions, whether for consumption, raw materials, or investment. In the context of government spending, imports play a significant role, particularly when the government spends on capital goods, technology, military equipment, strategic raw materials, and infrastructure development needs. For example, in the construction of national strategic projects such as toll roads, dams, or power plants, the government often has to import machinery and heavy equipment from abroad due to limited domestic production. High import volumes will impact increased government spending, particularly if driven by large-scale development projects that require foreign components. In addition, the government can also increase its spending in the form of subsidies or fiscal compensation to maintain the public's purchasing power for imported goods that fluctuate due to changes in exchange rates.

National Debt

Based on Law Number 1 of 2004 concerning State Treasury, state debt is defined as a number of financial obligations that must be paid by the Central Government, whether arising from laws and regulations, agreements, or other legitimate reasons. In the practice of state financial management, debt is one of the financing instruments used when the realization of state spending exceeds revenue, or when fiscal policy is expansionary to encourage economic growth. In this context, the existence of debt has a strategic function to maintain fiscal sustainability and support the implementation of national development programs Prasetyo (2021), State debt plays a strategic role in supporting government spending, especially as one of the main sources of financing the State Budget (APBN) deficit. In conditions where state revenues are insufficient to finance all state spending, debt becomes a fiscal instrument used to maintain the continuity of government programs. Funds obtained from debt are often allocated to finance infrastructure, handling emergency situations, and maintaining national economic stability.

Corruption

Corruption is a form of abuse of public authority for personal or group interests, which negatively impacts state finances and undermines the institutional order and governance system. According to Transparency International (2023), corruption encompasses various unethical practices such as bribery, asset embezzlement, nepotism, and the manipulation of policies and regulations for individual gain. Corruption significantly impacts the effectiveness and efficiency of government spending. High levels of corruption can lead toIrregularities in budget allocations, which in turn lead to project cost overruns, a decline in the quality of public services, and delays in construction completion. In many cases, government projects are even at risk of stalling due to corrupt practices in the procurement of goods and services. This phenomenon demonstrates that corruption not only causes financial losses but also undermines public trust in state institutions.

RESEARCH METHOD

This study uses a quantitative approach by utilizing secondary data in the form of time series. This study aims to analyze the factors that influence government spending in Indonesia during the period 1995 to 2024. The data analyzed covers the last 30 years, namely from 1995 to 2024. The dependent variable is government spending, while the independent variables consist of economic growth, the Human Development Index, the Economic Complexity Index, imports, state debt, and the level of corruption.

This study specifically examines the relationship between each of these variables and government spending, both in the short and long term, using the ARDL analysis approach. This study uses the Autoregressive Distributed Lag (ARDL) approach to analyze the relationship between economic variables dynamically, both in the short and long term. Through this approach, the study is expected to provide a comprehensive picture of the influence of macroeconomic variables on government spending simultaneously and in a balanced manner. The short-run equation in this study is:

$$PPt = \alpha 0 + \beta iPEt\text{-}i + \gamma iUNt\text{-}i + \partial IKEt\text{-}i + \lambda 1IPMt\text{-}i + \lambda 2PGt\text{-}i + \lambda 3INFt\text{-}i + \varepsilon t$$

RESULTS AND DISCUSSION

Stationary Test Results (Unit Root Test)

The unit root test is an initial test of time series data that will be used in research to determine whether it is stationary. The following results were obtained from the stationary test:

Table 2
Stationary Test Results

Variabel	Level		1st Difference		Hasil
	t-Statistic	Prob	t-Statistic	Prob	
LN_PP	-2.834273	0.0659	-5.801008	0.0000	I(0)
PE	-4.926700	0.0004	-8.069648	0.0000	I(0)
IPM	-0.306738	0.9111	-4.742695	0.0008	I(1)
ICE	-3.216917	0.0292	-5.738319	0.0001	I(0)
IMPOR	-1.060971	0.7160	-6.502267	0.0000	I(1)
LN_UN	-2.785934	0.0727	-3.778001	0.0005	I(0)
COR	-0.939905	0.7606	-5.084055	0.0003	I(1)

Source: Results of processing Eviews 12

Based on table 4.1, the stationary test using Augmented Dickey-Fuller (ADF) explains that at the level level, the probability value of the HDI, import, and corruption variables is greater than α=5%, meaning that the HDI, import, and corruption variables are not stationary at the level level. Meanwhile, the government expenditure, economic growth, state debt, and economic complexity index variables are stationary at the level level, because the variable probability value is smaller than α=5% and α=10%. Variables that are not stationary at the level level are then tested for data stationarity at the first difference level. Based on the results of the ADF test at the first difference level, the probability value of the HDI, import, and corruption variables is smaller than α=5%, meaning that the HDI, import, and corruption variables are stationary at the first difference level. These results indicate that the data for all variables (government expenditure, economic growth, HDI, import, state debt, economic complexity index, and corruption) have met the requirements for estimation using ARDL, so that the test can proceed to the next step.

Optimum Lag Determination Test Results

After conducting the unit root test, the next step in the ARDL model is the optimum lag. The optimum lag test is used to determine the optimal lag length for the ARDL model. The shorter the lag, the better the ARDL model. The Akaike information criterion approach was used in the lag study. The optimum lag test results obtained after testing in the Eviews application are as follows:

Source: Results of processing Eviews 12

Based on Figure 4.8, there are 20 best models generated in determining the optimal lag length (Lag Length), which is determined using supporting criteria such as the Akaike Information Criterion (AIC). All identified models have appropriate lags, but the ARDL (4,1,2,2,2,2,2) model was selected as the most appropriate model for estimation in this study. The selection was based on the lowest AIC value of -3.716488, which indicates that this model has the smallest prediction error rate compared to other models. Thus, this model is considered the most efficient and stable in representing the relationship between government spending and the economic variables studied. This model includes 4 lags for the LN_PP variable, 1 lag for PE, and 2 lags each for the HDI, imports, economic complexity index, state debt, and corruption variables. This configuration reflects that the influence of each variable on government spending occurs in a non-uniform time pattern.

Bound-Test Cointegration Test Results

In this study, testing was carried out by comparing the F-statistic value against the critical value at various levels of significance (I(0) and I(1)) adjusted to the number of independent variables (K = 6).

Table 3

Bound-Test Cointegration Test

F-Bounds Test				
Test Statistics	**Value**	**Significant.**	**I(0)**	**I(1)**
F-statistic	7.868684	10%	1.99	2.94
K	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

Source: Results of Eviews 12 processing

The results of the cointegration test using the Bound Test method presented in the Table show that the F-statistic value of 7.868684 exceeds the upper bound value at all significance levels used, namely 1% (3.99), 2.5% (3.61), 5% (3.28), and 10% (2.94). Thus, it can be concluded that there is a long-term cointegration relationship between government spending and the independent variables studied, namely economic growth, the Human Development Index (HDI), imports, state debt, the economic complexity index, and the level of corruption. This finding indicates that changes in these variables not only have a temporary impact, but also influence the direction and structure of government spending in the long run. As an illustration, an increase in state debt or the rate of economic growth not only triggers an increase in government spending in a certain period, but also contributes to a sustainable spending pattern in the longer term.

Autoregressive Distributed Lag (ARDL) Model Estimation Results

a. ARDL Model Estimation Results on Short-Term Equations

The short-run equation estimation for the ARDL (4,1,2,2,2,2,2) model is as shown in table 4.3:

Table 4.
Short-Term Equation Estimation Results of the ARDL Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LN_PP(-1))	-0.084615	0.046183	-1.832165	0.1409
D(LN_PP(-2))	0.421957	0.042533	9.920772	0.0006
D(LN_PP(-3))	0.382322	0.043871	8.714766	0.001
D(PE)	0.178954	0.014364	12.45879	0.0002
D(HDI,2)	-2.076192	0.554902	-3.74155	0.0201
D(HDI(-1),2)	15.33587	1.151427	13.31901	0.0002
D(IMPORT,2)	-0.005012	0.001951	-2.569296	0.062
D(IMPORT(-1),2)	0.012848	0.001228	10.46592	0.0005
D(ECI)	-0.107376	0.023387	-4.591244	0.0101
D(ECI(-1))	-0.145927	0.028007	-5.210328	0.0065
D(LN_UN)	1.224801	0.131263	9.33089	0.0007
D(LN_UN(-1))	0.393327	0.092994	4.229608	0.0134
D(COR,2)	-0.020543	0.003411	-6.023137	0.0038
D(COR(-1),2)	-0.040029	0.004741	-8.442724	0.0011

Source: Results of Eviews 12 processing

Estimation of the short-term model in the ARDL method, referring to the table, it is concluded that the short-term test results can be described as follows:

1) The regression results show that the coefficient D(LN_PP(-1)) is not significant (p = 0.1409), but the expenditure of the previous two and three years shows (D(LN_PP(-2)) and D(LN_PP(-3))) have a positive and significant effect with coefficients of 0.421957 and 0.382322, respectively. This means that an increase in government expenditure by 1% in the previous two and three years will push current expenditure by 0.42% and 0.38%, respectively. This shows that government expenditure policies tend to be sustainable, where current expenditure is not only influenced by current economic conditions, but also by fiscal policies that have been implemented in the past.
2) Economic growth has a positive and significant short-term effect on government spending, with a coefficient of 0.178954 (p = 0.0002). This means that every 1% increase in economic growth will lead to a 0.18% increase in government spending, supporting Keynesian theory that governments tend to increase spending when the economy improves.
3) The short-term estimation results show that the Human Development Index (HDI) variable exhibits an inverse effect depending on the period. The current HDI (D(HDI,2)) has a negative and significant effect (coefficient -2.076192), meaning that a 1-unit increase in the HDI reduces government spending by 2.08%. However, the HDI one year earlier (D(HDI(-1),2)) has a positive and significant effect with a coefficient of 15.33587, meaning that an increase in the past HDI boosted government spending by 15.34%. This finding illustrates that spending increases as the government catches up on human development, but decreases after achievements improve and interventions decrease.
4) The regression results show an inconsistent effect of import variables on government spending. Current imports (D(IMPORT,2)) have a negative effect (coefficient -0.005012), but are not significant. Conversely, imports in the previous period (D(IMPORT(-1),2)) have a positive and significant effect (coefficient 0.012848). This means that a 1% increase in imports in the previous year increases government spending by 0.013%. This could occur because past imports of raw materials or capital goods require further budget allocations in the current year.
5) In the short term, the Economic Complexity Index (ECI) has a negative and significant effect on government spending, both in the current period (-0.107376) and lag 1 (-0.145927). This indicates that a 1-point increase in the ECI will reduce government spending by 0.11–0.15%. This means that the more complex the economic structure, the less reliance on government spending, as the private sector begins to play a more dominant role in economic activity.
6) The government debt variable has a positive and significant effect on short-term government spending. Both current debt (coefficient 1.224801) and debt from the previous year (0.393327) substantially increase government spending. In other words, a 1% increase in debt in the current year can increase government spending by up to 1.22%, strengthening debt's role as a primary instrument of short-term government financing.
7) The corruption variable shows a negative and significant effect on government

spending in all periods, both the current period (coefficient -0.020543) and the previous period (coefficient -0.040029). This means that every 1-point increase in corruption (e.g., a worsening of the corruption perception index) will reduce the effectiveness of government spending by around 2–4%. This indicates that corruption hinders budget efficiency, slows fund disbursement, and reduces the quality of public spending.

b. ARDL Model Estimation Results on Long-Run Equations

The long-run equation estimation for the ARDL (4,1,2,2,2,2,2) model shows that economic growth, HDI, imports, Economic Complexity Index, national debt and corruption statistically has an effect on expendituregovernment:

Table 5.
Long-Term Estimation Results of the ARDL Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PE	1.048295	0.372454	2.814562	0.0481
D(HDI)	-57.9054	33.46575	-1.730289	0.1586
D(IMPORT)	0.012668	0.062354	0.203163	0.8489
ECI	-3.964417	1.77366	-2.235161	0.0891
LN_UN	1.479769	0.159082	9.301905	0.0007
D(COR)	0.223111	0.103151	2.162953	0.0966
CointEq(-1)*	-0.238878	0.018156	-13.15717	0.0002

Source: Results of Eviews 12 processing

Based on the results of the long-term equation estimation test in the table above, it can be explained as follows:

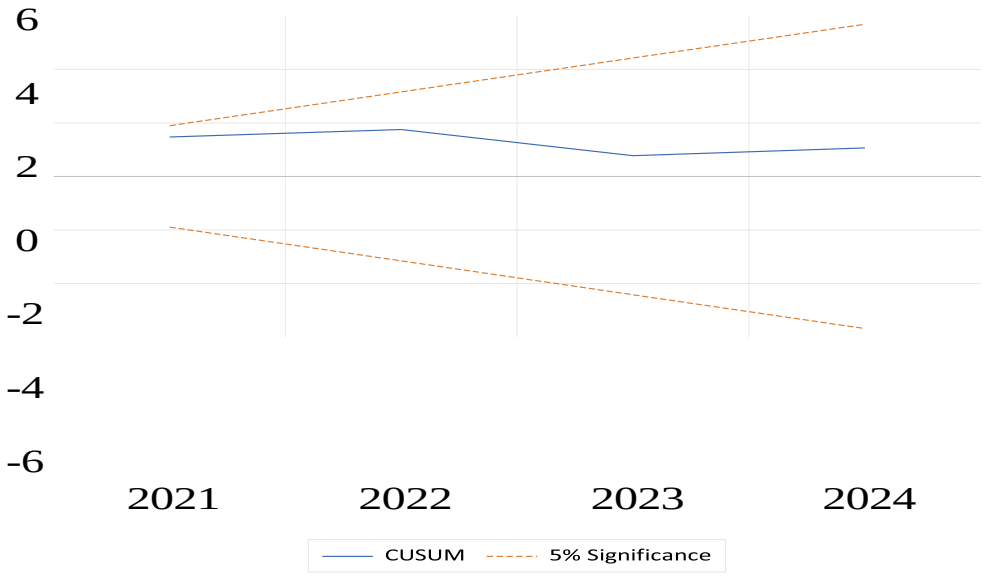
1) The long-term estimation results are also supported by the Error Correction Term (CointEq(-1)) coefficient value of -0.238878 with a significance level of 0.0002. This value indicates that there is a strong long-term relationship between the variables in the model. This negative and significant coefficient indicates that the system will adjust by 23.88% to the imbalance in one period (one year), which means that if there is a deviation from the long-term equilibrium condition, the model will return to equilibrium at this adjustment rate every year.
2) The economic growth variable has a positive and significant influence on government spending in the long run. A coefficient of 1.0483 and a p-value of 0.0481 indicate that every 1% increase in economic growth will lead to a 1.05% increase in government spending. This aligns with Wagner's law, which states that economic growth is followed by an increase in public spending.
3) In the long run, the HDI variable has a negative but insignificant effect on government spending. A coefficient of -57.91 with a p-value of 0.1586 indicates that although a 1-point increase in the HDI can be estimated to reduce government spending by approximately Rp 57.91 billion, this effect is not statistically strong enough to be concluded as a significant effect.
4) The import variable shows a positive but insignificant effect on government spending in the long run. This is evident from the coefficient of 0.012668 with a p-value of 0.8489, meaning a 1% increase in imports only increases government spending by

approximately 0.013%, and this relationship is not statistically convincing enough to be considered significant.

5) In the long run, the Economic Complexity Index variable has a negative and statistically significant effect at the 10% level, with a coefficient of -3.9644 and a p-value of 0.0891. This means that every 1-point increase in the economic complexity index will reduce government spending by 3.96%. This indicates that the more complex and advanced a country's economy, the less dependent it is on government spending because the private sector is more actively involved.
6) Public debt has a positive and significant impact on government spending in the long run. A coefficient of 1.4798 and a p-value of 0.0007 indicate that a 1% increase in public debt will increase government spending by 1.48%. These results confirm that debt is a major source of financing for public spending in the long run.
7) The Corruption variable also has a positive and significant effect at the 10% level on long-term government spending. With a coefficient of 0.2231 and a p-value of 0.0966, these results indicate that every 1-point increase in the corruption index will increase government spending by approximately 0.22%. This finding indicates that corruption has an impact on swelling state spending, likely due to budget inefficiencies and leakages in program implementation.

Model Stability Test

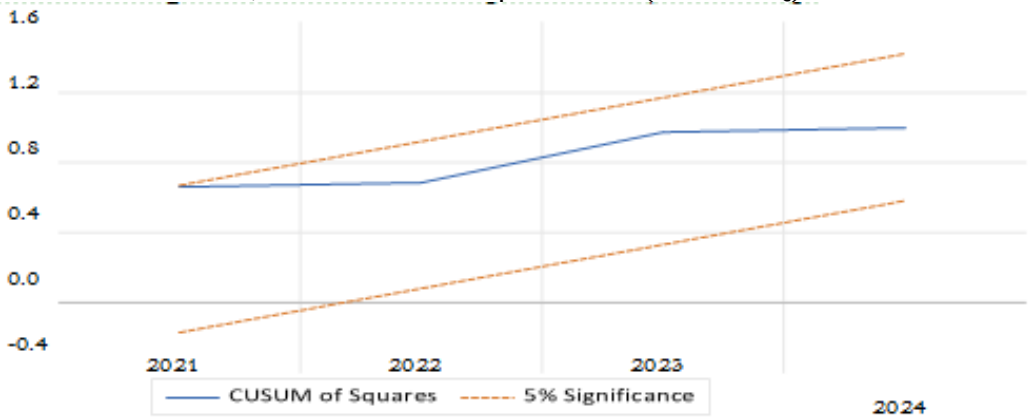
To ensure that the ARDL model used in this study is stable and does not experience structural changes during the observation period, two types of model stability tests were conducted: CUSUM and CUSUM of Squares (CUSUMQ). These two tests are part of the diagnostic checking commonly used in time series models.



Source: Results of processing Eviews 12

Based on Figure 4.9, the CUSUM test results show that the CUSUM line (blue) is within the upper and lower limits at the 5% significance level (marked by two red dashed lines) during the period 2021 to 2024. This indicates that the model parameters are in a stable condition, with no significant structural changes in the relationship between variables. This

parameter stability is important to ensure that the model estimation results are reliable and can be used as a basis for policy decision-making. Furthermore, to test the stability of the variance of the model residuals, the CUSUM of Squares Test (CUSUMQ) is used.



Based on Figure 4.10, the CUSUMQ line shows a similar pattern, where the CUSUMQ line is also within the 5% significance level throughout the observation period. Overall, these two tests provide evidence that the ARDL model in this study is stable, both in terms of parameters and error variance, so the estimation results can be used with a high degree of confidence.

The results of a short-term analysis based on the ARDL model indicate that most independent variables have a significant relationship with government spending. This phenomenon is not only consistent with theory but can also be observed in the dynamics of policy and economic events in Indonesia.

The Influence of Economic Growth on Government Spending in Indonesia

The ARDL model estimation results show that economic growth has a positive and significant effect on government spending in the short run. This finding indicates that whenever Indonesia's Gross Domestic Product (GDP) increases, the government tends to adjust its spending in a more expansionary direction. This response is evident through increased capital expenditures, social assistance, and regional transfers, as a form of sustained economic stimulation. The positive coefficient in the model indicates that the government is leveraging increased economic activity to expand fiscal capacity to maintain growth momentum. Thus, while economic growth generally drives increased government spending, the fiscal policy context, budgetary capacity, and institutional characteristics of the country remain important factors influencing the direction and strength of this relationship.

The Influence of HDI on Government Spending in Indonesia

Based on the short-term estimation results, the Human Development Index (HDI) shows a significant effect on government spending, although the direction of the effect varies depending on the time period (lag) analyzed. The HDI in the previous period (lag-1) has a positive and significant effect, indicating that past improvements in human resource quality encouraged the government to continue or increase budget allocations, particularly in the education, health, and social services sectors. Conversely, the HDI in the current period shows a negative and significant effect, indicating that as human development outcomes improve, the government may adjust or reduce spending due to increased efficiency in public service delivery. Thus, these results confirm that the impact of the HDI on government

spending is dynamic and needs to be viewed within the context of time and ongoing fiscal policy.

The Impact of Imports on Government Spending in Indonesia

The short-term estimation results show that imports have varying effects on government spending depending on the period. Imports in the previous period (lag) have a positive and significant effect, while imports in the current period have a negative and nearly significant effect. This pattern reflects a lag effect, where an increase in imports does not immediately increase government spending in the same year, but has an impact in the following period, after the procurement, logistics, or project implementation processes are completed. Thus, the effect of imports on government spending in the short term is indirect and depends on the timing, the type of goods imported (consumer goods vs. capital goods), and the fiscal management strategy implemented. This emphasizes the need for careful management of import policies to avoid burdening the fiscal sector in the short term while still providing benefits in the subsequent period.

The Influence of the Economic Complexity Index on Government Expenditure in Indonesia

Short-term estimation results indicate that the Economic Complexity Index (ECI) has a negative and significant effect on government spending. This means that as Indonesia's economic complexity increases, as evidenced by its ability to produce and export high-value-added goods, the government tends to reduce its spending. This finding suggests that the more advanced and complex a country's economic structure, the greater the role of the private sector in driving economic growth, thus limiting direct government intervention through public spending. Therefore, the ECI's influence on government spending is contextual and highly dependent on the development strategy implemented. If development is directed toward a market-based and private model, public spending tends to decline. However, if development is oriented toward strengthening technological capacity and innovation, the government still needs to actively invest through planned public spending.

The Influence of National Debt on Government Spending in Indonesia

Short-term estimates show that government debt has a positive and significant impact on government spending. This means that when the government increases debt, both domestically and internationally, government spending also increases, particularly to finance infrastructure projects, subsidies, and economic recovery programs. Therefore, although debt plays a significant role in driving government spending in the short term, prudent and transparent debt management is still necessary to avoid creating fiscal risks in the future. The government needs to ensure that debt is used for productive activities, not simply to cover the deficit, to avoid disrupting long-term budget stability.

The Impact of Corruption on Government Spending in Indonesia

The research results show that corruption has a significant negative impact on government spending in the short term. This means that as corruption levels increase, budget allocation becomes inefficient, and public spending tends to decline. This is caused by budget leaks, delays in fund absorption, and irregularities in program implementation, which hamper the effectiveness of state spending. Thus, although the short-term impact of corruption on spending can be ambiguous, overall, corruption has been shown to impair the effectiveness of state spending, primarily due to decreased efficiency and increased potential for budget

misuse. Therefore, strengthening budget oversight and transparency systems is crucial to prevent fiscal waste and irregularities.

Long-Term Research Results

The Influence of Economic Growth on Government Spending in Indonesia

Long-term estimates show that economic growth has a positive and significant impact on government spending in Indonesia. This means that when economic activity increases, the government also tends to increase its spending allocation, particularly to support public services and infrastructure development. Therefore, while economic growth generally drives increased government spending, the final outcome remains highly dependent on the fiscal structure, development strategy, and budget policies implemented by each country or region.

The Influence of HDI on Government Spending in Indonesia

The long-term analysis shows that the Human Development Index (HDI) has a negative but insignificant effect on government spending. This means that while theoretically, improving human quality should reduce people's dependence on government services, thereby lowering the burden on state spending, in practice, this effect has not been strongly and consistently observed in Indonesia. Therefore, while the theoretical relationship between the HDI and government spending is clear, in the Indonesian context, its long-term effect remains statistically weak. Therefore, it is necessary to evaluate the effectiveness of social spending and reform the budgeting system so that government spending truly reflects progress in sustainable human development.

The Impact of Imports on Government Expenditure in Indonesia

Long-term estimation results indicate that imports have a negative but insignificant effect on government spending in Indonesia. This means that while theoretically, increased imports can boost government spending, for example, on infrastructure development or capital goods procurement, in practice, this relationship is not statistically strong enough to be considered a major factor influencing government spending in the long run. Thus, while imports have the potential to boost government spending, their long-term effect is not statistically strong and consistent, as it depends on fiscal conditions, development strategies, and the extent to which imports are part of national economic policy.

The Influence of the Economic Complexity Index on Government Expenditure in Indonesia

The estimation results show that the Economic Complexity Index (ECI) has a negative and significant effect on government spending in the long run. This means that the higher the economic complexity of a country—characterized by its ability to produce and export more sophisticated and diverse products—the lower the country's dependence on public spending. This occurs because economic growth is driven more by the private sector and competitive markets, rather than by direct government intervention. Therefore, although the results of this study indicate that the ECI can reduce government spending in the long run, in reality, this relationship is strongly influenced by the government's chosen development strategy. If development is directed toward an innovation- and technology-based economic model, government spending is still necessary to support the industrial ecosystem and increase competitiveness.

The Influence of National Debt on Government Spending in Indonesia

Long-term analysis results show that national debt has a positive and highly significant impact on government spending in Indonesia. Every 1% increase in debt is

estimated to increase state spending by 1.48%. This finding indicates that debt is the government's primary source of financing to support sustainable increases in public spending, both for infrastructure development, the social sector, and national strategic programs. Since the COVID-19 pandemic, Indonesia's debt has indeed increased quite sharply, particularly to finance economic recovery programs, social assistance, and national strategic projects. However, going forward, the government needs to ensure that debt is only used for productive activities with a direct impact on development, to ensure sustainability and avoid creating a long-term fiscal burden.

The Impact of Corruption on Government Spending in Indonesia

The ARDL model estimation results show that corruption has a positive and significant effect on government spending in the long run. This means that as corruption levels increase, government spending tends to increase as well. This suggests that corruption not only undermines governance but also has a direct impact on state budget overruns. Although corruption has been shown to drive long-term increases in state spending, the resulting spending is often low-quality and ineffective. To address this, the government needs to strengthen transparency, accountability, and law enforcement to ensure that state spending is more targeted and beneficial to the public.

CONCLUSION

Economic growth has a positive and significant impact on government spending in both the short and long term. This indicates that increased economic activity drives sustainable public spending.

In the short term, the Human Development Index (HDI) shows a significant influence on government spending, although the direction of the influence varies depending on the previous period. However, in the long term, the HDI's influence is insignificant and tends to be negative.

Imports have a positive but insignificant effect on government spending in the long run, but in the short run, they show an inconsistent effect on government spending, meaning the direction of the effect can differ depending on the previous time period.

The Economic Complexity Index (ECI) shows a significant negative impact on government spending, both in the short and long term. This suggests that the more complex a country's economic structure, the less dependent it is on government spending.

National debt has a positive and significant impact on government spending, both in the short and long term. This means that debt plays a crucial role as a source of financing for state spending.

Corruption has a significant negative impact on government spending in the short term, but in the long term, it has a significant positive impact. This indicates that corrupt practices can lead to budget waste, which in the long run leads to increased state spending.

REFERENCES

Agustina, E. (2022). *Analisis Belanja Fiskal dan Pembangunan Manusia di Indonesia*. Jurnal Ekonomi Pembangunan Indonesia, 7(1), 45–60.

Annisa Shofura (2023). T*he Analysis of Factors Affecting Original Local Government Revenue in Eastern Indonesia. Indonesian Journal of Development Economics* Vol 6 (1) (2023).

Bawinti, I., Kawung, A., & Lutungan, H. (2018). *Pengeluaran pemerintah dan pertumbuhan ekonomi daerah*. Jurnal Ekonomi Pembangunan, 15(2), 112–123

Eldemerdash, Y. A., & Ahmed, A. D. (2019). Public Spending and Economic Growth: Evidence from Developing Countries. *Applied Economics*, 51(23), 2471–2484.

Elena Pelinescu. (2015). *The impact of human capital on economic growth. Quality -Access to Success*, 14(SUPPL. 1), 395–399. https://doi.org/10.1016/s2212-5671(15)00258-0.

Eriyanti. (2018). *Peranan Belanja Negara dalam Pembangunan Ekonomi Nasional*. Jurnal Fiskal, 7(1), 55–67.

Hoeriyah (2021). Kompleksitas Ekonomi dan Pertumbuhan Inklusif: StudiEmpiris di 125 Negara http://repository.ipb.ac.id/handle/123456789/108028\

Monika Andrasari , Weni Hawariyuni. (2024). Analisis Pengaruh Penanaman Modal Asing, Penanaman Modal Dalam Negeri Dan Variabel Makroekonomi Terhadap Penurunan Jumlah Tingkat Pengangguran Di Indonesia.

Pelinescu, E. (2015). The Impact of Human Capital on Economic Growth. *Procedia Economics and Finance*, 22, 184–190.

Prasetyo, Rindang Bangun dan Muhammad Firdaus. 2009. *Pengaruh Infrastruktur Pada Pertumbuhan Ekonomi Wilayah di Indonesia.* Jurnal Penelitian antara Badan Pusat Statistik Sulawesi Tengah dan Departemen Ilmu Ekonomi Fakultas Ekonomi dan Manajemen Institut Pertanian Bogor.

Santoso, R. (2023). Efek Jangka Panjang Korupsi terhadap Kinerja Belanja Negara di Indonesia. *Jurnal Ekonomi dan Kebijakan Fiskal*, 14(2), 98– 115.

Siregar, E., & Rahmanta. (2018). Impor dan Pengeluaran Pemerintah di Indonesia. *Jurnal Ekonomi dan Kebijakan Publik*, 11(2), 87–101.

Sjafii, Ahmad. 2009. *Pengaruh Investasi Fisik dan Investasi Pembangunan Manusia terhadap Pertumbuhan Ekonomi Jawa Timur 1990 – 2004*. Journal of Indonesia Applied Economics, Vol 3, No 1 hal 59 – 76.

Toha, M., & Manaku, A. A. C. (2020). Perkembangan Dan Problematika Pasar Modal Syariah Di Indonesia. *Al-tsaman: Jurnal Ekonomi dan Keuangan Islam*, *2*(1), 135-144. Retrieved from https://ejournal.uas.ac.id/index.php/Al-tsaman/article/view/312