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HOW EFFECTIVE ARE INDONESIA'S PUBLIC POLICIES IN DRIVING ECONOMIC GROWTH?

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ABSTRACT

Indonesia faces a few structural challenges that fundamentally impact the sustainability of economic growth, as evidenced by its fluctuating growth patterns. This study aims to examine the extent to which government expenditure, inflation, trade, and the budget deficit contribute to growth or act as a hindrance. The data used is an annual time series over the observation period of 1988 - 2024. This study uses the Autoregressive Distributed Lag (ARDL) analysis method to identify the long-term and short-term relationships between variables. The research results show increase in Government Expenditure directly boosting aggregate demand, although the impact is temporary. Inflation tends to depress economic growth due to weakened purchasing power and economic uncertainty. Trade contributes little to growth due to fluctuations in global commodity prices. Budget deficits can boost growth through fiscal stimulus, so that it can stimulate economic activity and increase domestic output. In the long term, government expenditure resulting in a greater increase in growth than other factors. Research findings indicate that controlling inflation and improving the quality of government spending play a crucial role in maintaining stable economic growth. Key factors in promoting sustainable growth are maintaining consistent fiscal policy, prudent budget deficit management, and strengthening trade.
Keywords: GDP, Government Expenditure, Trade, Inflation, Budget Deficit

ABSTRAK

Indonesia menghadapi sejumlah tantangan struktural yang secara fundamental mempengaruhi keberlanjutan pertumbuhan ekonomi. Hal ini terlihat dari pola pertumbuhan yang cenderung fluktuatif. Penelitian ini bertujuan untuk melihat sejauh mana pengeluaran akhir pemerintah, inflasi, perdagangan internasional dan defisit anggaran berkontribusi dalam mendorong pertumbuhan atau justru menjadi faktor penghambat. Data yang digunakan adalah data time series pada periode 1988-2024. Studi ini menerapkan pendekatan Autoregressive Distributed Lag (ARDL) untuk mengidentifikasi hubungan jangka pendek dan jangka panjang antarvariabel. Hasil penelitian ini menunjukan peningkatan pengeluaran konsumsi akhir pemerintah secara langsung mendorong permintaan agregat meskipun dampaknya bersifat sementara. Sedangkan inflasi cenderung menekan pertumbuhan akibat melemahnya daya beli masyarakat dan ketidakpastian ekonomi. Perdagangan internasional memberikan kontribusi yang lemah karena pengaruh fluktuasi harga komoditas global. Dalam jangka panjang, pengeluaran konsumsi akhir pemerintah menghasilkan kenaikan pertumbuhan yang lebih besar dibandingkan faktor lain. Temuan penelitian menunjukan bahwa pengendalian inflasi dan peningkatan kualitas konsumsi pemerintah

berperan penting dalam menjaga stabilits pertumbuhan ekonomi. Faktor kunci dalam mendorong pertumbuhan jangka panjang ialah menjaga konsistensi kebijakan fiskal yang berkelanjutan, pengelolaan defisit anggaran yang hati-hati, dan penguatan perdagangan internasional.
Kata Kunci: *PDB, Pengeluaran Pemerintah, Perdagangan Internasional, Inflasi, Defisit Anggaran*

I. INTRODUCTION

Economic growth is often used as a benchmark for observing economic dynamics and as an indicator of a country's level of social well-being. Generally, economic growth in developed countries tends to be slower than in developing countries. Developed countries already have stable economies, allowing them to focus solely on improving the quality of human resources and sustainable economic development. Meanwhile, developing countries, including Indonesia, still rely on specific sectors and emerging industries. The goverment has a crucial role in promoting comprehensive and sustainable growth by providing fundamental public services and goods. The government has the capacity to mobilize and allocate resources from taxes, non-tax revenues, and grants to improve the quality of public services and accelerate economic development (Mallick et al., 2016).

Based on the perspective of Solow's (1956), neoclassical economics growth theory, increases in economic output are influenced by capital increases, labor force growth, and technological development, with technological progress acting as the primary driver of growth in the long run. Furthermore, the endogenous growth approach proposed by Romer (1990) emphasizes the importance of government's role through public policy, investment in human resources, productive government expenditure, and trade openness in supporting sustainable growth. Furthermore, stable macroeconomic conditions are crucial because high inflationary pressures and excessive fiscal deficits have the potential to reduce investment appetite and slow economic growth (Fischer, 1993). Therefore, a comprehensive understanding of the determinants of economic growth, grounded in sound theory, is essential for formulating effective and sustainable development policies.

The problem of economic growth in Indonesia has a more prominent urgency and complexity when compared to other ASEAN countries. Indonesia, as a developing country has passed global economic challenges under various circumtances, such as the 1998 economic crisis, the 2008 global financial crisis, the 2013 taper tantrum, the 2017 global economic slowdown, and the impact of the COVID19 pandemic in 2020. Although Indonesia is the largest economy in ASEAN, its economic growth rate tends to be moderate and fluctuating, and has not yet fully matched the high growth achieved by some other ASEAN countries over a given period. The economic growth of Indonesia and other ASEAN countries can be seen in figure 1 below.

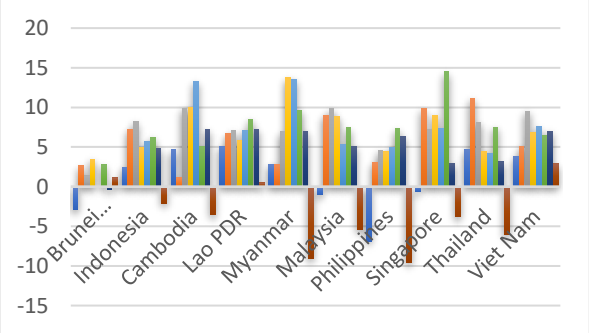


Figure 1. Gross Domestic Product

During the research period, there have been several declines in economic growth rates, with the drastic decline occurring in 1998, reaching 13.13% due to the monetary crisis. Subsequently, there was a further decline of 0.20% in 2008 due to the global financial crisis. In 2020, there was a sharp decline due to the impact of the COVID19 pandemic, reaching 2.06%. This situation demonstrates that economic size does not always translate into optimal growth performance. Furthermore, with its large economic scale and large population, any slowdown or acceleration in growth in Indonesia has far-reaching economic and social impacts. In response, the country needs a strong and continuous recovery to face various future economic challenges. This urgency stimulates policymakers to optimize

existing fiscal instruments to encourage economic recovery and maintain long-term financial stability (Gazar, 2025; Hongzhong et al., 2023). Fiscal policy is a vital approach implemented by policy makers to encourage strong economic growth by determining the amount of government revenue and expenditure each year, which is stated in the State Budget (APBN).

The relationship between government expenditure and economic growth over time continues to be a central issue that is widely discussed by policy makers and researchers (Ibrahim, 2019). Since the 1998 economic crisis, Indonesia has experienced various changes in managing government final consumption expenditure. This crisis not only undermined economic stability but also weakened the country's fiscal capacity due to a decline in GDP, the collapse of the banking system, and a sharp increase in the budget deficit. In the initial stages of fiscal reform between 1999 and 2004, the government attempted to revive the economy by increasing spending on public services, despite limited fiscal space due to the debt burden and a spending focus dominated by routine expenditures, such as debt interest payments and employee salaries. Entering the 2005-2014 period, fiscal conditions began to improve along with stable economic growth, but government spending still faced common problems, such as poor efficiency, less than ideal distribution to productive sectors, and a heavy reliance on household consumption as a driver of GDP. These challenges were exacerbated by various World Bank studies that demonstrated that although the proportion of government consumption expenditure remained relatively constant, the quality of expenditure was often not aligned with long-term development needs, particularly in education, health, and infrastructure. During the 2015-2019 period, the Indonesian government placed greater emphasis on infrastructure development and improving the budget system, but regional disparities and fragmented planning continued to undermine spending effectiveness. When the COVID19 pandemic struck in 2020, government consumption spending surged dramatically as a means of supporting the economy through health initiatives, social assistance, and recovery programs. While this helped stabilize the economy, it also squeezed fiscal space due to a ballooning deficit and the need for greater debt financing. In the 2021-2024 period, the government faces new challenges, such as post-pandemic spending adjustments, the fiscal burden of mandatory spending, and the need to restructure the budget for greater efficiency. Indrawati et al. (2024) shows that the restrictions on fiscal space after the pandemic make spending priorities crucial, while previous research such as Hans & Prasetyia (2025) and the World Bank's Public Expenditure Review confirms that structural ineffectiveness, including the dominance of routine spending, uneven quality of public services, and differences between provinces, has persisted since the late 1990s and continues to be an obstacle until 2024. Therefore, the issue of government expenditure in Indonesia during 1998-2024 is not only about budget volume, but also includes distribution efficiency, fiscal resilience, and institutional capacity to ensure that government expenditure can stimulate inclusive and sustainable economic growth. Government expenditure also plays a crucial role in stimulating aggregate demand, driving economic growth, and supporting job creation through investment in public goods and services (Gupta et al., 2024), reducing adverse impacts and promoting economic resilience (Arpaia & Turrini, 2008; Onifade et al., 2020).

Another factor that has the potential to influence economic growth is inflation. High inflation depresses economic growth by weakening purchasing power, increasing production costs, and creating uncertainty that hinders investment flows, thus slowing overall economic expansion. This pattern is clearly evident in the historical dynamics of the period 1988 to 2024. Inflation surged around 58% in 1998 due to the sharp depreciation of the rupiah and rising prices of basic necessities, triggering an economic contraction of up to -13,1% as household consumption declined and many companies were unable to bear the rising production costs. In contrast, from the beginning of 2000

to 2010, there was a more constructive relationship, with low inflation of around 5% to 10%, with economic growth of around 5% to 6%, supported by increasing foreign investment flows due to price stability. However, in 2022/2023, global inflationary pressures following the COVID19 pandemic and the impact of the Ukrainian war pushed domestic inflation to 4-6%, burdening middle-class consumption and reducing growth from 5,3% in 2022 to 5% in 2023 due to rising energy and food prices and monetary policy tightening by Bank Indonesia. In general, data from Statistics Indonesia (BPS) and the World Bank show that inflation above 10% is consistently associated with stagnant or negative growth, thus highlighting the importance of price stability through coordinated fiscal and monetary policies to maintain sustainable Indonesian economic growth.

Besides inflation, trade is also a factor that can influence the dynamics of Indonesia's economic growth from the 1990s to the present (Ifa & Yahdi, 2020; Kambono, 2025; Putra et al., 2025). Despite its significant contribution, challenges remain, such as high dependence on commodities that are highly sensitive to global price fluctuations. These challenges include the fall in oil and coal prices in 2014-2016, which triggered a trade deficit of around US$31 billion in 2018 and reduced economic growth to 4.9% in 2019. Major shocks such as the 1997/1998 crisis caused a GDP contraction of -13,1%, and the COVID19 pandemic in 2020 caused growth to reach only 2,1%, further exacerbating pressures as exports plummeted while imports of consumer and capital goods remained high. Data from Bank Indonesia and the Statistics Indonesia show that although the export-to-GDP ratio reached 30% in 2011, these strong fluctuations have made the economy unstable, marked by a recurring trade deficit of US$10-20 billion per year until 2023. This situation underscores the need for export diversification into the manufacturing sector to reduce dependence on raw commodities.

Another factor observed to influence economic growth is the budget deficit. Budget deficits depress growth primarily through increasing public debt burdens, rising potential inflation, weakening exchange rates, and shrinking fiscal capacity to finance productive investment. Indonesia's budget deficit throughout the 2000s showed an increasing trend, despite fluctuations between periods. This increase in the deficit reflects a shift in Indonesia's fiscal policy direction from a more restrictive approach to one that is expansive and responsive to the dynamics of the economic cycle (Agustin, 2025; Elisabeth & Sugiyanto, 2021; Kusuma et al., 2025). However, this situation also presents serious challenges, this resulted in interest payments consuming a significant portion of the budget and crowding out the private sector. This situation exacerbated macroeconomic instability and scarred investment. Meanwhile, debt (especially foreign debt) increased exchange rate, interest rate, and inflation risks, which in turn slowed economic growth. Overall, nearly 14 decades have shown that without prudent debt management, efficient spending allocation, and strong fiscal discipline, deficits tend to hinder rather than encourage economic growth.

Research on the relationship between economic growth, government expenditure, inflation, trade, and budget deficit have been extensively studied, including in Indonesia. However, the empirical findings are inconsitent. Some studies indicate the GE has positive effect on economic growth (Mazorodze, 2018), while other studies show weak or even negative effects (Nor & Yusof, 2025). In addition, government expenditure also does not have the power to influence growth in the long term (Islam et al., 2022). Differences in research results also occur in other variables, Hussain & Zafar (2018)) and most findings agree that high inflation has a negative impact on economic growth in a country, but this differs from the findings Aich et al. (2025); Enejoh & Tsauni (2017) who found that controlled inflation can increase economic growth in Bangladesh and Nigeria by emphasizing policies that support sustainable development. Other variables such as trade according to Islam et al. (2022); Sunde et al. (2023) can support the achievement of economic growth, on the other

hand, Bouchoucha & Ali (2019) said that trade actually has a negative relationship. Furthermore, according to Adebowale (2021); Sabr et al. (2021) who have researched the relationship between budget deficit and economic growth, concluded that if budget deficit is not managed well it will have a negative impact on economic growth, especially in the long term. The results of this research contradict the findings of Molocwa et al. (2018); Valentin et al. (2025); Yusuff & Abolaji (2020) which states that wise and careful management is needed to optimize the positive impact on the dynamics of economic growth.

The differences in previous research findings above indicate a research gap in the literature, which is thought to arise from differences in observation periods, data characteristics, and estimation methods used. Furthermore, macroeconomic variables and economic growth is dynamic and can vary over time.Therefore, this study applies the Autoregressive Distributed Lag (ARDL) approach, which is able to handle differences in variable stationarity levels and estimate short-term and long-term relationships. This is expected to produce more comprehensive empirical findings and bridge the existing research gap.

II. RESEARCH METHOD

This study utilizes secondary data sourced from official and credible institutions. The data used is annual time series data covering Government Expenditure (GE), Inflation (INF), Trade, Budget Deficit (BD) variables, and Economic Growth (GDP) in Indonesia during the observation period of 1988-2024.

Variable Measurement

Economic growth (GDP) is an indicator that shows the total market value of all goods and services produced within a country during a one-year period. GDP serves as an instrument for assessing a country's overall economic performance, monitoring economic growth rates, analyzing economic structure, and serving as a guide for the government in designing economic policies. Annual GDP data is sourced from the World Bank.

Government Expenditure (GE) refers to total government expenditure on goods and services, excluding capital expenditure. Government consumption has a direct impact on current consumption, making it crucial to analyze its role in maintaining stability and stimulating economic activity during crises. Government consumption also serves as an indicator reflecting its direct influence on economic activity, which aligns with Keynesian theory. Annual government consumption data is sourced from the World Bank.

Inflasi (INF) is a condition where the prices of goods and services rise continuously, which can lead to a decline in the value of money, purchasing power, and public welfare. Inflation can be measured using the consumer price index; inflation represents the annual percentage change in the average consumer's expenditure on representative goods and services over a specific period, such as a year. Annual inflation data is sourced from the World Bank.

TRADE includes the total value of exports and imports of goods and services. Trade is expressed as a percentage of GDP, which is the total income received from the production of goods and services in a region during a specific period. Annual trade data is sourced from the World Bank.

A Budget Deficit (BD) is a situation where revenue is less than expenditure within a reporting period, usually a year. In short, the government is spending more than it is receiving in revenue. Annual budget deficit data is sourced from the Ministry of Finance.

This study uses the Autoregressive Distributed Lag (ARDL) analysis method with eviews 12, to identify the long-term and short-term relationships among variables. The ARDL model was chosen because it has the advantage of accommodating variables with different levels of integration, both I(0) and I(1). In addition, this model is able to produce accurate long-term estimates even using a relatively small sample size. The ARDL equation form applied is as follows:

$$\Delta GDP_t = \beta_0 + \sum_{i=1}^{m} \beta_i \Delta GDP_{t-i} + \sum_{i=0}^{n_1} \theta_i \Delta GE_{t-i} + \sum_{i=0}^{n_2} \theta_i \Delta INF_{t-i}$$

$$+\sum_{i=0}^{n_3}\theta_i TRADE_{t-i}+\sum_{i=0}^{n_4}\theta_i \Delta BD_{t-i}+\varphi_1 GDP_{t-1}+\varphi_2 GE_{t-1}$$
$$+\varphi_3 INF_{t-1}+\varphi_4 TRADE_{t-1}+\varphi_5 BD_{t-1}+\varepsilon_t$$

Furthermore, the analysis is carried out using quantitative techniques through several stages, including stationarity testing, determining the optimum lag test, bounds test, ARDL model estimation, and stability test, so that the results obtained can provide a comprehensive picture of the influence among variables in the short and long term.

III. RESULS AND DISCUSSION

1) Stationarity Test

Before conducting estimation using the ARDL model, several diagnostic tests need to be performed to ensure that the model does not violate basic econometric assumptions. The first step is a stationarity test using the Augmented Dickey-Fuller (ADF) test at a significance level of 95% or α = 5%. Based on the ADF test results shown in Table 1, the stationary variables at the level are GDP and inflation, while at the first difference level, all variables are stationary.

Tabel 1. Unit Root Test

Variable	P-value at Level	P-value at First Difference
GDP	0,0016	0,0000
GE	0,4720	0,0001
INF	0,0008	0,0000
TRADE	0,0747	0,0000
BD	0,1176	0,0000

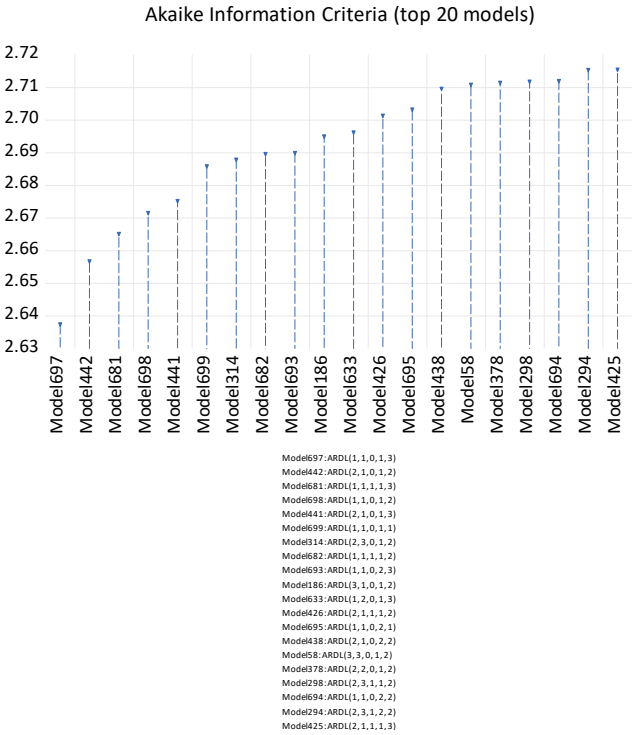
2) Lag Length Criteria

The next step is to determine the lag length for the ARDL model boundary test. In this study, the optimum lag was determined using the AIC criteria. The lag length was determined based on the lag that yielded the lowest critical value. Based on table 2, lag 3 is the most optimal option for the ARDL model. Results for the ARDL model (1,1,0,1,3) which successfully met the minimum limit based on the AIC criteria are presented in Figure 2. Meanwhile, the results of the ARDL cointegration test (1,1,0,1,3) are summarized in table 3.

Table 2. Var Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-388,2833	NA	7669,517	23,13431	23,35877	23,21086
1	-317,0765	117,2817	515,7125	20,41627	21,76305*	20,87556
2	-287,1257	40,52169	426,7522	20,12504	22,59415	20,96708
3	-246,3630	43,16051*	223,8133*	19,19782*	22,78926	20,42261*

Source: data processed, 2025



Source: data processed, 2025

Figure 2. Estimation of The Best ARDL Model

3) ARDL Bounds Test

This test aims to ensure that the obtained ARDL model is feasible and meets the criteria. The test is conducted using the Bounds Test to assess the presence or absence of a long-term relationship in the selected ARDL model. The main focus of this Bounds Test is the F-statistic value, which is then compared to the critical value at the 5% significance level. If the F-statistic value exceeds the upper limit, a long-term relationship exists. The results of the Bounds Test are presented in table 3. Based on the bounds test, the F-statistic value was 30,76213, which means it is greater than or exceeds the upper limit at the 5% level.

Table 3. Bounds Test

F-Bounds Test	
Test Statistic	Value
F-statistic	30,76213

k	4

Source: data processed, 2025

This finding indicates that the five variables in the study GDP, GE, INF, TRADE, and DB have a long-term relationship or are cointegrated. Therefore, this model meets the requirements for the ARDL model to be recommended for use.

4) ARDL Short-Term and Long-Term

Table 4. ARDL Short-Term Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8,446887	3,525262	-2,396102	0,0251
GDP(-1)*	-1,017397	0,088995	-11,43209	0,0000
GE(-1)	1,135547	0,268256	4,233070	0,0003
INF**	-0,319061	0,030200	-10,56493	0,0000
ΓRADE(-1)	0,140948	0,033881	4,160133	0,0004
BD(-1)	0,732797	0,170759	4,291414	0,0003
D(GE)	-0,025474	0,405202	-0,062867	0,9504
D(TRADE)	0,036799	0,036026	1,021456	0,3177
D(BD)	1,198868	0,170350	7,037678	0,0000
D(BD(-1))	0,355365	0,178913	1,986243	0,0590
D(BD(-2))	0,253534	0,169349	1,497104	0,1480

R-squared	0977063
Adjusted R-squared	0,972967
S.E. of regression	0.,21306
Sum squared resid	14,56792
Log likelihood	-33,83575
Durbin-Watson stat	2,393803

Source: data processed, 2025

Based on Table 4, it can be seen that in the short term, in the previous 1-year period, economic growth was influenced by GE, Trade, and BD. A 1% increase in GE contributed to an increase in GDP of around 1,135547. This finding confirms a strong positive relationship, where GE, including spending on goods and services such as employee salaries, public institution operations, and public services, has been shown to contribute to GDP. Within the Keynesian theoretical framework, this spending can increase aggregate demand, which then expands domestic output, strengthens employment, and boosts household consumption. Statistics Indonesia data shows that this spending component contributes around 10-15% to GDP. Furthermore, GE strengthens social infrastructure and administrative capacity, which indirectly increases private sector productivity by reducing transaction costs and strengthening investor confidence. However, its effectiveness also depends heavily on the quality of budget management. This finding aligns with research conducted by Bonokeling et al. (2022); Emeru (2023); Loizides & Vamvoukas (2019); Maingi (2017); Mandala (2020) who consider that GE is capable of increasing GDP in the short term.

Furthermore, a 1% increase in TRADE is able to increase GDP by 0,140948. Entering the early 1980s, Indonesia faced economic pressures due to declining revenues from the oil and gas sector, prompting the government to shift its development strategy toward export diversification. In this context, a non-oil and gas export promotion policy was formulated adn implemented in amore structured manner through the 1982 Export Policy. Although this policy initially failed to produce optimal results and was even followed by a decline in non-oil and gas exports in 1983 the government subsequently strengthened the policy direction through various trade deregulation packages, investment deregulation, and the devaluation of the rupiah in the mid-1980s. These measures succeeded in creasing the competitiveness of non-oil and gas exports, particularly from the manufacturing sector, improving the current account deficit, and in 1987, non-oil and gas exports surpassed oil and gas exports for the first time. This success marked an important foundation for Indonesia's export diversification (Basri, 2002; Sjahrir, 2018). However, in the past two decades, the trade balance has shown a downward trend, although it still recorded an average surplus, as imports grew faster than exports. Despite this, the trade balance has been relatively resilient in the face of various crises, only experiencing a deficit in 2012, while maintaning a surplus during the 2008 global crisis and the 2020 COVID19 pandemic. This situation also indicates the continued high dependence of domestic industry on imported raw materials. Therefore, the government needs to strengthen import substitution policies and optimize the agriculture and upstream industrisl sectors to maintain a sustainable trade surplus (Fadhlani et al., 2024; Sari, 2024; Sudarmawan, 2022).

(Thirafi, 2020). This finding is also supported by Ali & Abdullah (2015); Esaku (2021); Farag et al. (2021); Hye & Lau (2015); Keho (2017); Kong et al. (2021); Muhammad et al. (2016); Singh (2023).

Meanwhile, BD also has a positive and significant influence on economic growth where every 1% increase in BD in the previous period will increase economic growth by 0,732797. The economic situation in 1987 showed that the budget deficit was used as a recovery tool and successfully contributed positively to economic growth. In that year, the Indonesian economy was still in the recovery phase after the impact of the decline in oil prices in the early 1980s. In this situation, the government implemented an expansionary budget deficit policy to stimulate economic activity. This policy produced positive results because it focused on infrastructure development, labor-intensive programs, and strengthening the industrialization process, which ultimately increased aggregate demand and created more jobs. This fiscal measure accelerated the shift in economic structure from the oil sector to the manufacturing sector (Sjahrir, 2018). The results of this study support the findings Awolaja & Esefo (2019); Hosain et al. (2024); Mwigeka (2025); Sore et al. (2024).

Table 5. ARDL Long-Term Result

Variable	Coeff.	Std. Error	t-Stat	Prob.
GE	1,116130	0,226180	4,934706	0,0001
INF	-0,313605	0,031671	-9,901870	0,0000
TRADE	0,138538	0,033451	4,141561	0,0004
BD	0,720267	0,157364	4,577088	0,0001
C	-8,302451	3,351294	-2,477387	0,0210

Source: data processed, 2025

Meanwhile, as seen in table 5 shows that 1% increase in long-term GE results in an increase in economic growth of 1,116130 is greater than offsetting growth from other factors such as TRADE and BD. The results of this study support Keynesian and endogenous growth theories. According to Keynes, increased government spending can boost aggregate demand through the multiplier effect, thereby increasing national output. Meanwhile, within the framework of endogenous growth theory, government spending—particularly in productive sectors such as infrastructure, education, and health—can improve the quality of human capital and productivity, which impacts long-term economic growth.

This finding confirms that GE plays a crucial role in efforts to grow the Indonesian economy. GE can increase aggregate demand and maintain economic stability when private sector activity weakens, thus the government can prevent a decline in production and a surge in unemployment that could disrupt economic activity in the future. This finding is in line with the findings of the World Bank review, which confirms that public consumption spending continues to contribute to long-term output even though its impact is not as strong as investment. Furthermore, GE becomes the foundation of economic growth if managed efficiently so that a fiscal strategy is needed that optimizes the composition of spending, such as maintaining public consumption that strengthens basic services and human capital, and ensuring that productive public investment is not neglected, as well as improving bureaucratic efficiency and the quality of budget management as recommended by the OECD and the World Bank. This finding is supported by research conducted by Bonokeling et al. (2022); Mandala (2020); Awolaja & Esefo (2019).

Furthermore, a 1% increase in the long-term INF is correlated with a decrease in the economic growth rate or vice versa 0,313605%.

The research results show that inflation (INF) is proven consistent with monetarist theory and the Aggregate Supply–Aggregate Demand (AS–AD) framework. According to the monetarist view, high and unstable inflation creates economic uncertainty, reduces people's purchasing power, and hinders productive investment. Within the AS–AD framework, inflation stemming from cost pressures or excess demand can reduce real output when the economy overheats. A country benefits from maintaining low inflation level sustainably, as this reflects healthy economic perfomance and maintained price stability. Conversely, sharply rising and

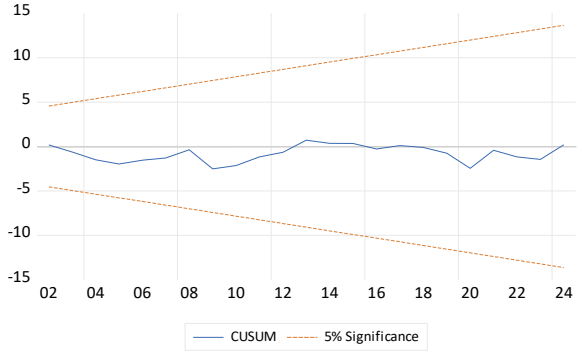
unstable inflation can have various detrimental impacts, such as rapid and unpredictable price increases. This situation leads to a decline in people's purchasing power, leading to a decline in living standards, ultimately hampering a country's economic growth (Putri et al., 2024). Thus, controlling inflation through effective monetary policy is crucial to prevent negative impacts and support sustainable growth. These findings are supported by previous research conducted by Ahmed (2022); Mohseni & Jouzaryan (2016).

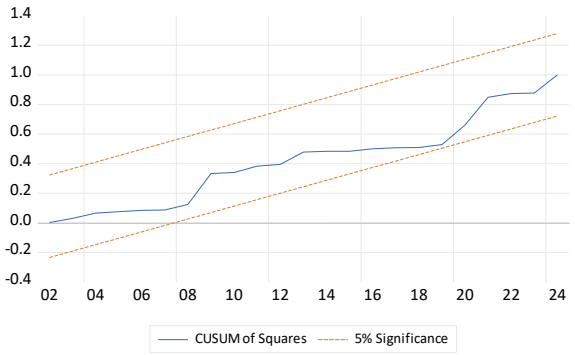
A 1% increase in long-term TRADE can stimulate economic growth by up to 0,138538%. The research also found that trade supports the theory of comparative advantage. In the context of Indonesia as a developing country, increased international trade activity since the era of economic liberalization has proven to be a driving factor in economic growth, particularly through increased exports. This is based on the fact that international trade can expand market access for export activities, enabling larger and more productive production scales. Furthermore, Indonesia's involvement in global value chains (GVCs) accelerates the flow of technology, encourages the use of modern production techniques, and creates productive jobs. GVCs contribute significantly to growth when supported by adequate domestic policies (Ndubuisi & Owusu, 2023; World Bank, 2017). Trade is also considered to increase competition and efficiency, spur innovation, and lower costs at the company level, as demonstrated in empirical studies by the IMF and OECD regarding the impact of market openness on productivity and economic structure. This finding is also supported by Esaku (2021); Farag et al. (2021); Keho (2017); Kong et al. (2021); Muhammad et al. (2016); Singh (2023).

Meanwhile, a 1% increase in BD is able to drive GDP by 0,720267%. The finding contradicts the crowding-out theory from both classical and neoclassical perspectives. A budget deficit can positively impact economic growth if allocated to productive public spending, thus generating a multiplier effect greater than the potential crowding-out. Furthermore, when the economy is still below full employment and financial markets are not yet fully functioning, an increase in the deficit does not always trigger an increase in interest rates, thus maintaining private investment and increasing economic growth. However, these benefits are highly influenced by the scale and quality of investment, as well as manageable debt levels. Excessive public debt or a rising deficit without the support of productive investment can actually suppress growth through crowding out private investment or increasing fiscal risk (Keho, 2024; Samwel, 2016). This finding aligns with research conducted by Anyadike et al. (2024); Ekpo et al. (2025); Gyasi (2020); Hosain et al. (2024).

5) Stability Test

Furthermore, to evaluate model stability, the CUSUM and CUSUMQ tests are necessary. The graph in Figure 3 shows that the residual line is within the 5% confidence interval, indicating that the model is stable. The CUSUM test uses recursive residual accumulation, and as long as the line does not exceed the critical limit, the model is considered stable. Conversely, if it exceeds the limit, it indicates structural change. Meanwhile, the CUSUMQ utilizes recursive residual accumulation of squares, and results that remain within the confidence limits indicate variance stability. If the line goes outside the limit, it may indicate heteroscedasticity or a structural change in the error variance (Putri et al., 2024). Overall, these results confirm the consistency and accuracy of the ARDL model used in analyzing the correlation between GDP, GE, INF, TRADE, and BD in this study.





Source: data processed, 2025

Figure 3. CUSUM Test & CUSUM of Squares Test

IV. CONCLUSION

This study focuses on identifying how GE, INF, TRADE, and BD affect Indonesia's economic growth (GDP) during 1988-2024. The results of this study indicate a short-term influence of GDP on GE, Trade, and BD in the previous one-year period. This finding confirms a strong positive relationship, where GE, including spending on goods and services such as employee salaries, public institution operations, and public services, is proven to contribute to GDP. Furthermore, a 1% increase in trade can increase GDP by0.140948. Around 1987, Indonesia was undergoing a transition phase from dependence on petroleum to export diversification with GDP growing at around 5-6% per year. This occurred due to the encouragement of trade deregulation policies and foreign investment under the New Order government. Meanwhile, BD also had a positive and significant influence on economic growth, where every 1% increase in BD over the previous period would increase GDP by 0,732797. The economic situation in 1987 showed that BD was used as a recovery tool and successfully made a positive contribution to economic growth.

Meanwhile, in the long term, increasing GE results in a greater increase in GDP than offsets the growth of other factors such as TRADE and BD. This finding confirms that GE plays a crucial role in Indonesia's economic growth. The TRADE factor can stimulate GDP through international trade, enabling larger and more productive production scales. Meanwhile, BD, used to finance productive investments, can expand production capacity, reduce logistics costs, and increase productivity, thus supporting long-term growth. For example, through bond issuance to finance infrastructure development, energy, education, and health sectors. Furthermore, high and uncontrolled inflation can increase economic uncertainty, reduce private investment, and reduce public purchasing power, ultimately hampering productivity and capital accumulation. Overall, the results of this study confirm that stable and sustainable Indonesian economic growth requires well-coordinated synergy of fiscal, monetary, and trade policies, so as to create a balance between growth stimulus, macroeconomic stability, and long-term development sustainability.

The findings emphasize the importance of prudent fiscal policy, particularly GE and BD as recovery tools. Further research is recommended that simulates policy scenarios, such as the impact of reducing BD through tax reform on GDP, or how GE focused on green infrastructure can offset INF risks. This could involve simulation models such as DSGE for future projections, helping Indonesian policymakers optimize budget allocations amidst the post-COVIDS19 economic transition.

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