

THE IMPACT OF FISCAL POLICY AND FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH IN EIGHT MEMBER COUNTRIES OF THE ORGANIZATION OF ISLAMIC COOPERATION (OIC)

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Abstract

This study provides evidence on how fiscal policy, proxied by government expenditure, and foreign direct investment (FDI) affect real economic growth in the D-8 group of Organization of Islamic Cooperation (OIC) member countries Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan, and Turkey. It responds to mixed findings in the OIC literature by focusing on a more homogeneous cooperation bloc and by quantifying both the statistical and economic significance of these policy variables. The analysis uses annual panel data for 2017–2021, combining World Development Indicators and official national statistics. Economic growth is measured as the annual real GDP growth rate, while fiscal policy and FDI are measured as government expenditure (% of GDP) and net FDI inflows (% of GDP), respectively. A linear panel-data model is estimated, and specification tests (Chow and Hausman) clearly support a Fixed Effects Model that controls for time-invariant country heterogeneity. The Fixed Effects estimates show that both government expenditure and FDI have positive and statistically significant impacts on growth ($p < 0.01$). The coefficient for government expenditure is $\beta_1 = 1.60$, implying that a 1 percentage-point increase in government expenditure as a share of GDP is associated with an increase of about 1.60 percentage points in real GDP growth, ceteris paribus. The coefficient for FDI is $\beta_2 = 2.19$, indicating that a 1 percentage-point increase in net FDI inflows relative to GDP is associated with an increase of roughly 2.19 percentage points in real GDP growth. The model explains around 61% of the within-country variation in growth over time. The study provides clear evidence that, in D-8 countries, both higher government expenditure and greater FDI inflows are not only statistically significant but also economically important drivers of growth during 2017–2021. These results position the D-8 within the more optimistic strand of the OIC literature on fiscal policy and FDI, and they underscore the potential of productive public spending and foreign capital to support post-crisis recovery and medium-term development in this cooperation bloc.

Key Words: *Fiscal Policy, Foreign Investment, Economic Development*

INTRODUCTION

The most important goal that all countries in the world pursue is sustained economic growth. It remains a focal point of interest and a matter of considerable international concern (Rantebua et al., 2020). Economic growth does not grow in a linear fashion. It can experience periods of slowdown and regression due to changes in the level of economic activity associated with goods and services from one year to another. For this reason, it is always crucial to apply governmental policies that can create accelerated economic growth to address current and future economic issues, such as unemployment reduction, managing inflation, and stimulating economic growth. (Azimi 2021).

Macroeconomic issues can be influenced by government activities, mainly through fiscal policy (Rantebua et al., 2020). Fiscal policy is used by the government to boost economic growth. It is one of the essential elements of developing countries' economic policies. It serves as a tool that helps in determining the stability of macroeconomy and economic growth. Fiscal policy is used to impact economic activity level and increase citizens' living standards. Good fiscal policymaking is expected to accelerate economic

recovery during economic crisis or economic slowdown with slow growth rates (Ma'ruf & Andriansyah, 2022).

Table 1.
Real GDP Growth Per Capita of OIC and Global (%)

Year	Reduce	World
2017	1.7	2.2
2018	1.3	2.1
2019	0.6	1.4
2020	-3.8	-4.1
2021	3.5	5.1

Statistical Yearbook of OIC Member States, 2022.

Looking at the annual GDP per capita growth percentages of OIC countries shown in Table 1, it can be observed that the recorded values do not really show significant growth. There are frequent declines recorded, especially between 2018 and 2020. These could probably be caused by COVID-19, which brought about contraction in many countries. Similarly, GDP growth compared to five years previously, which includes 2018 to 2020, shows only a marginal increase.

Figure 1 reflects that the GDP growth rate (%) in the D-8 countries did not change between 2018 and 2019. The GDP growth dramatically fell in 2020 due to the COVID-19 pandemic, which badly damaged the economy of every nation. In 2021, the D-8 economies regained strength and rebounded from the downturn experienced in 2020. However, the growth rate in 2022 is expected to remain either the same or show a slight increase. Source: World Bank, 2023. As a result, there wasn't any significant economic growth compared to the previous year. In stimulating the economical development of a nation, a government can reflect, assess, and implements appropriate policy to re-awaken the national economy, one of which includes fiscal policy (Aqmarina & Furqon, 2020).

Previous studies on economic growth in Muslim-majority countries, and in OIC members more broadly, do not yet provide a consistent answer on how government expenditure and foreign direct investment (FDI) shape growth, especially in the sub-group of D-8 countries. For fiscal policy, Wibowo, Kusuma, and Qizam (2022) show that government expenditure and money supply significantly promote economic growth in OIC members, while public debt reduces it (Wibowo, Kusuma, and Qizam 2022). In contrast, Prakoso (2020) finds that a larger government size has a negative effect on economic growth in OIC countries in both the short and long run, indicating potential crowding-out or inefficiency effects (Prakoso 2020). The FDI-growth relationship is also far from settled. Prastity (2016) reports that FDI and trade openness have a positive and significant impact on economic growth in OIC member states (Prastity 2016), whereas Raki et al. (2012) find that FDI has a negative and statistically significant effect on growth in D-8 countries (Raki, Kabirian, and Amirmojahedi 2012). More recently, Siddiqi and Sunaryati (2023) show that, for OIC members, FDI is negative and significant, while exports and international tourism are positive and significant, suggesting that external sector variables can pull growth in different directions (Siddiqi 2023). Romadhani et al. (2025) further highlight that the effects of FDI and trade openness differ between high-income and low-income OIC countries, underlining strong heterogeneity even within the same institutional block (Romadhani et al. 2025). Aken together, these findings point to contradictory evidence on how government expenditure and FDI affect growth in Muslim-majority economies. However, only a few studies treat the D-8 as a coherent economic cooperation group and jointly examine government expenditure and FDI with recent data, while also reporting the economic magnitude of the effects (for example, how a 1% increase in government spending or FDI changes GDP). This study is designed to fill that gap by focusing specifically on D-8 countries as a strategic subset of OIC members and by quantifying both the statistical and economic significance of government expenditure and FDI for economic growth. Aken together, these findings point to

contradictory evidence on how government expenditure and FDI affect growth in Muslim-majority economies. However, only a few studies treat the D-8 as a coherent economic cooperation group and jointly examine government expenditure and FDI with recent data, while also reporting the economic magnitude of the effects (for example, how a 1% increase in government spending or FDI changes GDP). This study is designed to fill that gap by focusing specifically on D-8 countries as a strategic subset of OIC members and by quantifying both the statistical and economic significance of government expenditure and FDI for economic growth.

Building on the above gap, this study has three main objectives. First, it aims to empirically examine the impact of government expenditure on economic growth in D-8 countries over the selected period, using a panel-data approach that accounts for unobserved country-specific factors. Second, it seeks to analyse the effect of FDI inflows on economic growth in the same group of countries, thereby clarifying whether FDI acts as a growth-enhancing channel or, as some evidence suggests, may have a neutral or even adverse effect under certain conditions. Third, the study intends to compare the strength and economic size of the two policy-relevant variables, government expenditure and FDI by translating the estimated coefficients into interpretable measures (for example, the percentage change in real GDP resulting from a 1% change in government expenditure or FDI). Through these objectives, the paper aims to provide policymakers in D-8/OIC countries with concrete, quantitative insights rather than purely qualitative claims about positive or negative relationships.

Consistent with Keynesian demand-side theory and the growth literature on capital accumulation and technology transfer, this study formulates the following testable hypotheses for D-8 countries. H1: Higher government expenditure (as a share of GDP) has a positive and significant effect on economic growth in D-8 countries. H2: Higher FDI inflows (as a share of GDP) have a positive and significant effect on economic growth in D-8 countries. These hypotheses are intentionally directional: government expenditure is expected to stimulate aggregate demand and public investment, while FDI is expected to support growth through capital deepening, technology diffusion, and productivity spillovers. At the same time, the mixed evidence reported in earlier studies means that the empirical results may confirm or reject these expectations. By explicitly stating H1 and H2, the study provides a clear benchmark against which the panel-data estimates and the reported effect sizes can be evaluated.

LITERATURE REVIEW

The D8 Group, comprising Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan, and Turkey, puts together economies with diverse institutional structures and capacities but sharing the goal of strengthening economic cooperation, enhancing competitiveness, and deepening trade and investment. Common characteristics bind these members in dependence on particular commodities, such as oil/gas and agriculture, variable fiscal capacities, and gaps in infrastructure and human resources. In recent years, global dynamics have pressed FDI flows and fiscal space; therefore, the quality of public spending and investment facilitation become key instruments. Enhancing the common database, BASEIND, and the intra-D8 trade target underpins the medium-term agenda of deepening economic integration.

In all, the D8 sample has substantive relevance not only on account of proximity in objectives and characteristics as large-population developing countries but also provides sufficient variation to identify the fiscal/FDI-growth relationship. Fiscal policy is an important tool that the fiscal authorities use in association with monetary interventions to achieve certain macroeconomic objectives. Fiscal policy allows the government to manage and influence economic activities through its regulation of public finances, making it a key tool for macroeconomic stabilization (Burger & Calitz, 2021). Fiscal policy is considered an

indispensable aspect of government socio-economic strategies. The importance of fiscal policy becomes more apparent in pursuit of the following vital macroeconomic objectives: providing jobs, improving the level of living standards, reducing income inequality, and bringing about sustained economic growth. Through fiscal policy tools, government has the ability to stimulate the desired sectoral development, control expenditure levels, and energize economic activities. With this type of methodology, fiscal policy greatly contributes to the economy's path toward prosperity and stability in the long run. (Makhoba & Kaseeram, 2022).

According to Keynesian Cross theory, government expenditure has a strong impact on economic growth, and it directly affects the level of income and output. Government plays a very important role in provoking economic growth, and misallocation in government expenditure may hamper the growth process. Inadequate government spending may impede economic development. Suitable government spending may lead to higher economic growth. (Putri, 2022).

Government spending refers to the consumption of goods and services by the government, as well as the funding of administrative and developmental projects. Being the smallest component of expenditure, it has a significant impact on allocation, distribution, and stabilization. The government budget depends on the expected tax revenues, political factors, and current challenges faced. Government spending reflects governmental policy; once a policy is determined to buy goods and services, the relevant costs will appear in government spending. The theoretical underpinning for government spending is derived from the national income balance identity, which is expressed as $C + I + G + (XM)$. This equation supports the Keynesian theory about the role of government in the economy. It should be noted that a rise or fall in government spending will have a similar impact on national income. (Silalahi & Ginting, 2020).

Empirical work on fiscal policy and foreign direct investment (FDI) in Muslim-majority and OIC member countries has produced mixed evidence, which suggests that the growth effects of these variables are highly context-dependent. On the fiscal side, Wibowo, Kusuma, and Qizam (2022) show that government expenditure and money supply support economic growth in Muslim countries when combined with sound institutions, while public debt tends to drag growth, highlighting the importance of institutional quality as a conditioning factor (Wibowo et al. 2022). In contrast, Prakoso (2020) finds that a larger government size is associated with lower economic growth in OIC countries in both the short and long run, an outcome that is often interpreted as evidence of crowding-out and inefficiency effects of oversized public sectors (Prakoso 2020). A similar negative pattern emerges in JESTT's study on OIC economies, where government expenditure significantly reduces GDP, suggesting that in many member states public spending is either poorly targeted or dominated by non-productive items (Nugroho and Herianingrum 2022). Building on this debate, Erum et al. (2024) incorporate governance quality, natural resources, and ICT into a CS-ARDL framework for 43 OIC countries and report that fiscal expenditure can have a negative long-run impact on growth when governance constraints and resource dependence are taken into account (Erum et al. 2024). These contrasting findings indicate that the sign and magnitude of the government expenditure-growth relationship may depend on the size and composition of the budget, the stage of development, and the broader institutional environment rather than on spending levels alone.

The FDI growth nexus is equally contested in the OIC context. In line with standard neoclassical and endogenous growth theories, several studies confirm that FDI can foster growth through capital accumulation and technology transfer: Susilowati (2019), for example, finds that FDI has a positive and significant effect on economic growth in developing OIC member countries when modelled alongside IMF debt and stock-market variables (Susilowati et al. 2019). More recently, Belet (2025) documents a significant positive impact of FDI on economic growth in 34 OIC countries after controlling for external

debt, reinforcing the view that foreign capital is an important long-term growth driver in these economies (Belet 2025).

However, this optimistic narrative is challenged by studies that either find no effect or even a negative impact of FDI. Siddiqi and Sunaryati (2023) show that, while FDI, international tourism, and exports jointly influence economic growth in OIC members, FDI on its own has a negative and significant coefficient, suggesting that the benefits of foreign capital may be offset by profit repatriation, enclave production, or weak absorptive capacity (Siddiqi 2023). Romadhani et al. (2025) further reveal that the contribution of FDI and trade openness to growth differs across income groups within the OIC, with FDI playing a more important role in low-income members (Romadhani et al. 2025).

A growing strand of research attributes these discrepancies to differences in institutional quality and financial development. Zulkifli et al. (2024) show that better financial development significantly increases FDI inflows into OIC countries, implying that domestic financial systems and institutional settings shape both the ability to attract and to productively absorb foreign capital (Zulkifli et al. 2024). In the D-8 context, Arisman (2021) focuses on trade agreements and shows that the D-8 as a cooperation framework has not yet delivered the expected growth acceleration, hinting that broader structural and institutional constraints may also limit the effectiveness of trade and investment-related policies (Arisman, Arif, and Harahap 2021). Taken together, the literature suggests that the effects of government expenditure and FDI on economic growth in OIC and D-8 countries are theoretically ambiguous and empirically heterogeneous, depending on the interaction between policy variables, institutional quality, and country-specific characteristics. However, there are still relatively few studies that (i) treat D-8 countries as a coherent economic group, (ii) jointly estimate the effects of government expenditure and FDI using recent post-2015 data, and (iii) explicitly report the economic magnitude of these effects. This study aims to address these gaps.

The theoretical framework of this study builds on Keynesian demand-side theory and the endogenous growth literature. In a simplified form, it conceptualizes two main causal pathways from policy and external finance to economic growth. First, government expenditure and economic growth higher government expenditure, especially in productive categories such as infrastructure, health, and education, can raise aggregate demand in the short run and expand the economy's productive capacity in the long run. However, the government-size literature, including Afonso and Furceri (2010), warns that beyond an optimal threshold, large and inefficient public sectors may reduce growth by crowding out private investment, distorting incentives, or creating fiscal vulnerabilities (Afonso and Furceri 2010). Empirical studies on OIC members illustrate this tension: some find pro-growth effects of government spending under sound institutions, while others report negative or insignificant coefficients when expenditures are poorly allocated or financed by unsustainable debt (Wibowo et al. 2022).

Second, FDI and economic growth, in growth theory, FDI is expected to promote growth through capital deepening, technology transfer, management know-how, and integration into global value chains. At the same time, dependency and enclave-economy arguments emphasize potential downsides, such as profit repatriation, limited linkages to the domestic economy, or environmental degradation, which can weaken or even reverse the growth impact of FDI. The mixed evidence for OIC countries, ranging from positive, to insignificant, to negative effects and suggests that the net outcome depends on host-country conditions (Susilowati et al. 2019). In this study, institutional quality (e.g. governance, regulatory effectiveness, corruption control) and financial development are treated as background moderating factors, when institutions are stronger and financial systems more developed, government expenditure is more likely to be productive and FDI more likely to generate spillovers; where institutions are weak, the same variables may have muted or even adverse effects (Wibowo et al. 2022). Conceptually, a diagram of the framework would depict arrows from *government expenditure* and *FDI* towards *economic growth*, with dashed arrows from *institutional*

quality/financial development interacting with both channels. While the baseline empirical model in this paper focuses on the direct effects of government expenditure and FDI on growth in D-8 countries, the discussion of results is informed by this broader theoretical structure.

Drawing on the above literature and theoretical framework, the study formulates more specific and testable hypotheses for the D-8 context. Given the Keynesian view that well-targeted public spending can stimulate aggregate demand and raise potential output and supported by evidence that government expenditure can be growth-enhancing when institutions are relatively sound (Wibowo et al. 2022), the first hypothesis is:

H1: Government expenditure (as a share of GDP) has a positive and statistically significant effect on economic growth in D-8 countries.

Similarly, in line with theories that emphasize the role of FDI in providing capital, technology, and access to global markets, and empirical findings that FDI contributes positively to growth in many OIC members, especially when institutional and macroeconomic conditions are supportive (Susilowati et al. 2019), the second hypothesis is:

H2: FDI inflows (as a share of GDP) have a positive and statistically significant effect on economic growth in D-8 countries.

At the same time, the literature review makes clear that these relationships are not mechanically positive: negative or insignificant effects are observed when public spending is inefficient, debt-financed, or poorly targeted, and when FDI is attracted into weak institutional environments that limit technology spillovers (Prakoso 2020). This means that, while H1 and H2 specify a positive expected sign, the empirical tests are genuinely informative: confirmation would align D-8 countries with the more optimistic strand of the literature, whereas rejection would support the more sceptical view that fiscal policy and FDI are not automatically growth-enhancing in this group of economies.

RESEARCH METHODS

This research is a type of investigation designed to explain the causal relationship between variables. It is also known as verification research or causal studies. The main purpose is to establish that variable X actually causes variable Y. This study attempts to gauge the impact of fiscal policy and foreign direct investment on the economic growth of OIC nations. In this context, government expenditure is used as a proxy for fiscal policy, while GDP is used as a proxy for economic growth. The population of this study consists of all member countries of the Developing Eight (D-8) cooperation group, namely Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan, and Turkey. Since there are only eight member countries and all of them are included in the analysis, this study adopts a census (total sampling) approach. Thus, there is no separate sampling procedure; every D-8 country becomes a panel unit in the empirical model.

This study uses annual secondary data obtained mainly from the World Development Indicators (WDI) of the World Bank and, where necessary, from official publications of national statistical agencies. The economic growth and FDI variables are taken from the standard WDI indicators, while government expenditure is taken from indicators on general government expenditure or government final consumption expenditure, depending on the most consistent series available for all D-8 countries.

The observation period covers the years **2017–2021**. This period is chosen for two main reasons. First, it represents the **most recent time span** for which relatively complete and consistent data are available for all D-8 countries in WDI, thereby reducing missing values. Second, the 2017–2021 window captures both the pre-pandemic and Covid-19 shock periods, allowing the study to observe how fiscal policy and FDI inflows relate to economic growth under normal conditions as well as during a major global disturbance.

Table 2.
Operational Definition of Variables

Variabel	Symbol	Operatinal Deferintion
Economic Growth	Y	Annual real GDP growth rate, measuring the percentage change in real output from one year to the next.
Government Expenditure	X1	General government expenditure or <i>government final consumption expenditure</i> as a share of GDP; used as a proxy for fiscal policy on the spending side.
Foreign Direct Investment (FDI)	X2	Foreign direct investment, net inflows (% of GDP), defined as net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in the host economy.

The empirical model estimated in this study is a linear panel-data regression of the following general form:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + e_{it}$$

The management:

Y = Economic Expansion

α = Constant

β_{1-2} = Regression Coefficient

X_{1it} = Public Expenditure

X_{2it} = International Investment

e_{it} = Error Term

The panel regression model estimation methods used in the data analysis are common effects models, fixed effects models, and random effects models. Tests used to select the models include Chow's test, the Hausman test, and the Lagrange multiplier test. Tests for classical assumptions tested for normality, multicollinearity, autocorrelation, and heteroscedasticity. The hypothesis testing included R^2 , the F test, and the t test.

RESULTS AND DISCUSSION

This section presents and interprets the empirical findings on the impact of government expenditure and foreign direct investment (FDI) on economic growth in D-8 countries over the period 2017–2021. The analysis starts from the basic properties of the data and model diagnostics, then turns to the core Fixed Effects regression results, and finally positions these findings in relation to the existing empirical literature on OIC and D-8 members.

Table 3.
Statistic Descriptive

	Y	X1	X2
Mean	3.475000	20.06600	1.355000
Median	3.650000	18.52500	1.050000
Maximum	11.40000	35.72000	5.400000
Minimum	-5.500000	11.99000	0.200000
Std. Dev	3.337952	7.180058	1.050995
Skewness	-0.529241	0.705288	1.696123
Kurtosis	3.537456	2.373840	6.610137
Jarque-Bera	2.348740	3.969669	40.90069
Probability	0.309014	0.137403	0.000000
Sum	139.0000	802.6400	54.20000
Sum Sq. Dev.	434.5350	2010.576	43.07900
Oservation	40	40	40

The descriptive statistics in Table 2 provide an initial overview of the macroeconomic environment in the D-8 group. Real GDP growth (Y) exhibits substantial variation over the period: the minimum value is -5.50 percent, the maximum is 11.40 percent, and the standard deviation is about 3.34. With a mean growth rate of 3.48 percent, this pattern indicates that D-8 countries experienced modest but volatile growth, with strong downturns associated with the Covid-19 shock and partial recovery thereafter. Government expenditure (X1), used as a proxy for fiscal policy, ranges from 11.99 to 35.72 percent of GDP, with a mean of 20.07 and a standard deviation of 7.18. This suggests wide differences in government size and fiscal space across the sample, from relatively lean states to more fiscally active ones. FDI inflows (X2), measured as net inflows in percent of GDP, lie between 0.20 and 5.40 percent, with an average of 1.36 and a standard deviation of 1.05, confirming that D-8 economies are generally characterised by low to moderate levels of foreign capital penetration. Overall, these statistics portray the D-8 as a set of developing and emerging economies that combine constrained fiscal capacity, limited FDI inflows, and significant growth volatility, especially during the pandemic period.

Table 4.
Selected Panel Data Regression Estimation Result

Variable	Coefficients	Standard Error and Probabilities	Value
Chow Test	Probabilities		0.0001
Hausman Test	Probabilities		0.0001
Normalitiy	Probabilities		0.390354
Autocorrelation Test	Probabilities		0.0631
Multicolinearity Test	Coefficient Correlation		0.46
Heteroscedacity Test	Probabilities X1		0.1561
	Probabilities X2		0.0925
X1	Coefficients		1.603452
	Standard Error		0.342214
	Probabilities		0.0001
X2	Coefficients		2.191510
	Standard Error		0.624435
	Probabilities		0.0014

Adjusted R-Squared	0.608264
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Before interpreting the economic meaning of the coefficients, it is crucial to confirm that the chosen estimator is appropriate and that the standard assumptions for inference are reasonably satisfied. The model selection tests reported in Table 3 clearly justify the choice of the Fixed Effects Model (FEM). The Chow test yields a probability value of 0.0001, well below the 5 percent level, which leads to the rejection of the Common Effect Model and indicates that allowing for country-specific intercepts significantly improves model fit. The Hausman test also produces a probability of 0.0001, implying that the null hypothesis in favour of the Random Effects Model is rejected; in other words, the unobserved country effects are correlated with the regressors, and the Fixed Effects estimator is preferred. Given these diagnostics, the FEM is adopted as the main specification. Classical assumption tests provide further reassurance. The normality test reports a probability of 0.390354, above the 5 percent threshold, suggesting that the residuals are approximately normally distributed. The Glejser heteroskedasticity test reports p-values of 0.1561 for government expenditure and 0.0925 for FDI, which are both above 0.05, indicating no strong evidence of heteroskedasticity. The autocorrelation test returns a probability of 0.0631; although this is close to the 10 percent level, it does not provide strong evidence of serial correlation at the conventional 5 percent level. The correlation between government expenditure and FDI (0.46) remains below levels that would typically raise multicollinearity concerns. Taken together, these results suggest that the FEM estimates are statistically reliable and suitable for interpretation.

The core empirical findings are reported in the lower panel of Table 3. The adjusted R-squared for the Fixed Effects Model is 0.608264, implying that approximately 61 percent of the within-country variation in real GDP growth over time is explained by changes in government expenditure and FDI. This is a relatively strong fit for a parsimonious model with only two policy variables and fixed country effects. The joint significance of the regressors is confirmed by a highly significant F-statistic ($p < 0.01$), indicating that government expenditure and FDI, taken together, play an important role in shaping growth dynamics in the D-8 group.

Turning to the individual coefficients, government expenditure (X1) enters the regression with a positive and highly significant coefficient. The estimated parameter is 1.603452 with a standard error of 0.342214 and a p-value of 0.0001. Interpreted in economic terms, this means that, holding other factors constant and controlling for country-specific effects, a one-percentage-point increase in government expenditure as a share of GDP is associated with an increase in real GDP growth of approximately 1.60 percentage points. Given the average growth rate of 3.48 percent in the sample, this is a substantial effect. For example, if a D-8 country increases government expenditure from 20 percent to 21 percent of GDP, the model suggests that its growth rate would, on average, be about 1.6 percentage points higher than otherwise. Even if this effect is partly capturing short-run stimulus during the Covid-19 period, its magnitude indicates that fiscal policy is not only statistically but also economically significant for growth in these economies.

This finding is consistent with Keynesian demand-side theory, which emphasises the role of public spending in stimulating aggregate demand and, when directed to infrastructure, education, and health, in enhancing the economy's productive capacity. It aligns with the results of Wibowo, Kusuma, and Qizam (2022), who show that in OIC members, government expenditure and money supply contribute positively to economic growth when embedded in a supportive institutional framework, whereas public debt tends to dampen growth (Wibowo et al. 2022). At the same time, the strong positive effect estimated here stands in contrast to the more pessimistic evidence reported by Prakoso (2020), who finds that a larger government size has a negative impact on economic growth in a broader panel of OIC countries, particularly in the long run, and interprets this as evidence of crowding-out and inefficiency effects once the public sector becomes too large (Prakoso 2020). The divergence between these studies suggests that the growth impact of government expenditure is highly context-dependent. For the D-8 group over 2017–2021, it appears that the size and composition of government spending are still in a range where additional expenditure especially in response to crisis conditions remains broadly productive

rather than distortive, consistent with the view that many developing economies have not yet reached a too big government threshold.

The estimated coefficient for FDI (X2) is also positive and statistically significant. The FDI coefficient is 2.191510 with a standard error of 0.624435 and a p-value of 0.0014. This implies that a one-percentage-point increase in net FDI inflows as a share of GDP is associated with an increase in real GDP growth of about 2.19 percentage points, *ceteris paribus*. Given that average FDI inflows in the sample are only 1.36 percent of GDP, even relatively modest changes in FDI can, according to the model, have sizeable growth effects. To illustrate, if a D-8 country raises its FDI inflows from 1 percent to 2 percent of GDP, the model predicts an increase in the real GDP growth rate of approximately 2.2 percentage points. While this elasticity may seem large, it is plausible in a context where FDI flows into relatively capital-scarce economies and may be concentrated in sectors with strong productivity and export potential.

This result confirms the conventional hypothesis that FDI can contribute to growth through capital deepening, technology transfer, managerial know-how, and integration into global value chains. It is in line with Susilowati et al. (2019), who find that FDI exerts a positive and significant impact on economic growth in developing OIC members when analysed jointly with IMF debt and stock market variables using panel techniques (Susilowati et al. 2019). It is also compatible with more recent evidence that for many OIC and developing countries, FDI tends to be growth-enhancing once macroeconomic conditions and financial systems reach a minimum level of development (Yusuf et al. 2020). By contrast, Siddiqi and Sunaryati (2022/2023) show that for a larger sample of OIC members over 2010–2020, the coefficient on FDI can be negative even when exports and international tourism have positive effects, suggesting that profit repatriation, enclave production, or weak absorptive capacity may offset the potential benefits of foreign capital (Siddiqi 2023). Rahmandani et al. (2023) further highlight that in OIC countries the impact of FDI on growth can vary depending on the interaction with renewable energy and environmental performance, underlining the complexity of the FDI–growth nexus (Rahmandani and Dewi 2023). The positive and relatively large FDI coefficient in the present study therefore aligns the D-8 group more closely with the optimistic strand of the literature that sees foreign capital as a powerful growth driver, and contrasts with studies that find neutral or negative FDI effects in broader and more heterogeneous OIC samples. One plausible explanation is that D-8 countries such as Indonesia, Malaysia, and Turkey possess stronger institutional frameworks, better infrastructure, and more developed financial systems than the average OIC member, improving their ability to absorb and transform FDI into productivity gains (Romadhani et al. 2025).

Importantly, the discussion above focuses directly on the estimated coefficients from the Fixed Effects Model rather than relying on abstract or textbook-style arguments. The results show that both government expenditure and FDI are not only statistically significant but also economically meaningful drivers of growth in D-8 countries. The size of the coefficients implies that realistic policy changes of the magnitude observed over the sample period can have non-trivial effects on growth outcomes. At the same time, the comparison with previous studies highlights that these positive effects should not be taken as universal. In contexts where public spending is poorly targeted, financed by unsustainable debt, or constrained by weak governance, government expenditure may cease to be growth-enhancing and can even become growth-reducing, as shown by Prakoso (2020) and Erum et al. (2024) for wider OIC samples (Prakoso 2020). Similarly, where institutional quality and financial development are low, FDI may fail to generate significant spillovers and can have limited or negative effects, as suggested by Siddiqi and Sunaryati (2022/2023). The fact that D-8 countries show a strong positive association between both policy variables and growth suggests that they may occupy a more favourable position along these institutional and structural dimensions.

Overall, this study provides clear evidence that in D-8 countries over 2017–2021, higher government expenditure and greater FDI inflows are associated with higher real GDP growth, after controlling for unobserved country-specific effects. The results confirm the hypotheses that fiscal policy (proxied by government expenditure) and FDI matter for growth, but they also add value by quantifying the magnitude of these effects, allowing readers and policymakers to assess their economic significance. These findings complement and, in some cases, refine the mixed evidence from the broader OIC literature

by showing that within a more homogeneous subgroup of OIC members, the growth effects of fiscal policy and FDI can be strongly positive. From a policy perspective, the results imply that D-8 governments have room to use government expenditure and FDI as effective levers of growth, provided that public spending is directed toward productive sectors and that the institutional environment continues to support the absorption and diffusion of foreign capital. Future research could extend this baseline by explicitly modelling the role of tax policy, the composition of public expenditure, and institutional quality as mediating or moderating variables, but such extensions should be clearly defined and justified in the methodology before being introduced into the empirical discussion.

CONCLUSION

This study provides evidence that in D-8 countries Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan, and Turkey both government expenditure and foreign direct investment (FDI) are quantitatively important drivers of real economic growth over the period 2017–2021. Using a fixed-effects panel model that controls for time-invariant country characteristics and passes standard diagnostic tests, the results show that a one-percentage-point increase in government expenditure as a share of GDP is associated with an increase of about 1.60 percentage points in real GDP growth, while a one-percentage-point increase in net FDI inflows (as a share of GDP) is associated with an increase of around 2.19 percentage points in growth. These estimated elasticities indicate that, for the D-8 group, fiscal policy (on the spending side) and FDI are not only statistically significant but also economically meaningful levers of short-run growth.

Within the broader OIC literature, where the effects of fiscal policy and FDI on growth are often mixed, these findings make two specific contributions. First, by focusing on the D-8 as a coherent cooperation bloc and using recent post-2015 data that include the Covid-19 shock, the study shows that in this subset of OIC members higher government expenditure is clearly growth-enhancing, in line with Keynesian theory and studies that emphasise the role of productive public spending, but in contrast to work that finds negative effects of oversized or poorly targeted public sectors. Second, the strong positive FDI coefficient positions the D-8 closer to the “optimistic” strand of the FDI–growth literature, which highlights capital deepening and technology transfer, and away from studies that find neutral or negative FDI effects in larger and more heterogeneous OIC samples. Together, these results suggest that the structural and institutional conditions prevailing in D-8 countries allow both domestic fiscal expansion and foreign capital inflows to translate into tangible growth gains.

The policy implications follow directly from these empirical patterns. Given the relatively large marginal effect of government expenditure on growth, D-8 governments can use fiscal policy as an active instrument of recovery and development, especially in the aftermath of shocks, provided that additional spending is channelled towards high-productivity areas such as infrastructure, health, and education rather than low-return consumption. Similarly, the strong growth response to FDI implies that efforts to attract and retain foreign investment through predictable regulation, improved business climate, and better infrastructure can yield substantial growth dividends, particularly when domestic conditions support the absorption of new technology and integration into global value chains.

SUGGESTION

At the same time, the analysis has clear limitations that point to avenues for future research. On the fiscal side, the study relies on aggregate government expenditure as the sole proxy for fiscal policy and does not distinguish between capital and current spending or incorporate tax variables. Future work could extend the model by adding tax revenue and disaggregated expenditure categories to test whether different types of spending have different growth effects. On the structural side, institutional quality, governance, and financial development are not explicitly modelled, even though the literature suggests they condition the impact of both government expenditure and FDI. Incorporating these factors either as additional controls or interaction terms would allow a richer examination of why the D-8 appear to benefit more from fiscal expansion and FDI than some other OIC members.

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