Analyzing How FDI and Globalization Shape Economic Growth in Bangladesh: an Empirical Investigation for Bangladesh

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Abstract

Significant changes in the economic landscape of Bangladesh have occurred in recent decades due to variables such as globalization, urbanization, FDI, trade, population dynamics, and their interplay. Effective policies and strategies must be developed with a thorough comprehension of the interconnected dynamics of these factors and their influence on economic expansion. This study investigates the dynamic linkages between globalization, urbanization, foreign direct investment (FDI), trade, population, and economic growth in Bangladesh. The study employs sophisticated econometric techniques to analyze the impact of these variables on the nation's economic landscape from 1991 to 2021. The stability of the dataset is evaluated using stationarity tests including ADF, DF-GLS, and P-P unit root tests. The results indicate a varied order of integration estimation for the investigated variables, necessitating additional investigation. The Autoregressive Distributed Lag (ARDL) estimation technique is utilized to investigate the long-term relationship between the variables. The results demonstrate a positive and statistically significant relationship between globalization, urbanization, trade, FDI, and economic growth. The significance of external factors and urbanization in propelling Bangladesh's economic growth is highlighted by these findings. Surprisingly, during the examined period, population dynamics had no significant impact on economic growth. This emphasizes the need for policymakers to investigate the intricate relationship between population trends and sustainable economic growth. Using the Ramsey Reset test, Jarque-Bera test, Breush Godfrey LM test, and CUS UM & CUSUM square test, the model's dependability is rigorously evaluated. The results demonstrate the model's robustness and validity, bolstering the veracity of the study's findings. On the basis of the research findings, a number of policy recommendations emerge.

Introduction

Foreign Direct Investment (FDI) and globalization have emerged as pivotal drivers of economic growth in the contemporary era, particularly for developing economies like Bangladesh. FDI, as a direct capital infusion from foreign entities, brings not only financial resources but also advanced technology, managerial expertise, and access to international markets. On the other hand, globalization facilitates the interconnectedness of economies through trade, investment, and knowledge sharing. In the context of Bangladesh, a country that has witnessed significant structural transformation over the past few decades, understanding how FDI and globalization influence its economic growth is of paramount importance.

Bangladesh has transitioned from an agrarian-based economy to a burgeoning hub for manufacturing and services, with consistent GDP growth exceeding 6% over the last decade. This remarkable growth trajectory has been supported by an influx of FDI, particularly in the ready-made garments (RMG) sector, and by leveraging the opportunities provided by globalization. However, the impact of these factors on long-term economic development remains a subject of considerable debate. While FDI is often associated with increased productivity, job creation, and export growth, critics argue that it can lead to profit repatriation, dependency on foreign investors, and adverse environmental effects. Similarly, globalization has facilitated access to international markets and diversified exports, but it has also exposed Bangladesh to external shocks and economic vulnerabilities.

The nexus between FDI, globalization, and economic growth is particularly significant for Bangladesh in light of its aspirations to achieve middle-income status by 2030 and to become a developed economy by 2041. Policymakers must strike a delicate balance between attracting foreign investments and ensuring that globalization benefits are equitably distributed across different sectors of society. Moreover, the country must address challenges such as infrastructural bottlenecks, bureaucratic inefficiencies, and the need for a skilled workforce to fully harness the potential of FDI and globalization.

Empirical studies on the impact of FDI and globalization in Bangladesh have yielded mixed results. While some researchers highlight their positive contributions to GDP growth, others emphasize the role of complementary factors such as human capital, institutional quality, and trade openness. The present study seeks to provide a comprehensive analysis by examining the causal relationship between FDI, globalization, and economic growth in Bangladesh using robust econometric techniques. By exploring this relationship, the study aims to shed light on the mechanisms through which FDI and globalization influence economic performance and to offer evidence-based policy recommendations for sustainable growth.

This research is particularly timely as Bangladesh navigates the post-pandemic global economic landscape and contends with challenges such as climate change, geopolitical uncertainties, and fluctuating global demand. By analyzing the historical trends and empirical linkages, this study not only contributes to the existing literature but also provides practical insights for policymakers to design strategies that optimize the benefits of FDI and globalization while mitigating their potential downsides. The findings will be instrumental in shaping Bangladesh’s development policies and ensuring that its growth trajectory remains inclusive, resilient, and sustainable in the years to come.

Literature Review

The relationship between Foreign Direct Investment (FDI), globalization, and economic growth has been extensively examined in the context of developing economies, highlighting both opportunities and challenges. Studies emphasize that FDI contributes to economic growth by providing capital, technology transfer, and employment opportunities (Borensztein et al., 1998). However, its impact often depends on factors like domestic absorptive capacity, infrastructure, and institutional quality. Bangladesh, as a rapidly developing economy, presents a unique case due to its reliance on FDI in key sectors like garments, infrastructure, and telecommunications.

Globalization, characterized by increased economic integration, trade liberalization, and cross-border capital flows, has also been recognized as a critical factor influencing growth. Dollar and Kraay (2004) argue that globalization has led to significant poverty reduction and economic growth in developing countries by enhancing market access and promoting competition. However, critics like Stiglitz (2002) caution against the unequal benefits of globalization, which can exacerbate income inequality and economic vulnerabilities, particularly in fragile economies like Bangladesh.

In the Bangladeshi context, FDI has primarily been directed towards the ready-made garments (RMG) sector, which accounts for a substantial portion of exports and employment. Empirical studies reveal that FDI has significantly boosted Bangladesh's GDP growth, particularly through increased productivity and export diversification (Hossain & Hossain, 2012). However, challenges such as inadequate infrastructure, bureaucratic hurdles, and weak regulatory frameworks have limited its full potential.

Globalization has further amplified Bangladesh's integration into the global economy. Studies by Ahmed and Sattar (2004) highlight the positive role of trade liberalization and globalization in enhancing export performance and industrialization. Yet, Bangladesh remains vulnerable to global economic shocks, such as the COVID-19 pandemic, which disrupted supply chains and export revenues.

Existing research also underscores the importance of complementary factors in amplifying the benefits of FDI and globalization. For instance, Khatun and Ahamad (2017) highlight the role of human capital development, institutional reforms, and financial sector efficiency in maximizing the gains from globalization. Similarly, Rahman and Ara (2019) argue that trade openness, combined with sound macroeconomic policies, has been instrumental in sustaining Bangladesh's growth trajectory.

Despite extensive literature on the topic, gaps remain in understanding the dynamic interplay between FDI, globalization, and growth in Bangladesh, especially in light of emerging challenges like climate change and geopolitical uncertainties. This study aims to address these gaps by employing advanced econometric models to assess the long-term causal relationships and provide evidence-based insights for policymakers.

Methodology

This study investigates the impact of Foreign Direct Investment (FDI) and globalization on economic growth in Bangladesh using an empirical approach. A time-series analysis framework is adopted to explore the dynamic relationships between the variables. The analysis employs annual data spanning from 1990 to 2022, sourced from reliable databases such as the World Bank, UNCTAD, and the Bangladesh Bureau of Statistics (BBS).

Model Specification

The study uses the following econometric model to examine the relationship:

GDPt=β0+β1FDIt+β2Globalizationt+β3Control Variablest+ϵt\text{GDP}_t = \beta_0 + \beta_1 \text{FDI}_t + \beta_2 \text{Globalization}_t + \beta_3 \text{Control Variables}_t + \epsilon_tGDPt=β0+β1FDIt+β2Globalizationt+β3Control Variablest+ϵt

Here, GDP represents economic growth (proxied by GDP per capita), FDI denotes Foreign Direct Investment inflows, and globalization is measured using the KOF Globalization Index. Control variables include trade openness, domestic investment, and labor force participation, as these factors significantly influence growth.

Data Preprocessing and Stationarity Tests

Given the time-series nature of the data, all variables are subjected to stationarity tests using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. This ensures that the variables are integrated of the same order, avoiding spurious results. If variables are non-stationary, appropriate differencing is applied.

Estimation Techniques

The study employs the Autoregressive Distributed Lag (ARDL) model, which is suitable for analyzing both short-term and long-term relationships among variables, irrespective of whether they are integrated at level (I(0))(I(0))(I(0)) or first difference (I(1))(I(1))(I(1)). The ARDL bounds testing approach is used to determine the existence of cointegration.

Once cointegration is established, the long-run coefficients are estimated to identify the enduring impact of FDI and globalization on economic growth. For short-run dynamics, the Error Correction Model (ECM) is utilized, highlighting the speed of adjustment to equilibrium following a shock.

Diagnostic and Robustness Tests

To validate the reliability of the model, diagnostic tests are conducted, including tests for autocorrelation (Breusch-Godfrey), heteroscedasticity (White’s test), and model specification (Ramsey RESET). Robustness checks are performed by re-estimating the model using alternative measures of globalization and additional control variables.

Software and Tools

The analysis is conducted using statistical software such as STATA and EViews, which provide advanced econometric capabilities for time-series data.

This methodological framework ensures a rigorous and comprehensive analysis of how FDI and globalization shape economic growth in Bangladesh, providing valuable insights for policymakers.

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