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Exploring the Long-Term Relationship between Foreign Direct Investment and GDP: Empirical Insights from Bangladesh

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Abstract

The study's purpose is to examine the long-term correlation between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP) in Bangladesh. The article is mostly based on secondary data collected from Bangladesh Bank's website covering for the period 1980-2021. Data were processed with the assistance of the Statistical Package of Social Science (SPSS IBM 23 Version). Correlation and regression analyses were used to examine the data in the study. The results suggest that there is a high degree of positive correlation (0.976) between FDI and GDP, along with the implication that FDI has a significant positive impact on GDP in the long run within the Bangladesh economy. The results also suggest that if FDI changes by 1 unit, then the GDP will positively change by 0.92381 at the level of 5% significant statistically. This finding is reinforced by the regression analysis, which indicates a statistically significant relationship between FDI and GDP growth. So, it is understandable that there is a well-built impact of FDI on Gross Domestic Product (GDP) in the long-run in the Bangladeshi economy. These results are further supported by regression analysis, underscoring a statistically significant relationship between FDI and GDP growth. However, it is important to acknowledge certain limitations, such as data availability constraints and potential confounding variables not addressed in the analysis. Future research endeavors could address these limitations and explore additional factors influencing the FDI-GDP relationship in Bangladesh. Overall, the study highlights the substantial impact of FDI on Gross Domestic Product in the long run and discusses policy recommendations to attract FDI inflows to Bangladesh.

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Introduction

Bangladesh's economy has been doing well over the last ten years. Even if all macroeconomic indices are at record highs right now, population growth is outpacing the state of the economy. The World Bank (WB) estimates that in 2022, Bangladesh's population density was 1265 persons per square kilometer, over 34 times higher than that of the United States. In order to meet the needs of its growing population, Bangladesh must thus find a way to grow its economy. Foreign direct investment (FDI) can be a technique for attaining the required growth, despite disagreements among academics over its impact on GDP development. There are three main schools of thought when it comes to how FDI influences GDP growth. While some academics argue that foreign direct investment (FDI) has a positive impact on GDP growth, others argue that there is an unfavorable correlation between FDI and GDP growth. Other study found that the relationship between FDI and GDP growth depends on the host economy's capacity for absorption. The neoclassical theory holds that foreign direct investment (FDI) inflows can facilitate the rapid economic expansion of capital-poor countries (Barro et al., 1992). Reza et al. (2018) claim that FDI from the public and private sectors can assist LDCs in overcoming their deficiency in investment. Hussain and Haque (2016) share the same view. FDI advances the technology and people resources of the host country, claim Kim and Seo (2003). Further benefits of foreign direct investment (FDI) include improved managerial structure and machinery, increased business competitiveness, knowledge transfer, human capital growth, integration of global business, and benefits to the nation's businesses (Borensztein et al., 1998, pp. 115-135; Haile et al., 2006; De Mello, 1999, pp. 133-151; Al-Iriani, 2007; Tabassum et al., 2014, pp. 117-135). However, FDI inflows have negative impacts on the host country that cause unequal global growth, according to Singer (1975, pp. 43–57). The profit-exportation of the parent country may put the balance of payments (BOP) of the recipient country at jeopardy (Kentor, 1998, pp. 1024-1046). Foreign direct investment (FDI) actually discourages household investment, according to Epstein and Braunstein (2002), which has a negative impact on GDP growth. On the other hand, Sylwester (2005, pp. 289–300) claims that foreign direct investment is supplementary to local investment. Bengoa et al. (2003, pages 529–545) and Balasubramanyam et al. (1996, pp. 92–105), in contrast to other scholars, contend that the absorption capability of the receiving country determines the influence of FDI on GDP development.The connection of FDI on GDP is unclear. In some nations, FDI contributes to economic development by bridging the reserve gap, promoting human capital development, advancing recipient nation technologies, etc. However, because the earnings from the host nation are exported, imports rise, and foreign investment replaces domestic investment, it has a detrimental impact on some economies. In this article, the relationship between GDP and FDI is empirically investigated in order to evaluate the impact of FDI on the Bangladeshi economy. The findings of this article will assist policymakers in developing policies that make FDI available for achieving the growth target necessary to meet Bangladesh's growing population's demands.

Furthermore, alongside delving into diverse viewpoints regarding the impact of FDI on GDP expansion, this investigation endeavors to furnish empirical observations concerning the enduring correlation between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP) in Bangladesh. By analyzing empirical data sourced from Bangladesh, the study seeks to contribute to the existing literature on this subject and shed light on the dynamics of FDI-GDP interactions in the context of the Bangladeshi economy. Furthermore, the study endeavors to derive policy recommendations aimed at facilitating and encouraging FDI inflows into Bangladesh, recognizing the critical role FDI plays in the country's economic development. Therefore, the objectives of this study are twofold: to examine the long-term relationship between FDI and GDP empirically and to propose policy recommendations to foster FDI inflows into Bangladesh.

Literature Review

According to Kumar (2002), Foreign Direct Investment (FDI) has developed into a significant source of external resources flowing to developing countries since the 1990s and has become a key element of capital development in the state. In "Foreign Direct Investment: Determinants, Trends in Flows and Promotion Policies," Joong-Wan Cho (2004) states that as official development assistance (ODA) flows dramatically decreased in the 1990s, emerging countries began to look to FDI as a foundation of investment. Hsiao and Shen's (2003) time series analysis of Chinese data shows a positive link between FDI and GDP. Using data from 80 countries between 1971 and 1995, Choe(2003) discovers a two-way causal relationship between FDI and economic growth, however the effects are more pronounced from FDI to growth. Reza et al. (2018) found a long-term and short-term positive association between FDI inflow and Bangladesh's GDP after looking at co-integration and the Vector Error Correction Metrics (VECM). A VAR system with the error correction model was used to analyze the causal linkages between FDI, domestic investment (DI), and GDP using Chinese annual data from 1978 to 2003. The research found that FDI complements DI and that FDI and GDP are related solely by one causal mechanism (Tang et al., 2008, pp. 1292-1309). Moreover, Agosin and Mayer (2005, pp. 149-162) discovered that FDI and DI are mutually advantageous. Both India and China profit from FDI, however the Chinese economy is more heavily affected than the Indian economy by FDI, according to a comparison between the two countries (Agrawal et al., 2011). FDI, in accordance with Baliamoune-Lutz (2004, pp. 49–57), boosts exports, which benefits GDP. Zhang (2005, pp. 25–26) agrees with Baliamoune (2004) that FDI increases China's export volume, which benefits GDP growth. The ability of the economy to absorb foreign direct investment determines the relationship between FDI inflow and GDP growth, according to Buckley et al. (2002, pp. 637–655). They claim that the economic, political, and social environment determines how FDI affects GDP. According to Toulaboe et al comparative's research of low- and middle-income countries (2009, pp. 155–169), developed countries gain more from FDI than do developing countries. It implies that FDI responds more favorably to nations with more absorptive ability. FDI only boosts GDP if the host nation has a sizable pool of talented workers and advanced technological infrastructure (Borensztein et al., 1998, pp. 115-135). In his 2009 study, Abu Rayhan examined the trend of increased investment in the gas and oil industries between the years 1997 and 2007. According to Akter (2013), Bangladesh's FDI influx over the past few decades has not been steady because of the adverse political climate. Potential foreign investors' confidence in the home nation may be hampered by political upheaval. More foreign direct investment (FDI) may enter the country if the political climate were to become stable. The difficulties and opportunities of FDI in Bangladesh were demonstrated by Kafi, Uddin, and Islam, who also highlighted several influencing variables to promote FDI in Bangladesh. Shimul et al. also use the co-integration technique to examine the relationship between FDI and GDP growth in 19 developing nations in South East Asia and Latin America. Aitkin (2001) demonstrated a strong correlation between FDI and the expansion of the US economy. In his paper, Alamgir (2017) examined the current state of FDI in Bangladesh, as well as its issues and solutions. He has discovered that due to several uncertainties, such as an uneven ratio between savings and investments, the contribution of FDI from developed and emerging nations, including Bangladesh, is not significant. Sultana (2013) made an effort to determine the cause of the FDI inflow's variation in Bangladesh. According to the report, investors in the power and gas sectors invest mostly in the UK and the USA, whereas the majority of foreign direct investments (FDI) into Bangladesh (BD) have increased between the years 1996 and 2011. Rahman(2009)Compared the FDI trend of

Bangladesh with that of India. The study showed that FDI inflow in Bangladesh rose by eleven times from the time period year 1995 to 2006 while for India it increased by six times for the same period. Billah (2012) explored FDI trend in Bangladesh that was up and down in nature. 26 different countries investors invested in Bangladesh. Among them Service sector's investment was highest in Bangladesh during time period of 1995-2010. Kafi, M. A et al. (2007) investigated on FDI inflow during 1995-2006 period of time and found the possible reasons of low FDI inflow in Bangladesh based on secondary data. Their study examined contradictory procedures of the FDI in Bangladesh since 1995 and importantly manufacturing sector is getting popular for investment in Bangladesh. There is no appreciable relationship between FDI and economic growth, according to the findings of numerous researches on the subject. Athukorala and Karunarathna (2004) found that there was little correlation between foreign direct investment and Sri Lanka's economic growth. According to Ousseini et al. (2011), only domestic investment—as opposed to domestic investment—has a noticeable influence on economic development in Niger; foreign direct investment does not. 170 The intermittent benefits of FDI were detailed by S.K. Ghosh and S. Sarker Hanson (2001); nevertheless, Gorg and Greenaway (2002) observed that FDI might drive out local businesses, which would subsequently limit economic progress.

Relationship between Foreign Direct Investment and GDP

The literature on the relationship between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP) spans across various regions and time periods, shedding light on the dynamics and implications of FDI inflows on economic growth. This review synthesizes findings from multiple studies to provide insights into the multifaceted relationship between FDI and GDP. Numbu and Belyaeva (2021) explored the relationship between FDI and GDP in Cameroon from 2000 to 2020. Against a backdrop of economic crises and the COVID-19 pandemic, their study aimed to assess the potential of FDI to rejuvenate the Cameroonian economy. Utilizing correlation and regression analysis, the authors found a robust positive correlation between FDI and GDP over the 21-year period. Their results underscored the significant contribution of FDI inflows to economic growth in Cameroon, both directly through investment and indirectly through impacts on trade and government spending. Akoto (2016) focused on South Africa to examine the causal relationships between FDI, exports, and GDP. The study revealed a significant long-term impact of FDI on boosting exports, suggesting bi-directional Granger causality between GDP and exports in the short run. This finding underscores the intricate interplay between FDI, export performance, and overall economic growth in South Africa. Shawa and Shen (2013) conducted a similar analysis for Tanzania, aiming to identify strategies for achieving development objectives. Their study found a unidirectional causality from FDI to exports, indicating that FDI served as a predictor of export growth in Tanzania. However, no causality was observed between FDI and GDP growth, suggesting that FDI-led export growth might be crucial for enhancing Tanzania's export competitiveness. Syarifuddin and Setiawan (2022) investigated the impact of the COVID-19 pandemic on FDI and its relationship with GDP in Indonesia. Their research highlighted variations in the effects of the pandemic on FDI across economic sectors, further influencing the relationship between FDI and GDP. This study underscored the dynamic nature of the FDI-GDP relationship in the face of external shocks such as the COVID-19 pandemic. Sijabat (2023) extended the analysis to ten ASEAN countries, examining the short- and long-term relationships between FDI, Foreign Portfolio Investment (FPI), and GDP. The study found a positive bilateral association between FDI and GDP, indicating mutual reinforcement between these variables. Additionally, bilateral causality between FPI and GDP was observed, emphasizing the significant influence of foreign investment on economic development in ASEAN member states. Rahman (2015) provided empirical evidence from Bangladesh, confirming a uni-directional causality running from FDI to GDP. The study highlighted the importance of attracting foreign investors through infrastructure development, skilled labor availability, and macroeconomic stability to stimulate economic growth in Bangladesh.

Mahadika et al. (2017) focused on Indonesia, examining the long-run relations between FDI, GDP, and export volume. Their findings indicated a significant influence of export volume and FDI on Indonesia's economic growth, emphasizing the importance of these factors in driving economic development. Hansen and Rand (2006) analyzed the Granger causal relationships between FDI and GDP in 31 developing countries over 31 years. They found bi-directional causality between the FDI-to-GDP ratio and GDP level, suggesting a lasting impact of FDI on GDP. This finding supported the hypothesis that FDI contributes to economic growth through knowledge transfers and technology adoption. Thilakaweera (2012) investigated the economic impact of FDI in Sri Lanka, identifying a long-run relationship between real per capita GDP, FDI, and infrastructure level. The study confirmed a unidirectional causality from the level of infrastructure to FDI, emphasizing the role of infrastructure development in attracting FDI inflows and promoting economic growth. In Ghana, Solarin et al. (2017) examined the pollution haven hypothesis, focusing on CO2 emissions as an indicator of air pollution. Their findings revealed a long-run relationship between GDP, FDI, and CO2 emissions, suggesting that FDI, urbanization, and financial development positively influenced CO2 emissions, while institutional quality had a mitigating effect. Rahaman and Chakraborty (2015) reiterated the causal relationship between FDI and GDP in Bangladesh, emphasizing the need for policy interventions to enhance FDI inflows and stimulate economic growth. Olasehinde and Ajayi (2022) investigated the relationship between FDI and economic growth in Nigeria, identifying a significant long-run relationship between FDI, real exchange rates, and GDP. The study underscored the bidirectional causality between FDI and economic growth, highlighting the mutual influence of these variables on each other. Tanaya and Suyanto (2022) analyzed the causal nexus between FDI and economic growth in Indonesia, finding evidence of a long-run and short-run causal direction from GDP to FDI. This finding emphasized the role of economic growth in attracting FDI inflows and fostering sustainable development in Indonesia. Overall, the reviewed studies provide comprehensive insights into the relationship between FDI and GDP across different countries and contexts. While the specific dynamics may vary, the consensus highlights the significant contribution of FDI to economic growth and the importance of fostering an enabling environment to attract foreign investment and maximize its developmental impact.

The rationale behind conducting this study stems from the critical need to comprehensively understand the dynamics between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP) in Bangladesh. As Bangladesh strives to position itself as a competitive player in the global economy, attracting FDI has become a pivotal strategy for sustainable economic growth and development. However, despite the recognized importance of FDI, there is a paucity of empirical evidence specifically examining its long-term correlation with GDP in the Bangladeshi context. By filling this gap in the literature, this study aims to provide policymakers, investors, and researchers with valuable insights into the nature and magnitude of the relationship between FDI and GDP in Bangladesh. Ultimately, a deeper understanding of this relationship can inform evidence-based policy formulation aimed at maximizing the positive impact of FDI on economic growth and prosperity in Bangladesh.

Data and Methodology

The World Bank, the International Monetary Fund (IMF), the United Nations Conference on Trade and Development (UNCTAD), and the Bangladesh Bank's FDI Survey Report 2022 make up the majority of the paper's secondary sources. The Global Investment Report, the Bangladesh Board of Investment, and different national and international periodicals, publications, books, studies and articles were used to compile additional material. The dataset was created by the authors using the BBS database. The authors have used time-series data spanning the fiscal years 1980 through 2021 to analyze the current situation of FDI, forecast FDI Inflows toward Bangladesh over the next 10 years, and demonstrate the effects of FDI on GDP.

Model Specification:
Billah (2012) uses this model to demonstrate a cointegration analysis between FDI and GDP. Anower& Kamal (2012) use it to highlight the experiential connection between FDI and GDP in South Asia. Model as follows:

$$\mathbf{GDPi} = \alpha + \beta\ \mathbf{FDIi} + \boldsymbol{\varepsilon}$$

Where,
α = constant term; ε = error term; i = different years; β = Regression coefficients for the independent variable; FDI = Foreign Direct Investment (Million USD); & GDP = Gross Domestic Product (Millions USD)

Overview of GDP and FDI in Bangladesh

FDI is currently one of the main sources of income for Bangladesh's peripheral economy. FDI encourages all forms of financial investment. Foreign direct investment (FDI) is defined by the World Trade Organization (WTO) as an investment made when a shareholder from the mother country owns and controls assets in the host country and is ready to oversee the asset's administration and operations. Mortaza et al. (2007) assert that FDI can increase productivity, transfer knowledge and technology, increase exports, create jobs, and support the global developing countries' stable economic growth. Nations of all economic levels aspire to leverage FDI for development more than before. For developing countries like Bangladesh to strengthen their economies, Investment is crucial. One of the least developed and poorest countries is Bangladesh. It constantly competes with the economies of other developing countries. FDI inflows to Bangladesh have been trending upward at an accelerated rate in recent years (Tabassum and Sohag, 2010). Bangladesh is ranked 122 out of 183 countries in the world in the Doing Business 2012 report by the World Bank and the IFC. Although industrialized countries that trade with Bangladesh have suffered greatly from the most recent economic slump, FDI has made a significant contribution to overall investment in the Bangladeshi economy (MoF,2012). Additionally, FDI increased national income and savings in recent years while also generating jobs and closing the country's trade deficit.

Findings and Analysis

Table 1: Correlation Matrix between FDI and GDP

	GDP	FDI
GDP	1.000	0.0976
FDI	0.0976	1.000

The table 1 provides insights into the relationship between FDI and GDP, demonstrating the degree of correlation between the two variables in the dataset under analysis. The author may infer from the data above that there is a strong correlation between FDI and GDP, with a value of 0.976. Increased FDI will inevitably lead to higher GDP, which will get better the nation's economic development, employment, per head income, and price increases rate. Therefore, the management should encourage overseas investors to invest in a variety of promising industries, including agriculture, services like rail and air travel, electricity and power, cement and fertilizer.

Table 2: Regression Result

Multiple R	0.0976[a]
R square	0.0953
Adjusted R square	0.0951
Standard Error	15607.75435
Total Observations	41

The regression result (Table-2) reveals a favorable relationship between FDI and GDP, illuminating the contribution of FDI to Bangladesh's financial development 9% of the GDP growth can be explained by the FDI figures. As a result, FDI has significantly aided Bangladesh's economic expansion. As a result, FDI can help Bangladesh's economy thrive, especially in the RMG, banking, energy, telecommunications, and other manufacturing sectors.

Table 3: ANOVA Result

	df	Sum of Squares (SSR)	Mean Squares	F	Significance F
Regression	1	180757155454.540	180757155454.540	742.018	.000[b]
Residual	39	9013273844.434	243601995.796		
Total	40	189770429298.974			

Table-3 shows that the Sum of Squares and Mean Squares are both quite tall and that the Significance F is significantly smaller than 0.05, the data indicates that there is a strong positive link between the two variables. So, the null hypothesis is unequivocally refuted.

Table 4: Regression Result

	Coefficients	Standard Error	t- stat	p- value
Intercept	24690.284	3246.554	7.605	.000
FDI	0.092381	3.391	27.240	.000

Table-4 shows If FDI is 0.092381 and the coefficient of intercept is 24690.284, it follows that the GDP will unquestionably change by 0.092381 if FDI changes by one unit. The null hypothesis is going to be rejected because the p-value is significantly below 0.05. It is therefore clear that FDI has a big impact on Bangladesh's GDP growth.

Policies to Attract FDI in Bangladesh

The government should concentrate on accelerating GDP growth because FDI has a significant impact on GDP and, therefore, the economy. The following are some of the key determinants that companies consider when deciding where to locate their investments in a certain emerging nation.

Economic Factors: Profit motive drives investment, and international investors will always choose a nation with a thriving commercial sector. Bangladesh should therefore work to boost its sustainable and fair GDP growth rate, lower its inflation rate to draw in more international investors, and raise its industrialization level.

Good Governance: A developing nation's institutions and overall governance system may be overly complicated and bureaucratic, which is linked to corruption. The Bangladeshi government should establish non-discriminatory FDI policies and guarantee investor security.

Infrastructural Development: The domestic nation becomes more appealing to foreign investors as its infrastructure becomes better. The following infrastructure factors are important for drawing FDI, and they are as follows:

1. Strong foundation of linked and auxiliary industries (suppliers, subcontractors, university research centers, commercial services, and raw materials)
2. A port system and safe, comfortable transportation options
3. The accessibility and affordability of services like telephones, energy, and water

4. Environmental guidelines and practices

To draw FDI to Bangladesh, Bangladesh must provide these infrastructure facilities. The government should offer all of the facilities since the infrastructure for communication, transportation, and the availability of raw equipment and energy are also more vital elements for investors.

Financial and International Integration: Financial and global integration are other elements that influence the attraction of FDI to emerging nations. To draw in foreign investment, Bangladesh must have sound financial infrastructure, global integration, regional and international cooperation, and a stable monetary system. The most important aspect of conducting business in a nation is ensuring credit availability. Therefore, the Bangladeshi government should secure the free flow of finances and regulate the process of collecting foreign investors' funds.

Political Stability: overseas investment in emerging nations is influenced by factors including political stability and openness. Investors give political factors, such as frequent change of governments, opposition political parties' critical stances, a lack of openness in the public sector, the prevalence of corruption, and the potential for terrorism, careful consideration before making an investment choice. In order to draw FDI, the government needs create a stable political environment in the nation.

Skilled Labor Force: A nation's skilled labor force is one of the primary prerequisites for its economic progress. It is impossible to guarantee a nation's sustainable development without human development. The most important resources for developing human resources are education, training, social services, and health. Prior to developing any policy to attract FDI, a planned assessment of the availability of human resources is required. Bangladesh has a sizable labor force; however, the majority of them lack education and skills. Bangladesh benefits from having a large labor force since it can produce garments more cheaply, but in order to draw in international investment, the nation must develop a trained labor force.

Technological Advancement: Economic development is highly dependent on technological progress. The implementation of governmental foreign investment policy is aided by a sophisticated technology infrastructure. Some nations, including South Korea, Hong Kong, and Singapore, have been successful at luring FDI thanks to the availability of technology. Bangladesh should develop its technical sector to increase production and draw foreign direct investment.

Applications

The findings of this study have several practical implications for policymakers, practitioners, and stakeholders involved in economic development in Bangladesh. Understanding the relationship between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP) in Bangladesh holds significant implications for policy formulation, investment promotion, sectoral development, risk management, and academic research. Policymakers can use the insights from this study to formulate evidence-based policies aimed at attracting and facilitating FDI inflows. By understanding the positive impact of FDI on GDP growth, policymakers can design investment promotion strategies, create a conducive regulatory environment, and implement targeted incentives to attract foreign investors. Government agencies, investment promotion authorities, and economic development organizations can leverage the study's findings to enhance their efforts in promoting Bangladesh as an attractive investment destination. Highlighting the positive correlation between FDI and GDP growth can help attract potential investors by showcasing the potential economic benefits of investing in Bangladesh. The study's insights can also guide investment decisions and resource allocation across different sectors of the economy, such as manufacturing, services, infrastructure, and technology. Moreover, stakeholders involved in foreign investment and economic planning can use the study's findings to assess and manage risks associated with FDI inflows. Finally, the study contributes to the existing body of academic literature on FDI and GDP growth, providing a foundation for further research and analysis in this field. Scholars and researchers can build upon the study's methodology and findings to explore more nuanced aspects of the FDI-GDP relationship, such as sectoral variations, regional disparities, and the role of governance structures.

CONCLUSION

In addition to being a strategic decision for a country, foreign direct investment (FDI) is also essential to the expansion of that country's economy. The majority of nations try to attract foreign direct investment (FDI) by creating various incentive packages, liberalizing the investment environment, and implementing fiscal reforms. Thanks to FDI, a nation's economic circumstances can shift swiftly. It transfers technical know-how and management knowledge in addition to financial access. It also acts as a stabilizing element for the economy. Numerous qualities of Bangladesh make it a desirable destination for investment from both established and developing nations. The ability of the country to sustain a macroeconomic climate that is reasonably stable and the increasing availability of skilled and unskilled labor at relatively low salaries are just a couple of the variables that attract foreign investment. The general public is aware of all these facts, which include the fact that Bangladesh has some of the lowest wage rates in Asia, that inflation is usually kept within reasonable bounds that the exchange rate is generally stable, and that customs laws are conducive to investment without discriminating between domestic and foreign investors. Based on the existing discourse and research, it appears probable that Bangladesh will continue to see low levels of FDI flows as the country has not yet been able to establish an environment that would draw in enough FDI. In terms of drawing FDI, the nation lags behind most other developing countries in the area. Therefore, it's imperative to knock down any obstacles to industrialization and attract foreign direct investment.

Limitations and Future Research Directions:

This study is not without its limitations, which warrant acknowledgment. Firstly, the reliance on secondary data obtained from Bangladesh Bank's website may introduce limitations regarding data accuracy, completeness, and reliability. Despite efforts to ensure data integrity, inherent limitations in the data source could impact the validity of the findings. Secondly, the study's analysis is constrained by the selected time period (1980-2021), which may not capture all relevant trends and dynamics in the relationship between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP). Changes in economic conditions, policy interventions, and other contextual factors evolving over time may influence the observed relationship. Furthermore, the study primarily focuses on the aggregated-level relationship between FDI and GDP, neglecting potential variations across sectors, regions, and types of investment. Future research could delve deeper into sectoral or regional analyses to better understand the nuanced effects of FDI on different segments of the economy. Additionally, while statistical techniques such as correlation and regression provide valuable insights, they inherently involve assumptions and simplifications that may not fully capture the complexity of the relationship between FDI and GDP. Other factors such as political stability, institutional quality, and trade policies were not fully explored in this study but could significantly influence the observed patterns. Addressing these limitations opens avenues for future research. Future studies could consider longitudinal analyses, explore sectoral or regional dynamics, incorporate a broader range of economic indicators, and investigate the role of institutional quality and governance frameworks in shaping the relationship between FDI and GDP growth. By addressing these research gaps, scholars can contribute to a more nuanced understanding of the relationship between FDI and GDP growth in Bangladesh.

References:

Akoto, W. (2016). On the Nature of the Causal Relationships Between Foreign Direct Investment, GDP and Exports in South Africa. *Journal of International Development*, *28*(1), 112–126. https://doi.org/10.1002/jid.2892

Akter, I. S. (2013). Fluctuation of FDI Inflow in Bangladesh-Obstacles and Potentials: An Issue of Policy Failure. *Mediterranean Journal of Social Sciences*, 4(2), 695-702.

Alamgir, M. (2017). Janata Bank Journal of Money, *Finance and Development*, 4(1), 227-241.

Al-Iriani, M. (2007). Foreign direct investment and economic growth in the GCC countries: A causality investigation using heterogeneous panel analysis. *Review of Development Economics*, 9.

Anower, H., & Hossain, M. K. (2012). Empirical Relationship between Foreign Direct Investment and Economic Output in South Asian Countries: A Study on Bangladesh, Pakistan and India. *International Business Research*, 5(1). Retrieved from www.ccsenet.org/ibr.

Balasubramanyam, V. N., Salisu, M., & Sapsford, D. (1996). Foreign Direct Investment and Growth in EP and IS Countries. *Economic Journal*, 106(434), 92-105.

Bangladesh Bank. (2009). Foreign Direct Investment in Bangladesh, Survey Report, January-June. Statistics Department, Bangladesh Bank, Dhaka.

Bangladesh Bank. (2022). FDI Survey Report, July-December 2022. Statistics Department.

Bangladesh Economic Review. (2022).

Barro, R. J., Mankiw, N. G., & Sala-i-Martin, X. (1992). Capital mobility in neoclassical models of growth (No. w4206). National Bureau of Economic Research.

Bengoa, M., & Sanchez-Robles, B. (2003). Foreign direct investment, economic freedom and growth: New evidence from Latin America. *European Journal of Political Economy*, 19(3), 529-545.

Billah, M. A. (2012). Foreign Direct Investment Scenario: Bangladesh Perspective. *Thoughts on Economics*, 22(1), 69-85.

Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115-135.

Chakrabarti, A. (2001). The determinants of foreign direct investment: Sensitivity analyses of cross-country regressions. *Kyklos*, 54(1), 89–114.

Choe, J. I. (2003). Do Foreign Direct Investment and Gross Domestic Investment Promote Economic Growth? *Review of Development Economics*, 7(1), 44-57.

Chow, P. (1987). Causality between Export and Industrial Development. *Journal of Development Economics*, 26, 55-63.

De Mello, L. R. (1999). Foreign direct investment-led growth: Evidence from time series and panel data. *Oxford Economic Papers*, 51(1), 133-151.

Epstein, G., & Braunstein, E. (2002). Bargaining Power and Foreign Direct Investment in China: Can 1.3 Billion Consumers Tame the Multinationals? Working Papers from Political Economy Research Institute, University of Massachusetts at Amherst.

FDI Inflow Survey (2022). Board of Investment, Bangladesh.

Haile, G. A., & Assefa, H. (2006). Determinants of Foreign Direct Investment in Ethiopia: A timeseries analysis. In 4th International Conference on the Ethiopian Economy.

Hansen, H., & Rand, J. (2006). On the causal links between FDI and growth in developing countries. *World Economy*, *29*(1), 21–41. https://doi.org/10.1111/j.1467-9701.2006.00756.x

Hsiao, C., & Shen, Y. (2003). Foreign Direct Investment and Economic Growth: The Importance of Institutions and Urbanization. *Economic Development & Cultural Change*, 51(4), 883–896.

Hussain, M. E., & Haque, M. (2016). Foreign direct investment, trade, and economic growth: An empirical analysis of Bangladesh. *Economies*, 4(2), 7.

Kafi, M. A., Uddin, M. M., & Islam, M. M. (2007). Foreign Direct Investment in Bangladesh: Problems and Prospects. *The Journal of Nepalese Business Studies*.

Kentor, J. (1998). The long-term effects of foreign investment dependence on economic growth, 1940-1990. *American Journal of Sociology*, 103(4), 1024-1046.

Khatun, F., & Ahamad, M. (2015). Foreign direct investment in the energy and power sector in Bangladesh: Implications for economic growth. *Renewable and Sustainable Energy Reviews*, 52, 1369-1377.

Kim, D. D. K., & Seo, J. S. (2003). Does FDI inflow crowd out domestic investment in Korea? *Journal of Economic Studies*.

Kumar, N. (2001). Infrastructural Availability, Foreign Direct Investment and Their Exports: A Cross Country-Exploration. Research and Information System for Developing Countries, India.

Mahadika, I. N., Kalayci, S., & Altun, N. (2017). Relationship between GDP, Foreign Direct Investment and Export Volume: Evidence from Indonesia. *International Journal of Trade, Economics and Finance*, *8*(1), 51–54. https://doi.org/10.18178/ijtef.2017.8.1.538

Markusen, J., & Venables, A. J. (1999). Foreign Direct Investment as a Catalyst for Industrial Development. *European Economic Review*, 43, 335-338.

Mian, M. E., & Alam, Q. (2006). Foreign Direct Investment and Development. *Monash Business*, 2(1), April.

Ministry of Finance. (2022). Bangladesh Economic Review 2022. The Government of The People's Republic of Bangladesh.

Numbu, L. P., & Belyaeva, Z. S. (2021). The relationship between foreign direct investment and gdp in cameroon (2000–2020). *R-Economy*, *7*(3), 200–209. https://doi.org/10.15826/recon.2021.7.3.018

Olasehinde, I. O., & Ajayi, C. F. (2022). Foreign Direct Investment and Nigerian Economic Growth. *Journal of Applied And Theoretical Social Sciences*, *4*(3), 313–327. https://doi.org/10.37241/jatss.2022.69

Rahaman, A., & Chakraborty, S. (2015). Effects of Foreign Direct Investment on GDP: Empirical Evidence from Developing Country. *Advances in Economics and Business*, *3*(12), 587–592. https://doi.org/10.13189/aeb.2015.031207

Rahman, A. (2015). Impact of Foreign Direct Investment on Economic Growth: Empirical Evidence from Bangladesh. *International Journal of Economics and Finance*, *7*(2). https://doi.org/10.5539/ijef.v7n2p178

Rayhan, M. A. (2009). Foreign Direct Investment in Bangladesh: Problems and Prospects. *ASA University Review*, 3(2), 101-113.

Reza, S. M., Fan, H., Reza, T., & Wang, B. (2018). The impact of foreign direct investment inflows on economic growth: Evidence from Bangladesh. *Journal of Business and Retail Management Research*, 12(2).

Shawa, M. J., & Shen, Y. (2013). Causality Relationship Between Foreign Direct Investment, GDP Growth and Export for Tanzania. *International Journal of Economics and Finance*, *5*(9). https://doi.org/10.5539/ijef.v5n9p13

Shimul, S. N., Abdullah, S. M., & Siddiqua, S. (2009). An examination of FDI and growth nexus in Bangladesh: Engle Granger and bound testing cointegration approach. *BRAC University Journal*, 1, 69-76.

Sijabat, R. (2023). The Association between Foreign Investment and Gross Domestic Product in Ten ASEAN Countries. *Economies*, *11*(7). https://doi.org/10.3390/economies11070188

Singer, H. W. (1975). The distribution of gains between investing and borrowing countries. In The Strategy of International Development. Palgrave Macmillan, London, pp. 43-57.

Solarin, S. A., Al-Mulali, U., Musah, I., & Ozturk, I. (2017). Investigating the pollution haven hypothesis in Ghana: An empirical investigation. *Energy*, *124*, 706–719. https://doi.org/10.1016/j.energy.2017.02.089

Syarifuddin, F., & Setiawan, M. (2022). The Relationship between COVID-19 Pandemic, Foreign Direct Investment, and Gross Domestic Product in Indonesia. *Sustainability (Switzerland)*, *14*(5). https://doi.org/10.3390/su14052786

Sylwester, K. (2005). Foreign direct investment, growth and income inequality in less developed countries. *International Review of Applied Economics*, 19(3), 289-300.

Tabassum, N., & Ahmed, S. P. (2014). Foreign direct investment and economic growth: Evidence from Bangladesh. *International Journal of Economics and Finance*, 6, 117–138.

Tanaya, O., & Suyanto, S. (2022). The Causal Nexus between Foreign Direct Investment and Economic Growth in Indonesia: An Autoregressive Distributed Lag Bounds Testing Approach. *Periodica Polytechnica Social and Management Sciences*, *30*(1), 57–69. https://doi.org/10.3311/PPso.16799

Thilakaweera, B. (2012). Economic Impact of Foreign Direct Investment in Sri Lanka. *Staff Studies*, *41*(1), 41. https://doi.org/10.4038/ss.v41i1.4684

United Nations Conference on Trade and Development (UNCTAD). (2022). World Investment Report. New York.

World Bank. (2022). World Development Indicator and Global Development Finance 2022.

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