

# Comparative Study on the Influence of FDI on Economic Growth in Bangladesh and Its Neighboring Countries

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**Abstract:** Due to globalization, there has been a significant amount of growth in foreign direct investment, exports, imports and remittances which exaggerate the interaction between states, regions and firms. It became obvious for the developing countries like Sri Lanka, Pakistan, India and Bangladesh to take the advantage and stimulate their economic growth through trade and investment. Literature shows that the relationship among these macroeconomic variables is ambiguous as some of the macroeconomic variables have positive impact on growth and others have negative impact, and vice-versa. Keeping this in mind, this paper examines what influence that foreign direct investment, export, gross capital formation, labor force participation and remittances have on economic growth based on a time series data to realize the meticulous scenario. Both descriptive and inferential statistics were implied here where RGDP was response variable and the rest five were explanatory variables. Ordinary Least Square method of multiple linear regression and correlation were carried out and the results disclose that gross capital formation and remittance have significant positive influence, export has significant negative impact on RGDP for most of the countries, and foreign direct investment has significant positive influence only in Pakistan. It will be worthy to say that foreign direct investment, exports and remittances have roles to play for a country's development as long as they become greater in terms of volume and their ratio to GDP.

**Keywords:** Economic Growth, Comparative Study, Foreign Direct Investment, Exports, Remittances

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## 1. Introduction

Today, the way of doing business has changed, not only in Bangladesh but also all over the world, due to globalization. One of the key outcomes of globalization is that it generates a remarkable growth in global foreign direct investment, exports, imports and remittances. FDI and remittances are important factors in the globalization process because they exaggerate the collaborations among states, regions and firms. Increasing flows of funds, direct investment, remittances and trade through international markets are all parts of this progression. Globalization creates an extraordinary opportunity for developing countries like Sri Lanka, Pakistan, India and Bangladesh to stimulate trade and investment resulting economic growth. This stimulated growth only be possible through international trade, inward remittances and the rapid growth of FDI, transfer of technologies, and efficient production through the development of international markets and procurement networks [29].

Bangladesh is a developing country, recently became the lower middle-income country, and is one of the pro-capitalist countries in the world. According to World Bank, between 1990 and 2014, Bangladesh averaged a GDP growth rate of 5.3% [3]. The growth of the Bangladesh economy is progressively more led by export-oriented industrialization like of textile, pharmaceuticals, shipbuilding, ceramics, leather goods and electronics. The Bangladesh textile industry is the second-largest in the world [21]. Remittances and export from textile industry provide vital foreign exchange to Bangladesh. According to the data of World Bank [28], GDP per-capita of Bangladesh, India, Pakistan and Sri Lanka stood at USD 2,457.9, USD 2,256.6, USD 1,505.0 and USD 4,013.7 in 2021 respectively. To achieve significant macroeconomic stability, these four neighboring countries are facing challenges of infrastructural development and increased energy generation.

Although these four countries have many economic and development challenges, but their importance have increased a lot during the period of financial crisis recovery. Like other Asian countries these four countries have huge potential for economic growth and they are expanding rapidly enough to draw the eyes of the west. Although their industrialization is not rapid enough like Japan, Singapore, Hong Kong, Malaysia and South Korea, but they have attracted enough investment from the west. It is more encouraging to see that the two fastest growing Asian countries like China and India are experiencing rapid industrialization and economic advancements in recent years due to their liberal trade policies with increased foreign direct investment [1]. Over the years India lag behind China who recently became the second largest economy in the world with three times more GDP per capita than those of India [1].

The FDI, remittances and export performances are different for Sri Lank, Pakistan, India and Bangladesh. From 1990 to 2010, India and Sri Lanka have been able to attract more FDI, generate greater exports and earns more remittances than Pakistan and Bangladesh [30]. Over the years, India has attracted more foreign direct investment (FDI) and their export earnings are higher than other three developing countries [30]. The volume of foreign direct investment, export and remittance have increased a lot during the last two decades, making them more attracted topic for the researchers, and there is a need to investigate the reasons of how the growths are different for Bangladesh than the other three developing countries while utilizing FDI, remittances and exports.

## 2. Literature Review

Increasing role of globalization and opportunity for trade opens the door for foreign direct investment to play a significant role in economic growth. Increasing role increases the interest of scholars to do research on the role of foreign direct investment, exports, remittances and some other variables on economic growth. Chadee and Schlichting [6] suggested that FDI has made a positive contribution to all the economies in Asia-Pacific region. But scholars like Borensztein, *et al.* [5] confirm that if the LDCs want to get benefited from FDI, they need to absorb sophisticated technologies. Different scholars like Zhang [35], Chakraborty and Basu [7], Hsiao and Shen [14], Li and Liu [17], and Lee [16] found significant relationship between FDI and growth.

Hansen and Rand [11] opined that FDI promotes economic growth, but the volume is subject to be its trade policies, skills of labor force and adaptive capabilities. By using dynamic panel models, Baharumshah and Thanoon [4] demonstrated the positive contribution of FDI on the growth process of East Asian economies. On the other hand, Herzer, *et al.* [12] has claimed that there does not exist any long-term or short-term effect of FDI on economic growth. Chakraborty and Nunnenkamp [8] studied impact of FDI on different economic sectors of India and establish that FDI in the

service sector seems to positively influence the growth in the industrial sector. While trying to find out the impact of FDI and local investment, Merican [19] found that the FDI is better in some cases while domestic investment is better on other cases for Asian countries. In their comprehensive study, Whalley and Xin [31] mentioned both the export and economic growth of China would remain sustainable as long as the flow of FDI remains the same in the future. Karimi and Yusop [15], and Wijeweera, *et al.* [32] studied impact of FDI on economic growth for different countries and revealed that there is a range of probable factors that might have positively motivates FDI to create an impact on economic growth. Agrawal and Khan [1] attempted to investigate and found that in case of China FDI effects growth more than that of India.

To develop productive capacity and enhance the skills of labor, foreign direct investment helps capital-poor countries through transfer of technology and managerial capability by integrating the domestic economy with the global economy. That is why Perron [24] mentioned in their study about the importance of structural changes to be studied for obtaining meaningful result. Hossain [13] institute that exports and imports have high positive correlation with FDI inflows and a positive net impact on the balance of payments. Mukhtarov *et al.* [22] indicated that in the case of Jordan, there is a long-run impact of foreign direct investment on export. According to Nguyen [23], external factors play a vital role in the social and economic development of a country. They examined the relationship among FDI, foreign aid, exports and economic growth in Vietnam and found positive relationship among them. Azam and others [2] wanted to investigate the effects of remittances, foreign direct investment, exports and investment on real GDP in different countries from Europe and Central Asia. They indicated that both foreign remittances and FDI inflows have a multiplier effect on the entire macroeconomic performance of these countries [2]. Zardoub & Sboui [34] have suggested that governments should establish a framework that encourages domestic and foreign investment.

Using panel data set of six high remittances receiving countries, representing more than 10 percent of GDP during the period 1999–2013, Meyer & Shera [20] identified empirically that impact of remittances on economic growth increases with higher levels of remittances. On the other hand, Sutradhar [27] confirms a negative effect of remittances on economic growth in South Asian countries except India which have a positive impact. Using long-term data of Fiji Islands, Makun [18] found imports have an adverse effect while remittances and foreign direct investment have positive effect on economic growth. While examining the economies of the selected South Asian countries for the period of 2008-2020, GÜVENEK & KHATIR [10] found both remittances and economic growth influences each other but there is lack of proper association between FDI and economic growth. Shahzad, *et al.* [26] tried to explore the long run and short run relationship among different macroeconomic variables and exposes a

positive impression of capital, remittances, exports, and FDI, and a negative impact of labor on growth. The effects of exports, FDI and a certain type of remittances on real GDP were examined by Rahman [25] and revealed close similarities in the dynamics of the variables between Pakistan and Sri Lanka only in the short run, and between Bangladesh and India in both the long and short run.

While applying fully modified ordinary least square technique, Xinying and others [33] ascertained that the personal remittances, exports and FDI as an individual factor have positive effect on economic growth. They also found that FDI tends to become negative with the presence of personal remittances and exports in West Africa, and proposes further studies to unknott the precise relationship [33]. So, it will be worthy to investigate the influence of FDI, remittances and exports on economic growth once again for these four developing countries in a simple but different manner to realize the meticulous scenario.

### 3. Connotation of the Study

This study is very much applicable as it investigates the influence of gross capital formation, labor force participation, foreign direct investment, remittances and exports on economic growth in Bangladesh and compare with the similar influence on Sri Lanka, Pakistan and India. This will help the governments of these countries to determine their macroeconomic policy to enhance the economic growth and development.

### 4. Objectives of the Study

Generally, economists accept the role of exports, remittances and foreign direct investment but there is ambiguity and intense debate about the pattern of the role. This ambiguity has created an opportunity for the researchers to provide deep insights into the role of remittances, export and FDI on the GDP growth, and there is still a possibility for additional empirical analysis of the issue. Considering their economic status and the contrast of these four neighboring countries, it would be interesting to know the comparative influence of gross capital formation, labor force participation, foreign direct investment, export and remittances on their economic growth. Keeping all these things in mind, this study attempts to explore the comparative influence of foreign direct investment, export and remittances on economic growth of India, Pakistan, Sri Lanka and Bangladesh.

Hence, the overall objective of this study is to observe the influence of foreign direct investment, gross capital formation, labor force participation, remittances and exports on economic growth of India, Pakistan, Sri Lanka and Bangladesh.

Detailed objectives are to be mentioned here for a better understanding about this study, and they are:

- 1) To oversee the movement in foreign direct investment, gross capital formation, labor force participation,

remittances and exports in Sri Lanka, Pakistan, India and Bangladesh over the years 1990 to 2020;

- 2) To find out relationships between GDP growth and other macroeconomic variables in Sri Lanka, Pakistan, India and Bangladesh over the years 1990 to 2020; and
- 3) To inspect the influence of foreign direct investment, gross capital formation, labor force participation, export and remittances on real GDP in India, Pakistan, Sri Lanka and Bangladesh over the years 1990 to 2020.

## 5. Methodology

The design of the study allows only to use the secondary data and data were mostly collected from World Bank's World Development Indicator and in some cases from Monthly Economic Trend published by Bangladesh Bank. Time series data from 1990 to 2020 were collected for the variables namely real gross domestic product (RGDP), gross capital formation (GCF), labor force participation rate (LFPR), foreign direct investment (FDI), remittances (REM) and exports (EXP); in which RGDP is the dependent variable and others are the explanatory variables.

To observe the current status of Sri Lanka, Pakistan, India and Bangladesh, data were gathered and analyzed using the following descriptive and inferential statistical techniques described below:

#### *Trend analysis*

Time series plots were used to determine the trend of the above-mentioned macroeconomic variables, i.e., real gross domestic product, foreign direct investment, gross capital formation, labor force participation rate, remittances and exports. This technique has been used for the historical data which can help to projects possible future outcomes by conducting medium to long-range forecasts.

#### *Correlation coefficient*

For the determination of the correlation coefficient, the following formula has been used which is described by Gujarati [9] in his book on Econometrics:

$$r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{(n-1)s_x s_y} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}} \quad (1)$$

This correlation coefficient has been used to identify the linear relationship between GDP and the other variables for Sri Lanka, Pakistan, India and Bangladesh separately.

#### *Model specification*

The following empirical model has been specified and used to determine the influence of all the macroeconomic variables on GDP:

$$Y_t = F(GCF_t, LFPR_t, FDI_t, EXP_t, REM_t) \quad (2)$$

Here, Y is the extent of economic activity and "t" as subscript means the time period. Here, Real Gross Domestic Product (RGDP) is employed as a commission for the economic growth; FDI, GCF, LFPR, EXP and REM are

measures of foreign direct investment, gross capital formation, labor force participation rate, exports and remittances respectively. Same empirical model has been used for Sri Lanka, Pakistan, India and Bangladesh to find out the comparative impact of the same macroeconomic variables. The model can be specified as follows:

$$RGDP = \beta_0 + \beta_1 GCF + \beta_2 LFPR + \beta_3 FDI + \beta_4 EXP + \beta_5 REM + E_t \quad (3)$$

Where:

$E_t$  = Error term

$\beta_0 \beta_1 \beta_2 \beta_3 \beta_4$  and  $\beta_5$  are the coefficients of the independent variable

RGDP = Real gross domestic product (billion)

GCF = Gross capital formation,

LFPR = Labor force participation rate,

FDI = Foreign direct investment,

EXP = Exports and

REM = Remittances

The OLS (Ordinary Least Square) method of multiple linear regression were used which is subjected to the lag structure of the variables.

## 6. Descriptions of the Results

### 6.1. Time Series Plots

GDP per capita (1990 to 2020): Figure 1 shows the trend of GDP per capita (constant 2015 US\$). In 1990, the GDP per capita was very low, it increased gently throughout the years. The only exception is Sri Lanka which shows a negative tendency after 2016, although it has a higher GDP growth rate.

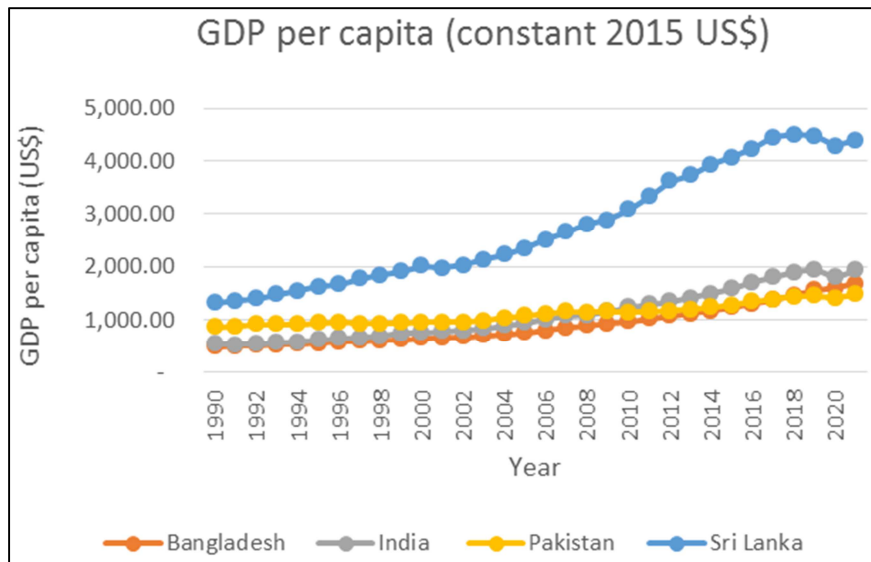


Figure 1. Time series plot of GDP for Sri Lanka, Pakistan, India and Bangladesh.

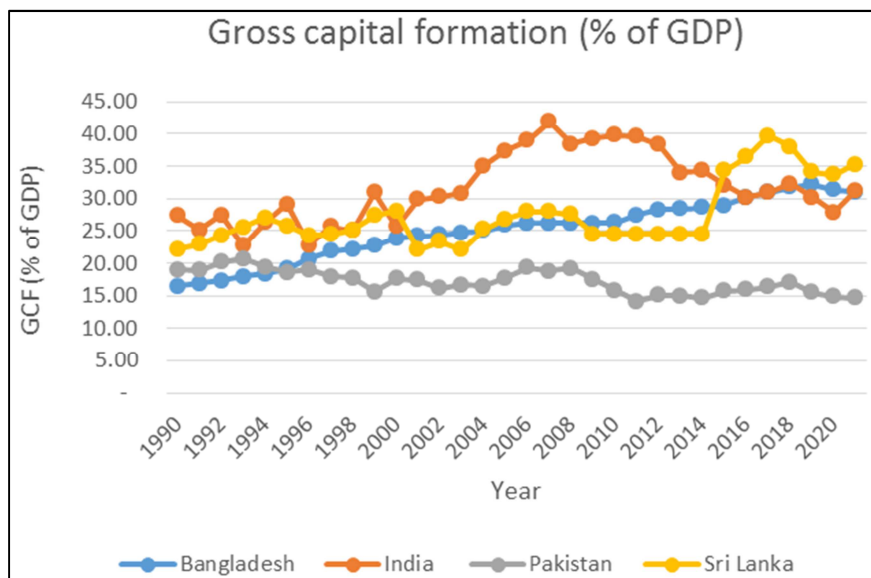
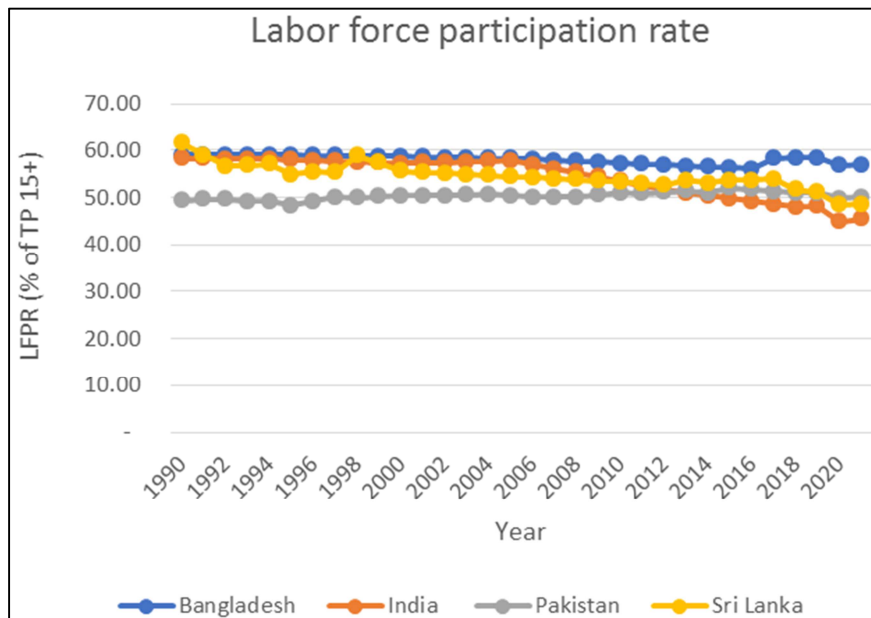


Figure 2. Time series plot of gross capital formation for Sri Lanka, Pakistan, India and Bangladesh.

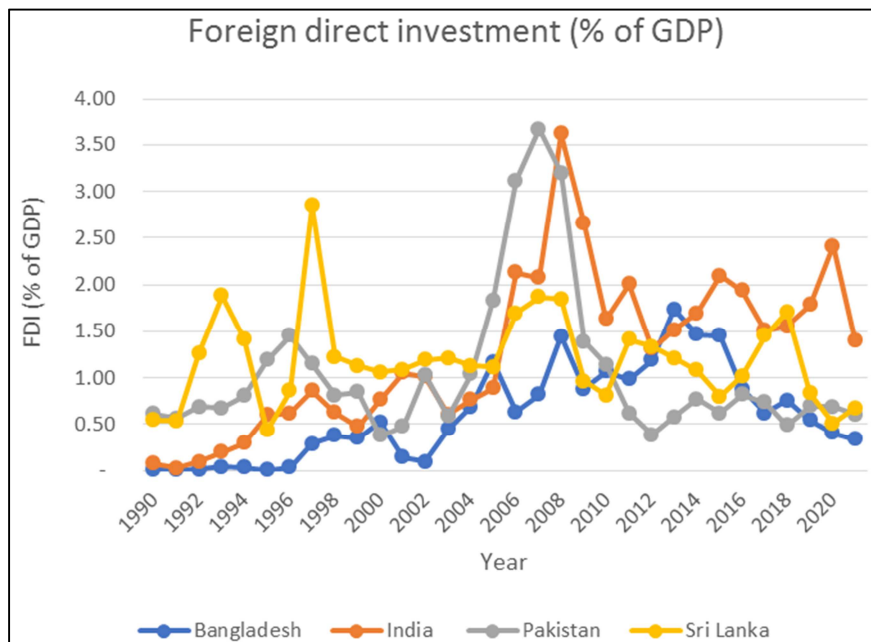
Gross capital formation (1990 to 2020): Figure 2 shows the measure of gross capital formation over the time period of 1990-2020. The gross capital formation shows an increasing trend, only exception is Pakistan. In 2006-08 it was high for India and dropped afterwards; but for Bangladesh, it rose gradually till 2018.

Labor force participation and foreign direct investment

(1990 to 2020): Figure 3 and 4 shows trend in labor force participation and foreign direct investment of Bangladesh, India, Pakistan and Sri Lanka. We can clearly see from the figure that the labor force participation shows slightly declining trend over the years for all the countries. The FDI show cyclical pattern for all the four countries over the years, reached its peak between 2006 and 2008.



**Figure 3.** Time series plot of labor force participation for Sri Lanka, Pakistan, India and Bangladesh.



**Figure 4.** Time series plot of FDI for Sri Lanka, Pakistan, India and Bangladesh.

Exports and Inflow remittances (1990 to 2020): Figure 5 and 6 shows the pattern of exports and remittances of Bangladesh, India, Pakistan and Sri Lanka from 1990 to 2020. The anticipated figures of exports and remittances have shown in two stages, namely first fifteen years (1990-2005)

and last fifteen years (2006-2020). First fifteen shows steady but slow increasing trend (only exception is exports of Sri Lanka), and the last fifteen shows mixed pattern for all the countries.

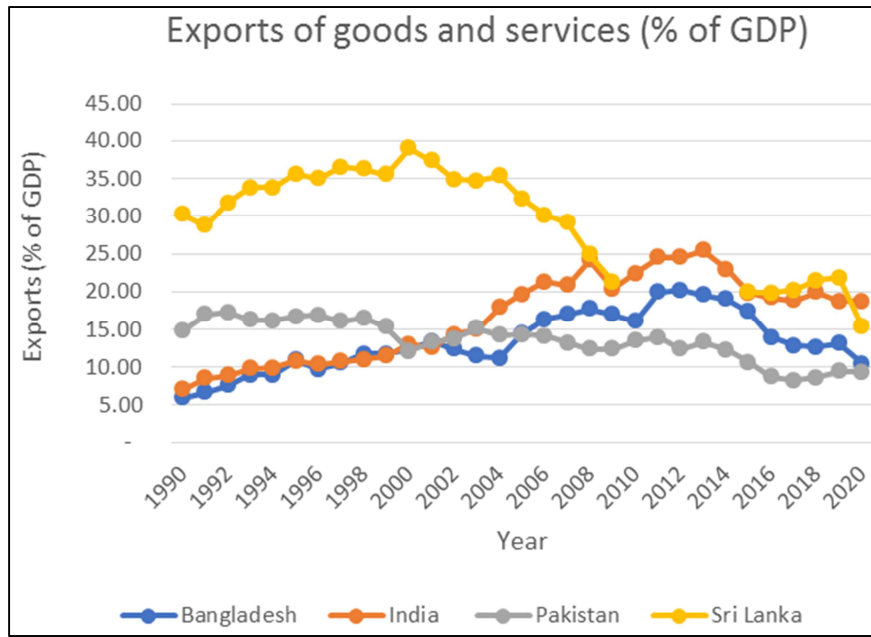


Figure 5. Time series plot of Exports for Sri Lanka, Pakistan, India and Bangladesh.

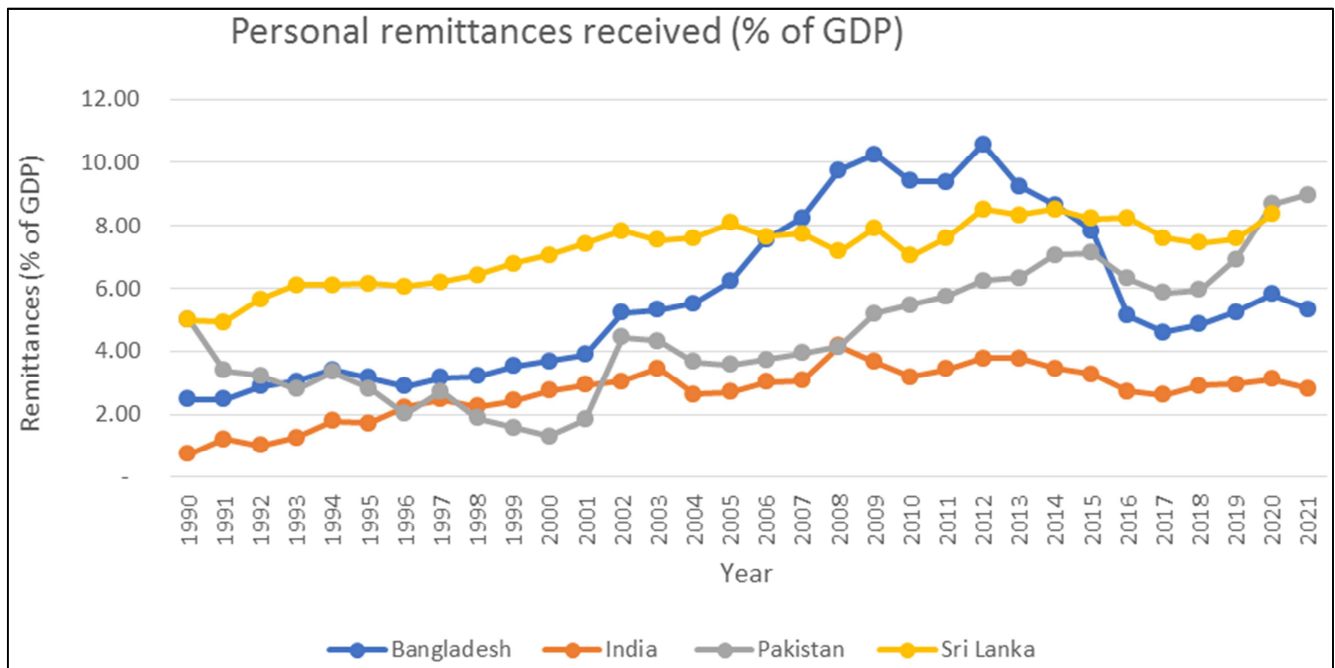


Figure 6. Time series plot of remittances for Sri Lanka, Pakistan, India and Bangladesh.

## 6.2. Correlation Matrix of Macroeconomic Variables

Relationship between dependent variable real gross domestic product and other variables such as foreign direct

investment, gross capital formation, labor force participation rate, exports and remittances for Bangladesh can be shown by the correlation matrix in Table 1.

Table 1. Correlation matrix of GDP, gross capital formation, labor force participation rate, foreign direct investment, exports and remittances for Bangladesh.

		GCF	LFPR	FDI	EXPORTS	REMITTANCES
Bangladesh	GDP	0.916**	-0.709**	0.472**	0.397*	0.425*

\* Significant at 5 percent level

\*\* Significant at 1 percent level

For Bangladesh, there is a strong positive correlation between gross capital formation and Gross Domestic Product (0.916), relatively weak positive correlation between foreign direct investment and gross domestic product (0.472), remittances and gross domestic product (0.425), and exports and gross domestic product (0.397). On the other hand, there is a negative correlation exists between labor force participation rate and gross domestic product (-0.709). Thus,

gross capital formation is powerfully contributing to the GDP as expected, but foreign direct investment, exports and remittances are weakly contributing to the growth of GDP. Omitting the explanatory variables like gross capital formation, labor force participation rate, exports and remittances, this study found that the strength of the correction between foreign direct investment and real gross domestic product has increased (0.582).

**Table 2.** Correlation matrix of GDP, gross capital formation, labor force participation rate, foreign direct investment, exports and remittances for India, Pakistan and Sri Lanka.

		GCF	LFPR	FDI	EXPORTS	REMITTANCES
India		0.367*	-0.967**	0.650**	0.736**	0.565**
Pakistan	GDP	-0.613**	0.604**	-0.019	-0.911**	0.843**
Sri Lanka		0.858**	-0.811**	-0.097	-0.816**	0.727**

\* Significant at 5 percent level

\*\* Significant at 1 percent level

Table 2 shows the relationship for Sri Lanka, Pakistan and India respectively from the bottom to top. For India, there is a strong positive correlation between exports and Gross Domestic Product (0.736); positive correlation between foreign direct investment and gross domestic product (0.650), remittances and gross domestic product (0.565), and relatively weak correlation between gross capital formation and gross domestic product (0.367). Thus, gross capital formation, foreign direct investment, exports and remittances are significantly contributing to the growth of GDP. There is strong negative correlation between labor force participation rate and gross domestic product (-0.967). Thus, labor force participation rate is negatively contributing to the economy.

There is a mysterious result for Pakistan and Sri Lanka in all aspects. It reveals that there is a strong positive correlation between remittances and gross domestic product (for Pakistan 0.843 and for Sri Lanka 0.727), and labor force participation rate and gross domestic product (for Pakistan 0.604). But there exists a very fragile negative correlation between foreign direct investment and gross domestic product (for Pakistan -0.019); strong negative correlation between exports and gross domestic product (for Pakistan -0.911 and for Sri Lanka -0.816), and gross capital formation and gross domestic product (for Pakistan -0.613). Thus, only labor force participation rate and remittances are powerfully contributing to the GDP, and gross capital formation, FDI and exports are negatively contributing to the economic growth. For Sri Lanka there is a strong positive correlation between gross capital formation and gross domestic product (0.858), but there exists a very weak negative correlation between foreign direct investment and gross domestic product (-0.097). Thus, only labor force participation rate and remittances are powerfully contributing to the GDP, and gross capital formation, FDI and exports are negatively contributing to the economic growth.

### 6.3. Multiple Linear Regression Models for Bangladesh

There is an inverse relationship between economic growth

and foreign direct investment, and an affirmative relationship between economic growth and other variables like, gross capital formation, labor force participation rate, exports and remittances. Thus, gross capital formation, labor force participation rate, exports and remittances have positive influence on the growth of real gross domestic product while holding foreign direct investment constant; but the reverse is the case for foreign direct investment, when gross capital formation, labor force participation rate, exports and remittances are held constant. Only gross capital formation, labor force participation rate and exports are seeming to have statistically significant influence on the GDP. In total of 79% of the variation in GDP has been elucidated by the illustrative variables as shown by the value of R-square; the value of F-statistics is 111.87 and D. W. = 0.751. The regression equation is as follows:

$$RGDP = 11.063 + 0.075GCF - 0.102LFPR - 0.015FDI - 0.032EXP + 0.021REM \quad (4)$$

\* Variables with bold fonts are statistically significant.

While trying to see the individual influence of foreign direct investment on real gross domestic product, this study omitted to other explanatory variables like gross capital formation, labor force participation rate, exports and remittances. The result shows that increase in FDI has positive influence on the growth of real gross domestic product. The influence is statistically significant and 33.9 percent of the variation in GDP has been explained by the only explanatory variable FDI; the value of F-statistics is 15.35 and D. W. = 0.189. The regression equation is as follows:

$$RGDP = 6.460 + 0.440FDI \quad (5)$$

### 6.4. Regression Results for India, Pakistan and Sri Lanka

The result of linear regression for India says that there is inverse relationship between economic growth and the change in foreign direct investment, and economic growth and change in labor force participation rate; whereas there is a positive relationship between economic growth and the change in other



variables (gross capital formation, exports and remittances). Thus, increase in gross capital formation, exports and remittances will increase the real gross domestic product while holding foreign direct investment and labor force participation rate constant; but the real gross domestic product will be shrinking is the case for increase in foreign direct investment and labor force participation rate, when gross capital formation, exports and remittances are held constant. All the estimated macroeconomic variables are statistically significant except foreign direct investment and exports.

In case of Pakistan, increase in labor force participation rate, foreign direct investment and remittances will increase real gross domestic product while holding gross capital formation and exports the same; but there is an opposite impact in case for gross capital formation and exports, when

labor force participation rate, foreign direct investment and remittances are held constant. The t-statistics shows that the impression of foreign direct investment, exports and remittances on the GDP are statistically significant. In case of Sri Lanka, increase in gross capital formation and remittances will increase real gross domestic product while holding labor force participation rate, foreign direct investment and exports constant; but there is an opposite movement in the instances for labor force participation rate, foreign direct investment and exports, when gross capital formation and remittances are held constant. There exist significant influences of gross capital formation, exports and remittances on economic growth.

The regression equation for India, Pakistan and Sri Lanka are as follows:

$$RGDP = 10.545 + 0.014GCF - 0.080LFPR - 0.010FDI + 0.004EXP + 0.087REM \quad (6)$$

$$RGDP = 7.069 - 0.009GCF + 0.007LFPR + 0.038FDI - 0.035EXP + 0.030REM \quad (7)$$

$$RGDP = 7.456 + 0.028GCF - 0.024LFPR - 0.001FDI - 0.014EXP + 0.185REM \quad (8)$$

\* Variables with bold fonts are statistically significant.

opportunity for FDI to play its desired role in the growth of a country.

## 7. Discussion of the Findings

This study mainly paid attentions on the comparative individual influence of foreign direct investment and combined influence of FDI and some other variables on economic growth of Bangladesh and its neighboring developing countries. To do this it is needed to investigate the combined impact of the variables like foreign direct investment (FDI), gross capital formation (GCF), labor force participation (LFPR), export (EXP) and remittances (REM). It is also required to compare the impact in Bangladesh with the impact in other neighboring developing countries, such as Sri Lanka, Pakistan and India. While investigating this study found instability in the movement of the aforementioned variables in Bangladesh, India, Pakistan and Sri Lanka considered with reference to the year 1990 to 2020.

Foreign direct investment has a lower level of positive correlation with real gross domestic product but has increased while ran independently. It has insignificant negative influence on real GDP in Bangladesh but has positive significant influence while omitting the other explanatory variables. This study further shows that gross capital formation and remittance have significant positive influence on real GDP for most of the countries. But only for India, exports have insignificant positive impact on real GDP; whereas for all the other countries, exports have significant negative impact on real GDP. It may be happening in these countries due to their high dependence on imports for the procurement of exported goods. Foreign direct investment has adverse impact on GDP in Bangladesh, Sri Lanka and India which is statistically insignificant, but has significant positive impact in Pakistan as they have higher FDI to real GDP ratio. Comparative study gives an impression that increasing the volume with an increased ratio may create the

## 8. Conclusion

GDP growth rate of Bangladesh lies between 2-7% from 1990 to 2004, although the growth rate was negative in year 1991. The GDP growth rate reaches its pick of 8.75% in the year 2010 [21]. GCF, Exports, Remittances have shown a steady upward trend over the years. The LFPR was steady till 2005, after this there is a downward trend. FDI inflows were increasing quite slowly and it reached its pick in 2008. After this there was a sharp decline in year 2009 and 2010 [21]. The study indicates that foreign direct investment, exports and remittances have roles to play for a country's development. But for them to play a significant role on the development of an economy, the volume of the FDI and exports needs to be greater in volume and the ratio of foreign direct investment to GDP, and exports to GDP needs to be higher for a country. It is rightly observed by Hossain [13] that effective implementation of growth policy and success of an economy depends on higher FDI inflows, but it requires significant institutional reforms with a lower level of control, development of vital infrastructures, better environment for investment, and continual social and political stability.

## References

- [1] Agrawal G. D. & Khan M. A. (2011), "Impact of FDI on GDP: A Comparative Study of China and India", *International Journal of Business and Management*, Vol. 6, No. 10; October, 71-79.
- [2] Azam, M., Shahbaz, M., Kyophilavong, P., & Abbas, Q. (2016). External sources and economic growth-the role of foreign remittances: Evidence from Europe and Central Asia. *The Journal of Developing Areas*, 367-387.



- [3] Ministry of Finance (2015), Bangladesh Economic Review, Economic Adviser's Wing Finance Division, Government of the People's Republic of Bangladesh, July.
- [4] Baharumshah, A., & Thanoon, M. (2006). Foreign capital flows and economic growth in East Asian countries.
- [5] Borensztein, Greorio, De and Lee. (1998). How Does Foreign Direct Investment Affect Growth? *Journal of International Economics*, 45, 115-135. [http://dx.doi.org/10.1016/S0022-1996\(97\)00033-0](http://dx.doi.org/10.1016/S0022-1996(97)00033-0).
- [6] Chadee and Schlichting. (1997). Foreign Direct Investment in the Asia-Pacific Region: Overview of Recent Trends and Patterns. *Asia Pacific Journal of Marketing and Logistics*, 9, 3-15. <http://dx.doi.org/10.1108/eb010288>.
- [7] Chakraborty, C., & Basu, P. (2002). Foreign direct investment and growth in India: A cointegration approach. *Applied Economics*, 34, 1061-1073. <http://dx.doi.org/10.1080/00036840110074079>.
- [8] Chakraborty, C., and Nunnenkamp, P. (2008). Economic Reforms, FDI, and Economic Growth in India: A Sector Level Analysis. *World Development*, 36, 1192-1212. <http://dx.doi.org/10.1016/j.worlddev.2007.06.014>.
- [9] Gujarati, D. N. (2003). *Basic Econometrics*. (5th Edition). New York: McGraw-Hill.
- [10] GÜVENEK, B., & KHATİR, A. (2021). The effects of FDI and remittances on the economic growth of selected SAARC countries. *İktisadi ve İdari Yaklaşımlar Dergisi*, 3 (2), 66-76.
- [11] Hansen and Rand. (2006). On the Causal Links between FDI and Growth in Developing Countries. *The World Economy*, 29, 21-42. <http://dx.doi.org/10.1111/j.1467-9701.2006.00756.x>.
- [12] Herzer, D., Klasen, S., and Nowak-Lehmann, F. D. (2007). In search of FDI-led growth in developing countries: The way forward. *Economic Modelling*, 25, 793-810. <http://dx.doi.org/10.1016/j.econmod.2007.11.005>.
- [13] Hossain, M. A. (2008). Impact of foreign direct investment on Bangladesh's balance of payments: Some policy implications. *Policy Note*, 805.
- [14] Hsiao and Shen. (2003). Foreign Direct Investment and Economic Growth: The Importance of Institutions and Urbanization. *Economic Development and Cultural Change*, 51, 83-896.
- [15] Karimi, M., & Yusop, Z. (2009). FDI and Economic Growth in Malaysia. MPRA, Paper no. 14999.
- [16] Lee. (2005). Foreign Direct Investment and Regional Trade Liberalization: A Viable Answer for Economic Development? *Journal of World Trade*, 39, 701-717.
- [17] Li and Liu. (2004). Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship. *World Development*, 33, 393-407.
- [18] Makun, K. K. (2018). Imports, remittances, direct foreign investment and economic growth in Republic of the Fiji Islands: An empirical analysis using ARDL approach. *Kasetsart Journal of Social Sciences*, 39 (3), 439-447.
- [19] Merican, Y. (2009). Foreign Direct Investment and Growth in ASEAN-4 Nations. *International Journal of Business and Management*, 4, 6.
- [20] Meyer, D., & Shera, A. (2017). The impact of remittances on economic growth: An econometric model. *EconomiA*, 18 (2), 147-155.
- [21] MoF (2015), Bangladesh Economic Review, Ministry of Finance, Government of Peoples' Republic of Bangladesh.
- [22] Mukhtarov, S., Alalawneh, M. M., Ibadov, E., & Huseynli, A. (2019). The impact of foreign direct investment on exports in Jordan: An empirical analysis. *Journal of International Studies*, 12 (3).
- [23] NGUYEN, C. H. (2020). The impact of foreign direct investment, aid and exports on economic growth in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7 (10), 581-589.
- [24] Perron, P. (1989). The Great Crash, the Oil Price Shock, and the Unit Root Hypothesis. *Econometrica*, 57, 1361-1401. <http://dx.doi.org/10.2307/1913712>.
- [25] Rahman, M. (2009). CONTRIBUTIONS OF EXPORTS, FDI AND EXPATRIATES'REMITTANCES TO REAL GDP OF BANGLADESH, INDIA, PAKISTAN AND SRI LANKA. *Southwestern Economic Review*, 36, 141-153.
- [26] Shahzad, S. J. H., Rehman, M. U., Abbasi, F., & Zakaria, M. (2014). Relationship between remittance, export, foreign direct investment and growth: A panel Cointegration and Causal Analysis in South Asia.
- [27] Sutradhar, S. R. (2020). The impact of remittances on economic growth in Bangladesh, India, Pakistan and Sri Lanka. *International Journal of Economic Policy Studies*, 14 (1), 275-295.
- [28] The World Bank (2022). Data for Pakistan, India, Bangladesh, Sri Lanka, Nepal, Afghanistan. Data Bank Microdata Data Catalog. <https://data.worldbank.org/?locations=PK-IN-BD-LK-NP-AF>
- [29] Urata S. (1998), "Japanese foreign direct investment in Asia: Its impact on export expansion and technology acquisition of the host economies", Waseda University and Japan Center for Economic research.
- [30] UNCTAD. (2010). *World Investment Report*. New York: United Nations.
- [31] Whalley, J., and Xin, X. (2009). China's FDI and Non-FDI Economies and the Sustainability of Future High Chinese Growth. *China Economic Review*, Accepted Manuscript.
- [32] Wijeweera, A., Villano, R., & Dollery, B. (2010). Economic Growth and FDI Inflows: A Stochastic Frontier Analysis. *The Journal of Developing Areas*, 43, 143-158. <http://dx.doi.org/10.1353/jda.0.0059>
- [33] Xinying, J., Oppong, S., & Vitenu-Sackey, P. A. (2019). The Impact of Personal Remittances, FDI and Exports on Economic Growth: Evidence from West Africa. *European Journal of Business and Management*, 11 (23), 24-32.
- [34] Zardoub, A., & Sboui, F. (2021). Impact of foreign direct investment, remittances and official development assistance on economic growth: panel data approach. *PSU Research Review*, (ahead-of-print).
- [35] Zhang and K. H. (2001). Does Foreign Direct Investment Promote Economic Growth? Evidence from East Asia and Latin America. *Contemporary Economic Policy*, 19, 175-185. <http://dx.doi.org/10.1111/j.1465-7287.2001.tb00059.x>