An Analysis of the Year Wise Movement of Foreign Direct Investment and Its Forecasting Trends in Bangladesh: Period 2020-2029

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Abstract

Foreign Direct Investment (FDI) has a great impact on the advancement of a developing country like Bangladesh. The FDI has the important role to develop the garments & weaving, telecommunication, banking and pharmaceuticals industry of Bangladesh. The study aims at analyzing the current FDI status in Bangladesh and forecasting Foreign Direct Investment (FDI) inflows in Bangladesh for the period 2020-2029 using least square method based on data covering for the period 1980-2019. In this paper, the authors used trend of FDI inflows for the last 17 year (2003-2019) in Bangladesh from various angles. This study also found that Bangladesh has got most of FDI from the UK (United Kingdom) with $ 2783 million which was 16.44 percent of total FDI inflows during the period. The Authors forecasted that the expected total volume of FDI inflows will reach US$ 6259.18 million by the year 2029. Some of the policy recommendations for attracting FDI in Bangladesh are also discussed in the paper.

Key Words: Foreign Direct Investment (FDI), Forecasting FDI, Least Square Method.

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Introduction

Foreign Direct Investment (FDI) can play a vital role for accelerating the economic development in the developing countries of the world. FDI is a part of investment in the developing countries. According to the World Trade Organization (WTO), "FDI is the investment that arises when the investor in the domestic country holds and owns assets in the host country with the willingness to control management and operations of that asset". According to the International Monetary Fund (1993), a foreign direct investor can be an individual, an incorporated or unincorporated public or private enterprise, a group of related individuals, or a group of related incorporated and/or unincorporated enterprise, which has a direct investment enterprise that is a subsidiary, associate or branch, operating in a country other than the country or countries of residence of the foreign direct investor or investors. Free market economy is changing the strategies of multinational companies (MNCs) of developed countries and the way developing countries compete for FDI. FDI encourages the transfer of new business, and knowledge and it allows the domestic country to promote its products more widely in international market. Various policymakers and economists have emphasized on the importance of a sound business environment and flow of FDI for accelerating economic growth in developing countries. In Bangladesh, FDI is recognized as a key factor for economic growth. Being one of the developing countries with scarcity of domestic investment after fulfilling its basic needs, the importance of foreign investment is increasing day by day. The flow of FDI in Bangladesh has traditionally been lower than other South Asian nations. Through this Bangladesh can achieve some socio-economic objectives including some MDG goals, Foreign direct investment (FDI) has considered a powerful weapon of her development. Moreover, in Bangladesh, FDI can emerge as a important key to build up physical capital, create employment opportunities, develop productive capacity, enhance skills of domestic labor and can help to integrate the domestic economy.

Literature Review

Kumar (2001) says that Foreign Direct Investment (FDI) has emerged as the significant source of external resources flow to developing countries from the 1990s and has become a important part of capital formation in the country.

Joong-Wan Cho (2003) studied foreign direct investment: determinants, trends in flows and promotion policies. He said that developing countries were starting to look to FDI as a source of investment when flows of official development assistance (ODA) dropped dramatically in the 1990s. Hsiao and Shen (2003) found a positive relationship between FDI and GDP in their time series analysis of the data from China. Using data on 80 countries for the period 1971–1995, Choe detects two-way causation between FDI and economic growth, but the effects are more apparent from growth to FDI.

Kafi, Uddin and Islam (2007) showed the problems and prospects of FDI in Bangladesh and they have identified some influencing factors to enhance FDI in Bangladesh. In addition Shimul et. al. (2009) investigates the link between FDI and economic growth in nineteen developing countries of South East Asian and Latin America using co-integration technique. Aitkin et. al. (1999) showed the existence of a significant cointigration between FDI and the economic growth in the USA. Alamgir (2017) reviewed in his study the current situation of FDI in Bangladesh along with its problems and remedies. He has found that the contribution of FDI of developed and developing countries including Bangladesh are not appreciable because of some uncertainties like uneven ratio in savings and investments. Sultana (2013) attempted to identify reason behind the fluctuation of FDI Inflow in Bangladesh. The study found that investors invest in power and gas sectors mostly and country wise the UK and the USA are the major investors in Bangladesh. Inflows of FDI in EPZ and Non-EPZ areas have been increased over the period of 1996-2011.

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. Investors from 26 different countries invested in Bangladesh. Among them Service sector's investment was highest in Bangladesh during time period of 1995-2010.

Rayhan (2009) explored that investors invest more in Gas and oil sector within time frame year 1997-2007. Akter (2013) mentioned that FDI inflow in

Bangladesh during last few decades was not consistent due to unfavorable political environment. Political unrest may hamper the faith of potential foreign investors to keep on the domestic country. If the political culture is stabilized then it can create a good business environment and more FDI can be flown into the country.

Kafi, 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 and importantly manufacturing sector is getting popular for investment in Bangladesh.

Rationale of the Study

The above mentioned literatures are regarding about the previous trend of FDI **(**Kafi, et al. 2007; Billah 2012), comparison between two or more countries' FDI inflows (Rahman 2009); the reasons for low and high inflows of FDI (Akter 2013) and the analysis of sector wise FDI (Sultana 2013). But there has not yet found any significant study regarding forecasting trend of FDI inflows in Bangladesh.

The main objective of this paper is to analyze the future inflows of FDI based on previous inflows of FDI over the period 2020- 2029. It can be said that the inflows of FDI are contingent on the absorptive capacity of host countries, with respect to the improvement of domestic financial system. This indicates that the projected FDI induces more capital-intensive investment in host countries and a better-developed domestic financial market is more effective in promoting economic growth (Sghaier & Abida 2013). Choe (2003); Apergis et al. (2008); Yalta, (2013), argued that there is strong relationship between FDI and economic growth. So the authors are interested in the study to absorb the advantages embodied in FDI inflows in stimulating economic growth.

Objectives of the Study

1) To analysis the year wise movements of FDI inflows for the period of 2003 to 2019.
2) To forecast the future trend of FDI for the next 10 years (2020 to 2029).
3) To provide recommendations for encouraging FDI into Bangladesh.

Data and Methodology

Data Collection: The paper is mainly based on secondary data collected from World Bank, International Monetary Fund (IMF), World Economic Outlook Database 2019, United Nations Conference on Trade and Development (UNCTAD) and Bangladesh Bank's FDI Survey Report 2019. Other data have been collected from Bangladesh Board of Investment, World Investment Report and different national and international journals, publications, books, reports and articles. The authors have utilized the BBS database for constructing the dataset. For analyzing the present position of FDI and forecasting next ten year's FDI Inflows toward Bangladesh the authors have used the time-series data covering the financial years 2003 up to 2019 and for showing impacts of FDI on GDP the authors have used the same financial year's data.

Econometric Model: The forecasting for next 10 years trend in FDI inflows i.e. 2020- 2029 has been predicted after studying the financial year 2003 to 2019. The estimation of FDI inflows in Bangladesh is approximated by using Least Square Method. This method is most widely used in practice (Gupta and Gupta 2008). The method of least square can be used either to fit a straight line trend or a parabola trend. The straight line is represented by the following equation:

$$Y = a + bx$$

Where Y = Trend line (Computed FDI) values to distinguish the actual 'Y' values,

a = intercept of 'Y' or the values of 'Y' available when 'X'=0, b = slope of the line or the amount of change in Y variable that is associated with a change of one unit in x variable, 'X' = Time series analysis represent the line.

Data Analysis and Discussion

Trend Analysis of FDI in Bangladesh: As a developing country, Bangladesh needs more FDI for its ongoing development process. Since 1972, Bangladesh is trying to be a suitable location for FDI. However, the total inflow of FDI has been increasing over the years. In 1972, annual FDI inflow was$ 0.090 million, and after 33 years, in 2005 annual FDI flow reached to $845.30 million and to $989 million in 2006 (UNCTAD-2018, Bangladesh Investment Handbook

2018-BOI). Total inflows of FDI in Bangladesh were not remarkable until 1980, a year of policy change. In 1980, government enacted the 'Foreign Investment Promotion and Protection Act, 1980' in an attempt to attract FDI. Enacting the Act government opened all sectors for FDI other than defense equipment and machinery, nuclear energy, forestry in the reserved forest area, security printing and minting, and railways. The FDI inflows since 2003 were:

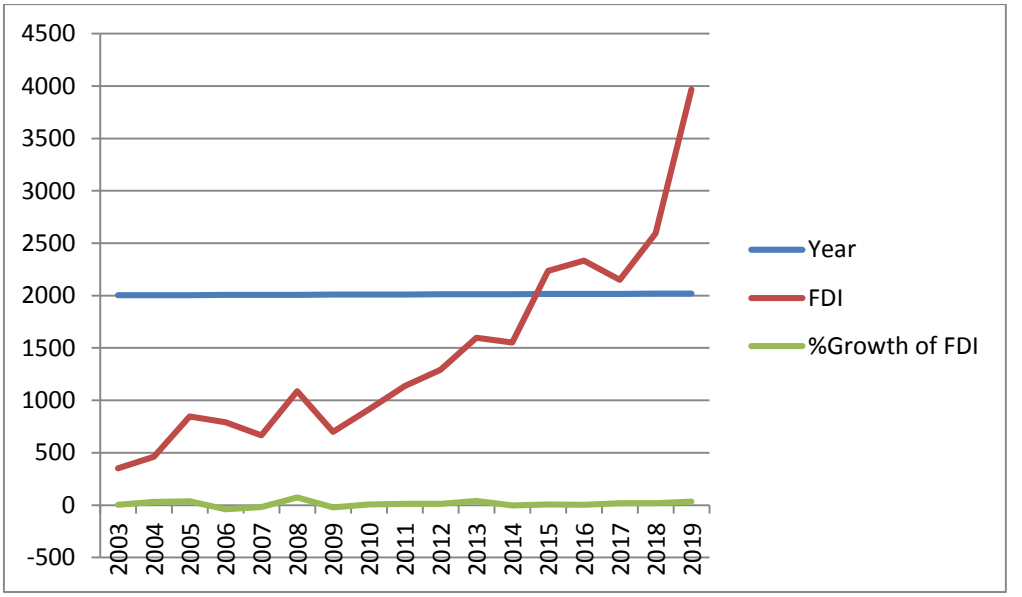
Table-1: FDI inflows from2003-2019 (US$ in millions)

Years	Foreign Direct Investment (FDI)	Annual Growth Rate (%)
2003	350.25	----
2004	460.4	0.31
2005	845.26	0.38
2006	792.48	-0.39
2007	666.36	-0.19
2008	1086.31	0.73
2009	700.16	-0.21
2010	913.32	0.07
2011	1136.4	0.13
2012	1292.6	0.11
2013	1599.2	0.40
2014	1551.3	-0.03

2015	2235.4	0.07
2016	2332.7	0.03
2017	2151.6	0.19
2018	2593.72	0.17
2019	3968.18	0.34

Source: www.Bangladesh Bank.org

Figure-1: Shows FDI inflow trend form 2003-2019 (US$ in millions)



The table and graph shows a fluctuating trend of the FDI inflows over the last 40 years. Data indicates that in 1999 there was a sudden fall in the FDI and again in 2001, 2002 and 2003 the decreasing trend continued for many reasons. It stabilized afterwards but remained below the average achieved between 1997 and 2000. Later on during next two years period it becomes alive again. From

2003 to 2019 there was a positive trend of FDI with some fluctuations in Bangladesh.

Table-2 (Details in Appendix-01) clearly shows that a major share of FDI inflows (16.44%) is contributed by U.K among top ten countries. It also indicates that the total amount of $18857.92 millions of FDI was received from 89 countries between 2003 and 2019. Among them top ten countries total contribution is $16925 million. It can be said that the top ten countries control FDI inflows in Bangladesh. Out of total FDI inflows to Bangladesh, 15.66% of the investment is made by the USA. Hence it is also a dominant source of FDI. 12.96% of the total investment is made by Singapore and is the third dominant source of FDI inflows to Bangladesh. However, Netherlands backed the fourth position by contributing 10.25%, South Korea holds fifth position among FDI source country in Bangladesh with their total investment $1540 million and Japan is in sixth position which contributed 8.37%. Hong Kong with 8.08%, Malaysia with 6.65%, Norway and Egypt both contributed with 6%.

From the table it is clearly understood that Bangladesh received the highest Foreign Direct Investment (FDI) from the United Kingdom (UK) in the past few years. Maximum amount of the UK FDI went to the banking sector in the past year, which the BB data also showed is $137.14 million followed by $42 million in textile and weaving sector (FE reporter, 2018). The data supports that Bangladesh received second highest FDI from USA. Maximum amount of the FDI coming from USA went to the Gas & Petroleum sector and followed by $ 242.04 million in power sector. Bangladesh government promoted power sector investment to help proper growth in the export-oriented economy and processed the proposal of "Prompt Power and Energy Supply (Special) Act-2010".

The third position is occupied by Singapore. About 150 companies of Singapore are operating their business in Bangladesh and over $4 billion is the trade volume of both countries (Khatun, & Ahamad, 2015). Major investments by Singapore in the last ten years went to telecommunication sector, power sector, trading sector, textile and wearing sector respectively. Basically Bangladesh telecommunication sector is largely controlled by Singapore's investor. It has also been seen that Singapore invested remarkably in computer software and IT sector of Bangladesh consistently from 2012 which is a positive sign for both countries. A team of investors based on Singapore visited Bangladesh during

July 7 to July 13 of the 2016 for obtaining first hand understanding of the business environment available here and tap the existing opportunities of their interested sectors. Bangladesh government spoke of allocating 202.343 hectare (500 acres) of land for Singapore in the Special Economic Zone (SEZ).

Bangladesh is getting a remarkable amount of FDI from South Korea so that South Korea stands 4th position among top ten countries of FDI inflow in Bangladesh. South Korea is a major investor in Bangladesh's garment sector. About 11 hundred million US dollar has been invested in garment sector of Bangladesh by South Korean's investors over last 10 years. Sector of Leather & Leather products is also preferred by South Korean investors where in every year they are doing their business in joint venture and in green field mode. But Bangladesh government should be more concerned about it because the amount of investment in this potential sector is being lessened in the current year compared to financial year 2014.

Hong Kong is also regarded as one of the consistent investors in Bangladesh and it has been investing $1131.35 million over last 15 financial year bearing 5th position of top ten counties which are investing in Bangladesh. Many Hong Kong's investor invests in Bangladesh and their top invested sector in Bangladesh is garment. Hong Kong also invests in banking sector of Bangladesh. HSBC; a Hong Kong based bank has been operating its banking services successfully since 1996 here. Bangladesh expects about $40 billion investment in power sector after 2020.

Hong Kong could be one of the key investor in power plant of Bangladesh as it has a growing trend of investment in this sector in the recent years. Though Egypt holds sixth position among top ten countries investment in Bangladesh, recently its investment is falling. This country only invests in Telecommunication sector. Orascom Telecom Holding SAE, a company organized under the laws of Egypt, invested in Banglalink of Bangladesh. Holding seventh position, Netherlands invests mostly in power sector followed by cement sector, garment sector and trading sector.

Bangladesh government considers electricity as key factor for the socio-economic development. The government has set the plan of providing electricity to all the peoples by 2021. Adequate and reliable supply of electricity

is an important pre-requisite for attracting investment. As the power sector is a capital-intensive industry, huge investments are needed in order to generate addition to the capacity. The government of Bangladesh adjusted its industrial policies to allow private investment in the power sector. In power sector many Netherland companies are investing due to facilities provided by our current government. Malaysia is one of the top ranked countries which invests in Bangladesh all in time. Bangladesh government and Malaysian government made various bilateral agreements for building up business relationship. Telecommunication sector is highly prioritized by Malaysian investors in Bangladesh. It also invests in garment, software and IT sector. Norway came to the top list because of its huge investment in IT sector. Lastly, Japan is regarded as trusted business partner from our independence. Japan invests in many sectors such as Garment, Pharmaceuticals Trading, Tobacco and Telecommunication. Bangladesh government is also very keen to maintain a good relationship with Japan as a result current government of Bangladesh are establishing a Special Economic Zone (SEC) for Japanese investors at Matarbari, Moheskhali, a upazila of Cox's bazar district.

Analysis of Forecasting Trends of FDI: Based on previous 17 years (2003-2019), the forecasting trend of next ten (2020-2029) year's FDI is shown in the following figure and table.

Figure-2: Forecast of Next Ten Year's FDI Inflows Toward Bangladesh

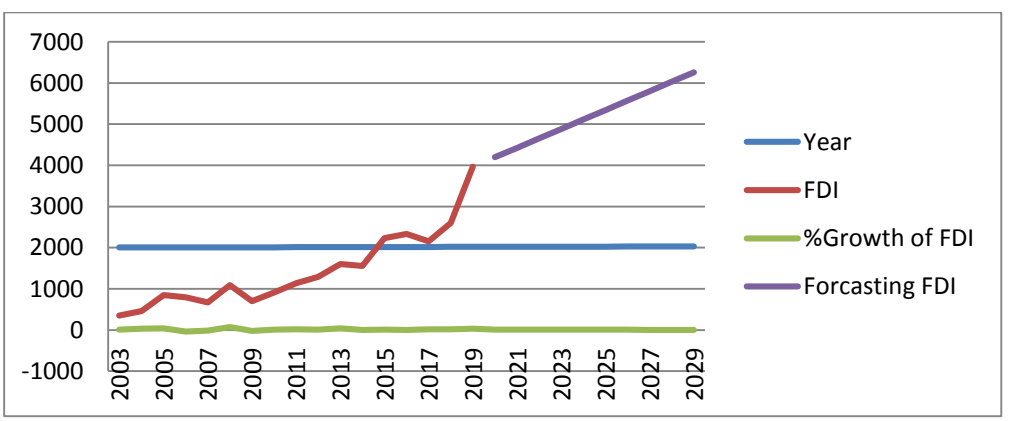


Table-3: Forecasts of FDI Inflows in the Next Ten Year (In US$ million)

Year	Forecasting FDI In Bangladesh
2020	4197.28
2021	4426.38
2022	4655.48
2023	4884.58
2024	5113.68
2025	5342.78
2026	5571.88
2027	5800.98
2028	6030.08
2029	6259.18

Source: Authors 'Own Calculation

Table-3 shows that it is possibility to increase FDI inflow in Bangladesh by observing past 17 year's FDI trend analysis.

Policies to Attract FDI in Bangladesh

As the FDI showed a great impact on GDP consequently economic so the government should focus on increasing GDP growth. The following are some of the major influencing factors that firm should choose to locate their investment in any particular developing country.

Economic Factors: Investment is driven by profit motive, and foreign investors will always prefer a country with a buoyant business sector. So Bangladesh

should try to increase the sustainable and equitable GDP growth rate, decrease the inflation rate to attract the foreign investors; and should improve the level of industrialization (Tabassum, N., & Ahmed, S., P., 2014).

Good Governance: A developing country's general structure of governance and the institutions may tend to be more complex and bureaucratic than necessary, associated with corruption. The Bangladesh government should make non-discriminatory regulations for FDI and ensure the security of investment (Tabassum, N., & Ahmed, S., P., 2014).

Infrastructural Development: The more improved is the infrastructural development of the country, the more attractive will be to foreign investors. The following infrastructure factors are significant in attracting FDI, these include: Good base of related and supporting industries (sub-contractors, suppliers, university research centre, business services and raw materials); Secured and comfortable transport facilities as well as port system; Availability and low cost of utilities such as telecommunications, energy and water; and environmental regulations and procedures. Bangladesh should ensure these infrastructural facilities to attract FDI in Bangladesh. The communication system, roads, availability of raw materials and energy are also more significant factors to the investors, so the government should provide all of the facilities (Kafi, M., A.; Uddin, M., M., & Islam, M., M., 2007).

Financial and International Integration: Financial and International Integration are also influencing factors to attract FDI in developing countries**.** Bangladesh should ensure the financial facilities and international integration, regional and international co-operation, and sound monetary system to attract foreign investment in Bangladesh. Ensuring the availability of credit is the key factor of doing business in a country. So, the government of Bangladesh should ensure the free flow of fund and regulation of collecting the funds of the foreign investors (Akter, I., S. (2013).

Political Stability: Political Stability and transparency are influential determinants for developing countries to attract foreign investment. Political factors like frequent changes of government, critical attitudes of opposition political parties, lack of transparency in the public service, incidence of corruption, and possibilities of terrorism are seriously considered by investors

in pre investment decision making. So the government should make the stable political system in the country to attract FDI (Kafi, M., A.; Uddin, M., M., & Islam, M., M., 2007).

Skilled Labor Force: One of the basic requirements of economic development of a country is its skilled labor force. Without human development it is not possible to ensure sustainable development of a country. Education, training, social services and health are the main tools for human resources development. A planned assessment of availability of human resources is necessary before formulating any policy for attracting FDI. Bangladesh has a large labor force but most of them are unskilled and uneducated. Due to huge number of labor force in the country, Bangladesh is enjoying a benefit in producing the garment product but to attract the foreign investment the country need to create skilled labor force (Rayhan, A., M., 2009).

Technological Advancement: Technological advancement plays a vital role in economic development. A well-developed technological infrastructure helps to implement government foreign investment policy. Some countries such as South Korea, Hong Kong, Singapore are succeeded to attract FDI by availability of technology. Bangladesh should improve the technological sector to enhance the production and attract the FDI (Khatun, F., & Ahamad, M., 2015).

Conclusion

FDI is not only a strategic option for a country, but also a key factor in the national economic development. Most nations try to attract foreign FDI through liberalization of investment environment, fiscal reforms and a package of incentive offers. FDI can transform a country's economic scenario within shortest possible time. It is not merely access to fund, but also to provide transfer of technical and management expertise. It is also a stabilizing factor in any economy. Bangladesh has a number of positive attributes that can successfully attract the attention of foreign investors in comparison to both developed and developing countries. The increasing availability of skilled and unskilled labor at relatively low wages and the success in maintaining reasonably stable macroeconomic environment are a few factors behind making the country an attractive destination for foreign investors. They are generally

aware that the wage rates in Bangladesh are among the lowest in Asian countries, the rate of inflation usually contains within tolerable limits, the exchange rate is reasonably stable, custom regulations are investment friendly without discrimination between foreign and domestic investors, and attractive incentive packages are available for the foreign investors. Based on the foregoing discussion and analysis, it may be stated that as Bangladesh has not yet been successful in creating a favorable environment for attracting sufficient amount of FDI. The country is lagging behind than many other developing nations in attracting FDI. Therefore, all barriers that stand in the way of industrialization and attracting FDI should be removed.

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