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IMPACT OF FOREIGN DIRECT INVESTMENT ON THE EXPORTS: BANGLADESH PERSPECTIVE

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Abstract

It is usually considered that Foreign Direct Investment (FDI) accelerates economic activities and eventually causes economic growth of a country. Foreign Direct Investment has profound impact on the growth of a developing country like Bangladesh. The foreign investor seeks for new sources of investment where the developing country seeks for new sources of fund to develop the country. The aim of this paper is to identify whether Foreign Direct Investment has significant impact on the economy of Bangladesh by investigating the relationship between Foreign Direct Investment and export. After analyzing necessary data of last 10 years (2001-10), the findings indicate that Foreign Direct Investment has significant positive relationship with export that helps the economic growth of Bangladesh.

Key words: FDI, Exports, Foreign Trade, Board of Investments, National Economy

Introduction

Industrial development is considered as one of the vital elements for economic development of a developing country. Bangladesh, an agro-based developing country of South Asia is gradually moving from agrarian economy to industrial economy. But the low rate of Gross Domestic Savings and Gross Domestic Investment as well as low level technology base hamper the expected industrialization process. In this situation, FDI can be viewed as a major stimulus to economic growth and industrialization process of the country (Rayhan, 2009, p.101). A number of researchers viewed FDI as an important factor in accelerating the wealth of a country by creating jobs, more competitive environment and contributing productivity. Thus, the contribution of FDI is necessary for the enhancement of the economic growth of a developing country like Bangladesh.

Exports, on the other hand, are also considered as an instrument of economic growth. It facilitates to generate the foreign exchange required to finance the import of goods and services; to obtain economies of specialization, scale and scope in production; and to learn from the experience in export markets. In today's world, export success can serve as a measure for the competitiveness of a country's industries.

The success stories of East and South-East Asian countries suggest that FDI is seen as a powerful tool of export promotion for the domestic country. So it can be said that FDI can increase the export base of the domestic country which ultimately contributes to the overall growth of the host country. Thus, the paper tries to explore

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the impact of FDI inflows on the export performance of Bangladesh.

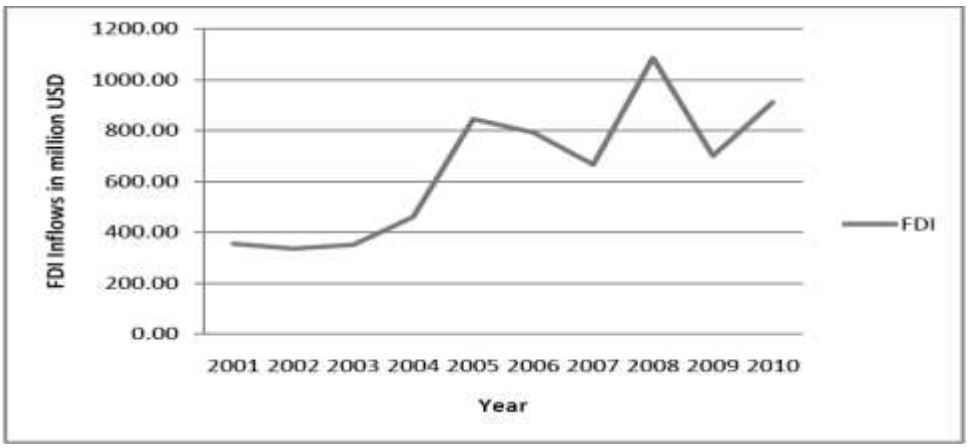
FDI and its Concepts

The term FDI refers to investment that is made to acquire a lasting interest in an enterprise operating abroad, the investor's purpose being to have an effective voice in the management of the enterprise. In other words, FDI is an international financial flow with the intention of controlling or participating in the management of an enterprise in a foreign country.

Current Status of FDI and Exports in Bangladesh

FDI is often emphasized as a shortcut to solve the problems in development policies. Bangladesh is no exception. Since independence, Bangladesh is trying to attract FDI. During 1980s, FDI to Bangladesh was very little and mostly concentrated in banking and a few other sectors. In order to accelerate FDI, Bangladesh government took some initiatives in the late 1980s. For example, setting up Board of Investment (BOI), lifting restrictions on capital and profit repatriation, opening up almost all industrial sectors for foreigners, introducing various financial and non-financial incentives such as tax exemptions for power generations, import duty exemptions for export processing industries, tax holiday schemes for undertaking investment in priority sectors and low development areas, zero duty rate for the import of capital machinery and spare parts for 100 percent export oriented industries, almost no restrictions on the entry and exit mode, and reduction of bureaucratic hassles in getting faster approvals of foreign projects. As a result, the trend of Inflow of FDI in Bangladesh has increased in the 1990s as compared to earlier periods and this same momentum continues till now. During the period of 1977-2010, total inflows of FDI were USD 8927.9 million, among which the total inflows of FDI during 2006-2010 was USD 4158.63 million(Source: Survey Report, Statistics Department, Bangladesh Bank). Figure 1 illustrates the trend of FDI inflows in Bangladesh during recent past (2001-2010).

Figure 1: The trend of FDI inflows in Bangladesh during 2001-2010.



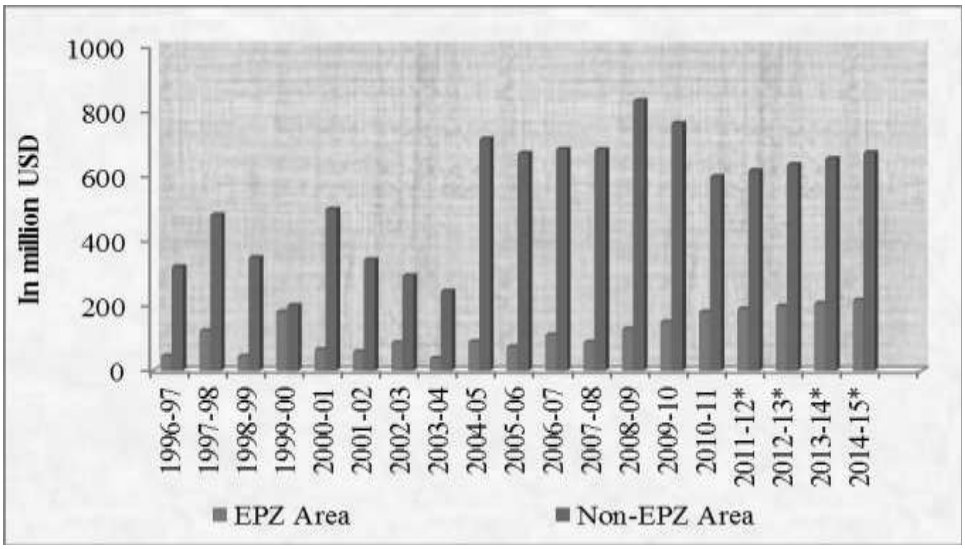
Source: Survey Report, Statistics Department of Bangladesh Bank and Foreign Direct Investment

in Bangladesh (1971-2010), Board of Investment.

The figure 1 shows an inconsistent inflow of FDI during the period. The FDI inflow was on the steady rise from 2001 to 2004. It rose to US$ 845.26 million in 2005 but declined to US$ 792.48 in 2006 and US$ 666.36 in 2007. It again increased to US$ 1086.3 million in 2008 but slumped to US$ 700.16 in 2009 and again increased to $913.32 in 2010. Political unrest together with some other factors forces this declination in the inflows.

Foreign trade is of vital importance to the economic development of Bangladesh. In order to finance imports and also to reduce the country's dependence on foreign aid grants, the government, since liberation, has been trying to enhance foreign exchange earnings through planned and increased exports. The significance of foreign trade to the economy is manifest in a number of facts and figures. In 1991-92, export-oriented industries' contribution to industrial value-addition was 56 percent; export industries' share of employment in the manufacturing sector was 60 percent, and the growth of export earnings was 16.09 percent. During the last decade, export earnings at current dollar prices increased by 14 percent per annum. From 2003 to 2007 Bangladesh achieved annual export value growth of 19.6%, a testimony to its export competitiveness. Figure 2 illustrates the trend of exports of Bangladesh during recent past (2001-2010).

Figure 2: FDI Inflows in EPZs and Non-EPZs

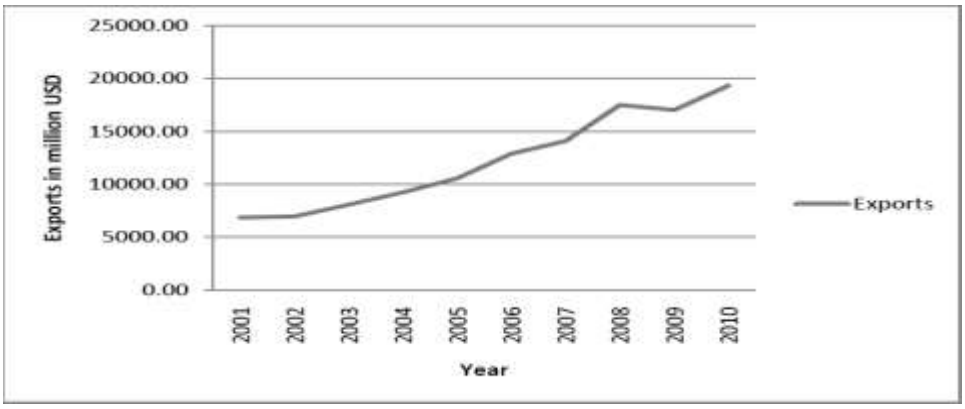


Source: Authors' calculation based on Bangladesh Bank, 2012

FDI in non-EPZ areas does not create as much employment opportunities that are created in EPZ areas. Until August 2011, total investment in EPZ areas is USD 53.18 million and total local employment is 1782. USD 181.45 million was invested in EPZ areas in FY 2010-11 that is 20.08 percent more than that of the previous fiscal year and only 23.29 percent of total FDI. Under the business as usual scenario, FDI in EPZ areas might increase to only USD 217.54 million in FY 2014-15, which

will be only 24.47 percent of total FDI.

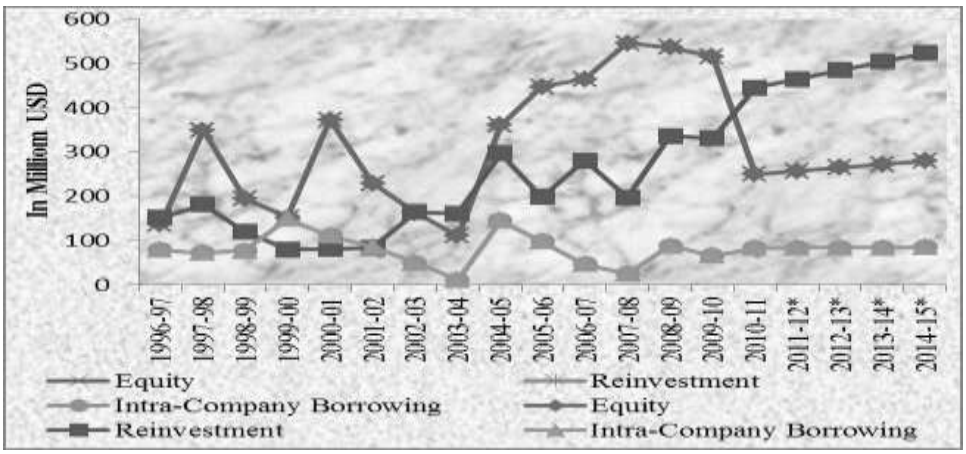
Figure 3: The trend of FDI inflows in Bangladesh during 2001-2010.



Source: Survey Report, Statistics Department of Bangladesh Bank.

The figure 3 shows a relatively consistent flow of exports during the period. The exports were on the steady rise from 2001 to 2008. It rose to US$ 17497.6 million in 2008 but declined slightly to US$ 17010.8 in 2009. It again increased to US$ 19315.85 million in 2010. In the perspective of export performance of Bangladesh, the country is still dependent on ready-made garment (RMG) sector with contribution of nearly 80 percent national export. So, it is clearly evident that the country is dependent on apparel sector. On the other hand, Bangladesh is dependent on few traditional markets including the US, the EU and Canada. Of the total exports of the country 23 percent goes to the US, nearly 60 percent to the EU, 5 percent to Canada and 12 percent to the rest of the countries of the globe. So, it is clear that how much is concentrated of the country's exports on a few numbers of markets.

Figure 4: Categories of FDI inflow in Bangladesh

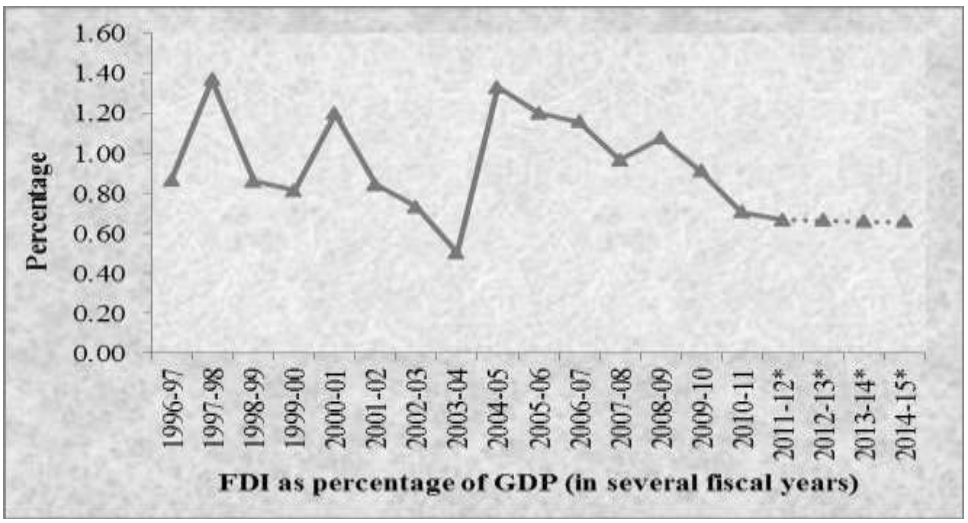


Source: Survey Report, Statistics Department of Bangladesh Bank.

This analysis is based upon the performance of the three components of FDI

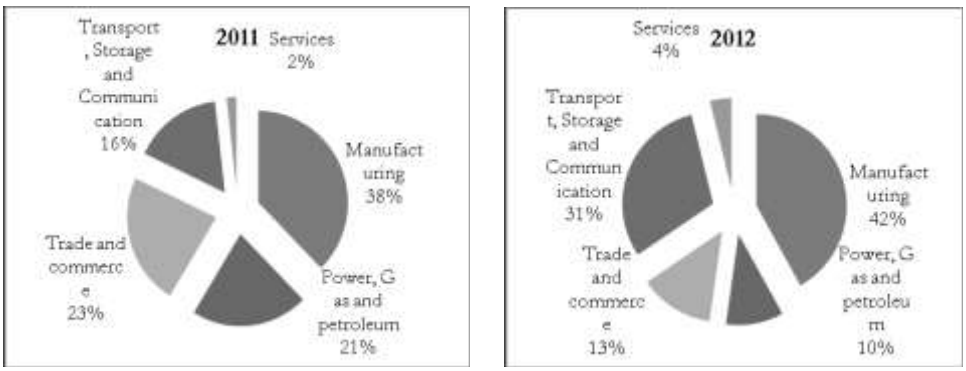
inflow, namely equity, reinvestment and intra-company borrowing. FDI flow to Bangladesh in the form of equity capital has been showing an erratic movement and it was difficult to estimate the future trends of this. However, if we bank upon the trends after 2009, it can be assumed that there could be positive trend of FDI flow in equity form, if the current environment would prevail in the coming years. Whilst reinvestment is showing some steady trends, the intra company loan inflow reveals a downward trend.

Figure 5: FDI as a Percentage of GDP (In Crore Taka)



Source: Author's calculation based on Bangladesh Bank, Bangladesh Bureau of Statistics, 2012

Figure 6: Comparison of major sectors of FDI



Source: Authors' calculation based on Bangladesh Economic Review, Ministry of Finance, 2014

The government of Bangladesh has listed the following five areas in which FDI should be encouraged under joint venture and 100% ownership by the foreigners:

a) Export oriented industries
b) Industries located in the Export Processing Zones (EPZs)
c) Industries that are based on high technology, which will either be import

substitute or export oriented

d) Basic industries based mainly on local raw materials and investment towards improvement of quality and marketing of goods manufactured and/or the increase of production capacities of existing industries

e) Physical infrastructure projects on Build-Operate-Own (BOO) and Build-Operate- Transfer (BOT).

Impacts of FDI on National Economy

Foreign Direct Investment (FDI) is considered as one of the crucial ingredients for fostering economic development of a developing country like Bangladesh. The current issue of the Bangladesh Economic Update focuses on the magnitude, dynamics, sectoral distribution, and country-wise sources of FDI inflow in the country. Besides, for utilizing domestic resources (raw materials and labor), having unconventional and profitable sectors, reducing exports, introducing advanced technology, FDI plays very significant role in the country.

Figure 7: Transmission mechanisms between FDI and poverty reduction

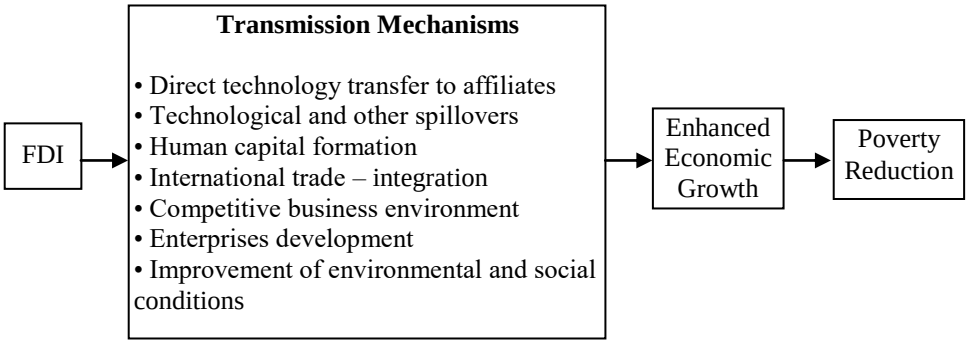


Table 1: Private Investment Statistics (March, 2012)

Year	Proposed Local Investment		Proposed Foreign Investment		Total Proposed Investment		Growth %
	Project	BDT	Project	BDT	Project	BDT	
2005-2006	1754	18370	135	24986	1889	43356	124.62
2006-2007	1930	19658	191	11925	2121	31583	-27.15
2007-2008	1615	19553	143	5433	1758	24986	-20.89
2008-2009	1336	17117	132	14749	1468	31867	27.54
2009-2010	1470	27414	160	6261	1630	33678	5.67
2010-2011	1298	39976	148	26935	1446	66912	98.71
2011-2012	1604	497078	209	338910	1813	835989	212

Source: Bangladesh Economic Review-2011 (Bangla version), Ministry of Finance

Therefore, it is easy to say FDI have enormous impacts on domestic business and exports. Nonetheless, investment opportunities enlarge the employments and other

types of economic development due to FDI.

Table 2: Major sectors of export earnings during July-January

Middle east countries	**2011-12**	**2012-13**
Saudi Arabia	27.75	27.25
Kuwait	8.93	8.44
U.A.E.	18.12	20.12
Bahrain	2.26	2.57
Qatar	2.52	2.04
Oman	3.02	4.34
Libya	0.10	0.41
Iran	0.01	0.02
Europe-America		
USA	11.26	13.21
UK	7.43	7.06
Germany	0.26	0.18
Italy	1.82	1.66
Except Middle east		
Australia	0.40	0.43
Hong Kong	0.17	0.14
Malaysia	6.39	7.08
Singapore	2.36	3.54
Japan	0.17	0.15
South Korea	0.23	0.44

Impact of FDI on Exports

Along with the economic reforms and increased FDI inflows, South Asian countries have also experienced higher exports growth during the nineties; Bangladesh achieved double-digit export growth in that decade. The export-related success stories of PRC (UNCTAD, 2002) and East Asian countries suggest that FDI is a powerful tool for export promotion because the relative technological superiority of multinational firms helps domestic firms, directly and indirectly, in terms of technological advancement and provides market access to export markets. However, the success stories of these economies cannot be generalized to South Asian countries given the lower level of infrastructure, slow market reforms and structural rigidities (Srinivasan, 1998). The role of FDI in export promotion depends upon the motive of investment. If the motive is to capture domestic market because of high trade costs or tariffs, FDI may not improve the export growth. On the other hand, if the motive of FDI is to make use of cheap inputs or the country's comparative advantages to tap the export market, it may contribute to export growth.

It has been also debated in the literature that export-oriented industries help domestic industries and therefore crowd-in domestic investment by creating demand

for intermediate demands. Multinationals firms, who bring FDI into the host country, are larger than domestic firms, pay higher wages, have higher factor productivity, are highly capital intensive and are more likely to contribute to exports due to their international exposure and competitiveness (Haddad and Harrison, 1993, Aitken et al, 1997; Aitken and Harrison, 1999).

Aitken et al (1997) show the FDI impact on exports using the example of Bangladesh, where the entry of a single Korean multinational in the garment industry led to the establishment of a number of domestic firms exporting garments, creating a large export industry.

Objective of the Study

The main objective of this study is to identify whether Foreign Direct Investment has significant impact on the export of Bangladesh by investigating the relationship between Foreign Direct Investment and export.

Literature Review

Extensive research has been carried out in the developing countries to measure the link between FDI and each of economic growth, GDP, export and import. (See for example, Rothgeb, 1984; Aitken and Harrison, 1999; Mottaleb, 2007; Dondeti & Mohanty, 2007; Xuan & Xing, 2008; Ahmed & Uddin, 2009;Quader, 2009; Prasanna, 2010; Azam, 2010; Kiran, 2011; Faruk,2013; Barua, 2013).

(Xuan & Xing, 2008) examined the implementation statuses of a total of 5,919 foreign direct investment (FDI) projects approved by the Vietnamese Ministry of Planning and Investment since 1988, and compiled a database of actually disbursed FDI in Vietnam. The database covers FDI flows into Vietnam from 23 countries from 1990 to 2004. Using the data, they analyzed the impact of FDI on the exports of Vietnam with gravity equations. The findings indicate that FDI is one of the major factors driving the rapid export growth of Vietnam. It has significantly facilitated the expansion of Vietnam's exports to FDI source countries. In particular, the empirical analysis shows that a 1 percent increase in FDI inflows will be expected to give rise to a 0.13 percent increase in Vietnam's exports to these countries.

(Ahmed & Uddin, 2009) investigated the causal nexus between export, import, remittance and GDP growth for Bangladesh using annual data from 1976 to 2005. The paper used time series econometrics tools to investigate the relationship adding import and remittance in the model. Study finds limited support in favor of export-led growth hypothesis for Bangladesh as exports, imports and remittance cause GDP growth only in the short run. The causal nexus is unidirectional.

(Azam, 2010) examined the impacts of exports and FDI on economic growth of four South Asian countries namely Bangladesh, India, Pakistan and Sri Lanka. He used secondary data ranging from 1980 to 2009 and found that exports are positively related with the economic growth of each country.

(Prasanna, 2010) explored the impact of FDI inflows on the export performance of India. This study finds that the impact of FDI inflows on export performance is

significantly positive. The study also suggests that the policy regarding domestic efforts to enhance manufacturing exports needs reassessment in line with the FDI policy framework in order to reap maximum and long-term benefits.

(Kiran, 2011) investigated the empirical evidence on the link between foreign direct investment and trade (export and import) in Turkey over the period from 1992:01 to 2008:04 by using the minimum LM unit root test for stationarity; Granger and Dolado-Lüthkepohl tests for causality. The test results based on the bi-variate VAR model indicate that there is no evidence of causality between foreign direct investment and trade in Turkey.

(Barua, 2013) examined the two most important benefits associated with the inflow of FDI for the host country in the form of: Export Promotion and GDP Growth. To study the dynamics of co-integration between FDI, GDP and Exports, evidence is taken from country-specific level like Indian Economy where the period of study is from 2000-2012. As FDI inflow can have a two-way impact on the host country, hence, the paper firstly examines the current economic scenario of India in terms of its FDI inflows, GDP growth rate and its export performance so far. Secondly, the paper shows a positive correlation between FDI, GDP and Exports by framing Simple Regression and Multiple Regression Models built on the hypotheses formulated and validating the results of the models based on ANOVA and Durbin-Watson test.

Methodology

This paper is fully based on secondary information. The relevant secondary data are collected from Statistics Department and Research Department of Bangladesh Bank (Central Bank of Bangladesh), Board of Investment, Bangladesh, Bangladesh Bank Bulletin, Economic Trend, Bangladesh Economic Review, World Investment Report 2012 published by UNCTAD, etc. The time period of the study is from 2001-2010.

The Dependent Variable, Independent Variable and Hypothesis

The independent variable used in this study is FDI inflow. FDI inflow refers to the long-term investment in a foreign country. It consists of three components: equity capital, reinvested earnings and intra-company loans. Export is considered as dependent variables for the current study.

Formulation of Hypothesis

To meet the objective of the study, following hypothesis has been formulated:

Hypothesis: FDI Inflow has positive and significant impact on export

Model Specification

To investigate the impact of FDI on export, the following model is developed

$$Export_i = \beta_0 + \beta_1 FDI_i + \varepsilon$$

Where, Export= Export (Millions USD)

FDI= Foreign Direct Investment (Millions USD)

$\beta 0$ = Constant term

$\beta 1$= Regression coefficients for the independent variable

i = Different years

e = Residual error

The above model has been used to find out whether there is a relationship between dependent variable and independent variable. Collected data has been processed and analyzed with the help of SPSS software.

Results and Discussion

Most of the previous studies focused on Asia especially South-Asian countries have found significant positive relationship between FDI inflows and exports of the host country. It is expected that similar relationship will be found in case of Bangladesh. The following section presents regression results between FDI inflows and exports.

Table 1 Regression results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844[a]	.712	.676	2622.29340
a. Predictors: (Constant), FDI				

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.358E8	1	1.358E8	19.751	.002[a]
	Residual	5.501E7	8	6876422.700		
	Total	1.908E8	9			
a. Predictors: (Constant), FDI						
b. Dependent Variable: Export						

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2715.855	2298.662		1.181	.271
	FDI	14.648	3.296	.844	4.444	.002
a. Dependent Variable: Export						

The results of the regression analysis of the association between FDI and export are documented in Table 1. The result shows that the F-ratio is 19.751 (P=.002), which statistically supports the significance of the model. This indicates that the variation caused by FDI inflow in the export is significant. The values of Correlation Coefficient (R) of .844 and Coefficient of Determination (R Square) of .712, implies that FDI has high degree of correlation with export. FDI inflow is found to have positive and significant relationship with export and therefore Hypothesis is supported.

Potential Determinants of Foreign Direct Investment

- Market size
- Growth prospects and positive country conditions
- Labor cost and availability of skilled labor
- Infrastructure facilities
- Openness and export promotion
- Government finance
- Rate of return on investment
- Human capital
- Policy measures

Some Key Roles of FDI Played in Bangladesh

a) Proper Utilization of Domestic Resources (Raw Materials and Labor)
b) Investment in Unconventional and Profitable Sectors
c) Development of Skilled Personnel
d) Bangladesh- A promising Market Segment
e) FDI Reduces Imports, Saves Currency and Provides Lower Price of Product
f) Introduction of Advanced Technology

Major Obstacles to FDI in Bangladesh

The following factors can be identified as major obstacles to FDI in Bangladesh:

a) Poorly developed socio-economic and physical infrastructure
b) Lack of skilled people at various levels
c) Unreliable energy supply
d) Corruption
e) Administrative complexity and non-transparency
f) Poor implementation of existing policies
g) Low labor productivity
h) Frequent change in govt. policies
i) Unhealthy trade union practices
j) Underdeveloped money and capital markets and regulations on these markets

k) Less improved seaport facilities & malpractices at the port
l) Deteriorating law and order situation
m) Political instability and disturbances
n) High cost of doing business
o) Redtapism and corruption in getting infrastructural facilities
p) Unfriendly legal system

Civil Society Perceptions

- Effect of FDI in Top Five Important Sectors, as per Civil Society Perceptions
- Quantity of jobs
- Quality of jobs
- Availability of new technology
- Competition in the market
- Opportunities for domestic business
- Quality of products available to consumers
- Prices of products to consumers
- Choice of products available to consumers
- Balance of payments
- Demonstration of better technology
- Up gradation by local firms
- Revenue of the government

Concluding Remarks and Recommendations

The findings of this study reveal that FDI has significantly contributed to accelerate the pace of exports of Bangladesh for the period 2001-2010. This increasing trend of exports ultimately increases financial resources for development, generates new employments, plug a country in the new arena of international trading system and promote a more competitive business environment. But, overdependence on a few products or on a single product is not a wise decision. For sustenance of business, it needs diversification of both export products and export destinations. In view of this, Bangladeshi policy makers should continue to take necessary steps to improve FDI together with diversifies both export products and export destinations.

In spite of vast potentiality, FDI inflows in Bangladesh are still below potential. It is highly recommended to improve infrastructural facilities to increase FDI inflows in Bangladesh. Another thing to be noted that, FDI inflows in Bangladesh is mostly concentrated on a few sectors. Focus should be given on the type of FDI inflows rather than the amount of gross FDI inflows.

Actually, before passing the clear-cut opinion or comments regarding the impact of FDI many relevant factors have to be considered in this regard. However, to increase as well as expedite the FDI strength in Bangladesh some steps could be

taken so far and these are:

a) Reduction of the gap between Saving-GDP ratio and Investment-GDP ratio.
b) Corruption free society
c) Development of Economic Indicators
d) Transparency and Accountability
e) Political stability
f) Development of Infra-structural Conditions
g) Development of Relationship with the International Organizations
h) Measures for Controlling Natural Disasters
i) Exploration of Gas, Fuel and Generation of Electricity
j) Tax Holiday and Tax Rebate
k) Clearance on transferring foreign money from Bangladesh Bank

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Appendix
Year wise FDI Inflows and Exports of Bangladesh

Year	FDI Inflow in million USD	Export in million USD
2001	354.47	6836,9
2002	335.47	6951
2003	350.25	8061.8
2004	460.4	9233.7
2005	845.26	10551.4
2006	792.48	12887.5
2007	666.36	14091.1
2008	1086.31	17497.6
2009	700.16	17010.8
2010	913.32	19315.85