

## **FOREIGN DIRECT INVESTMENT: IMPACT ON SECTORAL GROWTH IN BANGLADESH**

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### **INTRODUCTION**

Until the 1980s, most developing countries viewed Foreign Direct Investment (FDI)<sup>1</sup> with great suspicion. In recent years, however, FDI restrictions have been significantly reduced. Most countries offer incentives to attract FDI, such as tax concessions, tax holidays, accelerated depreciation on plants and machinery, export subsidies, import entitlements, etc. Many theoretical and empirical studies have attempted to account for the reasons of FDI movement across the globe.

As a developing country, Bangladesh needs FDI for its ongoing development process. Since independence, Bangladesh has been trying to be a suitable location for FDI. Special zones have been set up and lucrative incentive packages have been provided to attract FDI. Total FDI inflow has been increasing gradually over the years. In 1972, annual FDI inflow was 0.090 million USD (UNCTAD 2005), but after 33 years, in 2005 annual FDI rose to 845.30 million USD. The time has come, then, to investigate the benefit of FDI inflow in different sectors of the economy. Until recently, there has hardly been any empirical study undertaken to examine the impact of FDI on sectoral growth. What has been done so far mostly addresses the barriers and prospects of FDI (Rahman and Hossain 2001): one study investigated whether optimum utilization of natural gas was directly or inversely correlated to the FDI in that sector (Anu Muhammad 2004).

The objective of this paper is to address the impact of FDI on sectoral (agriculture, industry and service) growth patterns. It analyses data from secondary sources and estimates the relationship between inflow of FDI and annual output growth achieved in different sectors between 1995-2005, by computing correlation co-efficient and corresponding p-values. The analyses reveal that FDI inflow in the industrial sector does not appear to correlate much with industrial growth; however, it relates better to service sector growth. FDI inflow in the service sector is fairly well correlated with the growth in that sector. FDI in agricultural sector does not have any close relationship with the sectoral growth pattern. The paper is organized as follows: Firstly, it shows the trend of FDI inflow at both sectoral and aggregate levels. Secondly, it explains the relationship between FDI inflow and sectoral output growth based on Pearson Correlation Co-efficient. Thirdly, it provides an account of country-wise FDI inflow. Fourthly, it reports component-wise FDI inflow. Fifthly, it reviews FDI related outward remittances. Sixthly, it discusses net effects of FDI and policy recommendations in guiding FDI decisions. Finally, it offers some concluding remarks.

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1. Foreign Direct Investment (FDI) is capital provided by a foreign direct investor, either directly or through other related enterprises, where the foreign investor is directly involved in the management of the enterprise.

## THE MAGNITUDE OF FDI

FDI played a minor role in the economy of Bangladesh until 1980, a crucial year of policy change. This is because the Government of Bangladesh (GOB) then enacted the 'Foreign Investment Promotion and Protection Act, 1980' in an attempt to attract FDI. Except five industries, which were reserved for the public sector, (defence equipment and machinery, nuclear energy, forestry in the reserved forest area, security printing and minting, and railways), FDI was allowed in every sector of the economy.

Table 1 shows total FDI inflow (including that in Export Processing Zones or EPZs) over the last 11 years (1995-2005). Data reveals that in 1999, there was a sudden fall in FDI, and again in 2001, mainly because of continued political unrest, which discouraged foreign investment. Subsequently, it took several years to regain the confidence of foreign investors. FDI stabilized afterwards but remained below the heights reached during 1997-2000. In spite of Bangladesh's comparative advantage in labour-intensive manufacturing, adoption of investment friendly policies and regulations, establishment of EPZ in different suitable locations and other privileges, FDI flows failed to accelerate in the next few years. However, in 2005 substantial improvement was achieved once more.

<i>The Aggregate and Sector-wise FDI inflow, 1995-2005 (calendar year)</i>											<b>Table-1</b>
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Agriculture & Fishing (Total)	0	0.3	1.4	1.4	2.9	15.2	1.1	1.6	4.1	1.7	2.3
Power, Gas & Petroleum	3.2	47.0	242.1	235.2	83.5	301.0	192.4	57.9	88.1	124.1	208.3
Manufacturing	45.5	89.2	162.4	139.8	191.8	193.5	132.2	142.9	165.2	139.4	219.3
Industry (Total)	48.7	136.2	404.5	375.0	275.3	494.5	324.6	200.8	253.3	263.5	427.6
Trade & Commerce	41.3	92.3	158.9	164.3	27.5	53.2	27.6	63.7	44.0	66.6	130.5
Transport & Telecom.	1.7	1.5	5.9	25.3	0.5	5.4	0.9	48.5	45.9	127.5	281.9
Other Services	0.6	1.3	4.6	10.5	2.9	10.3	0.3	13.7	2.9	1.1	3.0
Services (Total)	43.6	95.1	169.4	200.0	30.9	68.9	28.8	125.9	92.8	195.2	415.4
Total FDI to Bangladesh	92.3	231.6	575.3	576.5	309.1	578.6	354.5	328.3	350.2	460.4	845.3

*Source: Statistics Department, Bangladesh Bank.*

**Note:** Enterprise Survey, the source of the current data set, is conducted by Statistics Department of Bangladesh Bank on a calendar year basis.

## FDI INFLOW: SECTORAL COMPOSITION

There have been several shifts globally in the concentration and composition of FDI. The first major compositional shift was within manufacturing, that is to say, from import-substitutes to export-oriented manufacturing. A more recent shift of FDI has been towards services. The presence of these global changes is also evident in the Bangladesh economy which has also been driven by the opening up of service industries to FDI. With the country's accession to the World Trade Organization (WTO), service sectors like power and energy, banking, insurance and telecommunications are being liberalized and progressively opened up. Owing to comparative advantage and an accommodative policy regime, a large chunk of FDI has gone into the ready-made garment (RMG) sector for establishing backward linkage industries, telecommunication, and power and energy sectors. Table 2 depicts the pattern of FDI inflow in different sectors and the growth rate during 1995-2005. In fact, there has been a substantial change in the pattern of FDI inflow in the new millennium. Foreign investors are now looking at sectors like telecom, banks and power and energy, where profit growth is likely to be high. This may alter the sectoral composition in the days to come.

*The Aggregate and Sector-wise FDI inflow, 1995-2005 (calendar year)*

**Table-2**

Year	fdi_ag (million USD)	fdi_in (million USD)	fdi_sr (million USD)	gr_ag (per- centage)	gr_in (per- centage)	gr_sr (per- centage)
1995	0.0	48.7	43.6	3.1	6.9	3.9
1996	0.3	136.2	95.1	5.9	5.8	4.5
1997	1.4	404.5	169.4	3.2	8.3	5.0
1998	1.4	375.0	200.0	4.7	4.9	5.2
1999	2.9	275.3	30.9	7.4	6.2	5.5
2000	15.2	494.5	68.9	3.2	7.5	5.5
2001	1.1	324.6	28.8	0.1	6.5	5.4
2002	1.6	200.8	125.9	3.2	7.3	5.4
2003	4.1	253.3	92.8	4.1	7.6	5.7
2004	1.7	263.5	195.2	2.2	8.3	6.4
2005	2.3	427.6	415.4	4.5	9.6	6.5

*Source : Statistics Department, BB & BBS*

**Note:** 'fdi\_ag' means FDI inflow in agriculture sector, 'fdi\_in' means FDI inflow in industrial sector and 'fdi\_sr' means FDI inflow in service sector. Again 'gr\_ag' means output growth in agriculture sector, 'gr\_in' means output growth in industrial sector and 'gr\_sr' means output growth in service sector.

If we compute correlation and corresponding p-values (probability) between the FDI inflow and the sectoral growth pattern, using the data in Table 2, we obtain the following results (Table 3) for 11 observations (1995-2005).

Pearson Correlation Co-efficients, $n = 11$ , Prob > $ r $ under $H_0: \rho=0$						Table-3
	fdi_ag	fdi_in	fdi_sr	gr_ag	gr_in	gr_sr
fdi_ag	1					
fdi_in	0.58574 (0.0583)	1				
fdi_sr	-0.14338 (0.6741)	0.41410 (0.2055)	1			
gr_ag	-0.02198 (0.9489)	-0.10683 (0.7546)	0.08209 (0.8104)	1		
gr_in	0.15920 (0.6401)	0.31572 (0.3443)	0.57728 (0.0629)	-0.26088 (0.4384)	1	
gr_sr	0.23195 (0.4925)	0.57942 (0.0617)	0.57897 (0.0620)	-0.08547 (0.8027)	0.56206 (0.0719)	1

**Note:** The correlation matrix has been generated by the SAS programme.

From the estimated Pearson correlation coefficients and corresponding p-values (shown in parentheses), it is evident that FDI inflow in industrial sector does not appear to correlate much to industrial growth. However, it relates better to service-sector growth. On the other hand, FDI inflow in the service sector is fairly well correlated with the growth in that sector as well as in the industrial sector. FDI inflow in agricultural sector does not have any close relationship with the sectoral growth pattern. The above pattern is suggestive of mutual externalities between growth in industrial and service sectors, though curiously, FDI in the service sector co-varies with growth in both these sectors, while FDI in industry co-varies only with service sector growth. The paucity of data prevents further inference.

## FDI INFLOW BY SOURCE COUNTRY

The emergence of new sources of FDI may be of particular relevance to low-income host countries like Bangladesh. Indeed, the role of developing and transition economies as sources of FDI has been increasing with the passage of time. Transnational Corporations (TNCs) from developing and transition economies have become important investors in many LDCs. Bangladesh also has to depend on 36 countries from across the globe for FDI. Among the sources, 21 countries belong to developing and transition economies. Table 4 illustrates total FDI inflow in Bangladesh over the last 11 years from 1995 to 2005 from different countries across the world. Nearly 70 percent of annual FDI was received from only 11 countries (Table-4).

**Table-4**

*Country-wise FDI inflow, 1995-2005 (calendar year)*

Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Denmark	0.78	2.23	0.00	0.03	0.14	22.50	4.00	3.10	14.00	18.80	18.30
Egypt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.90	48.40
Hong Kong-China	2.73	5.94	21.63	13.14	20.52	14.80	5.80	17.10	11.70	13.90	53.10
Japan	6.61	5.37	51.31	15.65	35.04	10.50	2.20	11.90	17.50	30.00	46.40
Malaysia	0.00	0.08	6.12	5.01	2.91	6.20	0.30	11.40	13.40	39.00	33.10
Norway	0.00	0.00	0.00	23.71	3.31	0.00	0.00	26.40	21.90	59.60	53.50
Singapore	0.06	0.03	2.83	0.50	1.10	1.90	1.60	12.70	3.20	2.30	97.50
South Korea	18.23	43.20	34.59	70.94	101.36	31.40	16.80	30.70	24.50	18.50	29.90
UAE	0.05	0.15	0.14	0.18	1.58	0.00	0.90	0.00	16.70	12.80	55.50
UK	20.26	86.36	255.88	40.93	35.61	157.00	52.90	18.50	83.60	91.00	152.80
USA	15.16	14.40	67.64	232.90	66.94	29.30	29.10	24.50	32.10	61.80	141.80
Others	28.42	73.85	135.17	173.47	40.63	305.00	240.9	172.00	111.60	92.80	115.00
Total	92.30	231.61	575.31	576.46	309.14	578.60	354.50	328.30	350.20	460.40	845.30

*Source: Statistics Department, Bangladesh Bank*

## FDI INFLOW BY COMPONENTS

FDI basically consists of three components: equity capital, reinvested earnings and intra-company loans. Equity capital is the foreign direct investor's purchase of shares of an enterprise in a country other than its own. Reinvested earnings equal the direct investor's share of earnings (in proportion to direct equity participation), not distributed as dividends by affiliates, or earnings not remitted to the direct investor. Such retained profits by affiliates are reinvested. Intra-company loans are intra-company debt transactions, and refer to short or long-term borrowing and lending of funds between direct investors (parent enterprise) and affiliated enterprises. Table-5 illustrates the distribution of FDI in Bangladesh by its main components.

Pearson Correlation Co-efficients, $n = 11$ , $Prob >  r $ under $H_0: \rho = 0$												Table-5
FDI component	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	A v e r a g e
Equity Capital	37.3	69.5	332.1	280.5	137.5	350.2	233.8	133.8	156.1	155.9	425.6	
Re-invested earnings	35.5	121.7	163.4	189.9	76.2	77.8	65.0	116.8	170.1	239.8	247.5	
Intra-company loans	19.5	40.4	79.8	106.1	95.4	150.6	55.7	77.7	24.0	64.7	172.2	E q u i t y
Total	92.3	231.6	575.3	576.5	309.1	578.6	354.5	328.3	350.2	460.4	845.3	
Share of equity capital to total FDI inflow (%), 1995-2005	40.41	30.01	57.73	48.66	44.48	60.53	65.95	40.76	44.57	33.86	50.35	47.03
Weighted share of equity capital to total FDI inflow (%), 1995-2005	0.79	1.48	7.05	5.96	2.95	7.44	4.97	2.84	3.31	3.31	9.04	49.14
Source: Statistics Department, Bangladesh Bank												

Table 5 reveals that the basic component of FDI, equity capital contributed about 47 percent of total FDI inflow on an average over the last 11 years, (1995 to 2005) whereas the weighted average was 49.14 percent. Therefore, actual inflow of FDI in the form of equity participation by foreign direct investors is substantially less than the headline figures cited in the media.

### **FDI RELATED OUTWARD REMITTANCES**

FDI brings much-needed foreign funds for current investment, but it also creates long-term obligations in the form of future repatriation of profit earned by foreign investors. Another disturbing aspect is the round tripping of capital that finds original investment (including intra-company debt and interest) and domestic capital reinvested as 'FDI', because of discriminatory taxation policy that favours FDI over domestic investment. Table 6 shows the possible repatriation of foreign exchange in the form of dividend/profit, capital repatriation, private debt repayment and family maintenance during 1995 to 2005.

Table 6 shows that between 1995 and 2002 the country enjoyed a higher rate of FDI inflow with a lower outflow of profit and loan repayment. But in 2003 and 2004, the net balance, i.e., inflow minus outflow, was negative, implying that foreign investors took out more money than they pumped into the country through repatriation of profit/dividend, capital and repayment of loans with foreign banks and other sources. However, total inflow of FDI exceeded total outflow in 2005. If we compute the present value (PV) of the 'gross inflow' and also 'net inflow' in Table 6, discounting at 5 percent, which is close to the long term US bond yield, we get 4566.19 million US dollar as the PV of 'gross FDI inflow' over the period, 1995-2005 (11 years). On the other hand, PV of 'net inflow' is 1516.26 million US dollars, just one-third of the gross inflow.

*FDI related outward remittances, 1995-2005 (calendar year)***Table-6**

(US in million)											
Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Dividend/Profit Repatriation	19	18	26	40	83	149	175	195	355	338	418
Inv. liquidation/Cap. Repatriation	0.3	-	0.6	0.1	2.9	0.5	0.5	2.6	2.2	10.5	3.3
Private Debt amortization	20	34	84	53	168	227	188	243	229	372	208
Family Maintenance	0.99	0.74	1.41	1.56	1.92	2.43	1.84	2.82	4.19	4.72	2.58
Total Outward flow (a)	40.29	52.74	112.01	94.66	255.82	378.93	365.34	443.42	590.39	725.22	631.88
Gross FDI inflow, including private outside loans (b)	106.3	267.6	610.3	668.5	455.1	703.6	568.5	573.3	466.2	545.4	927.3
Net Inflow/Outflow (b) – (a)	66.01	214.86	498.29	573.84	199.28	324.67	203.16	129.88	-124.19	-179.82	295.42

*Source: Statistics Department, Bangladesh Bank*

**Note:** 'gross FDI inflow' differs from 'total FDI inflow' in Table 1, due to inclusion of private outside loan with the total inflow.

## NET EFFECTS AND POLICY RECOMMENDATIONS

While welcoming FDI, we should also formulate a set of priorities to guide FDI decisions. The general principle one can easily agree on, is to promote long-term sustainable economic growth through labour-intensive economic activities, which should be the primary goal of any investment. The issue of advanced technology and its diffusion, strengthening of the country's comparative advantage that should be to help develop the domestic capital market are among the elements that should be the next level of focus. However, within these broad guidelines, it can be observed that foreign investors are often keen to private loans. As a result, they have to remit more outside the country for repayment purposes, which creates pressure on the country; foreign exchange reserves.

Foreign companies are often reluctant to arrange funds domestically or float shares in the domestic capital market. These practices do not help the capital



market overcome its weaknesses. One reason is perhaps the fear that if the stock prices of these foreign companies remain low in Dhaka that may ultimately hamper their business in other locations. Of course, as of now listing in the stock exchanges is not mandatory for foreign companies. Moreover, due to restrictions on sanctioning funds (e.g., single borrower exposure limit) by domestic banks and financial institutions, foreign companies have not been looking for domestic finance in most cases. In this connection, the syndication of domestic credit being negotiated by the Saudi owners of Rupali Bank is a positive move. Recently, Bangladesh Bank (BB) issued directives for foreign owned/controlled firms/companies seeking domestic currency term loans regarding the composition of their investment. The directive (FE Circular no.07, August 14, 2006) stipulates that debt may not exceed 50 percent of total investment.<sup>2</sup>

In spite of the negative flows generated in some years, overall FDI has helped output growth, particularly in the service and industrial sectors of the economy. However, one should weigh both the positive and negative implications of individual FDI proposals before taking any decision on them. It would appear that specific policy directives might be revalued so as to reduce dependence on foreign bank borrowing, instead foreign and domestic investors alike should be tapped to raise more capital from the domestic equity market. If some industry segments, e.g., cellular phone companies find the local market too limited, funds may be raised by floating shares simultaneously in both domestic and regional markets (e.g., Dubai, Hong Kong, Malaysia, Singapore, etc.).

## **CONCLUSION**

FDI can undoubtedly play an important role in the economic development of Bangladesh in terms of capital formation, output growth, technological progress, exports and employment. The relatively small share of FDI in GDP, however, indicates that thus far the potentials are far from being exploited. Concerns remain about the possible negative effects of FDI, including the question of market power, technological dependence, capital flight and profit outflow. The limited evidence gathered above tends to give credence to some of these apprehensions. On a positive note, service sector growth appears well correlated to FDI flow in this sector. Further, this has a linkage effect to the rest of the economy. Still political tension and lack of investment friendly bureaucratic attitude are often pointed out by potential investors as major impediments to FDI in Bangladesh.

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2. It is evident that the BB circular regarding the debt-equity ratio does not apply to foreign owned/controlled firms who do not seek term finance in local currency. Foreign borrowing by foreign owned/controlled firms is governed by the related BOI guidelines, which is presently under review.

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