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Iftekhar Ahmed Robin

Policy Analysis Unit
Research Department
Bangladesh Bank

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Abstract

This paper focuses on the impact of Foreign Direct Investment (FDI) on the sectoral (agriculture, industry and service) growth pattern of Bangladesh economy over the last 11 years, 1995-2005. The research deals with data from secondary sources and estimates the relationship based on Pearson Correlation Co-efficient. The analyses reveal that FDI inflow in the industrial sector does not appear to correlate much with industrial growth, however, it relates better with service sector growth. FDI inflow in service sector is fairly well correlated with the growth in that sector as well as in the industrial sector. FDI in agricultural sector does not have any close relationship with the sectoral growth pattern. One interesting point is that over the period 1995 to 2005, the country enjoyed a positive net FDI inflow except 2003 and 2004, when foreign investors have taken out more money than they have pumped into the country through repatriation of profit/dividend, capital and repayment of loans with foreign banks and other sources. The paper also deliberates on some policy suggestions and recommendations for weighing up the advantages and disadvantages of FDI to ensure enhanced growth and sustainability.

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1. Introduction

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. Until the1980s, most developing countries viewed FDI with great weariness. 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 and import entitlements etc. As a developing country, Bangladesh needs FDI for its ongoing development process. Since independence, Bangladesh is trying to be a suitable location for FDI. Special zones have been set up and lucrative incentive packages have been provided to attract FDI. However, the total inflow of FDI has been increasing over the years. In 1972, annual FDI inflow was 0.090 million USD, and after 33 years, in 2005 annual FDI came to 845.30 million USD. Still political tension and lack of investment friendly bureaucratic attitude are often pointed out by potential investors as the major impediments of FDI.

2. The magnitude of FDI

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

Table 1 shows total FDI inflow (including that in Export Processing Zones, 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 serious political unrest, which discouraged foreign investment, and it took several years to regain the confidence of foreign investors. It stabilized afterwards but remained below the average reached during 1997-2000. In spite of Bangladesh's comparative advantage in labour-intensive manufacturing, adoption of investment friendly policies and regulations, establishment of EPZs in different suitable locations and other privileges, FDI flows have failed to accelerate. However, in 2005 substantial improvement has been achieved.

Table 1: The Aggregate and Sector-wise FDI inflow, 1995-2005 (calendar year)

(USD in million)

	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**

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

3. FDI inflow: sectoral composition (agriculture, industry and service)

There have been several shifts globally in the concentration and composition of FDI among sectors. The first major compositional shift was within manufacturing 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 Bangladesh economy and has been driven in particular 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, power, oil and gas exploration sector. Table 2 depicts the pattern of FDI inflow in different sectors and the growth rate during 1995-2005. In fact, there is substantial change in the pattern of FDI inflow in the new millennium and the foreign investors are looking at sectors like telecom, banks, power and energy, where profit growth is likely to be high, which may alter the sectoral composition in the days to come.

Table 2: Sector-wise FDI inflow and growth, 1995-2005

Year	fdi_ag (million USD)	fdi_in (million USD)	fdi_sr (million USD)	gr_ag (percentage)	gr_in (percentage)	gr_sr (percentage)
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).

Table 3: Pearson Correlation Coefficients, n = 11, Prob > |r| under H_0: rho=0

	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 with industrial growth, however, it relates better with service sector growth. On the other hand, FDI inflow in 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 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.

4. 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 is increasing with the passage of time. Transnational Corporations (TNCs) from developing and transition economies have become important investors in many LDCs. Bangladesh also depends on 36 countries across the globe for FDI. Among the sources, 21 countries belong to the developing and transition economies. Table 4 illustrates the total FDI inflow in Bangladesh over the last 11 years from 1995 to 2005 from different countries across the world. Table 4 depicts that near about 70 percent of annual FDI has been received from only 11 countries.

Table 4: Country-wise FDI inflow, 1995-2005 (calendar year)

(USD in million)

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

5. FDI inflow by components

FDI comprises of basically 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.

Table 5: Component-wise FDI inflow, 1995-2005 (calendar year)

(USD in million)

FDI component	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average Equity
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	
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 the total FDI inflow on an average over the last 11 years, 1995 to 2005, whereas the weighted average has been 49.14 percent. Therefore, actual inflow of FDI in the form of equity participation by the foreign direct investors is substantially less than the headline figures cited in the media.

6. 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 the foreign investor. Another bothersome 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 the year 2003 and 2004, the net balance, i.e., inflow minus outflow is negative implying that foreign investors have taken out more money than they have 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 dollar, just one-third of the gross inflow.

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

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

7. Net Effects and Policy Recommendations

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

Foreign companies are often reluctant to arrange funds domestically or float shares in the domestic capital market. These practices do not alleviate the capital market of its weaknesses. One reason is perhaps the concern that if the stock prices of these foreign companies remain low in Dhaka that may ultimately hamper their business in other locations. Of course, listing in the stock exchanges is not mandatory for foreign companies as yet. Moreover, due to some 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 has put directives to foreign owned/controlled firms/companies seeking domestic currency term loans regarding the composition of their investment (FE Circular no.07, dated 14 August, 2006). The directive stipulates that debt may not exceed 50 percent of total investment.[2]

In spite of negative flows generated in some years, overall FDI helps output growth, particularly in service and industrial sectors of the economy. However, one should weigh up both the positive and negative implications of individual FDI proposals before any decision. It would appear that the specific policy directives might be revisited so as to reduce dependence on foreign bank borrowing,

[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.

and instead encourage foreign and domestic investors alike 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.).

8. Conclusion

The 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 the potentials are far from being realized in the Bangladesh experience thus far. Nevertheless, 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 support some of these apprehensions. On a positive note, service sector growth appears well correlated with FDI flow to this sector. Further, this has a linkage effect to the rest of the economy.

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