CHAPTER THREE

3.1 The Role of FDI in Industrial Development

An International Investment Agreements (IIAs) concerning FDI was first concluded in 1948 (*Havana Charter for an International Trade Organization*, however this multilateral binding form agreement unfortunately had failed to endorsed). The set up of the IIAs in the first place is to attract FDI to help affiliated countries to grow and developed (UNCTAD, 2003).

Now, five decades after the historical 1948 events, more than 160 IIAs had been completed and other 36 agreements were still in the negotiations or consultations stage[15]. Between the periods 1982-2002, annual growth rates of FDI inflow were recorded (in negative figure) 41% (2001) and 21% (2002) respectively. However, betweene the periods of 1996-2000, annual percentage growth rate was at 40.2%[16].

Countries Industrial development, among other things, closely linked to the ability of an industry to produce output through internal (domestic) and external (foreign) investment sources through an attractive (or effective) investment policies.

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[15] UNCTAD (2003): World Investment Report 2003, Annex table A.1.13, p. 208-218.
[16] Refer Appendix 3.0b for further details.

Report from United Nations Conference on Trade and Development (UNCTAD, 2003), it is clear, at least four possibilities situation when comparing countries FDI performance (inward) and potential.

Table 3.1

Matrix of Inward FDI

	HIGH FDI PERFORMANCE	LOW FDI PERFORMANCE
HIGH FDI POTENTIAL	Front-runners	Below potential
LOW FDI POTENTIAL	Above potential	Under-performers

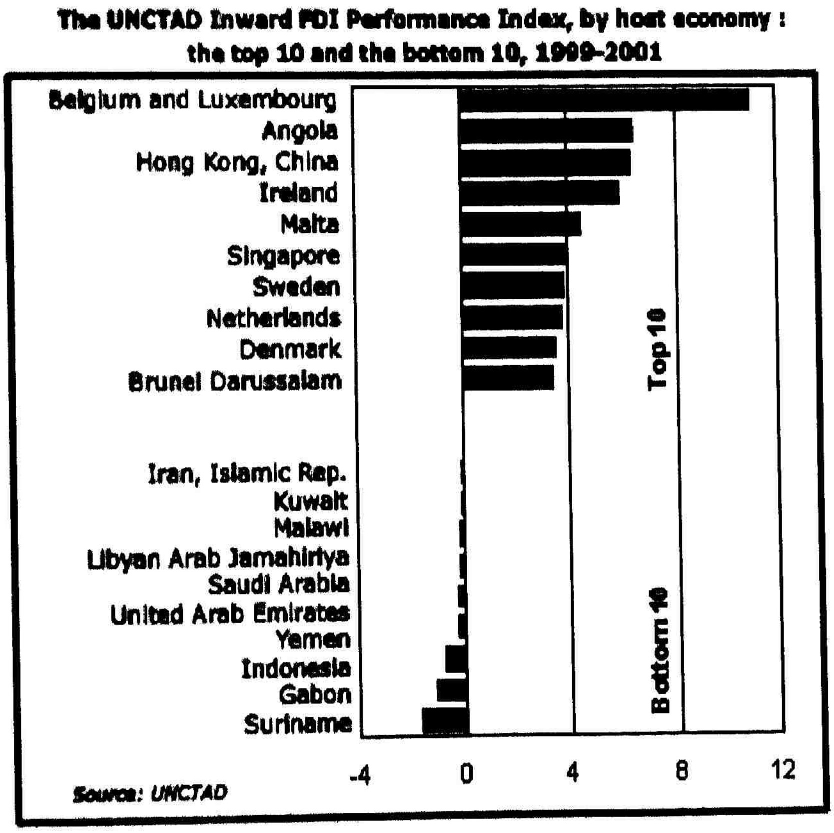
Source: UNCTAD (2003)
Notes: FDI performance and FDI potential are measured by an index and each cell value measured by taking various factors[17].

By taking two extreme comparisons, group (I) and (IV), countries with "high FDI performance" and "High FDI potential" include newly industrializing and advanced transition economies, however the latter mainly poor economies (including all South Asian economies, poor and least developed countries, along with Turkey).

[17] Index of all economies and methodology used by UNCTAD are attached in Appendix 3.1

Benchmark made by the UNCTAD taking periods 1999-2001(Figure 3.1), found that for Bottom 10 group, the inward performance index are very small or almost zero to negative (with score index between -1.613 and -0.016, except for Iran, Islamic Republic, 0.001)

Figure 3.1



Studies found that level of FDI received by host countries in developing and least-developed region are determined by three factors (or advantages which direct investment should have by the institutions) namely ownership, locations and internationalizations (Dunning, 1980) and exist in three different component namely equity capital, reinvested earning and intra-company loans (UNCTAD, 2003).

Table 3.2 :

Developed Countries : Components of FDI Inflows in Selected Countries, 2001-2002 (Million of Dollars)

Country	Total	Inflows		
		Equity	Reinvested earnings	Other capital[a]
France				
2001	55 190	20 659	2 180	32 351
2002	51 503	29 887	2 496	19 120
Germany				
2001	33 917	26 925	- 3 222	10 215
2002	38 035	25 397	- 3 388	16 026
Japan				
2001	6 243	4 908	1 546	- 215
2002	9 326	- 5 830	1 505	13 651
Luxembourg				
2002	125 660	111 218	2 403	12 038
Norway				
2001	2 212	1 314	- 382	1 280
2002	616	869	- 430	176
Sweden				
2001	11 780	9 168	- 589	3 205
2002	11 081	9 079	992	1 007
Switzerland				
2001	8 900	9 000	900	- 1 000
2002	9 300	2 400	3 300	3 600
United Kingdom				
2001	61 958	29 158	6 973	25 827
2002	24 945	14 724	15 405	- 5 185
United States				
2001	130 800	107 700	- 19 700	42 800
2002	30 100	57 600	10 200	- 37 700

Source: Partially adapted from UNCTAD (2003), World Investment Report 2003, Annex Table A.II.5, p. 230

Table 3.3

Asia and the Pacific: Source of FDI Finance in Selected Economies, 1999-2002

(Millions of Dollars)

Economy	1999 Total FDI inflows	1999 Equity	1999 Other capital[a]	1999 Reinvested earnings	2000 Total FDI inflows	2000 Equity	2000 Other capital[a]	2000 Reinvested earnings
Brunei Darusssalam	747	656	87	4	550	209	321	20
China	38 753	16 772	9 783	12 198	38 399	20 841	1 536	16 022
Indonesia	-2 746	1 110	-3 856	..	-4 450	992	-5 442	..
Hong Kong (China)	24 581	4 315	8 126	12 140	61 939	32 955	9 695	19 289
Kazakhstan	1 587	316	1 093	178	1 283	272	536	474
Republic of Korea	9 333	8 889	444	..	9 283	8 282	1 001	..
Taiwan Province of China	2 926	2 346	-69	649	4 928	4 493	-86	521
Malaysia	3 895	1 512	476	1 907	3 788	674	112	3 002
Philippines	1 734	1 145	219	370	1 354	1 024	504	-174
Singapore	12 825	7 951	1 252	3 622	5 389	1 342	-19	4 066
Thailand	6 149	6 139	10	..	3 366	3 402	-36	..
Papua New Guinea	297	274	-1	24	96	74.6	-0.4	21.7

Economy	2001 Total FDI inflows	2001 Equity	2001 Other capital[a]	2001 Reinvested earnings	2002 Total FDI inflows	2002 Equity	2002 Other capital[a]	2002 Reinvested earnings
Brunei Darusssalam	527	218	287	22	684	351	332	..
China	44 241	27 361	2 199	14 681	52 700	..	..	..
Indonesia	-3 278	688	-3 966	..	-1 522	1 817	-3 339	..
Hong Kong (China)	23 776	7 717	3 705	12 354	13 718	..	..	..
Kazakhstan	2 763	539	1 775	449	2 561	..	..	..
Republic of Korea	3 528	3 189	339	..	1 972	1 686	286	..
Taiwan Province of China	4 109	3 737	10	362	1 455	1 121	82	242
Malaysia	554	-854	-1 083	2 491	3 203	-204	-5	3 413
Philippines	1 537	628	421	488	494	945	-571	120
Singapore	10 916	9800b	1 117	..	6 102	7 661[b]	-1 559	..
Thailand	3 820	2 626	1 194	..	735	307	427	..
Papua New Guinea	63	45.3	-0.6	17.8	..	..	..	..

Source: Adapted from UNCTAD (2003), World Investment Report, Annex Table A.II.1, p.225.

According to Table 3.2 and Table 3.3, equity capital is the most common types of investment received by both group countries, followed by intra-company loans (i.e. other capital) and reinvested earnings. For the year of 2001 total FDI received by both groups were US$ 92, 556 millions (selected Asia and the Pacific) and US$ 311,000 millions (Developed nations) respectively.

However, both figure slump to US$ 82,103 millions or -11.30 percent (Asia and the Pacific) and US$ 300,565 millions or -3.36 percent (selected developed nations) respectively. The uneven falls of FDI figures, according to UNCTAD were due to three main factors namely macroeconomic (i.e. slow growth or even recession), microeconomic (i.e. Lower corporate profits, a decline in Transnational Corporations (TNCs) ability or willingness to finance FDI through intra-company loans and a slowdown in corporate restructuring) and institutional factors (i.e. winding down of privatization and corporate scandals).

Attracting foreign investment is not a simple task. Dunning (1980) – eclectic (OLI) framework – has provide three factors or advantages that countries should encompass as a platform. Firstly, ownership (O) advantage; is an advantage of particular firm has over its rivals in terms of intellectual property ownership, knowledge or marketing.

Locations (L) advantage; is the advantage derived from the host country's comparative advantage or its transaction cost including the absence of a tariff on the product if produced in the host country. Finally, the Internationalizations

(I) factors; the value judgment approach on what types of investment package should be channeled to the host country.

Figure 3.2

Host Country Determinants of FDI

Host country determinants

I. Policy framework for FDI

- economic, political and social stability
- rules regarding entry and operations
- standards of treatment of foreign affiliates
- policies on functioning and structure of markets (especially competition and M&A policies)
- international trade and investment agreements
- privatization policy
- trade policy (tariffs and non-tariff barriers) and coherence of FDI and trade policies
- tax policy

II. Economic determinants

III. Business facilitation

- investment promotion (including image-building and investment-generating activities and investment-facilitation services)
- investment incentives
- hassle costs (related to corruption, administrative efficiency, etc.)
- social amenities (bilingual schools, quality of life, etc.)
- after-investment services

Type of FDI classified by motives of TNCs	Principal economic determinants in host countries
A. Market-seeking	• market size and per capita income • market growth • access to regional and global markets • country-specific consumer preferences • structure of markets
B. Resource/ asset-seeking	• raw materials • low-cost unskilled labour • skilled labour • technological, innovatory and other created assets (e.g. brand names), including as embodied in individuals, firms and clusters • physical infrastructure (ports, roads, power, telecommunication)
C. Efficiency-seeking	• cost of resources and assets listed under B, adjusted for productivity for labour resources • other input costs, e.g. transport and communication costs to/from and within host economy and costs of other intermediate products • membership of a regional integration agreement conducive to the establishment of regional corporate networks

Source: Adapted from UNCTAD (2003), World Investment Report 2003, Table III.1, p. 85

The comprehensive framework proposed by UNCTAD (Figure 3.2) outlined three major determinants viz. policy, economic determinants (i.e classified by three TNCs motives – marketing, resources and efficiency) and business facilities.

Policies are the key of economic development. Though policy is decisive in preventing foreign investors from entering a country but once efficient policies were concluded (with additional bilateral or multilateral agreements between countries), the economic factors become dominant (UNCTAD, 2003) and these have been proved previously by Borensztein et.al (1998), Markusen and Venables (1999), Yin (1999), Liu and Wang (2003) and Buch et.al (2003).

The technological progress of capital deepening process from industrial countries (Borensztein et.al, 1998) is partially important as a vehicle for developing countries to achieve better foundation to lift up economic growth conditionally to the human capital stock avail by the host countries. Once such foundations fully established, forward and backward linkages will continuously and largely become a catalyst for local industrial development (Markusen and Venables, 1999).

The role of government, in these particular issues, as noted by UNCTAD, should be focusing in improving standard of treatment and protecting investors by reducing passive restrictions (or liberalizing mode of entry) and promoting investment climate by providing efficient information on investment opportunities through institutional and administrative improvement.

3.2 Attracting FDI: The Role of Government

Rapid economic developments over the past three decades change view of many developing and least-developed countries to the importance of FDI through an aggressive campaign of investment promotions to attract investment.

The successful story of Singapore started in early 70's (Dean, 2000) where through an aggressive campaign to attract foreign multinational company (especially from United States of America) has changed their economic landscape from the least resources country to Newly Industrialized Economies (NIEs[18]).

[18] NIEs include Singapore, Hong Kong, South Korea and Taiwan. These group also known as Asian Tigers among economist.

The important role of FDI to industrial development in developing country also changed Botswana[19] economy from a least developed country status to middle-income country[20] (UNCTAD, 2003).

However, the importace of FDI to industrial development much depends on countries policies reforms (Wint and William, 2002) and other internal factors as viewed by Gastanga et.al (1998),Smarzynska and Wei (2000) and Wei and Wu (2001).

Gastanga et.al (1998) examines the issues from the perspective of host country reform specifically involving the majority of less-developed countries. By applying the perspective of the "eclectic theory"[21] for international investment, the authors found that host country policies are capable of influence FDI inflows primarily through the advantages of location aspect in the host country.

The authors used multivariate analysis using pure cross-section and panel data fixed effect estimation for 49 less-developed countries over 1970-95 involving two different sources of FDI data with two different measures of capital control. However, the results from both analyses were slightly different due to

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[19] Botswana has never had a foreign law but has welcomed FDI in almost all area.
[20] The country income classification s produced by World Bank in July 2003 and effectively until July 2004. For details income country classification visit: www.worldbank.org
[21] The "eclectic theory" which was used by the authors is divided into three sets of advantages which direct investment should have over the other institutional mechanisms available to the firm for satisfying the needs of its customers at home and abroad. The three factors namely ownership, location and internationalization (i.e. OLI) which was pioneered by Dunning (1980)

complementary between various elements of investment climate and this might be overstates the effectiveness of individual policy reforms.

Wint and Williams (2002) in view of the role of government in developing countries in attracting FDI through promotional activities found that level of development has become a significant factor. They emphasize that functional policy (rather than selective) especially for developing nations to promote investment activities. Inspired by the product life cycle paradigm, the author believe that by shifted toward more liberal attitude toward FDI in line with wide dissemination of best practice in investment promotion for both local and foreign investor. However, due to data limitations their empirical analysis does not provide such support.

3.3 Integral Part of Role of Research and Development (R&D) and Technological Transfer (TT)

Research and Development activity (shortly R&D) or innovation oriented efforts are becoming a major engine for technological progress (Coe and Helpman, 1995). Source of innovation activity could be from domestic R&D capital and also from foreign R&D capital.

The R&D activity is an integral part of level of technological transfer through internalize of FDI (UNCTAD, 2003). The rapid R&D activity as a consequence of rapid FDI, viewed as a pull factors for investors to invest in high technology industry through an attractive package (i.e licensing and other contract arrangements and strategic alliances between local and foreign firms). For the end result the TT effect will definitely spillover into the industries and extensively assimilates to promote sound and viable economic growth in the host countries.

There are at least three (i.e interrelated) channels or source of TT. Firstly, licensing (Eaton and Kortum, 1996), secondly through FDI (Borensztein, De Gregorio and Lee, 1998) and last but not least, international trade (Markusen and Venables, 1999 and Markusen, 2000).

Researcher like Coe and Helpman (1995), Gustavson et.al (1999), Serapio and Dalton (1999), Bayoumi et.al (1999), Takalo and Kanniainen (2000), Wakelin (2001), Fosfuri et.al (2001), and Varsakelis (2001) has their own view on the issues.

Coe and Helpman (1995) believe R&D is one of the major engines for growth. However the presence of local externalities through local R&D stock (Gustavson et.al, 1999) is one of the determinant factors for competitiveness as well as stock of knowledge from total R&D in the domestic industry. The importance of supply factors in influencing a company's foreign investment decision in R&D is conducted by Serapio and Dalton (1999) and the importance of R&D spending, R&D spillover and trade in boosting growth in industrial and developing countries (Bayoumi et. al, 1999) proved to increase total factor productivity.

Study conducted by Takalo and Kanniainen (2000) found that a commitments to an R&D project enable to create future option for patenting and market introduction and influence in promoting productivity growth when firm's own R&D expenditure taking into account (Wakelin, 2001). Varsakelis (2001) found that R&D investments are significantly determined by national culture in an open economic region with strong patent protection.

As noted by UNCTAD (2003) in his *World Investment Report 2003* believed that FDI is still become an important channel for TT even though global FDI flow for all region in 2002 were recorded decline (*refer table 3.4*).

Table 3.4

FDI Inflow to Major Economies 2001 and 2002
(Billions of Dollars)

Host region/economy	2001	2002
World	823.8	651.2
Developed countries	589.4	460.3
European Union	389.4	374.4
France	55.2	51.5
Germany	33.9	38.0
Luxembourg	..	125.6
United Kingdom	62.0	24.9
United States	144.0	30.0
Developing economies	209.4	162.1
Africa	18.8	11.0
Algeria	1.2	1.1
Angola	2.1	1.3
Nigeria	1.1	1.3
South Africa	6.8	0.8
Latin America and the Caribbean	83.7	56.0
Argentina	3.2	1.0
Brazil	22.5	16.6
Mexico	25.3	13.6
Asia and the Pacific	106.9	95.1
China	46.8	52.7
Hong Kong, China	23.8	13.7
India	3.4	3.4
Korea, Republic of	3.5	2.0
Malaysia	0.6	3.2
Philippines	1.0	1.1
Singapore	10.9	7.7
Taiwan Province of China	4.1	1.4
Thailand	3.8	1.1
Central and Eastern Europe	25.0	28.7
Czech Republic	5.6	9.3
Poland	5.7	4.1
Russian Federation	2.5	2.4

Source: Adapted from UNCTAD (2003): World Investment Report 2003, Table 1.2, p. 7.