CHAPTER 6 DETERMINANTS OF OUTWARD FOREIGN DIRECT INVESTMENT

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SECTION 6.1

THEORIES OF OUTWARD FOREIGN DIRECT INVESTMENT

Economic literature has identified various factors that motivate outward FDI flows from the developing home countries. Aykut and Ratha (2003) have broadly categorised the determinants of FDI outflows from the Asian developing countries into demand side pull factors and supply side push factors. Pull factors are the economic, financial and institutional (micro and macro) characteristics of the host country markets that attract FDI towards them. Push factors, on the other hand are the micro and macro supply side factors originating from the economic, financial and institutional characteristics and conditions of the home / source / capital exporting country that push (induce and sometimes compel) outward FDI into the destination economies. Various push factors may compel a home country to make overseas FDI (e.g., diminished expected profit margin or global downturn in a sector, need for additional resources and ensuring their long-term supply, less than adequate domestic physical infrastructure, liberalised trade regime, high inflation rate, depreciated exchange rate) or induce it (increased supply of capital, loosened capital controls, regional integration, etc.) to make "market-seeking", "efficiency-enhancing" and "resource-augmenting" FDI abroad (Ariff and Lopez, 2007).

Four key types of push and pull factors, and two associated developments help explain the drive for internationalisation by developing country MNCs.

First, market-related factors appear to be strong forces that push developing-country MNCs out of their home countries or pull them into host countries. In the case of Indian MNCs, the need to pursue customers for niche products, for example, in IT

services and the lack of international linkages are key drivers of internationalisation. Chinese MNCs, like their Latin American counterparts, are particularly concerned about bypassing trade barriers. Over-dependence on the home market is also an issue for MNCs, and there are many examples of developing-country firms expanding into other countries in order to reduce this type of risk.

Secondly, rising costs of production in the home economy, especially labour costs are a particular concern for MNCs from East and South-East Asian countries such as Malaysia, the Republic of Korea and Singapore, as well as Mauritius (which has labour-intensive, export orientated industries, such as garments). Crisis or constraints in the home economy, for example, where they lead to inflationary pressures, were important drivers in countries such as Chile and Turkey during the nineties. However, interestingly, costs are less of an issue for China and India, two growing sources of FDI from the developing world. Clearly, this is because both are very large countries with considerable reserves of labour, both skilled and unskilled.

Thirdly, competitive pressures on developing-country firms are pushing them to expand overseas. These pressures include competition from low-cost producers, particularly from efficient East and South-East Asian manufacturers. Indian MNCs, for the present, are relatively immune to this pressure, perhaps because of their higher specialisation in services and the availability of abundant low cost efficient labour. For them, competition from foreign and domestic companies based in the home economy is a more important impetus to internationalise. Similarly, competition from foreign MNCs in China's domestic economy is widely regarded as a major push factor behind the rapid expansion of FDI by Chinese MNCs. Domestic and global competition is an important issue for developing-country MNCs, especially when these MNCs are increasingly parts of global production networks in industries such as automobiles, electronics and garments.

Fourthly, home and host government policies influence outward FDI decisions. Chinese MNCs regard their Government's policies as an important push factor in their internationalisation. Indian firms, on the other hand, have been enticed by supportive host-government regulations and incentives, as well as favourable competition and inward FDI policies. South African MNCs, among others, mention transparent governance, investment in infrastructure, strong currencies, established property rights and minimal exchange-rate regulations as important pull factors. Most importantly, liberalisation policies in host economies are creating many investment opportunities, for example through privatisations of state-owned assets and enterprises.

Apart from the above mentioned factors, there are two other major developments driving developing-country MNCs abroad.

First, the rapid growth of many large developing countries, foremost among these being China and India, is causing them concern about running short of key resources and inputs for their economic expansion. This is reflected in strategic and political motives underlying FDI by some of their MNCs, especially in natural resources.

Second, there has been an attitudinal or behavioural change among the MNCs. They increasingly realise that they are operating in a global economy, not a domestic one, which has forced them to adopt an international vision.

These two developments, along with push and pull factors, especially the threat of global competition in the home economy and increased overseas opportunities arising from liberalisation adds empirical weight to the idea that there is a structural shift towards earlier and greater FDI by developing country MNCs.

In principle, four main motives influence investment decisions by MNCs – "market seeking", "efficiency-seeking", "resource-seeking" (all of which are asset exploiting strategies) and created-asset-seeking (an asset augmenting strategy). (UNCTAD 2006)

SECTION 6.2

LITERATURE REVIEW

Outward FDI, that was a strong forte of the developed countries till the early period of 1990, has been extensively explained in the literature. Early studies drew heavily from the international trade theory and emphasised on the comparative advantage of the host countries as the most important determinant of FDI. This view successfully explained "resource-seeking" FDI. However, in the early 1970s, researchers started looking for alternative explanations as this theory could not explain the reasons of substitution of trade by FDI. Alternatively, "market access" was put forward as an explanation for FDI. The market imperfection hypothesis postulated that FDI was the direct result of an imperfect global market environment (Hymer, 1960). This approach successfully analysed the "tariff-jumping" FDI, which was prevalent in the countries encouraging import substituting industrialisation policies in the late seventies. However, in the eighties there was a need to explain the rising volumes of FDI despite the world markets becoming integrated. An alternative explanation came forth in the stream of thought that proposed the "Internalisation theory" (Rugman, 1986). This theory explained FDI in terms of a need to internalise transaction costs so as to improve profitability and explained the emergence of "efficiency-seeking" FDI.

However, the above theories were short of explaining the reasons as to why FDI tended to exploit relevant assets in some countries as against others. In this regard, Dunning's approach to international production gave "Locational" issues explicit importance by combining them with firm-specific advantages and transaction costs elements (Dunning, 1993). According to Dunning, FDI takes place owing to

Ownership, Internalisation and Locational advantages. Ownership advantages are firm-specific competitive advantages (tangible and intangible) which an investing firm possesses over local firms in serving particular markets. These include unique assets relating to technological know how, marketing expertise and managerial skills. These skills must be combined with some of the location-specific advantages of the host countries such as natural resources, cheap inputs, large markets and so forth. To minimise transaction costs and increase profitability, investing firms must exploit their Ownership and Locational advantages through "Internalisation" rather than arms length transactions.

Although the "OLI" theory explains to a large extent outward FDI emerging from developed countries and going into developing economies, it may not be an exhaustive framework to explain in particular outward FDI emerging from the developing economies and going into the developed countries. To explain such a phenomenon, Rashmi Banga (2007) uses three sets of factors – (a) trade-related drivers; (b) capability-related drivers; and (c) domestic drivers to explain outward FDI from Asian countries.

A few studies explore push and pull factors behind China's MNCs internationalisation (Wong and Chan, 2003; Wu and Chen, 2001; Cai, 1999). Surveys, such as the FIAS/IFC/MIGA survey (FIAS, 2005), conducted in 2005 provide information on the determinants of OFDI that are often classified in terms of "push" (home country), "pull" (host country), and "policy" factors (in both home and host countries). (UNCTAD 2006)

Traditional theories have characterised exports and FDI as alternative strategies. It was argued that firms can either produce at home and export, or produce abroad and substitute local sales of foreign affiliates for exports. The growing complexities in the

relationship between trade and FDI in the globalised era of integrated markets have led to the emergence of new approaches to study them. Some studies indicate that FDI is used to preserve markets that were previously established by exports (Grosse and Trevino, 1996) while others suggest that FDI follows exports (Eaton and Tamura, 1994). Following Mundell (1957), it was long thought that FDI substituted trade. This proposition was challenged by Agmon (1979), and subsequently a number of studies emphasised potential complementarities between FDI and trade. This literature has been reviewed by Ethier (1994, 1996) and Markusen (1995). Further, there have been some studies that have explored the relationship between FDI and trade by taking a unified approach, in which the two flows are determined simultaneously. (Markusen and Maskus, 2002) These studies can be divided into three categories. First, some researchers argue that the determinants of FDI and trade are similar and therefore the factors that determine trade also determine FDI flows (Ekholm, 1998). Second, others postulate econometric models in which FDI, exports and imports are determined simultaneously. They argue that all three are endogenous variables and therefore, their interactions should be taken into account (Hejazi and Safarian, 2003). Some of the studies found that openness to trade and regional trade and investment agreements were an important determinant of FDI in the decade of the 1990s (Binh and Haughton 2002; Worth 2002; and Banga, 2004). Banga (2004) shows that regional trade agreements such as AFTA and APEC increase the size of the market in those regions and therefore encourage FDI into the region.

Studies have also estimated the impact of BITs on inward FDI and argue that BITs encourage FDI as the risks associated with investments decline with greater commitments. Globerman and Shapiro (1999) found that the CUFTA and the NAFTA increased both inward and outward FDI. Blomstrom and Kokko (1998) separated the effects of regional trade agreements along two dimensions – the indirect effect on FDI through trade liberalisation; and the direct effects from changes in investment

rules connected with the regional trade agreements. According to them, lowering interregional tariffs can lead to expanded markets and increased FDI, but lowering external tariffs can reduce FDI to the region if the FDI is tariff-jumping.

With a number of studies indicating productivity spillovers from FDI (Caves, 1996; Globerman, 1979; Blomstrom and Wolf, 1994; Djankov and Hoekman, 2000; and Banga, 2004), the higher the inflow of FDI, the higher will be the capability of domestic investors to undertake investments abroad.

Meanwhile, higher degree of openness is linked with greater level of outward FDI. Kogut (1983) stressed that the adoption of export-oriented policy eventually enable firms to acquire knowledge on the foreign market as well as skills in running operations abroad. Ultimately, this will become the force for the firms to shift their strategy from exporting to abroad investment.

Kyrkilis and Pantelidis (2003) noticed that income is the most important determinant of FDI outflows for Germany. In addition, they also discovered that exchange rate is an influential factor in affecting the outward FDI of Brazil and Singapore. Meanwhile, low interest rate in the home country relatively will lead to higher tendency of outward FDI (Prugel, 1981; Lall, 1980; Grubaugh, 1987). Indeed, investments abroad require sound financial support and capital abundance in terms of low interest rate that enables the firms to access capital markets. Therefore, firms can obtain necessary funding to finance their abroad investment. In relation to that, exchange rate also has significant impacts towards the outward FDI. Although countries with stronger currencies, as compared to firms from countries with weak currencies, will discourage exports, however, this will lead to higher propensity to perform abroad investment due to appreciation of the currencies (Aliber, 1970; Kohlhagen, 1977; Stevens, 1993).

The main objective in this chapter is to identify the main determinants (home country push factors) of outward FDI from India during the period 1980 to 2005.

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For the purpose of this study the push factors have been classified in three categories:

Structural Factors	Institutional Factors	Cyclical factors
Economic Growth	Tax Policies	Inflation
Domestic Employment	New Economic Policies	Exchange Rate
Gross Domestic Savings	Bilateral Agreements	
Development of Stock Exchange	Labour Laws	
Exports	an a	
Imports		
Inflow of FDI		
Infrastructural		5 m
Availability		
Labour Skill Levels		
Availability of cheap capital		

Box-6.1: Push Factors determining OFDI

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Determinant	Possible Proxy Variable	Effect
Economic Growth	GDP, GDP Growth Rate	+/-
Level of Development	GDP per Capita, GDP per Capita Growth Rate, Domestic	+ /-
	Savings	
Infrastructure	Roads, Energy, Water	-
Capital Costs	Interest Rates	+
Agglomerations	IFDI Lagged One Period	+
	Number of Firms in the Region	+
Economic Integration	Member of EconomicPolitical Union	+
	Bilateral Agreements	+
Governments, Trade	(Exports + Imports) / GDP	+
Regime	Taxes	+
Labour Costs	Wages and Salaries	+/-
Exchange Rate Variability	Absolute / Relative Change in Real Exchange Rate	+/-
Economic Instability	Inflation	+

Box-6.2 Determinants - Summarised

As discussed above, both higher exports and higher imports may lead to higher outward FDI though the motive for undertaking outward investments in the two situations may differ.

With regard to the regional trade agreements, an increasing number of trade agreements of the home country will likely shift the production units into the site with the lower costs of production since access to home as well as host-country markets becomes available. Further, many regional trade agreements not only improve market access but also improve the investment environment to make it more conducive to a free flow of FDI. An important potential driver is inward FDI into the home country, as it may lead to spillover effects and improve the capability of domestic investors to undertake outward FDI in developing countries.

The most important factors that may affect the FDI flows, as recognised in the literature, are the domestic market-related variables. Both current market size and potential market size can have a significant influence on outward FDI. Small market size and potential risk of losing market share may act as push factors for outward FDI.

Other domestic drivers of outward FDI are those that cause investment cost differentials across countries. These include costs of labour, capital and infrastructure. Cost factors may significantly influence the choice of an investment location for the "resource-seeking" and "efficiency-seeking" FDI. It is expected that higher wages in the home country increases outward FDI.

It is expected that the lower the availability of infrastructure, the higher will be the infrastructure costs and the higher will be the outward FDI.

Domestic policies with respect to taxes can also influence the cost of investments across economies. The higher the tax, the higher will be outward FDI.

A favourable labour environment, which is influenced by flexible labour laws, also influences the decisions to invest. The more rigid the labour laws, the higher will be the incentive to invest abroad.

Following is a detailed explanation of some of the important push factors determining OFDI:

Exports

Exporting activity of tradable goods and services helps the initial exploration of overseas markets, enhances international competitiveness of the firms and also provides valuable information on emerging opportunities in other countries. Higher exports may assure the home country firms of the existing markets in the foreign economies and therefore, lower the risks and uncertainties attached to OFDI (Banga, 2007). As the trend shift towards more regional trade and increasing trade and investment agreements, the access to larger integrated markets also increases. This in turn increases the possibility of vertically-integrated outward FDI, making exports and OFDI more complementary.

Overall, FDI literature is ambiguous about the relation between OFDI and exports. While perfect substitutability was noted by Mundell (1957), later various other economists, for example Lipsey and Weiss (1981, 1984), Markusen (1984), Brenton, Di Mauro and Lücke (1999) and Kawai and Urata (1998), indicated the complementarity of the relationship. Literature has also shown that the nature of this relationship depends on the type of industries (Kawai and Urata, 1998; Buch, Kleinert and Toubal, 2003) and the location of the host countries (Graham, 1996; Brainard and Riker, 1997).

OFDI activities of home country firms (including India) can either complement or substitute its aggregate export activities, depending on the type and nature of OFDI projects undertaken by its domestic enterprises (Pradhan, 2007). In general, when trade barriers inhibit exports from the home country or when the home country tries to avoid domestic inefficiencies – such as exchange rate volatility or high capital costs due to poor country-risk ratings, OFDI can be a direct path to market expansion acting as a substitute to exports. (UNCTAD, 2006)

Horizontal and vertical OFDI can potentially be substituted or complemented by exports. When the home country firms undertake horizontal OFDI projects to exploit firm specific advantages in the host economy or to avoid trade barriers, transportation costs and other transaction costs, this reasonably indicates the substitution of exports of final products from parent firms (Carr, Markusen and Maskus, 2001). However, such horizontal OFDI projects may also promote intermediate exports from the home country through the additional exports of raw materials, intermediate inputs, capital goods, spare parts, etc. On the other hand, if the OFDI projects from the home country are vertical in nature, then there may be a complementary relationship between OFDI and exports. However, the vertical OFDI in the form of building trade-supporting infrastructure abroad could help to improve and complement exports of final product from the home country (Vernon, 1966).

Imports

Lowering of tariff barriers as a consequence of the opening up of the investing economies is likely to induce higher imports into the home country and this may have a 'crowding out' effect on domestic investments inducing the domestic firms to relocate outward into economies with lower manufacturing costs and higher access to larger markets (Banga, 2007). The Indian economy which had a protectionist policy for a long period, opened up in the early through complete removal of non-tariff barriers and drastic reduction in import duties. This led to import competition that could probably be a push factor for the recent growth of OFDI from India. Also, the vertical OFDI projects from the home country firms seeking to acquire sources of raw materials and inputs from abroad may directly result in higher imports into the home country.

FDI Inflows

Higher FDI inflows may also enhance the capability of the home country in undertaking outward FDI, by enhancing the flow of non-debt private capital and technological and managerial skills, creating domestic employment through backward linkage effects and also by building up the foreign exchange reserves of the country (Banga, 2007). This is relevant for India. Thus, FDI inflows and outflows could be complementary. However, it is also possible that increased presence of foreign firms increases competition in the domestic market, which in turn makes the domestic firms to seek additional markets through exporting and OFDI. India has taken active steps in attracting FDI inflows by improving its overall investment climate. It is, therefore, meaningful to know about the effect of FDI inflows into corresponding outflows in the Indian context.

Market Size and Income of the Country

In term of the macro economics perspective, one of the main determinants contributing to the outward FDI can be associated to the income of a country. Higher income of a country has relevant implications towards the structural changes in the economy of the country. As pointed out by Chenery et al. (1986) and Aykut and Ratha (2004), firms are able to gain competitive advantage in term of economies of scale in the production despite adoption of new technologies. Eventually, firms are able to acquire Ownership advantages which become the driving force for establishing foreign production (Lall, 1980; Grubaugh, 1987).

SECTION 6.3

HYPOTHESIS AND METHODOLOGY

Hypothesis

"The push factors determine the flow of outward foreign direct investment from India".

Methodology

In the present chapter the home country push factors (determinants) of the foreign direct investment outflows are studied. A brief analysis of these variables, set as a background for the empirical analysis of the determinants of FDI from India, has already been given in the previous section. Based on the theory of John Dunning, several variables affecting FDI have been discussed in this present section. The present study is a version of an explanation of the outward flows of FDI from India from 1980-¹81 to 2005 based on some important quantifiable policy and economic variables. A process of gradual relaxation of controls and regulations with a view to induce outflows of foreign investments was discernable from the year 1981. In a limited and phased manner market forces were allowed to govern the foreign investment flows during this period. Therefore, this period has been selected for the study. The objective in this chapter is to examine the effects of international trade and investment related macro economic variables, namely, exports, imports, FDI inflows, wages etc on the outflows of FDI from India over 1980 through 2005.

Considering the principal determinants of FDI inflows the equation is specified is as follows:

OFDI = $a_0 + a_1$ GDP + a_2 IFDI + a_3 WAGE + a_4 EX/GDP + a_5 IM/GDP + a_6 INFR + a_7 PCI

Where,

- 1. OFDI: Foreign direct investment net outflows measured as BOP current US\$ bn
- 2. IFDI: Foreign direct investment net inflows measured as BOP current US\$ bn
- 3. GDP: Gross Domestic Product at factor cost measured in current US\$ bn
- 4. WAGE: Total emoluments paid to the workers measured in Rs. Lakhs.
- 5. INFR: (Infrastructure) Proxied by energy use (in Kg. of oil equivalent per capita)
- 6. EX/GDP: Exports measured in US\$ bn divided by the GDP
- 7. IM/GDP: Imports measured in US\$ bn divided by the GDP
- 8. PCI: Gross National income per capita (Atlas Method) measured in current US\$ bn

EMPIRICAL ANALYSIS

For the purpose of the study, aggregate annual time series data at country level at current prices is used. Aggregate time series data is used for its stationary characteristics. This implies that the mean and standard deviation do not systematically differ over a period of time. In addition aggregate data is normally very useful in establishing long term econometric relationships between the variables.

As it is known that usually economic time series move together, therefore, if all the variables are included simultaneously in the equation there may be possibility of multi-collinearity. To examine the variables which may not be included simultaneously in the equation, a correlation matrix for all the expected explanatory

variables and the dependent variable was obtained. Based on the correlation matrix several variables were selected as the possible explanatory variables. The correlation matrix also shows high degree of association between all the explanatory variables.

	OFDI	IFDI	GDP	PCI	WAGE	INFR	IM/GDP	EX/GDP
OFDI	1	.891	.898	.877	.766	.725	.885	.859
IFDI	.891	1	.933	.878	.932	.889	.929	.930
GDP	.898	.933	1	.977	.927	.911	.963	.956
PCI	.877	.878	.977	1	.856	.854	.926	.903
WAGE	.766	.932	.927	.856	1	.981	.928	.962
INFR	.725	.889	.911	.854	.981	1	.880	.939
IM/GDP	.885	.929	.963	.926	.928	.880	1	.975
EX/GDP	.859	.930	.956	.903	.962	.939	.975	1

Box-6.3: Correlation matrix of OFDI flows and the determinants of OFDI flows

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed) Estimates based on appendix tables

Simple correlation between OFDI and GDP is found very high at 0.898. OFDI is also very highly correlated with IFDI at 0.891, with IM/GDP at 0.885, EX/GDP at 0.859 and PCI at 0.877. The correlation of OFDI with wage at 0.76 and energy at 0.725 is at a relatively lower level.

Using Multiple Linear Regression (MLR), the explanatory variables are regressed. In order to estimate the regression model, a statistical package, Statistical Package for Social Sciences (SPSS), is used. In addition, the output shows the t-statistic and p-values for the coefficients which results in either rejecting or failure to reject the hypothesis at a specified level of significance. The p-value is the probability of getting

a result that is at least as extreme as the critical value. The null hypothesis is rejected

if the p-value is less than or equal to the critical value.

REGRESSION RESULTS

(Estimates based on appendix tables)

Regression Analysis Explaining the Variations in OFDI flows

Dependent Variable	:	OFDI flows
Period	•	1980 To 2005
N	:	26

Model Summary:

R Square	Adjusted R Square	F-Value
0.946	0.935	87.198
		•

Coefficients:

Variables	Coefficient	Beta	t
(Constant)	- 1017.356		- 4.949
IFDI	0.301	0.843	5.067*
GDP	3.021	0.609	3.156**
WAGE	- 510.510	- 1.323	- 6.385*
EX/GDP	148.726	0.767	3.188**
Notes: * Significant at 1%	· .		
** Significant at 5%			

Excluded Variables:

Variables	Beta In	t
INFRA	- 0.090 [°]	- 0.311
PCI	- 0.363°	- 1.189
IM/GDP	- 0.443 ^c	- 1.419

SECTION 6.4

FINDINGS AND CONCLUSIONS

The above findings corroborate the theoretical predictions emanating from recent propositions in the theory of international trade and are able to explain about 94 percent of the variations of OFDI from India. The strength of the economy and market measured by GDP, labour productivity measured by WAGE, trade indicated by the EX/GDP ratio and IFDI to the economy are found to be statistically significant and have proper signs. The coefficient of WAGE is negative as expected and has the maximum explanatory power in explaining the OFDI flows from India. The coefficient of IFDI is positive and has a good explanatory power explaining the Indian outflows. INFR, PCI and IM/GDP ratio are found to be statistically insignificant.

The above results both confirm and complement the findings of earlier studies explaining the macro economic determinants of outward FDI flows (Helpman, 1984; Helpman and Krugman, 1985; Markusen and Zhang, 1999; Vernon, 1966; Chenery et al. 1986; Aykut and Ratha, 2004; Banga, 2007, Dasgupta, 2005).

As postulated, exports positively influence outward FDI, as they ensure markets and encourage vertical FDI. This result confirms the assumption that exports are important in determining OFDI from India and that the economy's ability of improving the FDI outflows will be related to the country's performance in its trade front. The rising volumes of exports from the Indian sub-region reflect the increasing competitiveness of the economy. However, it can be said that exports have been complemented by outward FDI, since the rising number of free trade agreements has made possible access to larger markets and large-scale production. Higher level of

export activities by the Indian firms also implies that the need to undertake trade supporting OFDI to support their exports is also very high. According to the World Development Indicators 2007, exports, as percentage of GDP in India, exceeded the 10 percent mark in 1994 and in 2005 it was around 23 percent. Around this period OFDI as a percentage of GDP also showed a rise from virtually zero to around 0.3 percent. In this regard OFDI can be considered as complementing the home country exports. Hence, this calls for active OFDI promotion as it would complement export promotion resulting in greater integration with the world markets. The vertical OFDI in the form of building trade-supporting infrastructure abroad, like distribution networks, customer care centers, service centers etc., by the Indian firms to strengthen the Locational advantages could help to increase the exports of the final products from the home economy. In the case of the Indian software sector, for example, on-shore presence through OFDI is critical to ensure exports of software services.

The results also corroborate the fact that the Indian companies, mainly motivated by cost considerations, undertake vertical FDI to disaggregate the production process geographically and locate specific stages of the value chain in the home country benefiting from the relative cost advantages.

However, trade in itself may not be able to boost outward FDI if the domestic investors lack the capability to invest abroad. Inward FDI flows have, of late, been identified as one of the drivers of outward FDI, which improve the capabilities of the domestic investors to undertake outward FDI. Better technology, better skills and information regarding the home economies of inward FDI are all necessary ingredients for enhancing domestic competitiveness.

The success of India in attracting FDI flows has had a dual impact on the domestic firms. On one hand, it has induced growing competition at home and encouraged

Indian firms to go abroad, adopting a diversification strategy in generating revenues. On the other hand, exposure to international business has played a part in encouraging Indian firms to venture abroad through demonstration and spillover effects on domestic firms. Once they venture out, the Indian MNCs begin to acquire advantages related to "transnationality-confidence", and knowledge of operating in a foreign environment. As noted by UNCTAD (2003), more Indian firms are aspiring to become global players by investing and operating abroad. More generally, the greater integration of India in the world economy and the intensification of international competition through imports and inward FDI to which Indian firms are confronted, the more MNCs will expand outside India to acquire a portfolio of Locational assets that helps them to improve their international competitiveness.

Domestic factors can be important push factors for outward FDI. Studies in the literature have found that the market size of the home economies is the most important variable which propels FDI. India has seen a sustained increase in the national income since liberalisation. Increased market size along with a buoyant manufacturing and the services sector has allowed the domestic firms to gain a competitive edge by acquiring suitable Ownership advantages. As a result, domestic firms are encouraged to invest overseas.

One reason behind the Indian companies investing more in the developed countries can be the growing Ownership advantages of the manufacturing and the services sector, which enables them to efficiently cater to the demand in those countries. The strengthening of the Ownership advantages is linked to the various linkages derived from the growth of the domestic market and competition. For example, many Indian firms in the pharmaceutical sector now have focused on product and process development, which strengthens their Ownership advantage to compete efficiently in the world market. Indeed, developed countries have been the main source of

opportunities for service firms in software sector to grow and integrate with the global economy. Since much of the software activities require proximity with their developed country customers, OFDI has been used by Indian software firms to establish their fully controlled branches or subsidiaries abroad and to acquire overseas competitors for gaining market access and additional intangible assets. It is also interesting to note that the Indian companies have been able to offer a range of relatively low cost but high quality products to the consumers in the host countries. For example, Indian pharmaceutical companies have been able to provide cheap generic drugs to the people in the developed nations.

Apart from the traditional motivation of market access, OFDI has been increasingly resorted to develop trade-supporting networks abroad. A large number of customer care and service centers have been created to ensure strong Locational advantages and also to improve exports from the Indian economy. Thus the technologically advanced Indian firms have been able to exploit Ownership advantages in efficient manner by utilising the superior Locational advantages offered by host countries. Indian firms also had a strong motivation to use OFDI in the Brownfield form to acquire additional technologies, skills, management expertise, marketing distribution networks overseas.

Since the early nineties the Indian firms have grown globally through OFDI for a variety of reasons. The past industrialisation and developmental process had improved India's Locational advantages like skills (general, technical and managerial), physical and scientific infrastructures and institutions. The firm-specific technological efforts were strongly complemented by these growing Locational advantages and India's much pursued policy of achieving technological self-reliance. A large number of Indian firms across a wide range of industries have emerged with higher levels of competitive advantages based on productivity, technology, skills,

management expertise, quality and scale of production. The process of increasing globalization including internal liberalization, resulting in higher FDI flows, had offered capable Indian firms business opportunities at a global scale and OFDI became the efficient strategy for expanding operation overseas.

The liberalisation of government policy with respect to OFDI like granting automatic approval to the OFDI applications, removal of ceiling on the amount of outward investment, allowing Indian companies to raise financial resources for overseas acquisitions and relaxation of other restrictive rules has provided ultimate impetus to the overseas expansion activities of Indian enterprises.

The emergence of knowledge-based segment of Indian economy such as drugs and pharmaceuticals, software and broadcasting as the leading outward investors indicate the rapid pace at which India is enhancing global position in knowledge based economy. During the second wave, the technological capabilities of Indian enterprises have seen diversification towards basic and frontier research activities under the facilitating role of national innovation system. For example, many of the leading Indian pharmaceutical firms like Ranbaxy, Dr. Reddy's Labs, among others, have made significant progress in directing their R&D focus on new product developments. Maybe modestly, the Ownership advantages of Indian OFDI in industries such as pharmaceutical, software and transport now seem to be based on advanced technologies. (Pradhan, 2005)

While rapid rise of OFDI is a natural process in an open economy, it faces many uncertainties and risks in sustaining their global sales and revenues. With increasing globalisation, Indian companies will have to continuously adapt themselves to successfully counter increasing competition. To manage technology as a global firm, Indian firms need to take up technology, when it is in the growth stage, develop

design capabilities, bring out product innovations and differentiate their products / services with technology. The large R&D expenditure of companies can translate into substantial competitive strength for them. Indian companies suffer the disadvantage of inadequate expenditure on R&D to develop process know-how and engineering skills.

Another issue that hampers trade is the lack of protection for IPR. Generally, countries and companies trading with India feel that intellectual property protection is weak in India. However, there is a rise in the number of patent applications, given the general increase in economic activity in the same period.

Not many Indian consulting firms have ISO accreditation that can enhance the quality image of Indian firms in the eyes of overseas investors. Project export companies have made good progress in areas like civil construction, turnkey projects, technical services, and earned a niche for themselves. The projects range from power generation, transmission and distribution, dams, tunnels, oil exploration, operation and maintenance to export of capital goods, transport equipment and consultancy services. But presently the Indian companies have been facing competition primarily from, exporters from developed countries and newly industrialising countries. Simultaneously at the macro level, the boom in the outward investments is likely to increase external pressure on India to quickly reduce tariffs and dismantle the remaining restrictions on capital inflows. Calibrating these moves without forgoing the interests of the vast unincorporated sector enterprises and the rural economy would remain a challenge for policy-maker.

Although the OFDI from India is currently low in volume and value as also in the numbers of investing firms relative to the global scale, yet it is growing at a fast pace at higher relative terms compared to past years as also in comparison to some other

comparable countries. Indian OFDI is visible in a wide range of manufacturing, information technology and knowledge based industries such as automobiles, software and pharmaceuticals, particularly through the route of mergers and acquisitions. The motivations have been "market seeking", "resource seeking" and "efficiency seeking", as can be seen from the empirical results. Outward FDI flows in India is pursued not only by the private corporate sector but also by the public sector entities that have aggressively sought to acquire equity in the natural resources (petroleum and gas) sectors of key producer countries as a strategic initiative to manage the growing energy intensity of the economy. Ongoing liberalisation of the policy framework has provided a favorable environment for FDI from India.

SECTION 6.4

LIMITATIONS AND SCOPE OF FURTHER RESEARCH

Limitations

Due to the inherent data constraints of the macro economic time series data, the above results are admittedly tentative. Yet it is true that they reveal certain new facets of the FDI outflows from India that have not been examined earlier. Moreover, India's success in outward FDI is very recent, dating back to the economic reforms of the nineties. With such a short history, it is yet to be seen whether the time series data can sustainably display the relations that that the empirical evidence of this study suggests or whether the interaction of the home country and host country economic forces change the prevailing relationship pattern.

Scope of Further Research

A natural extension of this study would be to examine the effects of international trade and variables on the FDI outflows of the competing Asian countries like China and South Korea and compare the outcomes with those of India. There is a possibility that the drivers of OFDI differ in significance with respect to different sectors. A detailed and separate analysis is, therefore, required for explaining OFDI from the manufacturing and the services sector. Another interesting research avenue would be to examine the impact of OFDI on the exports and employment of the Indian economy. A study on harmonizing inward and outward policies so as to enhance mutual growth inducing effects in the home and host country would also be very much in place.

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