

Foreign Direct Investment, Manufactured Exports and Economic Growth in Developing Countries.

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I. Introduction

Foreign direct investment (FDI) has long a subject of great interest in the field of international development. In an era of volatile flows of global capital, the stability of FDI and its emergence as an important source of foreign capital for developing countries has once again renewed interest in its linkages with sustainable economic growth. FDI usually flows as a bundle of resources including, besides capital, production technology, organizational and managerial skills, marketing know-how, and even market access through the marketing network of multinational enterprises (MNEs) who undertake FDI. These skills tend to spill over to domestic enterprises in the host country. Therefore FDI can be expected to contribute to growth more than proportionately compared to domestic investment in the host country. There is now a body of literature that has analyzed the effect of FDI on growth in inter-country framework and another analyzing knowledge spillovers to domestic enterprises from MNEs. However, the mixed findings reached by these studies on the role of FDI inflows in host country growth and on knowledge spillovers from MNEs suggest that these relationships are not unequivocal. The primary consideration for expecting a more favourable effect of FDI on growth is externalities of MNE entry for domestic firms. The externalities may not take place in some cases because of poor linkages with the domestic enterprises or poor absorptive capacity. There is also a possibility of MNE entry affecting domestic enterprises adversely given the market power of their proprietary assets such as superior technology, appeal of brand names and aggressive marketing techniques. Therefore, FDI may crowd-out domestic investment and may thus be immiserizing (Fry 1992, and Agosin and Mayer 2000). The crowding out effect may be sharper when the technology gap between foreign and domestic firms is very wide to be bridged. Furthermore, because FDI may be attracted to a country by high growth rates, among other factors, the observed relationships between FDI and growth rate may suffer from causality problems.

However, based on the experience of East Asian Countries, some economists question the desirability of a fully liberalized regime for foreign investors (Helleiner 1988, Lall 1995, Rodrik 1999). This 'revisionist' school of thought admits that FDI can play an important role in the transmission of technology, market know-how and modern management practices to developing countries. But it argues for a selective approach to the promotion and screening of FDI. This view

has often been reflected in an alleged mismatched between the liberalization of FDI and trade policy regimes in some countries⁽¹⁾.

The empirical underpinning for this revisionist view largely comes from studies conducted in the 1970s, at the formative stage of the export take-off in the newly industrializing countries (NIEs) in East Asia (eg. Hone 1974, Cohen 1975, Lall and Streeten 1977 Ch. 7, Nayyar 1978). The general inference of these studies was that the export takeoff in the East Asian NIEs was predominately based on local initiatives and ownership; and, at the firm level, transnationality was not an important aid to exporting⁽²⁾. It was the innovative and selective use of various 'non-equity' forms of foreign participation, so the argument went, rather than the direct involvement through FDI, that was the key to NIE success. Contrary to the generally presumed link between the MNE presence and export performance, some studies even inferred that 'FDI in Latin American countries, where emphasis on import-substitution continued to remain the key emphasis of industrialization, play a much more important role in manufacturing for export in than in Asia' (Nayyar 1978).

Against this backdrop, the present paper proposes to take a fresh look at the role of FDI in the export of manufactures and economic growth from developing countries using more recent and comprehensive data. The paper is motivated by the concern that, given the major changes in the investment climate in developing countries and patterns of international production over the past two decades, evidence from the early years of exported-led industrialization in the East Asian NIEs may send quite inappropriate signals to policy-makers in latecomer exporting countries⁽³⁾. The latter proposition is important because much of the early xenophobia towards MNEs in the developing world has dissipated, enabling MNEs to play an enhanced global role, and to exploit the comparative advantage of individual countries in international production. Two major developments are particularly noteworthy in these new patterns of international production. First, an

(1) A prime example is the treatment of foreign investment in India following the liberalization reforms initiated in 1991. See Joshi and Little (1996), pp. 195–196 and the works referred to therein. Further liberalization of the FDI regime also remains a thorny issue in the ongoing debate on further economic opening in China (Naughton 1996).

(2) Surprisingly even some strong proponents of open trade and investment policies seem to accept such inferences as of general relevance for all developing countries at all times. For instances, on the issue whether China's superior export performance relative to India can be explained in terms of relatively superior record in attracting FDI, Anne Krueger recently observed that 'this was not the case in Japan, Hong Kong and Korea' (Srinivasan 1998, 233 fn 9)

(3) The term 'latecomer exporting countries' is used here to refer to the developing countries, which are gradually shifting from primary commodity specialization into manufactured exports following the example of the East Asian Industrialized Countries (NICs). Two alternative terms used in the literature are 'new exporting countries' and 'second-tier exporting countries'.

increasing number of firms from some NIEs have become aggressive international investors, and these 'third world' MNEs significant seem to possess specific competitive advantages over 'first world' MNEs in some product areas, particularly where latecomers to export-led industrialization have a comparative advantage in international production. Second, and more importantly, the 'slicing up' of the product chain in high-tech industries, involving cross-border reallocation of global MNE activities according to host country's relative factor endowments, has rapidly gained importance over traditional labour-intensive final goods production as the prime mover of the internationalization of production.

The structure of the paper is as follows: Section II presents some stylized facts regarding the mechanism of impact of FDI on growth in developing countries and also reviews the existing literature on the subject. Section III develops a typology of MNE involvement in manufactured export expansion from developing countries. Section IV assembles a large body of empirical evidence on the role of MNEs in the export performance and growth of developing host countries, and analyses it from a comparative perspective. Section V summarizes our key findings and concludes with some remarks on policy lessons.

II. Mechanism of impact of FDI on Growth

In the neo-classical model, growth results from technological progress, growth of labour force and capital accumulation. However, new growth theories incorporate the role of knowledge or technology endogenously as a factor of production in its own right and provide for the possibility of non-diminishing to capital (Romer 1994, Grossman and Helpman 1991). The recognition of the role of knowledge in economic growth has also led to a renewed interest in analysis of the role of FDI in growth. This is because FDI is generally accompanied by transfer of considerable production and managerial knowledge from investor to the host country that is likely to spill over to domestic enterprises in the host country. Romer (1993: 548) has argued that by bringing new knowledge to their host countries, MNEs may help to reduce 'idea gaps' between developed and developing countries which are sources of growth. Thus FDI's effect on growth in host countries could be more valuable than its direct generation of output by completing the domestic investments. The indirect effect of FDI on exports and growth in the host country may comprise a sum total of its externalities on domestic investments through knowledge spillovers and vertical linkages.

The external effects of FDI on a host economy include positive as well as negative. Foreign entrant may generate demand for manufactured goods and may crowd-in domestic investment to deliver it. It may also help to diffuse new skills and knowledge brought in the host country. As observed earlier, FDI inflows are generally accompanied by a bunch of valuable resources such as

technology, organizational capability, managerial skills, and marketing know-how. The knowledge spillovers associated with FDI could be classified into two broad categories viz. intra-industry spillovers and inter-industry spillovers. Intra-industry spillovers are absorbed by competitors of foreign entrants who are prompted to respond to new improved process or product technology introduced by technology importing firms by upgrading their technology. In certain cases the demonstration effect from foreign firms to become more efficient users of existing technologies or to explore new technologies. Among the mechanisms of technology spillovers of this sort are reverse engineering by competitors, increased rivalry through R & D and product developments and the mobility of employees trained in new technologies by MNEs.

MNEs may demand higher specifications, retooling and technology updating from their component vendors forcing technology effort on their part. In quite a few cases they may actually be passing new designs, drawings and specifications which may be significant sources of technology diffusion. Similarly, certain element of knowledge may be passed on downstream to customers of foreign firms in embodied manner. The diffusion of knowledge through this channel could be particularly significant in the case of equipment manufactures. For instance, a foreign investment to make more efficient looms may play an important role in diffusing the new technology within the textile industry of the host country.

The most immediate externality of an MNE entry on domestic enterprises in the industry of the entrant is negative as foreign entry erodes their market share. In recent years acquisition of domestic enterprises has become increasingly popular form of MNE entry at least in some regions such as Latin America. In the case of acquisition, foreign entry entirely crowds out domestic investment. Besides eroding the market share of domestic enterprise, foreign entry could affect domestic investment in the industry adversely by its entry raising conduct. It has been argued that MNEs with their dowry of intangible assets such as internationally known brand names, captive access to technology and reservoirs of technical, managerial and organizational skills, are likely to pursue non-price modes of rivalry to maximize the revenue productivity of these assets. With higher emphasis on product differentiation and other modes of non-price rivalry, entry of new domestic firms to the industry is impeded by the 'contrived entry barriers' (Kumar, 1990, 1991). Therefore, MNEs entry may crowd-out domestic investment in the industry of entrant more than just eroding the market share of existing firms.

III. FDI and Production for Exports

These are two types of MNEs affiliates, firms engaged in serving the domestic market ('market-seeking' investors) and those engaged in production for the global market ('efficiency seeking' investors). When it comes to market-seeking investment in developing countries, the

forces explaining the location decisions of MNEs are about the same as those explaining their presence in industrialized countries. The location decision depends primarily on the prevalence in the host country of production opportunities aimed predominantly at meeting domestic demand. Given the scale economies and very small domestic markets in many developing countries, a major (if not the key) determinant of congenial domestic production is restrictions on international trade. As domestic income levels approached industrial country levels, MNEs many production activities aimed at serving both export markets, but MNE involvement in this area in most developing countries have so far been largely limited only to serving the domestic market, and such investment has predominantly been determined by the 'tariff jumping' motive. The so-called 'life cycle' investors who expand their production networks globally predominantly on scale-economy and efficiency considerations hardly find low-income countries as attractive investment locations under free-trade conditions. In theory, under certain circumstances, MNE affiliates originally set up to service local markets could well develop competitive advantage over the years and penetrate markets in other countries without government support (Bennett and Sharp 1979). But in the real world such cases are rare and limited predominantly, if not solely, to middle-income and upper-middle-income developing countries with sizable domestic market⁽⁴⁾.

A well-known feature of MNE behavior is that the parent company strictly controls the performance of its affiliates in the interest of global profit. The export decision of affiliates is, therefore, not simply a matter of responding to domestic export incentives and government directives. Even if import-substituting MNE affiliates do respond to host Government's carrot-and-stick approach, there is no guaranty that the final outcome would justify the overall cost involved. Import-substituting production units operating in a small-protected market are not usually internationally competitive. Therefore, export incentives have to be introduced and maintained at high levels to generate the anticipated export push. On the benefit side, there may be little to gain in terms of employment generation because such exports, being simply an extension of import-substitution production, tend to be highly capital intensive (Helleiner 1988).

The FDI's role in this sphere is 'more distinctively a developing-country question' (Caves 1996, p217). Export-oriented FDI is, however, not a homogeneous phenomenon. Rather it is complicated and finely differentiated means of globalization of production. The opportunities available to a given country in mobilizing FDI, in economic growth and development depends on relevant typological characteristics and the investment environment of the country and the changing

(4) As caves (1996, P. 253) aptly put it, '(G)iven scale economies and very small domestic markets of most developing countries, a foreign subsidiary will locate their either to serve the domestic market or to export exclusively, but it will not serve the domestic market and export a little. . . . Accordingly, generalizations than span the export and domestic market are somewhat suspect'.

pattern of international production in the global context. For the purpose of clear identification of the comparative advantage of a given host country in attracting export-oriented FDI, the related product lines can be divided into four categories (P. Athukorala 2003). In order to understand the opportunities arising from the interaction of these two factors, it is important to distinguish among four different categories of export-oriented production :

1. Resource-based Production
2. Labour-intensive Production
3. Component production and assembly process

MNE participation for export expansion depends primarily on the availability of relevant natural resources. However, even if resources are available, there are other factors, which may render policies designed to entice investors ineffective. Major deterrent is tariff structures in industrialized countries, which still provide heavy effective protection to domestic processing industries. Insecure property rights in resource-rich developing countries also may act as a deterrent to investors in large, capital-intensive projects. These constraints notwithstanding, there are some product areas where there are significant opportunities for successful export expansion though MNE participation. One such product line, which has gained importance over the past two decades for agricultural-resource rich developing countries, is agro-based processed food, seafood in particular.

For latecomers, labour-intensive consumables are generally considered the natural starting point in the process of export-led industrialization. The role of FDI in the former area remains a controversial issue. In the spectacular export take-off of East Asian NIEs in the 1960s, the key role was played by indigenous firms with the help of marketing services provided by foreign buyers-the Japanese trading houses and the large retail buying groups in developed countries (Hone 1973, Nayyar 1978, Naya 1990).

The most important factor behind the East Asian experience was the unique entrepreneurial background of these countries. Hong Kong, Taiwan and to some extent Singapore started with a stock of entrepreneurial and commercial talents inherited from the pre-revolution industrialization in China. The first and third of these also had well established international contacts based upon entrepot trade that involved exporting manufactured goods to begin with. Likewise, the considerable industrial experience that accumulated over the preceding five decades or so under the Japanese occupation was instrumental in Korea's export take off (Rhee et. Al. 1988). Therefore, there was not such a large difference between domestic firms in these countries and foreign firms with regard to knowledge of and access to production technologies and market channels.

De Mello (1999) has conducted time series as well as panel data estimation for a sample

covering 15 developed and 17 developing countries for the period of 1970–90 of the relationship between FDI, capital accumulation, export oriented manufacturing growth. The time series estimations suggest that effect of FDI on exports industries varies greatly across countries. Moreover, from around the mid 1980s, successful exporting firms in the East Asian NIEs began to play an important role as direct investors in the latecomers' labour-intensive export industries, especially in East and Southeast Asia. Two main factors accounted for this trend: the erosion of international competitiveness of labour-intensive export products from their home countries as a result of rising real wages and exchange rates; and the imposition and gradual tightening of quantitative import restrictions (QRs) under the Multifibre Arrangement (MFA) by industrialized countries on certain labour intensive exports (mostly textile, garments and footwear) (Wells 1983, 1994). There are indications that, consistent with rapid structural transformations that are taking place in the NIEs prior to the recent economic crisis (and from which they have quickly recovered), this intermediary role of these "new" investors in linking late comers to world markets may become increasingly important in years to come. A major advantage which investors from these new countries possess is that, unlike MNEs from developed countries they are familiar with and/or easily adaptable to the more difficult business conditions in latecomers. Given that NIE firms have developed considerable specialized knowledge of small scale and labour-intensive production procedures in the manufacture of standardized products.

In developing countries of relatively labour intensive, component production and assembly within vertically international industries has been an important feature of the international division of labour since about the late 1960s. This development is part of an adjustment process in the international division of labour whereby firms in industrialized countries adapt to the increasing pressures of domestic real-wage increase, and rising import competition from low cost sources (Grunwald and Flamm, 1985). This process has been significantly hastened by two factors: the growing ability of modern industry to 'slice up the value chain' of production processes traditionally viewed as skill-, capital-, or technological-intensive, and to shift the labour-intensive slices to low-wage locations, and improvement in communication technology which has brought about a dramatic reduction in the cost of maintaining services links in international operation (Krugman 1995, Jones 2000).

Assembly operations related to high-tech electronic industries-the production of semiconductor devices in particular - are by far the most important. The other industries with significant assembly operations located in developing countries are electrical appliances, automobile parts, electrical machinery and optical products. Assembly exports from developing countries have grown much faster than total manufactured exports from these countries (Yeats 2001; Freenstra 1998, Hummels, Rapoport and Yi 1998)⁽⁵⁾. In many high-tech industries (notably electronics and electrical products) rapid innovation and continuous technical change, which bring

about a constant cycle of change and obsolescence, are formidable constraints to rapid automation as an alternative to offshore assembly. Therefore, the indications are that this form of internationalization of production will continue to expand, providing labour surplus countries the opportunity to find expanded niches for labour intensive, export-oriented production.

During the last ten years have witnessed a noteworthy expansion of global assembly operations from component production and assembly to assembly of final products (eg. Computers, cameras, TV sets and motorcars). The overseas production units of FDI firms involved in such final stage assembly are, however, located in other industrialized countries or in more advanced NIEs. In final assembly labour costs, while significant, are of secondary importance compared : to the availability of world-class operator, technical and managerial skills ; a good domestic basis of supplies and services : relatively free access to world-priced inputs including capital ; and excellent infrastructure. In other words, the locational decisions of MNEs in this sphere depend on the availability of a wider array of complementary inputs that enable their facilities to be efficient by world standards. Also, given the heavy initial fixed costs, MNEs are hesitant to establish an overseas plant without considerable first-hand commercial experience in the host country.

More recently MNEs from more advanced developing countries, notably those from the East Asian NIEs have also joined this process of internationalization of production. In response to rapid domestic wage increases, the growing reluctance of domestic labour to engage in low paid blue-color employment, and stringent restrictions on the importation of labour, firms in electronic industry and other durable consumer goods industries in NIEs in East Asia have begun to produce components and sub-assemblies in neighboring countries where labor costs are still low.

A very important new development of FDI involvement in Asia in assembly activities is the emergence of cross-border multi-plant operations within the region (Dobson and Chia 1997 ; Athukorala and Menon 1997). MNE affiliates in high-tech industries located in countries like Hong Kong, Singapore and Taiwan, faced with intensifying competition emanating from deregulation and falling trade barriers, have begun to relocate some segments of the production process to neighboring countries. This process has created a new regional division of labour, based on skill differences, differential factor prices (especially wages) and superior communication facilities. Production is thus dispersed within the region, leading to intensified intra-regional trade in the context of a global industrial network. One important implication of these cross-border production activities, which are primarily focused on the complementarity of national resource endowments, is

(5) According to estimates by Yeates (2001) about 30% of world trade in machinery and transport equipment category (which accounts for over a half of total world commodity trade) based on global fragmentation of production. The corresponding estimate for for the mid 1980s was only 15%.

that promoting FDI is a 'positive sum game' in which all players gain from trade in differentiated products (Dobson and Chia 1997).

The readily available categories (based on the Standard International Trade Classification, SITC) do not permit a more exact analysis of trade patterns according to our four-way classification. However, Table 1 (P. Athukorala 2003) does provide empirical support for our arguments above concerning changing export patterns and the implications for the potential role of MNEs in manufactured export expansion. It is clearly evident that, over the past three decades, SITC 7 (machinery and transport equipment, where the assembly and component production of vertically integrated high-tech industries are predominantly concentrated) and SITC 8 (miscellaneous manufactures, which consist predominantly of light manufactured goods) have been the dynamic export lines for developing countries. Consistent with a priori expectations, the share of basic manufactures (comprising resource-based processing activities, other than food processing) has declined persistently throughout. The data, when disaggregated into exports by NIEs and other developing countries, indicate a clear decline in the importance of standard labour intensive products (proxied by miscellaneous manufactures) in the exports of the former country group. By contrast, the other developing countries as a group have shown a continuous expansion in the share accounted for by such products in their total exports. Relating to exports of machinery and transport equipment, NIEs exhibit a significant product diversification over time a pattern consistent with the postulated shift away from labour intensive assembly activities and towards more sophisticated final good production. Other developing countries, by contrast, demonstrate a continued and indeed increasing reliance on the electronics sector, where labour intensive assembly activities are heavily concentrated.

IV. Empirical Evidence

Almost all the existing international organizations have come to view FDI as an effective engine of growth for developing countries under properly managed conditions. The emphasis placed on it today as a vehicle of growth and development is, however, much stronger than was the case in the first two decades after the Second World War. This study was an attempt to examine the extent to which an average developing country in the world today can depend on MNEs to promote the process of their manufactured production for exports. FDI involvement in export expansion from the NIEs (other than Singapore) is low by international standards generally remains valid in our data set. However, it is important to note that in both Korea and Taiwan, the MNE share in exports did increase significantly from about the mid-1970s to mid-1980s, as compared to the figures reported by Nayyar for the late 1960s. Detailed case-studies of the export performance of these countries suggest that this increase reflected the important role played by MNEs in these countries, as they shifted from the early reliance on labour intensive, standard

consumer goods sectors to assembly activities in vertically integrated high-tech industries, and subsequently to sophisticated consumer durables production⁽⁶⁾. The available evidence on product composition of exports by MNE affiliates in Taiwan and Korea clearly attest to this important role played by these firms in the structural transformation of exports from these countries (Ranis and Schive 1985, Schive and Tu 1991, Koo 1985, Hu and Chan 2001)⁽⁷⁾. Given the rapid expansion of traditional labour intensive exports as the initial stage of export-led growth in these countries, any analysis based on MNE shares of aggregate exports obviously fails to capture this important point. It is interesting to note that the MNE export share in Korea and Taiwan have tended to decline from about the mid-1980s. This is most likely due to the combined effects of exports by domestic firms growing more rapidly in recent years, and an increase in domestic sales by MNE affiliates in consumer durable industries in response to the strong growth expansion in domestic demand fuelled by rapid economic growth.

The relatively small role of MNEs in export expansion from Korea and Taiwan compared to Singapore, and also second-tier exporting countries in the region, is generally interpreted as resulting significantly from the 'guided' industrial development policies pursued by these countries, particular the former. These countries, so the argument goes, followed the Japanese pattern by relying on non-equity arrangements rather than FDI to access technology and other MNE-controlled assets. However, following Goh Keng Swee (1993), the architect of modern Singapore's spectacular economic development, one can argue that this difference, at least to some extent, emanated from the nature of the investment environment at the time when technical advances in the US electronics industry began to create (from the late 1960s) rapid growth of demand for semi-conductors, whose production and assembly required the massive use of low-cost labour.

At this time, China's Cultural Revolution was reaching its height, and political stability was a key factor governing the location decisions of assembly operations by electronics MNEs. This argument received further support from the fact that not only Korea and Taiwan (which, according to the revisionists, followed 'strategic' FDI policy) but also Hong Kong, a country that followed almost laissez-faire economic policy throughout, was largely shunned by the electronics multinationals. By the time the political risk waned, and export-led growth policies became firmly rooted in these countries, wage levels has already increased to levels which made them less attractive as labour-intensive assembly locations. The electronics revolution in Singapore, which began in the mid-1960s, absorbed all unemployed labour in that country within a period of five to seven years

(6) Numerous studies have drawn attention to this phenomenon. See for example Hobday 1995, Koo 1985, Lee 1992, Naya 1990, Ranis and Schive 1985, Schieve 1990 and 1991.

(7) Foreign firms also contributed to the growth of domestic firms into major players in the world market by spinning out skilled workers and managers as well as through technical guidance to subcontractors (Kim and Hwang 2000).

and electronics MNEs shifted unskilled and semi-skilled simple assembly activities of neighboring low-wage countries - Malaysia, Thailand and Indonesia, and more recently to the Philippines. In the process, Singapore then assumed a major regional headquarters function for the electronics industry in Southeast Asia (Hill and Pang, 1992). In the following 20 years, the FDI diversified their investments in the region, first from simple assembly to component production operations (mainly hard disc drives), and subsequently to consumer electronics, such as TV sets, radios and sound systems. Contrary to the inference that the actual role of MNEs in export expansion from developing countries is far less than general perceptions, there is clear evidence that the strong export performance of countries since the 1970s has been closely associated with FDI involvement. In particular, rapid expansion of manufactured exports from Malaysia, Thailand, China, Philippines and Sri Lanka has been underpinned by increased participation of FDI.

In an inter-temporal comparison for each country, it is clearly evident that increase MNE shares in exports was significantly accompanied by faster export growth following market-oriented policy reforms, which created a conducive setting for MNE participation in export-oriented production. This inference that FDI participation is crucial for export success gains strong support from a comparison between China and India, the two giant economies in the region. In China, the share of exports from enterprises with foreign investment rose from 0.4 percent in 1984 to over 46% in 1996. This was accompanied by a more than 10-fold increase in manufactured exports over this period. By contrast, in India, where MNE subsidiaries are still predominantly of the old-fashioned 'tariff-jumping' variety, both the share of MNEs in total manufactured exports and the rate of export growth have continued to remain low⁽⁸⁾. Interestingly there has been a mild, yet persistent, decline in both MNE share in manufactured export from India from about the mid-1980s and the decline became sharper following the liberalization reforms initiated in 1991. A detailed analysis of the underlying factors is beyond the scope of this study, but the explanation seems to lie in the nature of the post-reform trade and foreign investment regimes. From the early 1980s India gradually relaxed restrictions on intermediate and investment goods imports, and removal of these restrictions was intensified as part of the liberalization reforms initiated in 1991. Consequently the pressure on MNE affiliates (which are predominantly domestic-market oriented) to export in order to become eligible for importing gradually waned and then virtually disappeared after 1991. At the same time, given the half-hearted nature of the policy regime relating to FDI and still-binding bureaucratic restraints on FDI approval procedure, so far India has not been successful in attracting export-oriented foreign investors⁽⁹⁾.

(8) For a fuller discussion on India's failure to attract MNEs as a major cause of her lack-lustre export performance, see Srinivasan 1998.

(9) Note that the increase in export share in the late 1980s is consistent with the tightening of import and exchange controls in response to the balance of payments crisis preceding the 1991 liberalisation.

V. Concluding Remarks and Policy Implications

For a long time, developing countries acted only as host countries for multinational activities and never as home countries. But now multinational activities are no longer monopolized by developed countries. Most developing countries in Asia have now changed their approach to industrialization and adopted a strategy on manufactured export oriented industrialization in recent times. Industrialization is promoted mainly through foreign direct investment, encouraged by governments through various incentives under a more open market economy.

The evidence in this study suggests that the share of MNEs in manufactured exports from developing countries has recorded a significant increase from about the mid 1970s, with the rate of MNE participation in export expansion accelerating over time. Moreover, MNEs have been responsible for a larger share of exports from latecomers to export-led industrialization in Asia compared to the historical experiences of the East Asian NIEs. Countries with more outward-oriented policy regimes have experienced *both* a rapid increase in MNE participation in export expansion and faster export growth, compared to countries which have been slow to dismantle inward-looking regimes. Contrary to the historically specific experience of Korea and Taiwan (and also Japan), for latecomer DCs the entry of MNEs is virtually essential for export success.

Here, we have focused on the direct link between international production and exports, operating through FDI. The importance of MNE participation as a key ingredient for export success is actually a good deal higher than that suggested by our estimates, for two main reasons. First, as a number of recent studies have convincingly demonstrated, the presence of MNEs in a given host country has significant positive spillovers on the performance of local firms⁽¹⁰⁾. Second there is evidence to suggest that a direct MNE presence also provides a conducive setting for the exploitation of gains from other non-equity forms of MNE linkages. For instance, the entry of foreign investors from the NIEs into garments and other labour-intensive product sectors in second-tier exporting countries propelled the entry of the latter countries into the global purchasing networks of international buying groups; eventually even non-FDI (local) firms benefit from such market linkages, which develop from what Wells (1993) has aptly termed 'country reputation'.

The major policy lesson that policy makers in developing countries can learn from our analysis is therefore that, in designing policies of outward-oriented development, investment and trade and

(10) For instance, in China MNE affiliates are usually responsible for product design, the supply of needed parts and components, and the sale of goods on the world market of products produced by local firms. In some cases the foreign firm even supplies specialized equipment that is required to assemble the products sold on the world market (Lardy 2002, pp. 6-7). This is also an experience widely observed across many countries with MNE presence in export-oriented industries (Blomstrom and Kokko 2002).

Manufactured Exports from Developing Countries : Commodity Composition and Share in Total Merchandise Exports, 1965-1998 (selected years), percent.

SITC Category	1965	1970	1975	1980	1985	1990	1995	1998
All developing Countries								
5 Chemicals	12.0	11.4	11.2	10.5	9.5	8.9	8.3	8.0
6 Resources based manufactures*	57.4	45.0	35.4	32.1	28.1	26.0	22.0	19.1
7 Machinery and Transport equipment	9.6	14.2	21.4	25.8	30.1	34.3	44.3	47.9
71 Non-electrical machinery	3.2	4.7	6.6	6.1	8.3	11.9	14.7	16.8
72 Electrical machinery	2.8	6.7	9.5	13.9	14.0	15.6	23.0	23.3
73 Transport equipment	3.6	2.8	5.3	5.8	7.8	6.7	6.6	7.9
8 Miscellaneous manufactures	20.9	29.4	32.0	31.7	32.3	30.9	25.4	25.0
83 Travel Goods	0.3	0.6	1.2	1.4	1.4	0.8	0.7	0.7
84 Clothing	9.7	14.0	16.6	14.8	15.5	14.5	10.8	11.3
85 Footwear	1.5	1.9	2.9	3.1	3.5	3.2	2.0	1.7
894 Toys and sport goods	1.8	2.5	2.0	2.8	3.2	2.3	1.7	1.6
Total Manufactures*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Value (\$ billion)	5.1	10.5	34.2	111.1	160.0	380.6	819.0	935.9
% of total merchandise exports	13.5	18.6	16.5	19.2	36.0	52.1	66.3	72.2
East Asian NIEs**								
5 Chemicals	4.8	2.6	2.8	5.0	3.9	5.1	7.0	7.6
6 Resources based manufactures*	33.6	25.8	24.9	24.2	19.7	18.8	17.5	16.5
7 Machinery and Transport equipment	13.3	17.3	24.0	28.3	36.8	43.2	57.5	59.7
71 Non electrical machinery	3.5	3.3	5.1	5.4	9.1	16.3	21.5	24.1
72 Electrical machinery	5.8	12.1	15.4	18.2	17.8	21.0	29.2	27.7
73 Transport equipment	4.1	1.9	3.5	4.8	9.9	5.8	6.8	7.9
8 Miscellaneous manufactures	48.2	54.3	48.3	42.4	39.6	32.9	18.0	16.2
83 Travel goods	0.7	1.0	1.8	2.2	1.8	1.1	0.4	0.2
84 Clothing	25.9	28.0	27.4	18.9	17.2	12.1	5.6	5.5
85 Footwear	2.6	2.4	3.7	4.4	4.7	3.7	0.6	0.3
894 Toys and sport	5.1	5.5	3.8	4.9	4.7	2.8	1.3	0.9
Total manufactures*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Value (\$ billion)	1.4	4.1	15.1	55.2	82.8	187.8	345.1	346.1
% of total merchandise exports	56.7	70.0	74.2	78.5	82.5	88.0	90.3	90.9

Other developing countries								
5 Chemicals	14.7	17.0	17.9	15.9	15.4	12.5	9.2	8.2
6 Resource based manufactures*								
7 Machinery and Transport equipment	8.2	12.2	19.3	23.2	22.9	25.6	34.6	41.1
71 Non electrical machinery	3.1	5.5	7.8	6.8	7.5	7.7	9.7	12.4
72 Electrical machinery	1.7	3.3	4.8	9.6	9.9	10.4	18.5	20.7
73 Transport equipment	3.4	3.4	6.7	6.8	5.5	7.5	6.4	7.9
8 Miscellaneous manufactures	10.6	13.4	19.1	21.1	24.5	28.9	30.9	30.1
83 Travel goods	0.2	0.3	0.7	0.6	1.0	0.6	0.9	0.9
84 Clothing	3.6	5.1	8.1	10.8	13.8	16.7	14.6	14.6
85 Footwear	1.1	1.5	2.2	1.9	2.1	2.7	3.0	2.5
894 Toys and sport goods	0.6	0.5	0.6	0.8	1.5	1.7	1.9	1.9
Total Manufactures*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Value (\$ billion)	3.7	6.4	19.1	55.9	77.2	192.8	473.9	589.8
% of total merchandise exports	10.5	12.6	10.2	11.0	22.4	37.3	55.6	64.4

Notes :

* Excluding non-ferrous metals (SITC 68)

** Republic of Korea, Taiwan, Hong Kong and Singapore

Source : P. Athukoral, (2003), Sri Lanka Economic Jurnal

policies must be considered together as co-determinants of the location of production and patterns of trade. Given the fact that an increasing number of developing countries compete in attracting export-oriented FDI, countries that attempt to implement a selective FDI promotion policy are likely to loose important opportunities for export expansion. Of course, enhancing national gains from export-oriented industrialization by encouraging greater participation of local companies is a legitimate objective for any country. But under the current competitive conditions governing international production, this objective can be achieved only by providing a conducive setting for domestic entrepreneurial development as part of the overall development strategy, not though direct restrictions on the entry and operation of MNEs. Governments need to focus the general business environment rather than just on FDI specific issues.

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