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THE ROLE OF MULTINATIONAL CORPORATIONS IN LATIN AMERICA AND ASIAN MANUFACTURED EXPORTS

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INTRODUCTION

The last 20 years have witnessed some remarkable structural changes in the world economy. The industrialization process has 'taken off' in several developing countries and we see an increasing importance of the Third World in world exports of manufactured goods today. Although a relatively small number of countries account for most of these exports, the overall figures are impressive, and appear to give cause for optimism about the future growth possibilities for many LDCs.

In this paper we examine the role of foreign owned multinational corporations (MNCs) in these developments. If such firms, rather than domestic firms, are responsible for the increases in exports from developings countries, the domestically-owned industrial base in the Third World has not changed much over the years.In that case, the 'industrialization by invitation', a term Arthur Lewis once coined, may not have resulted in much of an improvement in the domestic firms' innovativeness or inventiveness, in their management abilities, or in their technological capabilities.

We distinguish between the export performance of developing countries on the one hand and of foreign owned affiliates operating there on the other, in order to see whether the recent structural changes in the LCDs are domestically based or not. The investigation cover multinationals from the United States and Sweden, and uses recently available surveys of outward investment from these countries. The data are described in Appendix A.

Apart from developing countries as a group. we pay special attention to two developing regions (Latin America and the four Newly Industrializing Countries,(NICs) in Asia) and six individual countries (Brazil, Mexico, Hong Kong, Korea, Singapore and Taiwan. These countries receive the bulk of foreign direct investment in manufacturing in the developing countries and they are the main LDC exporters of manufactures. Furthermore, they have very different industrial strategies, which make them suitable for a comparison.Generally speaking, Latin America has followed a more inward looking policy, and has thereby attracted foreign manufacturing investment mainly into protected import-substituting activities, while the Asian NICs have followed a more outward oriented policy, which has lured export-oriented foreign affiliates.

The plan of the paper is as follows.The next section examines the export performance of the developing countries since the mid-1960s, first for manufacturing industries as a whole, then for broad industry groups.Section 3 investigates what role U.S. multinationals plays in these exports, and Section 4 extends the analysis to Swedish firms. Finally, Section 5 summarizes and concludes the study.

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2. THE EXPORT PERFORMANCE OF THE DEVELOPING COUNTRIES

Manufactured exports from the developing countries have expanded at rapid rates in recent decades. Between 1966 and 1982,(1) the LDCs' share in world exports of manufactures increased from 9.6 to 13.1 per cent, or by 36 per cent (see Table 1). However, the export performance was far from uniform among the countries, and only a few of them account for the vaste majority of developing countries' industrial exports. While the four Asian NICs (Hong Kong, Korea, Singapore and Taiwan) expanded tremendously, Latin America and Africa lost export shares. The Asian NICs multiplied their export shares 3.8 times between 1966 and 1982, while the share of Latin America as a group declined 12 per cent over the same period. Within Latin America, Brazil was a notable exception. Brazil increased its share by 45 per cent.

The increasing importance of developing countries as exporters of manufactures was also reflected within broad industry groups. As Table 2 shows, the developing countries as a group increased their shares of world exports substantially in all manufacturing industries, excepts foods and metals. Their share in electrical machinery rose by more than 5 times, it doubled in other manufacturing '6 which includes textiles) and it rose (although from a very low base) by 6.5 and 4.8 times in transport equipment and non-electrical machinery respectively.

Among the individual developing countries, there were, again, some notable differences (see Table 3). The Asian NICs increased their shares substantially in all broad industry groups. By 1982, their collective share of world exports of electrical machinery and 'other manufacturing' had reached no less than 10.3 and 12.1 per cent. (The export shares of the United States in these industries, were 15.8 and 10.4 per cent respectively in the same year(2).

Latin America, on the other hand lost shares in both foods and metals. In 1982, Latin America as a whole exported less than the four Asian NICs in every manufacturing industry except foods. The differences were particularly large in electrical machinery, where the Asian countries' share of world exports was 15 times that of Latin America, and in other manufacturing, where it was almost 6 times a large. If one excludes Brazil, which did much better than the rest of Latin America, the differences become even bigger.

In sum, manufactured exports from the developing countries as a group grew rapidly between 1966 and 1982. They increased their share of world exports significantly in all industry group, except for foods and metals. Among the developing countries, however, there were big differences in export performance. Hong Kong, Korea, Singapore, Taiwan and Brazil were the really successful exporters. By the end of the period, these countries exported more manufactured goods than all other developing countries together. The four Asian countries, as a group, exported more of 'other manufacturing', mainly textiles and apparel, than the United States, and almost as much electrical machinery. Apart from Brazil, Latin America, on the other hand, lost ground, and Africa almost disappeared as an exporter of manufactures.

3. U.S. MULTINATIONALS AND THIRD WORLD EXPORTS

In order to get a quantitative assessment of the importance of foreign-owned multinationals in manufactured exports from the Third World, we first examine the export behaviour of U.S. majority-owned foreign affiliates (MOFAs)(3). As Table 4 shows, U.S. majority-owned affiliates in the LDCs have steadily increased their shares in world exports since 1966, notably in the two machinery industries and in transport equipment. The export shares declined only in foods over this period.

We can compare the changes in export performance of the U.S. majority-owned affiliates with those of their host developing countries by taking ratios of changes in affiliates' shares of world exports to changes in world shares of the countries in which they are located (see Table 5). If this ratio equals unity, the percentage changes in export shares of U.S. affiliates and of their competitors in the host country have been the same.

Over the 16 years period U.S. affiliates' exports of manufactured goods increased relative to those od the host developing countries. Both gained in export shares in most industry groups (viz chemicals, machinery, transport equipment, and other manufacturing), but the increase for U.S. affiliates was greater than that for the countries themselves in machinery and transport equipment.(4)

In the metal industry the developing countries declined in competitiveness while the U.S. affiliates increased, and in the food industry, they both lost ground, although the decline of the U.S. affiliates was greater.

The evidence for the four Asian NICs is worth nothing. Although the U.S. affiliates located there tripled their share of world exports, the countries themselves increased their shares at about the same rate, or even somewhat more.(5)

Domestically owned and non U.S. foreign-owned firms did better as exporters relatively to the U.S. MOFAs in the 5 years from 1977 to 1982 than in the 16 years from 1966 to 1982. The multinationals may have demonstrated potential export markets for their local competitors and in that way may have played an indirect role in expanding exports from Third World companies. The local firms' gains may also reflect the impact of foreign firms on the productivity of indigenous firms. The evidence from Blomström and Persson (1983) and Blomström (1986) suggests that there is a positive relation across industries between the efficiency of domestic firms and foreign participation and that there exist spillover efficiency benefits from foreign direct investment. Such effects may enable local firms to compete, not only at home, but also on the world market.

This comparison does no quantify the affiliates' contribution to host country exports. In order to see whether the growth in affiliates' exports was significant for the countries' export performance the changes in the value of their export are compared with the changes in the value of host-countries' exports. This is done in Table 6.

The growth of U.S. majority-owned manufacturing affiliates' exports accounted for only 8 pper cent of the growth in LDC exports of manufactures between 1966 an 1982, but there are big differences among industries and countries. The affiliates' contribution was largest in the Latin American countries, where they accounted for almost 14 per cent of the region's export growth in manufactures (in Brazil 15 per cent and in Mexico almost 40 per cent). They played a less important role in the Asian NICs. In Taiwan and Korea they played almost no role at all from 1977 till 1982,

except in the electrical machinery industry. In Korea and Mexico we may, however, underestimate the role of U.S. affiliates, because, as we saw above, U.S. investment there involves minority participation to large extent.

U.S. multinationals have taken over an increasing part of manufactured exports from Latin America over the years, while their role in the Asian NICs has declined (Table7). U.S. firms do not play an overwhelmingly important role in Third World exports, but their share has increased significantly since the mid-1960s. Their share of LDCs exports of manufactures was 7.6 per cent in 1982, and in some countries it reached substantially more. In Latin America they increased their share from 7.6 to 13.00 per cent between 1966 and 1982 (in Brazil from 3.3 to 14.1 per cent, and in Mexico from 9.5 to 33.9 per cent). In the Asian NICs the U.S. stake was relatively high only in Singapore (14.5 per cent in 1982), but it fell in all these countries between 1977 and 1982.

U.S. firms play a more important role as exporters in chemicals, in the two machinery industries, and in transport equipment, than they do in the other industries (Table 8). The shares of U.S. MOFAs in the non-electrical and electrical machinery exports were particularly high (18.8 and 34.8 per cent respectively in 1982), as we might expect from the relatively technology and marketing intensive nature of these industries and the importance of these characteristics as determinant of foreign direct investment.

This general picture also carries over to the individual countries and regions. As table 9 shows, more than 80 per cent of Latin American electrical machinery exports in 1982 were by U.S. majority-owned affiliates. The U.S. shares of Latin American exports in chemicals, non-electrical machinery and transport equipment were also high (34, 32 and 24 per cent respectively in 1982), particularly considering that we expect to underestimate the role of U.S. firms in Mexico. In developing Asia, U.S. firms played an important role only in electrical machinery, where their share was 33 per cent.

The findings so far can be summarized as follows.U.S. majority-owned affiliates account for a rather moderate proportion (7.6 per cent in 1982) of manufactured exports from the LDCs, but their share has increased significantly since the mid-1960s. U.S. affiliates in developing countries have more than doubled their shares of world manufactured exports between 1966 and 1982. The affiliates in Latin America increased their shares of world exports by 50 per cent, while those in the Asian NICs tripled their shares.

Latin America and the Asian NICs as regions, however, performed very differently from each other. Latin America lost export shares. This suggests, that without the U.S. affiliates, the Latin American story would have been even worse than it was. The Asian NICs, on the other hand, not only increased their share of world manufactured exports, but they did so at about the same rate as the U.S. affiliates located there. This suggests that there are possibilities of fast export expansion without equity participation by foreign-owned multinationals, and that direct investment is by no means necessary for successful export- oriented manufacturing. On the other hand, given the fact that the multinationals were exporting relatively more in the beginning than in the end of the period, it may be the case that foreign investment har various 'demonstration effects'. By demonstrating potential export mar-

kets for local firms, foreign owned firms may play an important indirect role in expanding exports from the Third World. Foreign investment may also give rise to spillover efficiency which increases productivity in domestically owned firms and makes them more competitive on the world market.

The only earlier studies which has estimated the stake of U.S. companies in manufactured exports from the LDCs is Nayyar (1978). He found that the share of U.S. MOFAs in LDC manufactured exports fell between 1966 and 1974 from 10.6 to 8.7 per cent. The declining importance of multinational corporations in manufactured exports was particularly large in Latin America, where the share fell from 37.8 to 19.2 over the 8 year period. The difference in the definition of manufactures and differences in the data are the explanation for the different findings.(6)

4. EXPORTS OF MANUFACTURES FROM SOME LDCs BY SWEDISH MULTINATIONALS

Given the limited absolute size of Swedish production in developing countries, the analysis of Swedish affiliates' export performance is less detailed than that for U.S. firms. Swedish investment in the Third World is to a large extent directed towards a few Latin American countries. The analysis therefore concentrates on affiliates located there, and compares the export propensities of Swedish and U.S. affiliates in order to see wheter they affect the developing countries' export flows differently.

The Swedish stake in exports from Latin America, Brazil and Mexico is shown in Table 10. Although Swedish affiliates account for a relatively minor role in these countries exports, we see a clear trend of increasing importance (except for Mexico). This suggests that the phenomenon of increasing exports by foreign-owned affiliates is not limited to American multinationals.

U.S. affiliates were more export oriented than Swedish affiliates in almost all broad industry groups in the developing countries (Table 11).

U.S. firms in developing countries are much more export oriented than Swedish firms, mainly because U.S. and Swedish multinationals appear in different countries and industries. However, if we compare Swedish and U.S. affiliates in the same industries and countries (we were only able to do such a comparison for Brazil and Mexico), the differences do not disappear. One possible explanation of this finding is to be found in the size differences between U.S. and Swedish multinationals. The U.S. firms are generally much larger, and may therefore have greater access to distribution channels and international marketing skills than do the smaller swedish firms.(7) The importance of size of the firms is, however, difficult to measure in our statistical material.

In sum, U.S. multinationals use the developing countries as export platforms to a larger extent than Swedish MNCs do. Swedish firms, in their choice of both countries and industries, are mainly engaged in import substitution. Even within the same industries and countries, U.S. affiliates are more export oriented than the Swedish affiliates, although the latter have become more export oriented over the years.

5. SUMMARY AND CONCLUSIONS

Manufactured exports from the developing countries grew rapidly between 1966 and 1982. The developing countries as a group increased their share of world exports significantly in all industry groups, except for the foods and metals. Among the developing countries, Hong Kong, Korea, Singapore, Taiwan and Brazil were the most successful. By the end of the period, these countries exported more manufactured goods than all other developing countries together. The four Asian NICs, as a group, exported more of 'other manufacturing' (mainly textiles and apparel) than the United States , and almost as much electrical machinery. Other Asian countries also increased their export shares, but to a lesser extent. Apart from Brazil, Latin America, on the other hand, lost ground, and Africa almost disappeared as an exporter of manufactures.

U.S. majority-owned manufacturing affiliates in the developing countries increased their shares of world manufactured exports significantly over the 16 years after 1966, notably in the electrical and non electrical machinery industries and in transport equipment. Their exports grew faster than those ot their host developing countries as a group, so that their share of LDCs' export of manufactures increased from 4.6 to 7.6 per cent over the period.

The importance of U.S. affiliates as exporters was particularly notable in Latin America. There, U.S. affiliates increased their share of world exports by 50 per cent between 1966 and 1982, while, at the same time, Latin America lost export shares. This suggests that without the U.S. multinationals, the Latin American story would have been even worse than it was.

U.S. affiliates in the four Asian NICs increased their manufactured exports even more rapidly than U.S. affiliates in Latin America did, but that was still not enough to keep up with their host Asian countries. In 1982, U.S. majority-owned manufacturing affiliates accounted for only 5.6 per cent in the Asian NICs' manufactured exports. This suggests that there are possibilities of fast export expansion without equity particpation by foreign owned multinationals, and that direct investment is by no means necessary for successful export-oriented manufacturing. However, foreign retailers may still have played an important role in opening markets, although this cannot be judged from our study.

For comparative purposes, we extended the analysis to include multinational corporations from Sweden. This is the only country outside the U.S. that provide comprehensive data of foreign trade of their MNCss, and, by including them, we get an important check as to whether the trends for U.S. firms carry over the firms from other countries.

Given that Swedish foreign investment in the Third World is to a large extent directed towards a few Latin American countries, we concentrate the analysis on the affiliates located there. In general, the basic story was quite similar to the one for the U.S. affiliates. Althouh Swedish affiliates account for a relatively minor role in Latin American manufactured exports, there was a clear trend of increasing importance. This suggests that the evidence on U.S. affiliates is not exclusively limited to American multinationals.

The comparison also showed a notable difference between Swedish and U.S. MNCs. U.S. multinationals seem to use developing countries as export platforms to

a larger extent than Swedish MNCs. We found that Swedish firms, both in their choice of countries and industries, mainly were looking for import substitution. Even within the same industries and countries, U.S,. affiliates were more export-oriented than Swedish affiliates. The reason for this is unclear, but one may speculate whether it has to do with differences in size between the MNCs. The U.S. firms are, on average, larger than the Swedish ones, and may therefore have more labor-intensive component specialization within the firms or larger sales network abroad. Further research into this is desirable.

Even though the available data preclude a detailed analysis of the role of foreign MNCs in different types of exports, we can still speculate on their role. The evidence from the generally inward-looking Latin America suggests that foreign affiliates can play an important role in converting import-substituting industries to exporting. The reason for this is unclear, but it may be because MNCs have become a significant source of political pressure for lowering protection, both in their home countries, as well as among developing countries. It may also be a result of increasing export requirements on the parts on the MNCs. Many Latin American governments introduced such requirements for foreign owned firms during the 1970's.

The industries in which the foreign affiliates increased their exports most rapidly were the two machinery industries and transport equipment. These industries are relatively technology and marketing intensive, and they are characterized by significant labor-intensive component production. Thus, we expect the role of MNCs in exports hee to be important.

In 'other manufacturing', on the other hand, the LDCs seem to be doing pretty well on their own. This industry group includes a lot of local raw material processing (such as pulp and paper) and labor-intensive final product exports (such as clothing). Thus, if these avenues for the expansion of manufactured exports are choosen, there seems to be less need for using multinationals to increase exports.

In general, we conclude that multinational corporations have played an important role in the growth of manufactured exports in many developing countries, in the sense that their exports grew faster than those of their host countries. There was no indication that U.S. and Swedish affiliates inhibited the growth of host-countries exports, and some evidence that they promoted the growth of exports.

NOTES

(1) The availability of data on foreign affiliate exports explains why we have chosen this period for our study. As we explain in Appendix A, the data on U.S. investment abroad are mainly available for 1966, 1977 and 1982.

(2) Lipsey and Kravis, 1987.

(3) The available data permit analysis of these issues only for U.S. majority-owned foreign affiliates. For two reasons we believe, however, that this, at least in general, is not to much of a problem. Over 70 per cent of the sales and employmet of U.S. subsidiaries in developing countries were in majority-owned affiliates in 1982, and minority-owned affiliates were relatively important only in Korea and Mexico (see Blomström, 1987). Furthermore, it has been shown that MNC parents hold signifi-

cantly higher fractions of equity in export-oriented - than in localmarket oriented subsidiaries (Reuber,et al., 1973). By omitting the minority-owned subsidiaries we therefore expect to underestimate the role of U.S. multinationals significantly only in Korea's and Mexico's manufactured exports.

(4) For details, see Blomström, 1987.

(5) See Appendix, Table 2

(6) Nayyar's data on affiliate exports seem incorrect in the light of the published 1977 and 1982 surveys of U.S. foreign investment, published after he wrote. (Compare, for instance, the big difference between Nayyar's and our figures for the share of U.S. MOFAs in Latin American exports). The surveys are presumably quite complete censuses of U.S. direct investment abroad, and thus more reliable than the annual data available from samples.

(7) Average consolidate sales of U.S. manufacturing MNCs investing in Brazil or Mexico were S 1,168 million in 1972, which is the only year for which data are available for the moment (Lipsey, Kravis, and O' Connor, 1983). Comparable figures for Swedish MNCs investing in Brazil or Mexico are not available for 1972, but in 1970, their average consolidated sales were S273 millions.

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The data on U.S. direct investment abroad are from the 1966, 1977 and 1982 surveys on U.S. multinational enterprises (U.S. Department of Commerce, 1975. 1981 and 1985). These are presumably quite complete censuses of U.S. direct investment abroad.

The data on Swedish foreign investment come from the Insustriens Utredningsinstitut (IUI) of Stockholm. The IUI has completed four surveys of Swedish multinationals covering 1965, 1979, 1974, and 1978. In general, the Swedish and U.S. surveys are comparable.

Host-country exports, by the industry classification used in the U.S. and Swedish direct investment surveys, were taken from the United Nations trade tapes and converted from the SITC to this industry classification. (For details of this conversion see Blomström, Kravis and Lipsey, 1987).

TABLE 1
Shares of World Exports of Manufactures
(Percentage)

	1966	1977	1982
Developing Countries	9.59	11.89	13.05
Latin America	3.65	3.35	3.21
Brazil	.92	1.22	1.33
Mexico	.40	.33	.27
Other Latin America	2.33	1.80	1.61
Africa	1.68	1.25	.52
Middle East	.12	.46	.75
Asia	4.07	6.52	8.37
Hong Kong	.75	1.03	1.20
Korea	.14	1.36	1.88
Singapore	.38	.62	1.06
Taiwan	.30	1.24	1.88
Other Asia	2.50	2.27	2.35
Developing, excl. 4 Asia	8.02	7.64	7.03
Developing, excl. 4 Asia and Brazil	7.10	6.42	5.76

SOURCE: UN Trape Tapes. For explanation of data see Appendix A.

TABLE 2
Developing Countries' Shares of World Exports of Manufactures by Industry, 1966-82
(Percentage)

Year	Total Mfg.	Foods	Chemicals	Metals	Machinery		Transport Equipment	Other Mfg.
					Non-Electrical	Electrical		
1966	9.59	33.72	3.11	11.79	.71	2.18	.65	10.19
1977	11.89	35.92	5.42	10.16	2.24	10.09	2.37	17.34
1982	13.05	28.75	8.25	11.60	4.09	13.58	4.85	20.22

Source: UN trade Tapes

TABLE 3
Developing Countries' Shares of World Exports of Manufactures by Area, Country and Industry Group, 1966-82
(Percentage)

Year	Total Mfg.	Foods	Chemicals	Metals	Machinery			Transport Equipment	Other Mfg.
					Total	Non-Electrical	Electrical		
				LATIN AMERICA					
1966	3.65	17.43	1.68	5.49	.24	.25	.24	.09	1.13
1982	3.21	14.35	2.26	4.14	.98	1.19	.67	1.48	2.09
				BRAZIL					
1966	.92	5.75	.31	.11	.11	.12	.09	.03	.34
1982	1.33	5.89	.72	1.08	.56	.63	.45	.95	.93
				MEXICO					
1966	.40	1.25	.54	.65	.05	.04	.07	.03	.25
1982	.27	.86	.52	.16	.08	.12	.02	.28	.15
				HONG KONG					
1966	.75	.16	.07	.19	.40	.03	1.17	.03	2.29
1982	1.20	.18	.10	.23	.99	.33	1.97	.02	3.59
				KOREA					
1966	.14	.18	.01	.07	.03	.01	.07	.01	.37
1982	1.88	.88	.57	2.65	1.03	.29	2.12	1.56	3.54
				SINGAPORE					
1966	.38	.93	.29	.22	.20	.17	.25	.29	.43
1982	1.06	1.03	1.52	.86	1.74	.91	2.95	.29	.83
				TAIWAN					
1966	.30	.83	.16	.10	.12	.06	.24	.01	.49
1982	1.88	.95	.80	1.03	1.79	.76	3.30	.58	4.14

(a) Hong Kong, Korea, Singapore and Taiwan
Source: UN Trade Tapes.

TABLE 4
Shares in World Exports of U.S. MOFAs in Developing Countries
(Percentage)

Year	Total Mfg.	Foods	Chemicals	Metals	Machinery		Transport Equip-ment	Other Mfg.
					Non-Elec-trical	Elec-trical		
1966	.44	1.51	.72	.36	.18		.04	.27
1977	.77	.88	.60	.48	.43	3.72	.33	.37
1982	1.00	.77	.98	.43	.77	4.73	.48	.41

Source: Appendix Table 1

TABLE 5
Change in U.S. MOFAs Shares of World Exports Relative to Change in Host-Country Shares

	Total Mfg.	Foods	Chemicals	Metals	Machinery Total	Machinery Non-Elect.	Machinery Elect.	Transport Equipment	Other Mfg.
					1982/1966				
All LDCs	1.67	.60	.51	1.21	1.99	–	–	1.61	.77
Latin Am.	1.70	.67	.95	11.11	1.88	–	–	.53	1.01
Brazil	4.37	4.69	12.07	–	1.51	–	–	–	–
Mexico	3.31	.26	.83	–	8.75	–	–	–	–
Asian NICs[a]	.96	–	–	–	1.59	–	–	–	–
					1982/1977				
Brazil	1.25	1.29	2.53	–	.93	–	–	–	–
Mexico	1.57	1.33	.62	–	2.40	–	–	–	–
H. Kong	.85	–	–	–	–	.33	.93	–	–
Korea	.72	–	–	–	–	–	–	–	–
Singap.	.80	–	–	–	–	1.31	.57	–	–
Taiwan	.66	–	–	–	–	–	.73	–	–

(a) Hong Kong, Korea, Singapore and Taiwan
(-) not available
Source: Appendix Table 2 and 3

TABLE 6
Changes in U.S. MOFAs Exports as Per Cent of Changes in Host-Country Exports

	Total Mfg.	Foods	Chemicals	Metals	Machinery Total	Machinery Non-Elect.	Machinery Elect.	Transport Equip.	Other Mfg.
					1982/1966				
All LDCs	7.9	2.3	11.4	3.8	30.2	–	–	9.9	2.0
Latin Amer.	13.7	4.0	33.4	7.5	47.2	–	–	23.7	12.4
Brazil	15.1	8.3	41.2	–	41.0	–	–	–	–
Mexico	39.0	.4	14.7	–	–	–	–	–	–
Asian NICs[a]	6.5	–	2.9	–	–	–	–	4.6-5	–
					1982/1977				
Hong Kong	4.6	–	40.0	–	-	5-7	24.8	0	–
Korea	1.1	–	0	0	-	-3.8	12-16	–	–
Singapore	12.0	.4	2.3	–	-	34-35	17.0	0	–
Taiwan	2.7	0	-5.0	–	-	–	14.4	–	–

(a) Hong Kong, Korea, Singapore and Taiwan
Source: Blomström (1987), Appendix Tables B1-B8.

TABLE 7
Shares of U.S. MOFAs in LDCs Exports of Manufactures, by Country and Region, 1966, 1977, and 1982
(Percentage)

Host Countries	1966	1977	1982
Total LDCs	4.6	6.5	7.6
Latin America	7.6	9.8	13.0
Brazil	3.3	11.4	14.1
Mexico	9.5	20.5	33.9
Asian NICs	5.9	7.0	5.6
Hong Kong	-	8.1	6.5
Korea	-	1.4	1.2
Singapore	-	18.7	14.5
Taiwan	-	6.2	4.2

(a) Hong Kong, Korea, Singapore and Taiwan
(-) not available
Source: Blomström (1987), Appendix Table B-1 le B-1.

TABLE 8
Shares of U.S. MOFAs in LDC Exports of Manufactures, by industry, 1966, 1977 and 1982
(Percentage)

Year	Total Mfg.	Foods	Chemicals	Metals	Machinery			Transport Equipment	Other Mfg.
					Total	Non-Elec.	Elec.		
1966	4.6	4.5	23.0	3.1	15.1	--	--	6.9	2.7
1977	6.5	2.4	11.1	4.8	20.8	19.3	36.9	14.1	2.1
1982	7.6	2.7	11.9	3.7	29.9	18.8	34.8	9.8	2.0

(-) not available
Source: Blomström (1987), Appendix Table B1-B8

TABLE 9
Shares of U.S. MOFAs in LDC Exports of Manufactures, by Country and Industry, 1966 and 1982
(Percentage)

Year	Total Mfg.	Foods	Chemicals	Metals	Machinery			Transport Equipment	Other Mfg.
					Total	Non-Elect.	Elect.		
					LATIN AMERICA				
1966	7.6	6.8	36.0	.5	25.8	–	–	47.1	12.5
1982	13.0	4.5	34.1	6.2	45.7	32.4	83.4	23.9	12.4
					BRAZIL				
1966	3.3	1.6	4.9	–	23.3	–	–	16.7	–
1982	14.1	7.3	39.7	–	–	40.5	40.9	–	–
					MEXICO				
1966	9.5	8.5	19.4	.8	28.6	–	–	–	–
1982	33.9	2.2	15.2	–	–	31.2	–	63.5	–
					DEVELOPING ASIA[a]				
1966	3.9	3.3	6.8-12.8	13.6	13.2	–	–	0	1.7
1982	6.6-6.7	–	3.9	.6	–	14.5-15.4	33.0	4.5	.7
					HONG KONG				
1977	8.1	–	61.5	–	–	39.4-48.6	29.1	–	–
1982	6.5	–	50.8	–	–	13.9	27.3	–	–
					KOREA				
1977	1.4	–	.4	0	–	<11.5	5.4-10.4	0	–
1982	1.2	0	0	0	–	0	11.2	–	
					SINGAPORE				
1977	18.7	.7	.6	–	–	23.0-25.4	54.3	–	–
1982	14.5	.6	2.0	.7	–	31.6	30.9	37.5	
					TAIWAN				
1977	6.2	–	22.9	0	–	–	27.7	–	–
1982	4.2	0	1.1	–	–	<4.2	20.3	–	–

(a) Excluding the Middle East
(-) not available
Source: Blomström (1987)

TABLE 10
Share of Swedish MOFAs in Exports of Manufactures by Latin America, Brazil and Mexico
(Percentage)

	1965	1970	1974	1978
Latin America	.01	.09	.13	.28
Brazil	.02	.08	.36	.60
Mexico	.11	.04	.07	.04

Source: Blomström, Kravis and Lipsey (1987)

TABLE 11
Exports as Per Cent of Total Sales for U.S. and Swedish MOFAs (1977 and 1978 resp.), by Industry

	Developing		Latin Amer.		Brazil		Mexico	
	U.S.	Sw	U.S.	Sw	U.S.	Sw	U.S.	Sw
Foods	15.1	(*)	12.4	(*)	20.6	(*)	2.3	(*)
Chemicals	.1	.2	.1	.2	1.4	.2	7.1	0
Metals	27.2	2.6	19.4	3.2	6.1	2.9	10.4	2.3
Non-Elect. Machinery	19.4	11.0	13.2	9.4	10.9	10.6	12.2	0
Electrical Machinery	53.7	2.4	17.2	1.9	15.5	2.4	22.0	.9
Transport Equipment	7.5	13.5	7.3	14.3	9.2	13.1	13.8	(*)
Other Manufacturing	12.2	24.2	7.0	2.1	4.8	2.0	11.7	7.7
Total Manufacturing	18.1	6.3	9.7	5.8	8.9	6.9	10.4	.9

(*) No Swedish investment
Source: Blomström (1987)

APPENDIX TABLE 1
Shares (%) in World Exports of U.S. MOFAs in Different Regions, 1966, 1977, and 1982

Year	Total Mfg.	Foods	Chemicals	Metals	Machinery		Transport Equipment	Other Mfg.
					Non-Electrical	Electrical		
All Developing Countries								
1966	.44	1.51	.72	.36	---	.18	---	.04	.27
1977	.77	.88	.60	.48	.43	1.72	3.72	.33	.37
1982	1.00	.77	.98	.43	.77	2.38	4.73	.48	.41
Latin America								
1966	.28	1.18	.60	.03	---	.06	---	.04	.14
1977	.33	.61	.38	.30	.25	.36	.54	.31	.17
1982	.42	.65	.77	.25	.38	.46	.56	.35	.26
Brazil								
1966	.03	.09	.01	---	---	.03	---	0	---
1977	.14	.39	.04	.04	.15	.20	.27	.16	.06
1982	.19	.43	.28	---	.25	.23	.19	---	---
Mexico								
1966	.04	.11	.10	0	---	.01	---	---	---
1977	.07	.02	.10	.03	.03	.08	.16	.11	.06
1982	.09	.02	.08	---	.04	.14	.28	.18	---
Asian NICs[a]								
1966	<.09	<.03	---	---	---	<.10	---	0	---
1977	.29	<.02	.12	---	.15	---	2.42	0	0
1982	.33	---	.08	<.04	.37	1.17	2.36	.11	---
Hong Kong								
1977	.08	---	.05	---	.05		.57	0	---
1982	.08	---	.05	---	.05		.54	0	---
Korea								
1977	.02	---	0	0	0		.1 -.2	0	---
1982	.02	0	0	0	0		.24	0	0
Singapore								
1977	.11	.01	0	---	.10		1.02	0	---
1982	.15	0	.03	.01	.29		.91	.11	0
Taiwan								
1977	.08	---	.07	0	---		.69	0	---
1982	.08	0	0	---	<.03		.67	0	---

(a) Hong Kong, Korea, Singapore, and Taiwan
(-) not available
Source: Trade data from UN tapes; MOFA exports from U.S. Dept. of Commerce (1975), (1981), and (1985). For detailed calculations see Blomström (1987), Appendix Tables B1-B8.

APENDIX TABLE 2
Change in U.S. MOFAs Share of World of Manufactures

Host Country	Total Mfg.	Foods	Chemicals	Metals	Machinery		Transport Equipment	Other Mfg.
					Non-Electrical	Electrical		
				1982/1966				
All LDCs	2.27	.51	1.36	1.19	13.22		12.0	1.52
Latin America	1.50	.55	1.28	8.33	7.67		8.75	1.86
Brazil	6.63	4.78	28.00	—	7.67		—	—
Mexico	2.25	.18	.80	—	14.00		—	—
Asian NICs[a]	3.67	—	—	—	11.80		—	—
				1982/1977[b]				
Hong Kong	1.00	—	1.00	—	1.00	.95	—	—
Korea	1.00	—	—	—	—	—	—	—
Singapore	1.36	—	—	—	2.90	.89	—	—
Taiwan	1.00	—	—	—	—	.97	1.00	—

(a) Hong Kong, Korea, Singapore and Taiwan
(b) There are no data available for individual Asian NICs for 1966.
Source: Appendix Table 1

APENDIX TABLE 3
Changes in Developing Countries' Shares of World Exports of Manufactures

	Total Mfg.	Foods	Chemicals	Metals	Machinery			Transport Equipment	Other Mfg.
					Non-Electrical		Electrical		
				1982/1966					
All LDCs	1.36	.85	2.65	.98	5.76	6.63	6.23	7.46	1.98
Latin America	.88	.82	1.35	.75	4.76	4.08	2.79	16.44	1.85
Brazil	1.45	1.02	2.32	9.82	5.25	5.09	5.00	31.67	2.74
Mexico	.68	.69	.96	.25	3.00	1.60	.29	9.33	.60
Asian NICs[a]	3.83	1.45	5.64	8.22	8.48	7.41	5.98	7.21	3.38
				1982/1977					
Hong Kong	1.17	1.06	1.25	1.10	3.00		1.02	2.00	1.15
Korea	1.38	.78	1.84	2.39	2.64		1.27	3.00	1.16
Singapore	1.71	1.18	3.53	2.10	2.22		1.57	1.21	1.36
Taiwan	1.52	.85	2.58	2.64	2.11		1.32	2.15	1.45

(a) Hong Kong, Korea, Singapore and Taiwan
Source: UN Trade Tapes. For detailed calculations, see Blomström (1987), Text Table 3.