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Export processing zones in developing countries: Results of a new survey

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1. Introductory remarks

The phenomenon of export-processing zones (EPZs) is part of the much broader context of structural changes in global economic development in the 1970s and 1980s. A few purely factual indications on this broader context are therefore necessary in order to set the stage for the following study which focuses on EPZs.

Despite marked national and regional differences, as well as variations in the pace of change, these one-and-a-half decades have seen a truly remarkable expansion in both manufacturing production and even more in manufactured exports by the developing countries.

Between 1973 and 1981, the developing countries' share of global value-added in the manufacturing industry rose from 8.8 per cent to 10,6 per cent compared with a fall from 72,2 per cent to 65.2 per cent over the same period for the Western industrialised countries (cf. table 1). Some individual developing countries now account for a larger share of global value-added in manufacturing than many traditional industrial countries. This applies, for example, to India, the Republic of Korea, Brasil and Mexico. Brasil's manufacturing output now exceeds that of the United Kingdom. Whilst Brasil's share of global value-added in manufacturing rose from 2 per cent to slightly over 2.4 per cent between 1973 and 1981, the United Kingdom share shrank from 4.2 per cent to slightly below 2,4 per cent.

The share of value-added in manufacturing in total developing country Gross Domestic Product rose slightly between 1973 and 1983, compared with a slightly more marked shift in the opposite direction in the industrialised countries. In a number of developing countries, the contribution of value-added in manufacture to GDP now matches that of many Western industrialised countries.

However, the performance of different countries and regions exhibits marked contrasts. To take just one example, whereas the average rate of growth of the manufacturing industry was almost equal for developing America and developing Asia during the 1970s (6.5 per cent per year compared with 7.4 per cent per year), a vast difference opened up in the 1980s (-0.9 per cent per year as compared with +8.7 per cent per year for 1980-84).

Of course, share of global value-added does not provide any qualitative indication of the level of technical development in manufacturing, its structure and degree of complexity, its capacity for autonomous reproduction and the extent to which industry is accessible to national control.

Similar observations apply to exports of manufactured goods from the developing countries. After decades of gentle decline (comparable statistics are available from 1928 onwards), exports of manufactures originating in the developing countries began to rise as a percentage of corresponding world exports in the late 1960s (cf. table 2). Developing countries' share of world exports of manufactures almost trebled between 1965 and 1984 (from 4.6 per cent in 1965 to 13.1 per cent in 1984). Almost half of world clothing exports and more than a quarter of world textile exports are now accounted for by developing countries. Even if their share of machinery exports in the corresponding world total is still below 10 per cent, the developing countries' export performance in this core area of manufactured goods has improved spectacularly over the last two decades.

Developing countries' manufactured exports are heavily concentrated on a few countries, however. Three developing economies in Asia account between them for no less than 50 per cent. As for the product structure of developing countries' exports, by 1984 the share of manufactured goods had risen to 29.7 per cent. Excluding fuels, manufactures now account for a higher percentage of developing country exports than primary products. The image of the Third World predominantly as a supplier of raw materials is no longer in accord with reality.

However, this encouraging picture of advancing industrialisation in developing countries requires some qualification. A high percentage of manufactured goods exported by developing countries consists of the products of offshore assembly, semi-manufacture, etc., with only very weak forward linkages within local or other Third World economies (except as suppliers of low-wage, docile labour). The most exemplary case of this type of export-orientated production is represented by the EPZs. Irrespective of their quantitative significance, it is their paradigmatic character for this type of production which makes their study both an urgent and a fruitful task.

Table 1: Share of economic groupings and selected countries in world manufacturing value-added, at constant (1975) prices, 1973 and 1981

	Percentage	
	1973	1981
All countries or areas (excluding China)	100	100
Centrally planned economies	19.09	24.17
Developed market economies	72.15	65.21
Developing countries	8.76	10.61
Centrally planned economies		
Albania	0.02	0.05
Bulgaria	0.29	0.43
Czechoslovakia	1.14	1.29
German Democratic Republic	1.75	2.17
Hungary	0.44	0.52
Poland	1.79	1.79
Romania	0.77	1.29
USSR	12.89	16.63
Developed market economies		
Austria	0.66	0.64
Canada	2.18	1.97
France	6.03	5.38
Germany, Federal Republic of	9.93	8.63
Italy	3.78	3.44
Japan	9.43	10.49
Netherlands	1.52	1.33
Portugal	0.32	0.33
Spain	1.58	1.41
Switzerland	1.31	1.06
United Kingdom	4.18	2.37
United States	24.52	21.93
(Yugoslavia)	0.51	0.66
Developing countries		
Algeria	0.07	0.09
Egypt	0.12	0.18
Morocco	0.08	0.11
Mauritius	-	0.01
Nigeria	0.10	0.18
Sudan	0.04	0.02
Tunisia	0.02	0.04
Zimbabwe	0.05	0.05
Bangladesh	0.02	0.04
Burma	0.02	0.02
Hong Kong	0.14	0.24
India	0.79	0.91
Indonesia	0.12	0.29
Malaysia	0.09	0.13
Philippines	0.22	0.28
Republic of Korea	0.25	0.52
Saudi Arabia	0.13	0.15
Singapore	0.08	0.13
Sri Lanka	0.05	0.05
Thailand	0.13	0.23
Turkey	0.37	0.39

	Percentage	
	1973	1981
Argentina	0.74	0.51
Brazil	1.99	2.41
Chile	0.14	0.12
Colombia	0.16	0.18
Dominican Republic	0.04	0.05
Mexico	1.08	1.47
Peru	0.20	0.20
Puerto Rico	0.16	0.18
Venezuela	0.27	0.26

Source: UNIDO: Handbook of industrial statistics, 1984 (New York, 1985).

Appendix: Share of economic groupings (excluding China) in world manufacturing value-added, at constant (1975) prices, 1963, 1973, 1981, 1982

	Percentage			
	1963	1973	1981[a]	1982[b]
Centrally planned economies	14.6	18.7	24.0	25.0
Developed market economies	77.3	72.0	65.1	64.0
Developing countries	8.1	9.3	10.9	11.0

[a] Preliminary figures.

[b] Estimates.

Source: UNIDO: Industry in changing world (New York, 1983).

Table 2: Developing countries' percentage share of world exports of selected commodity classes: 1955, 1960, 1965, 1970, 1975, 1980, 1984

	1955	1960	1965	1970	1975	1980	1984
Total trade	25.4	21.4	19.6	17.6	24.0	27.9	24.6
Primary products	40.5	36.6	35.5	34.5	44.3	48.6	40.9
Food	42.5	37.0	34.0	31.8	28.9	28.5	30.8
Raw materials	38.8	34.8	32.1	30.5	27.7	28.1	26.5
Fuels	58.3	60.5	63.1	63.5	73.8	72.3	57.4
Iron and steel, non-ferrous metals	15.8	12.3	12.9	14.3	9.1	12.1	15.3
Manufactures	4.7	4.2	4.6	5.2	6.7	9.4	13.1
Chemicals	5.1	4.0	4.2	4.6	5.9	6.3	7.7
Machinery and electrical equipment	0.7	0.7	0.9	1.8	3.1	5.9	9.8
Passenger road vehicles and their parts			0.7	0.5	1.4	1.7	2.2
Textiles	14.0	...	16.3	15.4	17.5	22.1	27.0
Clothing	10.0	...	...	21.1	32.0	36.5	47.6
Other manufactures	6.5	...	...	7.6	9.1	11.9	16.7

Sources: UNCTAD: Handbook of international trade and development statistics, 1972 (New York, 1972) (for 1955 and 1960). UN: Monthly bulletin of statistics, 3/1971 and 5/1971 (for 1965), 5/1982 (for 1975), 5/1985 (for 1970), 5/1986 for 1980 and 1984). GATT: Networks of world trade by areas and commodity classes, 1955-76, Geneva, 1978 (for 1955): authors' calculations.

Commodity classification according to SITC: total trade 0-9; primary products 0-4 + 67 + 68; food 0 + 1 + 22 + 4; raw materials 2 excluding 22; fuels 3; iron and steel, non-ferrous metals 67 + 68; manufactures 5-8 excluding 67, excluding 68; chemicals 5; machinery and electrical equipment 7 excluding 781.0, excluding 784.1, excluding 785.1, excluding 785.2, excluding 785.31 (SITC, Revision 2); passenger road vehicles and their parts 781.0 + 784.1 + 785.1 + 785.2 + 785.31 (SITC, Revision 2); textiles 65; clothing 84; other manufactures 6 + 8 excluding 65, excluding 67, excluding 68, excluding 84.

Developing countries: Africa (other than South Africa); Caribbean, Central and South America; Asia, with the exception of Japan, Israel and the centrally planned economies; Oceania (other than New Zealand).

Ultimately, a more far-reaching and in-depth study would be required to ascertain how representative export-orientated manufacture of the assembly type will remain for the Third World in general and for specific developing countries, and what preconditions would have to be met to advance beyond this stage and initiate a process truly worthy of the name "development". Such a study, which would inevitably entail an analysis both of the world economic crisis in particular and the world capitalist development in general, goes beyond this descriptive outline of the EPZ phenomenon.

The present study is based on the empirical and analytical work which the Starnberg Institute (and its predecessor, the Starnberg Max Planck Institute) has devoted to EPZs for more than ten years. The results are contained in two major publications: Folker Fröbel, Jürgen Heinrichs, Otto Kreye, Die neue internationale Arbeitsteilung (1977), published in English as The New International Division of Labour (1980) and, by the same authors, Umbruch in der Weltwirtshaft (1986) (English edition in preparation). Each provides more elaborated empirical studies and a theoretical analysis. This research effort has included visits to EPZs in several countries (e.g. Brasil, Malaysia, Sri Lanka and the Philippines), together with interviews with investors, managers, workers, trade union representatives and public officials.

The present study also includes new empirical material from a 1986 survey-questionnaire addressed to more than 300 institutions in 114 countries involved in EPZs and other offshore manufacturing facilities and carried out as part of the Starnberg Institute's ongoing programme in this field.

2. The world market for production sites

The function of EPZs in developing countries is the provision of the technical, economic and legal framework and preconditions for the profitable use of low-cost labour and other factors of production, such as land, water, the environment, energy and raw materials, for world market-orientated, internationally competitive production. The principal requirements for such production are (i) modern infrastructure, (ii) an adequate supply of industrial inputs, and (iii) the lifting of any national restrictions on trade and payments which might hinder the free movement of goods and the free transfer of capital and profits. Exemption from customs duties for imports of machinery, raw materials and semi-manufactures for subsequent processing is only one concession amongst the many provided by EPZs, although in the past this aspect has been incorrectly singled out by some authors as the core feature of EPZs.

The standard of provision of infrastructure and industrial inputs at many developing country EPZs now matches that offered at comparable locations in the traditional industrial countries. The need and desire to attract producers to their sites has also led many developing countries to seek to outbid each other in the scale and nature of incentives, ignoring the experience of many investment authorities that, whilst firms are happy to take full advantage of any new incentives and investment promotion devices, they rarely cite them as a central determinant in their siting decisions.

A series of press announcements and advertisements launched by the Jebel Ali Free Zone (Dubai, UAE), which opened in the summer of 1985, gives some indication both of the scale of concessions offered by EPZ authorities and the conditions of their employees.[1]

Jebel Ali can offer anything, if not more, than other established free zones:

> What does Jebel Ali have to offer?
> Power supplies available;
> Water available;
> Telecommunications in operation;
> Close to Dubai International Airport (container and ro-ro-Port available);
> Housing accommodations already in place;
> Labour already available.

[1] Advertising supplement to the International Herald Tribune, 17 July 1985.

> In addition, there are to be no taxes and all capital and profits can be remitted freely for at least 15 years.
> But the most significant attraction is in the interpretation of the Decree establishing the Free Zone in relation to company ownership, employment and immigration ...
>
> A company operating from the Free Zone within the terms of the special licence will not require a local sponsor or be subject to UAE partnership regulations ...
>
> Manual and unskilled workers will have to live within the Free Zone-provided accommodation but will be free to travel within the UAE. White-collar workers and senior staff can live outside the Free Zone. ...
>
> It is the sponsorship and labour regulations which have sparked off the major interest in the Free Zone, as they provide a subtle method of gearing up greater economic activity without too many bureaucratic measures.
>
> ... Unskilled workers get about Dhs 1,000 ($277) a month compared to, say, Dhs 750 ($208) /elsewhere/. But ... there is no corporation or personal tax of any kind in Dubai and no currency restrictions.
>
> ... Initially, there will be accommodation for between 3,000 and 4,000 unskilled workers and further accommodation will be built as required .... The Free Zone is also considering providing ready-built warehousing and manufacturing "Shell" buildings which can be adapted to customer requirements.
>
> ... What the Free Zone is really looking for are major international manufacturers with large product lines who want assembly facilities and a gateway to distribution links.

Developing countries - and other countries offering similar facilities - ultimately lose out in such a contest, as internationally operating companies are able to make use of their enhanced bargaining position to extract ever-greater concessions.

Finally, EPZs in developing countries frequently contrast markedly and grotesquely from their immediate surroundings. Whereas districts in the vicinity of EPZs are often condemned to manage without adequate basic facilities such as water, electricity and waste disposal, the zones themselves possess an abundance and, in some cases, an excess of infrastructure, much of which frequently goes unused.

The world market for production sites is not simply a useful analytical device or a construct but constitutes a real entity on which sites - industrial areas, infrastructure, industrial buildings, etc., together with their associated labour force - are demanded, supplied and traded. The suppliers are customarily national governments or regional and local authorities, together with their appointed public and occasionally private organisations and agencies. And, like on any modern market, EPZs are also offered to the prospective consumer - here, companies - using all the devices of modern marketing. Competition to attract export-orientated industrial production, both between developing countries and between developing and industrialised countries, is enormous and made all the more severe by the conjunction of a large number of new countries entering the world market for production sites and a slackening of demand for sites in the wake of the world economic crisis.

3. Overview of EPZs in developing countries

In 1986, EPZs were in operation in 47 developing countries in Africa, Asia and the Pacific, Latin America and the Caribbean. A number of these countries, together with a further 18 with no EPZs proper, also offered EPZ conditions at other locations (world market factories, bonded factories, offshore plants, 100 per cent export units, etc.). Additionally, EPZs were under construction in 22 developing countries, of which 7 were establishing EPZs for the first time (cf. table 3).

The number of developing countries which have established and operate EPZs, and the number of zones themselves, have doubled over the last decade. In 1975, 25 developing countries operated 79 zones; by 1986, this had risen to 47 countries with 176 zones.

Virtually every country in Central America and the Caribbean and most countries in South East Asia now provide either EPZs or EPZ conditions at individual offshore plants. Although fewer countries operate EPZs in Africa, Western Asia, the Pacific and South America, the number currently offering EPZ conditions either nationally or at specific sites, together with specific incentives for export production, is growing.

Nevertheless, a number of developing countries, including those which have made massive efforts at industrialisation, have chosen not to pursue the path of "development" via the establishment of EPZs and the use of their labour forces and natural resources for export-orientated production; these include in Africa, Algeria, Tanzania and Zimbabwe, and in Asia, Bhutan, Burma and Laos.

A growing number of developing countries, including Egypt, Morocco, Tunisia, the Philippines, Thailand and Mexico, also offer EPZ terms and conditions for world market-orientated agricultural production and for services. Agricultural export zones have been established in Sri Lanka, and an export service zone was established in Mauritius in 1981.

Following the classification of "developing market economies" adopted by the United Nations, the People's Republic of China has not been included in the developing country category used above. However, in 1980, the People's National Congress of the People's Republic of China decided to establish a number of special economic zones (SEZs) within the framework of its broader policy of modernisation and "opening" to the West. Three cities in Guandong Province - Shenzhen, Zhuhai (near the area of Hong Kong and Macau) and Shantou - and a little later a fourth in Fujian Province - Xiamen - were accorded the status of SEZs. Work began in the same year on providing the necessary organisation for the zones, converting land to industrial use and expanding the infrastructure.

4. Employment in EPZs in developing countries: Scale and development

The number of EPZs in the developing countries more than doubled between the mid-1970s and the mid-1980s, with an almost parallel expansion in employment in the zones themselves and other offshore manufacturing facilities offering EPZ terms. In the mid-1970s, a total of 825,000 employees were employed world-wide in both EPZs and other offshore manufacturing facilities. By the mid-1980s, this figure had more than doubled to 1.9 million (cf. table 4). The proportion of the total industrial workforce directly engaged in production was also much higher than in the industrialised countries, well over half those working in production (and of all employees) were women.

Employment figures for 48 of the 65 countries offering EPZs or comparable conditions at other locations were obtained from original survey data, together with an analysis of the international business press for various years in the early 1980s up to 1986. Given that employment fluctuations over this period were either minor in scale or partly balancing each other as figures for more than one year for some countries show, it was considerable reasonable to sum the various years' data.

The figure of 1.9 million does not therefore represent total developing country employment in such facilities. Of those countries for which no figures were available - most with the probable exception of Saudi Arabia and Argentina - are not countries for which other indicators would suggest a large volume of employment in world market-orientated production. Hence, figures for these 17 countries would be unlikely to add greatly to the existing total of 1.9 million employees.

As the notes to the relevant table make clear, in some instances figures for employment in EPZs and other offshore manufacturing facilities are subject to some qualification. In Kong Kong, the figure covers only employment in foreign MNE subsidiaries; in the Republic of Korea, only employees working in export-processing zones have been counted, not those employed at other sites or in individual plants operating under EPZ conditions. In addition, employees engaged in world market-orientated production but working outside EPZs or in factories other than specified offshore plants have not been included in any country. The volume of such industrial production is quite substantial in countries such as India, Argentina and Brasil.

Table 3: Export-processing zones and other offshore manufacturing facilities in developing countries by region and country, 1986

Country or area	Export-processing zones			Other offshore manufacturing facilities*
	in operation	under construction	planned	in operation
Africa	25	63	6	9**
Botswana				x
Côte d'Ivoire				x
Egypt	4	1	2	
Gambia		1		
Ghana	1		2	
Kenya		1		
Lesotho			1	x
Liberia	1			
Mauritius[1]	7			x
Morocco	1	33		x
Namibia				x
Nigeria			1	
Senegal	1			
South Africa[2]				x
Sudan		1		
Swaziland				x
Togo	1			
Tunisia[3]	9	25		x
Zaire		1		
Asia and the Pacific	95	14	10	17**
Bahrain	2			x
Bangladesh	1		2	
Brunei		1		
Fiji		1		
Hong Kong[4]	14			x
India	2	4	1	x
Indonesia	2	2	1	
Iran			1	
Jordan	3			
Korea (Republic of)[5]	11			x
Kuwait				x
Macau[6]				
Malaysia	11			x
Oman				x
Pakistan	1		4	x
Philippines	3	2		x
Qatar				x
Saudi Arabia				x
Singapore[7]	22			x
Sri Lanka	3		1	x
Syria[8]	6	1		
Thailand	1			x
Tonga	1			
Turkey	2	2		x
United Arab Emirates	1			
Yemen (People's Democratic Republic)	1			
Taiwan, China	4	1	1	x

Country or area	Export-processing zones in operation	under construction	planned	Other offshore manufacturing facilities* in operation
Latin America and the Caribbean	56	9	8	14**
Antigua and Barbuda				x
Argentina				x
Bahamas	1	3		x
Barbados				x
Belize		1		x
Brazil	1			x
Chile	2	1		
Colombia	6			
Costa Rica	1	1		x
Dominica				x
Dominican Republic	5	1	2	
Ecuador			1	
El Salvador	1		1	
Guatemala	1			
Haiti	1	1	2	x
Honduras	1		1	
Jamaica	2			
Mexico	23			x
Montserrat				x
Netherlands Antilles	2			
Nicaragua[9]	1			
Panama	2			
Puerto Rico[10]	2	1		x
St. Kitts and Nevis				x
St. Lucia	2			
St. Vincent				x
Trinidad and Tobago	1			
Venezuela	1		1	
Total	176	86	24	39

[1] EPZ conditions available country-wide with 7 major industrial parks.

[2] EPZ conditions available at 4 industrial sites.

[3] EPZ conditions available country-wide with 9 major industrial estates.

[4] EPZ conditions available country-wide with 14 major industrial areas.

[5] Three export-processing zones (Masan, Iri, Gumi); 6 industrial export estates (Seoul); 2 heavy industry industrial estates (Changwon, Yencheon).

[6] EPZ conditions available country-wide with 4 industrial zones.

[7] EPZ conditions available country-wide with 22 major industrial parks.

[8] Joint Syrian-Jordanian EPZ under construction (Deraa).

[9] Not in operation since 1983.

[10] EPZ conditions available country-wide with 2 EPZs and 96 industrial parks.

* EPZ conditions at other locations. ** Number of countries with such facilities.

Source: Starnberg Institute Data Bank.

Table 4: Employment in export-processing zones and other offshore manufacturing facilities in developing countries by region and country, 1975 and 1986

Country or area	Employment* in export-processing zones		in other offshore manufacturing facilities		Total	
	1975	1986	1975	1986	1975	1986
Africa	34 102	131 190	5 300	37 600	39 402	168 790
Botswana	-	-	-	1 800	-	1 800
Côte d'Ivoire	-	-	2 800	3 200	2 800	3 200
Egypt	..	25 000	-	-	..	25 000
Ghana	-	2 600	-	-	-	2 600
Lesotho	-	-	-	1 000	-	1 000
Liberia	-	700	-	-	-	700
Mauritius	9 952	61 690	-		9 952	61 690
Morocco	-	..	..	10 000	..	10 000
Namibia				1 600		1 600
Senegal	150	1 200	-	-	150	1 200
South Africa	-	-	-	20 000	-	20 000
Swaziland	-	-	2 500	..	2 500	..
Togo	..	..	-	..	..	..
Tunisia	24 000	40 000	..	..	24 000	40 000
Asia and the Pacific	391 892	787 730	29 541	198 800	421 433	986 530
Bahrain	2 770	..	..	4 600	2 270	4 600
Bangladesh	-	4 515	-	-	-	4 515
Hong Kong	59 607	89 000	..	..	59 607	89 000
India	1 249	17 000	..	60 000	1 249	77 000
Indonesia	-	13 000	11 191	..	11 191	13 000
Iran	-	-	..	-	..	-
Jordan	..	..	-	-	..	..
Korea (Republic of)	112 250	140 000	..	..	112 250	140 000
Kuwait	-	-	-	..	-	..
Macau		62 512		..	62 512	
Malaysia	40 465	81 688	..	16 000	40 465	97 688
Oman	-	-	..	..	-	..
Pakistan	-	1 500	-	12 000	-	13 500
Philippines	8 177	39 000	1 650	50 000	9 827	89 000
Qatar	-	-	-	1 200	-	1 200
Saudi Arabia	-	-	-	..	-	..
Singapore	105 000	217 000	..	..	105 000	217 000
Sri Lanka	-	35 000	-	27 000	-	62 000
Syria	231	..	-	-	231	..
Thailand	-	4 746	16 700	28 000	16 700	32 746
Tonga		1 000		-		1 000
Turkey	-	..	..	..	..	..
United Arab Emirates	-	1 300	-	-	-	1 300
Yemen (People's Democratic Republic)	-	..	-	-	-	..
Taiwan, China	62 143	80 469	..	..	62 143	80 469

Country or area	Employment* in export-processing zones		in other offshore manufacturing facilities		Total	
	1975	1986	1975	1986	1975	1986
Latin America and the Caribbean	122 350	381 284	243 477	385 155	365 827	766 439
Antigua and Barbuda		-		..		..
Argentina	-	-	-	..	-	..
Bahamas		..		..		..
Barbados	-	-	3 000	6 865	3 000	6 865
Belize		-		200		200
Brazil	27 650	63 000	100 000	200 000	127 650	263 000
Chile	-	2 000	-	-	-	2 000
Colombia	5 600	6 700	-	-	5 600	6 700
Costa Rica	-	..	..	8 600	..	8 600
Dominica		-		200		200
Dominican Republic	6 500	36 000	-	-	6 500	36 000
El Salvador	6 143	2 079	-	-	6 143	2 079
Guatemala	..	..	-	-	..	..
Haiti	..	5 000	25 000	38 000	25 000	43 000
Honduras	-	2 586	-	..	-	2 586
Jamaica	-	8 000	6 100	..	6 100	8 000
Mexico	74 676	250 000	9 632	..	84 308	250 000
Montserrat		-		220		220
Netherlands Antilles	-	400	..	-	..	400
Nicaragua	-	..	..	-	..	..
Panama	1 300	2 058	-	-	1 300	2 058
Puerto Rico	481	734	96 245	130 226	96 726	130 960
St. Kitts and Nevis		-		..		..
St. Lucia	-	..	3 500	-	3 500	..
St. Vincent	-	-	-	844	-	844
Trinidad and Tobago	-	2 727	..	-	..	2 727
Venezuela	-	..	-	-	-	..
Total	548 344	1 300 204	278 318	621 555	826 662	1 921 759

* Latest available figure; in a number of cases, principally in "other manufacturing facilities", actual employment almost certainly exceeds the stated figure.

Source: Starnberg Institute Data Bank.

The addition of employment engaged in world market-orientated production in Hong Kong in undertakings other than foreign subsidiaries of multinationals (c. 525,000), together with employees outside EPZs in the Republic of Korea (c. 750,000) and elsewhere (in excess of 500,000) would double total employment in these sectors of world market-orientated production in the developing countries to 3.7 million workers.

Three other recent studies have suggested estimates for employment in world market-orientated industry in the developing countries. A 1980 study by UNIDO suggested a figure of 645,000 employees in developing country EPZs in 1978, rising to 1 million by 1980 (UNIDO, 1980). The study notes that these figures would need to be supplemented by figures for employment in offshore manufacturing at other sites but does not itself propose a figure. A 1983 USAID study suggests a figure of 3.5 million for employment in EPZs and offshore plants in developing countries but gives neither any indication of the methodology used nor specifies for which year the figure applies (USAID, 1983, p. 5). The study estimated employment in EPZs in developing countries to be in the order of one-third of total employment in EPZ and offshore plants combined, following the UNIDO study cited above. The Economist Intelligence Unit study gave an estimate of 2 million employees in offshore manufacturing in the developing countries for 1984 (Edwards, 1984, p. 5). This figure embraced employment in offshore plants both inside and outside EPZs and is comparable with the present survey of employment in its coverage of predominantly MNE-controlled world market-orientated production in EPZs and offshore plants offering EPZ conditions.

5. Share of EPZ employment in total manufacturing employment

According to UNCTAD, c. 37.7 million people (an estimate which seems to be rather low) were employed in the manufacturing industry in the developing countries (excluding the People's Republic of China) in the early 1980s (UNCTAD, 1983, p. 18). The employment of 1.9 million in EPZs and offshore plants in the 48 countries for which figures were available would thus account for 5 per cent of total employment in the manufacturing industry in the developing countries.[1]

The distribution of employment in EPZs and offshore plants is, however, highly uneven. In Africa, the relatively meagre level of employment of this type is concentrated in five countries: Mauritius, Tunisia, Egypt, South Africa and Morocco. In Latin America and the Caribbean, the bulk of such employment - with the exception of Brasil and Colombia in South America - is concentrated in Central America and the Caribbean, and in particular Mexico, Puerto Rico, Haiti, the Dominican Republic, Costa Rica and Barbados. In Asia, employment is spread over quite a large number of countries: Singapore, Republic of South Korea, Malaysia, the area of Hong Kong, the Philippines, India, Sri Lanka, Macau, Thailand, Pakistan, Indonesia, Bahrain, Bangladesh and a few others.

Employment in EPZs and offshore plants also varies considerably in its importance for overall employment in individual countries.

In a relatively small group of countries, employment in EPZs and offshore plants accounts for more than 50 per cent of total employment in the manufacturing industry. This includes both countries where the manufacturing industry accounts for a small proportion of total value-added (Mauritius and Barbados) and countries where manufacturing makes a substantial contribution to GDP (Hong Kong, Singapore and the Republic of South Korea).

In a second group of countries, employment in EPZs and offshore plants is less than 50 per cent of total industrial employment but still of considerable importance; the group includes Malaysia and the Dominican Republic.

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[1] According to ILO data (1980), the economically active population in industry was 135 million (excluding China). Industry, of course, includes: mining, quarrying, manufacturing, gas, electricity and water supply, and construction. It also includes everyone active in this field. Therefore, the UNCTAD reference to the "officially registered workforce of 37.7 million ... in manufacturing" is probably on the low side since it would only include large enterprises and probably exclude one-man businesses and clandestine employment, etc. Thus, one might posit that of the 135 million employed in industry, perhaps half (i.e. 70 million) might be in manufacturing. Comparing this with the UNCTAD figure of 38 million, a valid estimate for the purposes of this paper would lie somewhere in between, let us say, 55-60 million.

A third group includes countries where, despite high absolute levels of employment in EPZs and offshore plants, their share of overall manufacturing employment is small; this group includes India, Brasil and Mexico.

And in a fourth group of countries, employment in EPZs and offshore plants is either relatively minor or insignificant. This group includes both countries with not inconsiderable employment in manufacturing outside EPZs as well as countries in which the share of value-added from manufacture in total GDP is both relatively and absolutely small.

The high percentage of world market-orientated production in developing countries accounted for by four South East Asian economies - including Hong Kong, Singapore and the Republic of Korea - and the relatively advanced state of associated industrialisation in these four countries, albeit combined with indebtedness (Republic of Korea), high dependency on the US market and domination of foreign corporations (Singapore), would not have been possible without the coincidence of a number of unique political factors which favoured world market-orientated industrialisation in these countries.

For example, the important strategic locations of Hong Kong and Singapore as transhipment centres in world trade endowed these city-states with a relatively highly developed and industrially utilisable infrastructure. Each has a hinterland (Malaysia, the People's Republic of China) providing both a plentiful and a cheap supply of labour - two preconditions favouring successful industrialisation.

The available data does not suggest any systematic pattern in the changes in employment in EPZs and offshore plants between 1975 and 1986. Employment grew steadily in some countries, whilst others experienced stagnation or even periodic falls. A rather rapid increase in employment in EPZs and offshore plants can be observed in a number, but by no means all, countries since 1983-84. In Hong Kong, the number of foreign subsidiaries grew by 120 in the first six months of 1984 alone. In Mexico, the number of employees in the Maquiladora plants doubled between mid-1982 and mid-1986 to 250,000. (This increase is, of course, a reflex of the upswing in the United States and reveals the extent to which world market-orientated production in developing countries is dependent on developments in the markets of the industrialised countries.)

EPZ employment in Mauritius rose by c. 25,000 to c. 60,000 between 1985 and 1986. By contrast, Haiti reports a shrinkage of c. 26,000 between 1985 and 1986. The Dominican Republic, however, reports an increase of nearly 100 per cent by 16,000 between 1984 and 1986.

Few figures are available for the indirect employment effects of EPZs in the local economies. In Panama, the 9,000 permanent employees in the Colon Free Zone (which includes commercial activities as well as manufacturing) are supplemented by 5,000 temporary employees and additional indirect employment of 17,000 (Colon Free Zone, undated). In Trinidad and Tobago, the Point Lisas Industrial Estate, with direct employment of 2,692 in 1984, reported indirect temporary employment from plant construction, etc. of 10,350 for the period 1977-82, and indirect permanent employment of 834 for the period 1978-82 (Long, 1986, pp. 24-28). In Mexico, the total employment impact of the maquila industry was estimated at more than 600,000 jobs in 1985, compared with direct manufacturing employment of 225,000 (Ochoa, 1986, p. 31). EPZs in the Philippines reported 39,000 direct employees in 1985 and estimated indirect employment of a further 100,000 in the provision of support services (Castillo, 1986, p. 34). Such estimates need to be treated with caution, however.

In 1975, recorded employment in the EPZs and offshore plants of the developing countries amounted to 1.2 per cent of the 70.7 million employees in manufacturing in the Western industrialised countries. By 1986, this figure has risen to at least 2.9 per cent (based on the employment figure for manufacturing in the industrialised countries, 66.5 million by 1983 - a figure now probably lower still).

A more precise picture is provided by comparing figures for employment based on employees engaged directly in production. The proportion of employees working directly in production in EPZs and offshore plants is disproportionally high; available data would suggest close to 90 per cent, compared with c. 66 per cent of employees in the manufacturing industry in the industrialised countries. For example, production workers account for 89 per cent of total employment in the Masan zone, South Korea; 88 per cent in the Katunayake zone in Sri Lanka;

and 84 per cent in the Penang zone in Malaysia (Maex, 1983, p. 53). Applying these ratios to the overall figures would suggest that production workers in the manufacturing industry amount to 3.8 per cent of comparable employees in the industrialised countries.

The further addition of all world market-orientated industrial production in the area of Hong Kong and the Republic of Korea would further raise this figure to 5.4 per cent of total employment in manufacturing in the Western industrialised countries and at least 6.4 per cent of production workers.

An undoubted link exists between the increase in employment in EPZs, offshore plants and other export-orientated manufacturing factories in developing countries and the decline in employment in manufacturing in the Western industrialised countries. Nevertheless, it would not be correct to claim that the fall in employment in manufacturing in the Western industrialised countries was directly caused by relocations of production to the developing countries and their associated increase in employment in world market-orientated production at those locations. The relocation of production in the context of world-wide sourcing is one important element in the global reorganisation of production, alongside other such important aspects such as rationalisation and decisions to expand or curtail investment. Certainly, however, the relative and absolute falls in employment in manufacturing in the Western industrialised countries are significantly attributable to relocations of production within the context of "world-wide sourcing".

According to OECD statistics (OECD, 1985), employment in manufacturing in the Western industrialised countries fell by some 4.2 million, from 70.7 to 66.5 million, between 1975 and 1983. Over the same period, registered unemployment rose by 13.3 million, from 17.7 million to 31 million. A comparison of these figures with the 1.9 million employees working in EPZs and offshore plants in the developing countries reveals the quantitative significance of relocation for the scale of the changes in the labour markets of the Western industrialised countries.

The divergent paths taken by employment in manufacturing in the industrialised and developing countries can also be regarded as an expression of the continuation of the tendency towards a new international division of labour in both its forms, that is, the change in the division of the labour within and between firms in the context of the transnational reorganisation of production, labour power and corporate structures and the change in the global division of labour inasmuch as this manifests itself between the industrialised and the developing countries.

6. Structure of production in EPZs

In 1975, we noted the following spread of types of production in EPZ.

> Of the 29 ISIC major groups of the manufacturing industry, all but two (beverages and tobacco) are represented in the production structure of the free production zones (EPZs). This would seem to indicate a wide spectrum of products but is in fact deceptive as the entire range cannot be found in any individual zone. Only a few of the product groups are represented within any one zone, and generally with only part-manufacturing processes ... The greater part of production in free production zones - both individual plants and within the zones as a whole - can be designated as non-complex. Some steps towards complex or partially integrated manufacturing can be seen in the textile and garment industry, but only infrequently in other branches, and only in a small number of zones. The most important product groups are textiles and garments, electrical and electronic products, metal products, precision engineering, optical equipment, sports goods and toys. The major portion of production is associated with the consumer goods industry (Fröbel, Heinrichs, Kreye, 1980, pp. 328-29).

Whilst virtually all branches of industry are represented at EPZs, both production and employment are concentrated on a small number of product groups, led by textiles and clothing, together with electrical products. In 1975, we observed that this concentration also applied at sites in countries which had been amongst the first to embark on world market-orientated industrialisation, and where it had made the greatest progress; Hong Kong and Mexico were cited as examples. The data for the mid-1980s suggest only minor changes in this situation;

there has been no marked diversification in the structure of production in the majority of EPZs and only slight increase in its level of complexity, except within a limited number of EPZs which have been operating for some time, where some instances of full manufacture can be found.

The product range can only be precisely quantified for a small number of countries and zones (cf. table 5). However, all available descriptions of EPZs in various regions confirm this concentration on a restricted number of branches and product groups.

Little change was also discerned in the nature of work-tasks in EPZs. These continue to consist almost entirely of, in many cases, the labour-intensive segments of more complex production processes, typically sub-assembly, of individual processing operations and of the assembly of imported components and materials (including the making up of clothing). Whilst production processes in EPZs are customarily outwardly integrated into globally organised production systems, in most cases they have few, if any, linkages with adjacent processes within the export enclaves. And, as a number of examples show, where marginal and occasional recourse is made to local suppliers and subcontractors, this imposes a form of specialisation on local producers which does not favour a more developed form of integration.

In general, foreign-owned plants in export zones exhibit a low level of production linkage to existing or proposed "indigenous" plants.

> Recent PDC (Penang Development Corporation, Malaysia) data list 24 'supporting industries' working on 'backward linkages' to multinational enterprises in the FTZs. But barely 1,000 employees work in these enterprises, which are, moreover, hit by the same downturn affecting the electronics and textiles industries (Far Eastern Economic Review, 19 September 1985).

These 1,000 workers represent less than 2 per cent of overall employment of 66,000 in Penang's EPZs. Similarly, a study conducted within the United Nations Development Programme observed that "the degree of linkage between FTZ enterprises and the domestic economy through purchases of locally produced materials and capital equipment has been disappointing" (cited in Far Eastern Economic Review, 14 February 1985). EPZs in the Philippines were characterised by "the virtual absence of any linkage of domestic industry" (Far Eastern Economic Review, 9 June 1983).

A large number of developing countries, including Egypt, Morocco, Tunisia, the Philippines, Thailand and Mexico now offer offshore facilities for world market-orientated agricultural production and for services. Agricultural export zones have been established in Sri Lanka and a service export zone was established in Mauritius. Designated a free service zone (zone franche des services à l'exportation), this facility is intended to offer industrial and engineering consultancy, auditing, offshore banking, systems programming in information technology and architectural services.

Data processing (in reality, merely keying-in), which can be found in a number of EPZs (e.g. Barbados), also represents an example of fragmented offshore "processing".

Much recent debate has centred on the impact of the introduction of the new manufacturing technologies in many branches of export production in developing countries, and hence the structure of production at EPZs. Whilst, in some cases, the use of new manufacturing technologies has led to a concentration of production at traditional sites of industrial manufacture in industrialised countries, innovations in process technology have not led firms to turn their backs on low-cost sites in the world-wide organisation of their production. This is evidenced by the progressive automation of production observable at an increasing number of plants in EPZs. Cost considerations, including labour costs and equipment running-times, continue to play the decisive role. The wage-cost differential between developing and the traditionally industrialised countries for the skilled labour often required in such areas can be even greater than that between wages for unskilled workers.

Table 5: Main activities in export-processing zones by product groups in selected countries, various years

	Year	Textile and clothing	Footwear and leather products	Electrical and electronic products	Other metal products	Sports goods and toys	Other	Total (per cent)
Mauritius[1]	1986	91	1		3	2	3	100
Bangladesh[1]	1986	81		1	15		3	100
Sri Lanka[2]	1981		68		3		29	100
Malaysia[2]	1984	13		58	6	6	17	100
Philippines[2]	1980	30	11	13	12		34	100
Taiwan[1]	1983	17	4	54	6	19		100
Barbados[1]	1985		36	56			8	100
Colombia[3]	1985	46	3	10	23		18	100
Dominican Republic[4]	1985	56	15	4	4		21	100
Haiti[5]	1981	36	7	21	2	23	11	100
Jamaica[1]	1985	89					11	100
Mexico[1]	1980		16	60	9		15	100

[1] By employment.

[2] By establishments.

[3] By employment (only zona franca de Baranquilla).

[4] By establishments (only four EPZs).

[5] By US imports under tariff item 807.00 (from Grunwald, Flamm, 1985, table 5.2).

Source: Starnberg Institute Data Bank.

The trend to greater automation does not therefore render the option of using EPZs superfluous, although it may influence it. Less-skilled workers are replaced by machinery to an extent which is not outbalanced by the employment of more skilled operatives. Whether EPZs at all sites can meet the requirements of skill and infrastructure required by treater automation remains to be seen.

Plans also exist to make greater use of technically and scientifically trained personnel for research and development. However, so far, establishments located in EPZs have had very meagre or no participation at all in R & D. The establishment of "research parks" has also not yet gone beyond the planning stage.

7. Structure of employment in EPZs

By the mid-1970s, a distinctive pattern of employment has emerged in EPZs which we described as follows:

The overwhelming majority of the employed are:

- women;
- aged between 16 and 25 years;
- unskilled or semi-skilled;
- employed as production workers.
- There are no significant differences in the employment structure between export-processing zones that have been in operation for several years and those that have been established more recently (cf. Fröbel, Heinrichs, Kreye, 1980, p. 344).

This gender-, age- and skill-composition of employment in EPZs is widely known and, in most cases, has not undergone major change in the intervening period.

The share of employment in EPZs accounted for by women, which can be as high as 90 per cent, contrasts sharply with the share of women employed in multinational companies in developing countries generally, as a 1985 ILO study confirmed. In 1977, female employment in multinational firms operating in the following countries amounted to: Chile, 16 per cent; Mexico, 17 per cent; Panama, 18 per cent; India, 16 per cent; Pakistan, 2 per cent; Kenya, 19 per cent (ILO, 1985, table 4).

The same study put female employment in multinational enterprises in developing countries at somewhat over 1 million in 1980 (p. 7). As a comparison of this figure with that for employment in EPZ as a whole would suggest, the majority of these women must be employed in EPZs. (A more comprehensive empirical study of the world market for labour power might raise this estimate considerably.)

In contrast to the usual pattern of predominantly young un- or semi-skilled women, multinational enterprises in some EPZs employ mostly young skilled or semi-skilled men (for instance, in heavy industries such as iron, steel, petrochemicals and shipbuilding) utilising such specific site advantages as, inter alia, cheap energy.

Our 1986 study confirmed that EPZs continue to demand overwhelmingly un- and semi-skilled workers. Skills acquired on the job are often rather limited and mostly unusable outside the plant. Long probationary and training periods should not be interpreted as implying that skills are being acquired. For example, in the Philippines, the first six months of employment in plants in the Bataan export-processing zone constitutes a probationary period, paid at only 75 per cent of the minimum wage. In some plants, employment is terminated after this period has elapsed and workers replaced by fresh "trainees".

While most employees in EPZs do not exhibit specific occupational skills, those tasks requiring skills are executed to some extent by local and, to some extent, by expatriate labour wherever possible. Increasing technological input into production, together with the growing

automation observable at a number of sites, also increases the demand for technically qualified personnel for the maintenance, operation, supervision and repair of complex manufacturing equipment. Virtually all countries in which industrial production for export is of significance train some such personnel. Their greater use within EPZs could lead to a slight fall in the share of women and less-skilled workers in overall employment.

Although EPZs continue to be characterised by highly fragmented assembly operations, with only minor local forward linkages, there are some exceptions to this pattern. At some sites, the increasing automation of existing production is likely to bring about a gradual change in skill requirements. Elsewhere, other sites are beginning to exhibit types of production which go far beyond mere assembly. Integrated production lines for the full manufacture of quite sophisticated products (such as motor-bikes, engines, cameras and TV sets) can be found in EPZs in Brasil, Mexico, Singapore and the Republic of Korea, for example. This more complex structure of production naturally requires a much greater depth and diversity of occupational skills.

8. Labour productivity

On the question of labour productivity, the views of a number of federal German industrial representatives are illustrative of the position.

> As far as job performance is concerned, my feeling is that this easily matches the level of productivity found in West Germany after a short period of accustomisation which is also the norm at home.
>
> I would therefore have to contradict the statistical data on productivity. Given appropriately reasonable management, productivity in Morocco is not, as is often contended, 70-80%. I would stress that productivity is fully the equal of that in the industrialised countries, including West Germany. And eight years' experience means I'm quite certain on that. It would not be exaggerating to add that productivity often exceeds that level. One example: a seamstress working on an automatic was so skilled and dexterous that the machine couldn't keep up with her and developed a fault because of the speed of operation.
>
> A German employer
> (Rudnick, 1984, p. 173)
>
> In Singapore, graceful Chinese girls achieve results working on heavy presses that men would be hard put to match in Germany.
>
> Director of Württembergische Metallfabrik
> (SEDB, 1983, pp. 34f.)

A study undertaken by the Institut der deutschen Wirtschaft on labour costs and working conditions in South East Asian developing countries noted:

> According to individual plant managers of foreign branches, enterprises with identical structures and equally tightly-run management attain levels of productivity entirely equal to that of comparable plants in Germany, if not 10-20% better.
>
> (Salowsky, 1985, p. 12)

Such observations are a further confirmation that labour productivity in offshore plants in developing countries matches that of comparable operations at the traditional industrial sites. The frequent claim that productivity in developing countries is considerably lower, and that low-wage countries are not used as sites for manufacturing on cost grounds as wage differences are offset by lower productivity, is unwarranted.

Annual, weekly and daily working times in EPZs and offshore plants are generally longer than those in the industrialised countries. Annual hours worked per employee in the Federal Republic of Germany ranged from 1,635 to 1,760. Employees in the manufacturing industry in developing countries work, on average, approximately one-third longer. A substantial proportion of employees in EPZs are obliged to work up to 2,400 hours per year (ITGLWF, undated).

The working week is often in excess of 50 hours. In the Bataan EPZ (Philippines), the average working week in 1982 was 54 hours. One-quarter of the workforce worked more than 60 hours, and 5 per cent more than 70 hours per week (Castro, 1982, p. 37).

In the Republic of Korea, working weeks of 50-60 hours are the norm. In 1982, 46 per cent of employees in Sri Lanka's EPZ worked more than 55 hours (Ramanayake, 1982, pp. 54f.).

The 44-hour week in Singapore yielded an annual working time equal "to 143% of that for Federal Germany" (Süddeutsche Zeitung, 13-14 October, 1984).

Unlimited scope for shiftwork also allows managements to achieve operating times considerably in excess of those attainable at the traditional sites in the industrialised countries. In the textile industry, for example, annual equipment operating times of 6,800 hours in Brasil, 7,000 in Tunisia and 8,400 in South East Asia have been noted - 25-50 per cent higher than the average of 5,500 hours in Federal Germany (Neundörfer, Stahr, 1985, p. 77).

9. Corporate strategies and EPZs

Three basic trends can be identified in the reorganisation of production, labour power and corporate structures in world industry:

- the introduction of new manufacturing technologies (automation and robotisation);
- an increase in multinational corporate acquisitions; mergers and multinational enterprise co-operation;
- the increased use of world-wide sourcing within globally integrated production systems.

Reorganisation is not confined, as might appear at first sight, to the introduction of new manufacturing technologies, including automation and robotisation. The creation of globally integrated production systems via novel and diverse forms of transnational corporate co-operation are of equal importance. Globally integrated production systems are increasingly no longer established through intra-corporate organisation but, rather, inter-company co-operation, involving the largest enterprises in all branches. Ultimately, the process of reorganisation also entails the full exploitation of site advantages throughout the world, precisely because the introduction of new manufacturing technologies and the increased use of integrated production systems offers new or enhances existing options.

The reorganisation of production, labour power and corporate structures is also characterised by the fact that corporate decisions on rationalisation, including the introduction of modern manufacturing technologies, on changes in corporate structure, including the establishment of globally integrated production systems, and on the use of site advantages, including relocation to new sites, are not taken in isolation but in combination. The nature and scale of measures to be adopted in each subfield of rationalisation, structural change and choice of site are determined by the optimal combination of these factors for the overall corporate strategy and profitability of the concern as a whole.

Individual instances of re-relocation from developing countries should not be taken as evidence for, let alone proof of, the fact that the site advantages of the developing countries are losing ground in corporate strategies and investment decisions.

Re-relocations of production, where production is shut down in the developing countries and restarted in the industrialised countries, are minimal compared with new instances of relocation, and there is no reason to suppose any change in this trend for the latter half of the 1980s. Although "forced re-relocation" induced by displacement by competitors with a more profitable organisation, that is, distribution of production between sites in the developing and industrialised countries, is certainly a daily occurrence, it does not constitute a trend. Competition demands its sacrifice from companies looking for site advantages in both industrialised and developing countries. Closures in developing countries attributable to relocation to a different developing country are also occasionally misread as indicators of a general process of a retransfer of output back to the industrialised countries.

Processes of relocation following re-relocation can also be observed, that is, production which had been relocated to developing countries, then replaced by automated, semi-automated or conventional manufacturing processes in the industrialised countries, and then transferred back to the developing countries once manufacture appeared profitable there again.

The constant migration of companies round the world in the search for the most favourable and optimal combination of sites is not characterised by re-relocation but by further relocation to new and existing sites world-wide, a form of "shifting cultivation", or "using the labour resources wherever they are to produce for the market wherever that is".

To summarise:

- Employment in export-orientated industrial production in the developing countries increased markedly between 1975 and 1986.

- More than half of all employment in export-orientated industrial production in the developing countries is concentrated in four South East Asian economies, including the area of Hong Kong, Singapore and the Republic of Korea. However, massive relocations have also taken place to other developing countries, including eight additional countries in South East Asia, seven in Latin America and the Caribbean, and five countries in Africa. World market-orientated production is not, as is often supposed, confined to the four South East Asian NICs.

- Employment in EPZs and offshore plants has grown relatively rapidly in a number of countries which are new recipients of export-orientated industrial production, such as Egypt, Bangladesh and Sri Lanka.

- Relocations of production have taken place especially to those developing countries and to those locations in developing countries offering advantages in addition to low-cost labour. These include not simply infrastructure and industrial inputs but also factors such as political "stability" and the guarantee for unhindered remittance of profits. Companies are also guided by a number of other factors, such as proximity to their own domiciles and markets, as evidenced by the mass relocation of United States firms to Central America and the Caribbean, Western European companies to North Africa, and Japanese firms to developing countries in South East Asia. The acquisition and use of import quotas can also play a decisive role (especially in textiles and clothing).

- Although the relocation of world market-orientated production from industrialised to developing countries is of considerable importance for the divergent movement in employment in each group of countries, with a few notable exceptions the process of export-orientated industrialisation in the developing countries continues to be of rather minor significance in the industrial development of the developing countries, despite the the fact that a substantial share of available infrastructure and investible funds have been swallowed up by export-orientated production.

It is therefore not entirely surprising that even erstwhile enthusisastic proponents and architects of EPZs now concede that such facilities have not been a universal success story (Ryan, 1985, pp. 62-64).

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As stated at the outset, a reappraisal of the economic and social function of the EPZs needs to be examined within the context of structural changes in global economic development in the 1970s and 1980s. Further studies are necessary to find out why the development of EPZs in different countries differs considerably. Why do multinational enterprises prefer certain sites instead of others even though the conditions for investment and production are rather similar? Yet, the "success stories" of EPZs only show that a sufficient number of multinationally operating enterprises found it profitable to use these places for export production. They do not tell anything about the impact of that activity on the working and living conditions of the people involved. In-depth research is still needed to establish the

short-, medium- and long-term consequences of this specific and rather limited pattern of partial industrialisation in Third World countries. Such research could be guided by the overall question: What kind of economic and social development is desired; what has been achieved by FPZ activities and what would have been possible, if all the public assets used up for providing FPZ facilities could have been employed for production of goods and services according to the needs of the population at large?

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