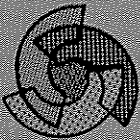


**A CRITICAL SURVEY OF THE  
ECONOMIC IMPACT OF EXPORT  
PROCESSING ZONES**



**UNION OF THE CHAMBERS OF COMMERCE,  
INDUSTRY, MARITIME TRADE AND  
COMMODITY EXCHANGES OF TURKEY**

**A CRITICAL SURVEY OF THE  
ECONOMIC IMPACT OF EXPORT  
PROCESSING ZONES**

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**UNION OF THE CHAMBERS OF COMMERCE,  
INDUSTRY, MARITIME TRADE AND  
COMMODITY EXCHANGES OF TURKEY**

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**Pamuk Ofset Matbaası-İstanbul 1989**

## FOREWORD

One of the most important development during the last two decades is the establishment of free trade zones (FTZs) and export processing zones (EPZs) in the developing countries. The main characteristics of the EPZs lie in the idea of developing such a zone for manufacturing and export purposes, and not just for storage or trade as in the case of FTZs.

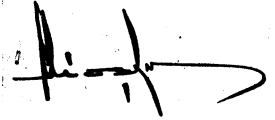
The purpose of this research was to overview the economic impact of EPZs with respect to past experience of developing countries including the recent experience of the Turkish case on the establishment of free zones.

The author concluded that EPZs in reland and South East Asian countries are more successful than EPZs in other countries. In this study, Dr.Emin Çarıkcı, Professor of International Economics at Hacettepe University, Ankara, examind and evaluated the most recent existng literature and data in order to highlight lessons of experience of the EPZ countries for the purpose of identifying the factors that responsible for the successes and failures of these zones.

I believe that thes study which analyses and discusses numerous aspects of the subject and concludes with a number of findings will be of value for interested parties, including the policy and decision makers and businessmen.

I would like to express may sincere congratulation to Prof. Dr. Emin Çarıkcı for his contribution and to extend may thanks to those people who have devoted their time and efford for the publication of this book.

Ali COŞKUN



President of TOBB



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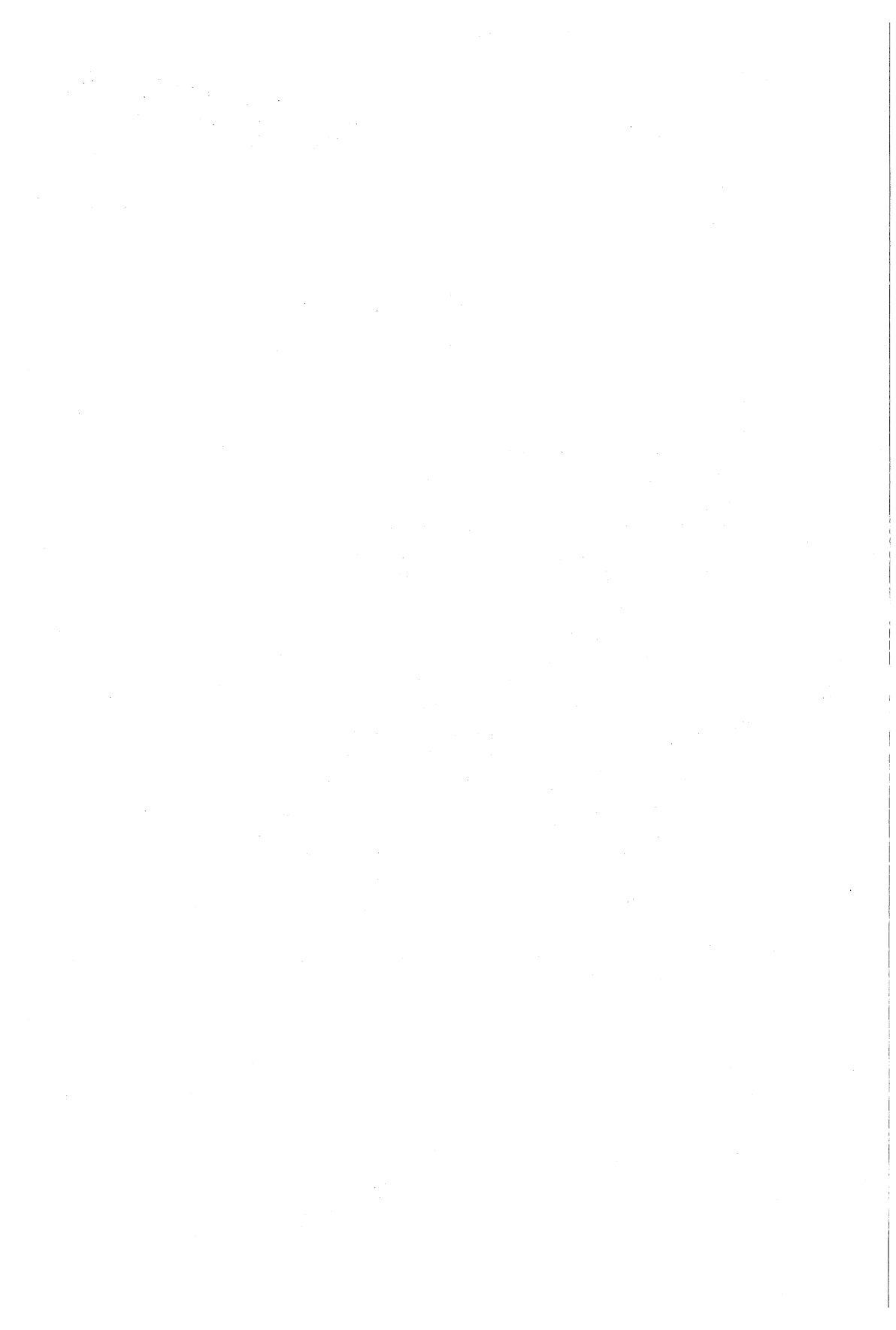
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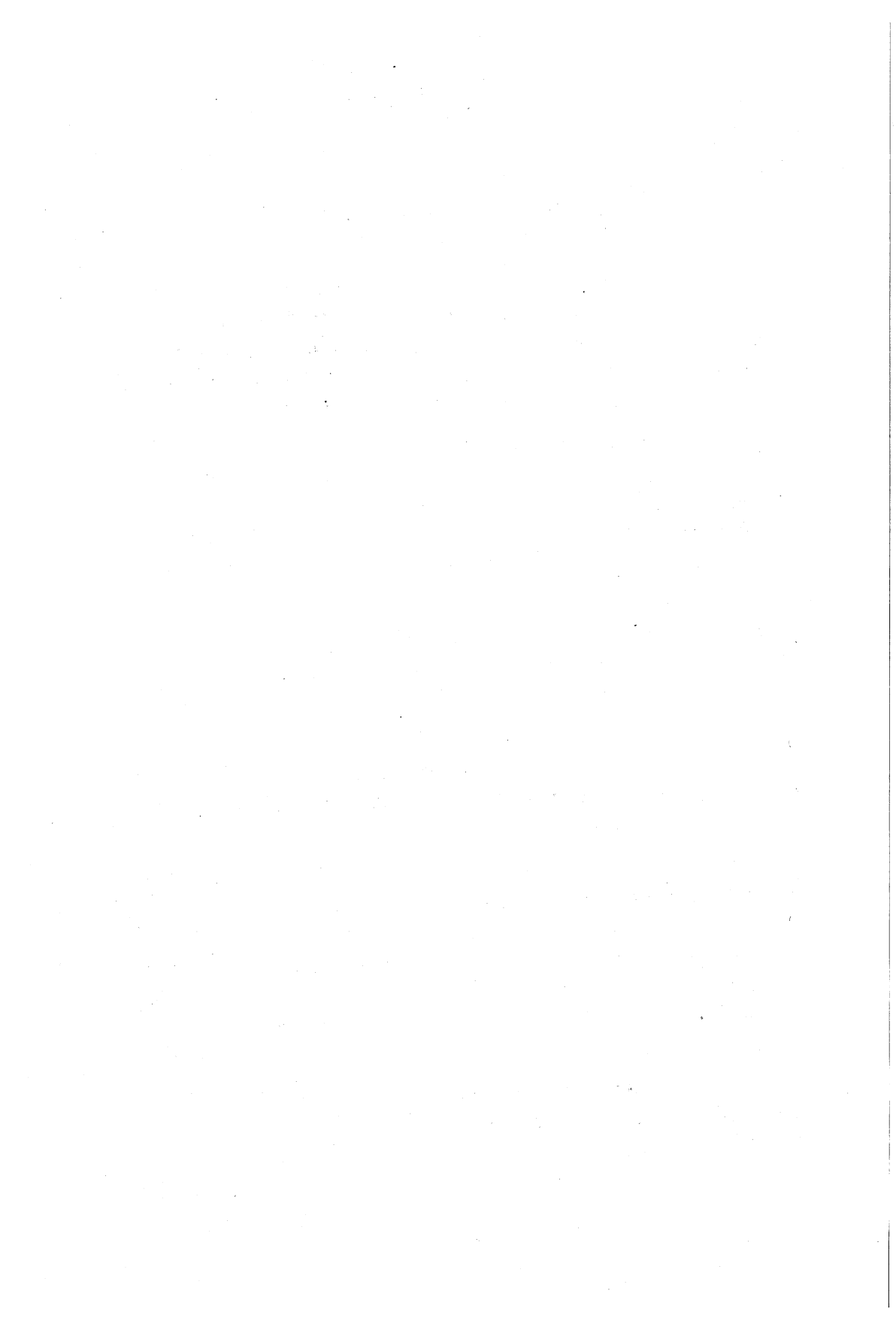
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*Ideas expressed in this book are entirely the personal responsibility of the author and in no way reflect the views of the IRTI/IDB or TOBB.*

Ankara October 1989



## **ABBREVIATIONS**

<b>ARTEP</b>	: Asian Employment Program
<b>EIU</b>	: The Economic Intelligence Unit
<b>EP</b>	: Export Promotion
<b>EPZs</b>	: Export Processing Zones
<b>FTZs</b>	: Free Trade Zones
<b>IDB</b>	: Islamic Development Bank
<b>ILO</b>	: International Labor Organization
<b>IPZ</b>	: Import Processing Zone
<b>IRTI</b>	: Islamic Research and Training Institute
<b>IS</b>	: Import Substitution
<b>NICs</b>	: Newly Industrializing Countries
<b>OIC</b>	: Organization of Islamic Conference
<b>OECD</b>	: Organization for Economic Cooperation and Development
<b>SESRTCIC</b>	: Statistical, Economic and Social Research and Training Center for Islamic Countries of OIC
<b>SPO</b>	: State Planning Organization of Turkey
<b>TOBB</b>	: Union of the chambers of Commerce, Industry, Maritime Trade and Commodity of Turkey
<b>TFZD:</b>	: Turkish Free Zones Directorate
<b>UN</b>	: United Nations
<b>UNIDO</b>	: UN Industrial Development Organization
<b>UNCTAD</b>	: UN Conference on Trade and Development
<b>WEPZA</b>	: World Export Processing Zone Association



# **INTRODUCTION**

1997

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## INTRODUCTION

*Definition of EPZ's*

Since the late 1960s, a growing tendency to establish free trade zones (FTZs) and export processing zones (EPZs) have been observed in many countries. FTZs and EPZs are regions located inside the political boundaries of a consist of limited areas of land and they are separated from the surrounding host country's territory by fences and other barriers.

Since 1971, the United Nations Industrial Development Organization (UNIDO), has been approached by many developing countries seeking various type of technical assistance in establishing or reorganizing EPZs. In response to this demand UNIDO has cooperated with the other organizations of the United Nations (UN) and with the World Bank to provide further assistance. UNIDO assisted more than 40 developing countries in this sphere (WEPZA Secretariat, 1987).

*Incentives*

UNIDO drew up a plan for a model EPZ and several governments have adopted its provisions for zone administration, infrastructure, tax holidays and other incentives. In addition, in February 1978, the World Export Processing Zones Association (WEPZA) was founded in Manila, which is also accredited to UNIDO as a consultant on EPZs. WEPZA focuses its entire work effort to carry out research projects, organize annual workshop/seminars on EPZs and promote cooperation among EPZ organizations. Currently, 19 countries are members of this association. and the Flagstaff Institute (Arizona, U.S.A.) is the permanent WEPZA Secretariat for the 1986-1990 period



## SCOPE AND PURPOSE

The purpose of this research is to overview and update the economic impact of EPZs with respect to past experience of developing countries without undertaking any case study intends to make a critical survey of the most recent existing literature in order to highlight lessons of experiences of these countries. Finally, a brief summary and major findings of this research will be presented in the last part of this study.

The need for the study of the economic impact of EPZs is very important, given the very rapid rate of growth of these zones throughout the developing world especially during the 1980s. Because, information on EPZs published ten or even a few years ago is now becoming out dated; therefore, the topic requires continuous updating. Thus, more updated information and understandings about this subject is needed.

*Main Sectors in EPZ'S*

In some developed countries, and especially in the United States, FTZs are increasingly being used to manufacture and assemble of goods most of which are ultimately imported into domestic market. Operations of these zones mainly include refining of petroleum, production of synthetic gas, manufacture of textile and steel pipe, assembly of automobiles, typewriters, aircraft engines and motor cycles. This import orientation is in distinct contrast to the export-oriented nature of EPZs operated in developing countries. FTZs in developed countries have not normally contributed significantly to export expansion.

In developing countries, the entire production of EPZs <sup>by</sup> normally intended for export purposes. EPZs are mainly established by developing countries for the purpose of promoting the development of export-oriented manufactured industries, generating foreign exchange earnings and employment. Major sectors of production in these zones are electronics, textile and clothing, footwear, leather products, electrical products, optical goods, plastics, toys, sporting goods, car parts and some transport equipment.

## METHOD AND PROBLEMS

In spite of very rapid increase in the number of EPZs in developing countries, the knowledge and statistics about the magnitude of the economic impact of these zones is hardly measured. In fact, because of this limited information, concerning not only the economic impact but also the operations of EPZs in developing countries, an analytical evaluation of the experiences of these countries can not be made comprehensively. Thus, this evaluation can only be tentative and of necessity on a selective basis. To analyze this topic the role of EPZs is viewed only for developing countries and their impact analyzed for those where data has been available.

For this research, the statistical material has mostly been gathered from the following sources:

*- Information from the WEPZA Publications, and planning and development authorities in major EPZ countries.*

*- National surveys, case studies, miscellaneous analyses and statistics from the UN Secretariat, the UNCTAD Secretariat, UNIDO, the International Labor Office (ILO) and other international organizations.*

*- Reports, analyses and statistics from the business press and international economic journals.*

The reader should not expect to find a fully complete assessment of the role of the developmental impact EPZ on any host country. The scarcity of data and the availability of information are the main constraints for a sound evaluation. In spite of these limitations, this study contribution to the literature on this recently developing important subject.

In the light of the above commitments, the reservations and the reservations and the limitations, the content of this research will be expected to finalize in the following manner.

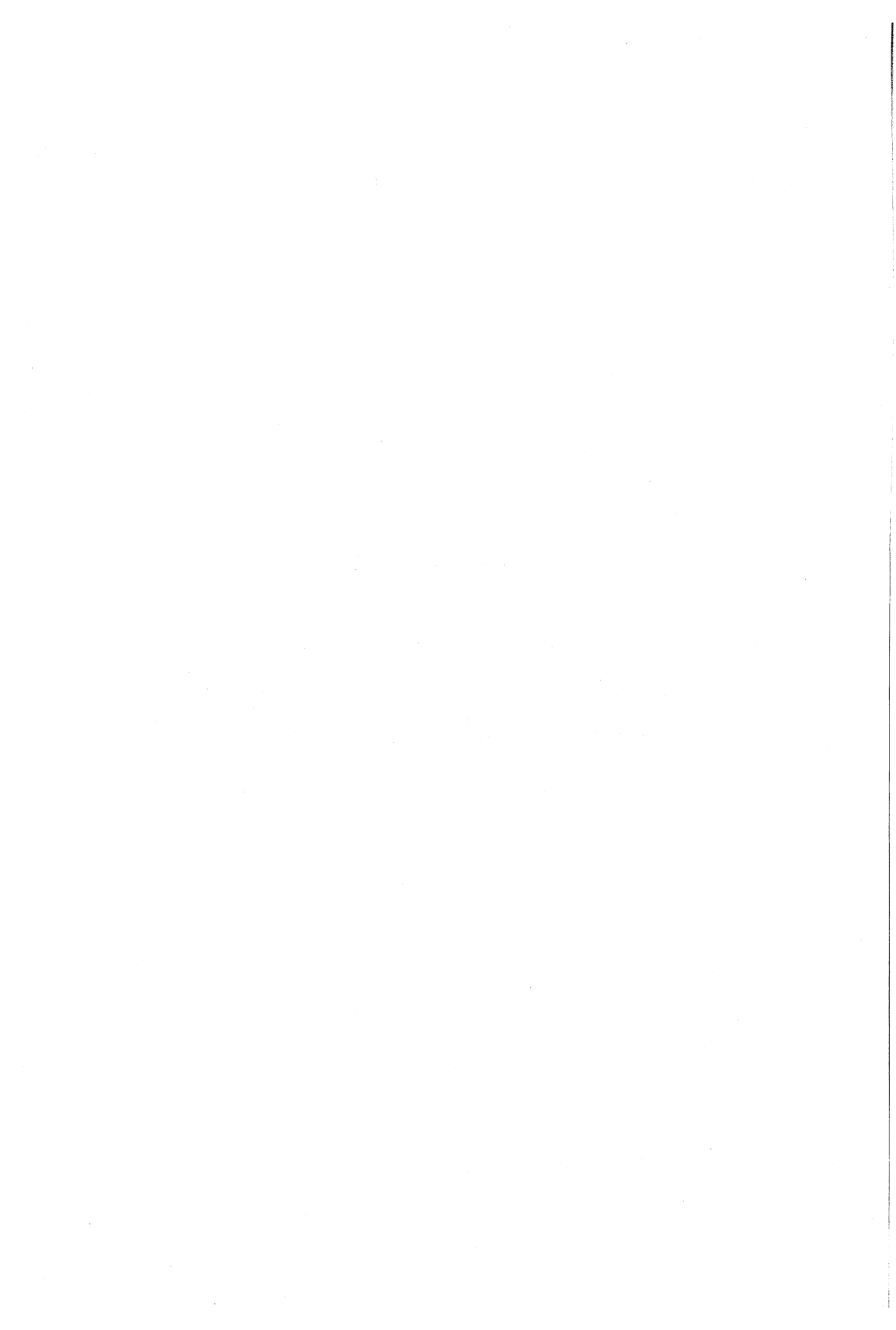
Part I - After a brief introduction of the objectives, method and problems of this research, Part I includes historical background, economic characteristics of EPZs and incentives in EPZs, as well as analysis of reasons for increase in the number of EPZs, and their global distribution in developing world.

Part II focuses on the objectives and functions, employment effects of EPZs in the first two sections. Section 3 of this part II provides a brief evaluation on the industrial impact and other economic impact of EPZs. Specifically, impact of EPZs on local industries, exports, foreign exchange earnings, indirect growth and employment issues have been elaborated. Reason for success and failures, final assessments and future prospects of EPZs are also studied in Part II.

In Part III, a summary of major findings and conclusions are presented.

**PART-I**

**CHARACTERISTIC AND  
DISTRIBUTION OF THE EXPORT  
PROCESSING ZONES**



## **PART I**

# **CHARACTERISTIC AND DISTRIBUTION OF THE EXPORT PROCESSING ZONES**

### **1. Historical Background and Economic Characteristics of Export Processing Zones**

#### **A. Historical Background of EPZs**

One of the most important development which took place in the world economy during the last two decades is the growth of EPZs in the developing countries. They have been growing in terms of both number and employment. For example, in 1970, there were only 20 FTZs in 10 developing countries. by 1986, in 46 developing countries 175 EPZs were at the planning stage. In addition, employment in these zones increased from 50.000 in 1970 to over 1.3 million in 1986<sup>1</sup>.

Before EPZs were established for the operation of export industries FTZs were established in many developing and developed countries in order to handle and speed up the eventual customs clearance of imported materials. Their orientation were/are towards local rather than export.

The modern export oriented EPZ can rightly be considered as an Irish invention. The first EPZ was established at Shannon International Airport in Ireland in 1959. That year the Irish Government transformed the airport area into a EPZ by supplying fiscal and non-fiscal incentives to the foreign firms

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1 ILO (1988) pp. 1-2 and 15.

for the establishment of manufactured facilities in the area. Thus, the Government transformed the old-age concept of the free trade zone into the modern concept of an industrial export processing zone<sup>2</sup>.

EPZ concept was used secondly by Puerto Rico, when a free zone was established 1962 for the location of manufacturing activities in the Island. Before 1970, a number of developing countries, namely India, Dominican Republic, Brazil and Colombia established their export processing zones. Then, the real growth of the number of EPZs occurred in 1970s, especially in South East Asian, Middle Eastern and North African countries<sup>3</sup>.

### ✓ B. Economic Characteristics of EPZs

The main characteristics of the EPZs lie in the idea of developing such a zone for manufacturing and export purposes, and not just for storage or trade as in the case of free trade zones. Free trade zones which were mostly established in developed countries were used to play mostly a commercial role in the past. Recently, they are also increasingly being used for the manufacture and assemble goods most of which are ultimately imported into the domestic markets. Thus, import orientation of FTZs is a clear contrast to the export oriented nature of EPZs established in developing countries.

✓ In any case the EPZ has two main characteristics: Firstly, it is an *an area* which enjoys a status that does not extend to the whole territory of the host country. Secondly, enterprises established in the zone must export their production. In EPZs, activities permitted include manufacturing, processing and assembling for export. In general, each zone is intended to foster economic cooperation and technical exchanges between the host and more developed countries by encouraging foreign investment and to diversify sources of foreign exchange earnings by increasing exports, employment generation

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2 Ibid; UNCTAD (1985) pp. 1-1.

3 Ibid; O. Kreye et. al. (1987), pp. 6-7.

and thereby to accelerate economic development of the country<sup>4</sup>.

In order to reach their goals, EPZs should have sophisticated infrastructure and they should be as open as possible in order to encourage close relations between foreign and domestically owned firms. Thus EPZs should encourage more joint ventures between local and foreign investors.

### C. Incentives in EPZs

#### a. Financial Incentives

Many developing countries offer a number of incentives to attract investment capital and technology to export oriented industries within their zones. IN addition to their highly sophisticated infrastructure and subsidized services, they offer tax holidays for 22 to 10 years, other rebates and deductions.

In most cases, the time period of tax holidays or exemptions is changed with respect to type of investment. In general, 5 to 10 years tax exemptions are offered companies investing in education, training, health scientific and technological development, water and power supply, transportation and other infrastructural projects. Enterprises in directly productive activities are usually granted a 100 per cent tax exemption in the first 2 to 5 year and 50 to 25 per cent in the following years<sup>5</sup>.

In some cases, such as Hong Kong, the country refrains from offering investors tax holidays and subsidies. Instead, the country attracts investors with an absence of restrictions, including full exemption from import and export duties and exchange control<sup>6</sup>

Duty free imports of capital goods such as machinery, eqipment, spare

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4 L. Sklair (July, 1986), pp. 754-755.

5 For further information about case studies, see W. Dimond and D. Dimond (1988) Volumes 1-3; Germidis (1984), pp. 37-38; SESRTIC (1986).

6 Ibid, Volume 1, pp.2-3, Hong Kong.



parts and construction materials, and raw materials as well as packing materials for re-export are also generally granted in each zone.

Export duties are not levied on finished and semi finished products unless they are shipped into the host country's domestic market. If the products are sold within the zone, an exemption or reduction of some of the taxes may be negotiable. Sometimes, duties may be charged at the full rate, reduced or remitted on items needed of those living and working in the zone. In most of the EPZs, exemption from duties, excise taxes and other state and local taxes are also guaranteed<sup>7</sup>.

#### b. Non-fiscal Incentives

Foreign investment law of each host country guarantees free transfer of capital and profits which are derived from dividends, royalties, interest and other earnings, and other income from the zone operations and compensation in the event of expropriation.

Other non-fiscal incentives are freedom to employ foreign nationals in supervisory, technical or advisory positions, unrestricted degree of foreign ownership, priority in allocation of concessionary government guaranteed loans at subsidized interest rates; simplified import and export documentation; and availability of high level of infrastructure facilities<sup>8</sup>.

In addition to above mentioned financial and nonfinancial incentives, availability of sophisticated infrastructure facilities in the zone as well as an efficient labor market and stable political conditions in both host and neighboring countries are the most important prerequisites to attract more foreign firms to the EPZs. Infrastructure facilities include standard factory buildings

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7 For case studies, see Ibid, Volumes 1-3; P. Warr (1987a), pp. 221-224.

8 Ibid; D. Spinanger (1984), pp. 68-71,75.

for production and water supply facility, highly sophisticated telecommunication systems, roads and drainage, very large warehouse for storage of raw materials and finished products, parking, recreation and dining halls to cater to the needs of employees of zone enterprises, health center and other services facilities<sup>9</sup>.

Every one knows that a developing country cannot attract an industrial foreign company unless the country have sufficient physical facilities in the zone. Realization of these infrastructure facilities is very expensive and they mostly have to be financed and supplied at subsidized rate by by the public sector of the host countries.

## **2. Reasons for Increase in the Number of Export Processing Zones and their Global Distribution**

### **A. Reasons for Increase in the number of EPZs in Developing Countries**

One of the main motivations underlying the creation of EPZs in the late 1960s and 1970s was the acceptance of the concept of export-oriented industrialization as a more appropriate development strategy with respect to import substitutions.

Having decided to industrialize, governments of developing countries had to choose an inward looking strategy of Import Substitution (IS) in order to achieve the objectives of industrialization, and to reduce balance of payments deficits. The economic history of many developing countries proves that the replacement of the imports of nondurable consumer goods and their inputs by domestic production did not encounter much difficulty, and the first or the easy stage of import substitution was completed with success in a few decades.

Maintaining high industrial and growth rates becomes increasingly difficult

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<sup>9</sup> P. Warr (1985) pp. 11-13, 21, 26-28; J. Kent (March 1986), pp. 50-51; p. Perry (March,1986) pp. 54-55.

to follow beyond the completion of the easy consumer goods phase. Then it necessitates turning to the second stage of import substitution or moving to the outward looking strategy of export promotion. After completion of the easy stage, majority of developing countries turned to the second stage of IS. This stage involves the replacement of the imports of intermediate inputs, capital goods and consumer durables by domestic production. Compared with the products of the first stage, these commodities require more skill, and they first mostly capital and import intensive<sup>10</sup>

Furthermore, the high level of import protection combined with an over-valued exchange rate discriminates against manufactured and primary exports and against primary export disincentive usually result in stagnant export revenue which leads to foreign exchange saving has been small since the country still has to import fuel, industrial intermediate in stagnant export revenue which leads to foreign exchange constraint. At the same time net foreign exchange saving has been small since the country still has to import fuel, industrial intermediate inpus, capital goods, and even foodstuff in order to pursue second stage of import substitution.

In order to solve their foreign exchange constraints, during the mid-1960's and 1970's, some of the developing countries intended to shift their trade strategies from Is to export promotion (EP). Export promoting policies are essentially characterized by the maintenances over time of a realistic exchange rate and interest rate, monetary and fiscal stabilization programs, easing of quantitative import restrictions and a substitution of tariffs for quotas, liberalization of foreign investment law, the reform of capital markets and administrative procedures, and reforms in the public sector mostly by adopting more realistic pricing policies for public utilities<sup>11</sup>

However, many planners of the developing countries quickly realized that

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10 For further information, see B. Balassa (1981), pp. 5-8; A. Kruger (1984), pp. 528-530; E. Carikci (1988), pp. 6-10; e: Carikci (1987) p. 40.

11 Ibid.

the transition from IS to export-oriented strategy was not easy to implement in practice. Because, a sudden transition from high protection to open international competition would probably have created some economic and social damage on heavily protected domestic economy. Then, establishment of EPZs appeared to many developing countries as the ideal solution to start their liberalization attempt as a risk-free experiment. Because if it succeeds, it would bring export revenue and generate effect for local enterprises if it failed, its adverse to its isolated character from the local economy. As a result, in late 1960's and 1970's, some of the developing countries declared their intention to open up EPZs as a part of their liberalization programs<sup>12</sup>.

In addition to the internal pressures for liberalization in developing countries, external forces have also been contributing factor for the rapid increase in EPZs. Since 1970's developed countries have lost their comparative advantages in labor intensive manufactured products. Thus, the worldwide process of industrial relocation have started as a result of the decline of a number of labor intensive industrial sectors in the industrialized countries. Through the establishment of EPZs developing countries responded to this new opportunity for attracting direct foreign investment in labor-intensive but export-oriented manufacturing resulting from industrial relocation. Thus, due to combined effect of these two domestic and external factors establishment of EPZs have rapidly increased during the last decade<sup>13</sup>.

### **B. The Global Distribution of EPZs**

Since early 1970's, there has been a steady increase in the number of EPZs established throughout the developing world. Number of EPZ countries and zones themselves have doubled from 1975 to 1986. IN 1975, 79 EPZs were in operation in 25 different developing countries, whereas in 1986, this had increased to 176 zones in 46 countries<sup>14</sup>.

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12 ILO (1988) pp.53-54; D. Jayawardena (Sept.-Oct.,1983)p.440.

13 E. Lee (1984) p.6 ILO (1988) P.68; M.Ariff and H.Hill (1985) pp.23-24.

14 O.Kreye (1987) p.6; for 1986, see, Table-1 of this study.

South East Asian countries took the lead, followed by Central American and North African countries by setting up a number of EPZs in 1970's. The existence of EPZs has nothing to do with the size, population and level of per capita income of the country. It has nothing to do with the economic and political system of the country either (see Table 1). For example, Red China's special economic zones came into existence under a law issued by the government in 1980. Shenzhen, Zhuhai, Shantou and Xiamen zones were established during the early 1980's. Under the 1984 decree, the government allows the four special Economic Zones (EPZs) and the 14 coastal cities designed as potential sites for foreign investment<sup>15</sup>.

As can be seen from the Table-1, some of the Muslim countries have already established their EPZs. These are Egypt, Morocco, Senegal, Tunisia, Bahrain, Bangladesh, Indonesia, Jordan, Malaysia, Pakistan, Syria, Turkey, UAE and P.D.R. of Yemen<sup>16</sup>. Table-1 also shows that, in Gambia, Sudan and Brunei EPZs are under construction.

Egypt, Syria and Jordan converted their commercial zones for industrial use in late 1970's. Major EPZ countries in Muslim World are Malaysia, Tunisia and Egypt. As of 1986, 176 EPZs were in operation in developing countries. Out of this total, 44 of them were in operation in Muslim countries (see, Table-1).

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15 Dimond and Dimond (1988), Vol. 2, pp. China 5-6.

16 For detailed study of case studies, see, Dimond and Dimond (1988) volumes 1-3; J. Currie (1985), Part-II, pp. 46-214.

**Table 1**  
**Export Processing Zones and Other Offshore Manufacturing facilities in**  
**Developing Countries by Region and Country, 1986**

Country or Area	Number of Export processing zones			Other offshore manufacturing facilities*
	in operation	under construction	Planned	in operation
<b>AFRICA</b>	25	63	6	9**
Botswana				x
Cote d'Ivoire				x
Egypt	4	1	2	
Gambia	1			
Ghana	1		2	
Kenya		1		
Lesotho			1	x
Liberia	1			
Mauritius <sup>1</sup>	7			x
Morocco	1	33		x
Namibia				x
Nigeria			1	
Senegal	1			
South Africa <sup>2</sup>				x
Sudan	1			
Swaziland				x
Togo	1			
Tunisia <sup>3</sup>	9	25		x
Zaire		1		
<b>ASIA AND THE PASIFIC</b>	95	14	10	17**
Bahrain	2			x
Bangladesh	1		2	
Brunei		1		
Fiji		1		
Hong Kong <sup>4</sup>	14			x
India	2	4	1	x
Indonesia	2	2	1	
Iran			1	
Jordan	3			
Korea (Republic of) <sup>5</sup>	11			x
Kuwait				x
Macao <sup>6</sup>				x
Malaysia	11			*
Oman				x
Pakistan	1		4	x
Philippines	3	2		x
Qatar				x
Saudi Arabia				x
Singapore <sup>7</sup>	22			x
Sri Lanka	3		1	x
Syria <sup>8</sup>	6	1		

Thailand	1			x
Tonga	1			
Turkey	2	2		x
United Arab Emirates	1			
Yemen (P.D.R.)	1			
Taiwan, China	4	1	1	x
<b>LATIN AMERICA AND THE CARIBBEAN</b>	<b>56</b>	<b>9</b>	<b>8</b>	<b>14**</b>
Antigua & Barbuda				*
Argentina				
Bahamas				
Barbados	1	3		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 El Salvador	1		1	
Guatemala	1			
Haiti	1	1	2	x
Honduras	1		1	
Jamaica	2			
Mexico	23			x
Montserrat	2			
Netherlands				
Antilles				
Nicaragua <sup>9</sup>	1			
Panama	2			
Puerto Rico <sup>10</sup>	2	1		x
St. Kitts & Nevis				x
St. Lucia	2			
St. Vincent				*
Trinidad & Tobago				
Venezuela	1		1	
<b>Total</b>	<b>176</b>	<b>86</b>	<b>24</b>	<b>39</b>

- 1 EPZ conditions available country-wide with 7 major industrial part
  - 2 EPZ conditions available at 4 industrial sites
  - 3 EPZ conditions available country-wide with 9 major industrial areas
  - 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, Yenchon)
  - 6 EPZ conditions available country-wide with 4 industrial zones.
  - 7 APZ 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 park
- \* EPZ conditions at other locations
- \*\* Number of countries with such facilities

**Source:** O. Kreye, J. Heinrichs and F. Frobel, *Export Processing Zones in Developing Countries: Results of a New Survey* (Geneva, ILO, 1987) Table 3, on pp. 8-9.

**Table 2**  
**Employment in EPZs in 1986 as a Percentage of Total EPZ**  
**Employment in each Region and Country**

REGION AND COUNTRY	PERCENTAGE	TOTAL EMPLOYEES
<b>ASIA</b>	(60.6)	787,700
Singapore	27.5	
S. Korea	17.8	
Hong Kong	11.3	
Malaysia	10.4	
Taiwan	10.2	
Macau	7.9	
Philippines	5.0	
Sri Lanka	4.4	
Others	5.5	
<b>LATIN AMERICAN AND CARIBBEAN</b>	(29.3)	381,300
Mexico	65.6	
Brazil	16.5	
Dominican Republic	9.4	
Others	8.5	
<b>AFRICA</b>	(10.1)	131,200
Mauritus	47.0	
Tunisia	30.5	
Egypt	19.0	
Others	3.5	
<b>TOTAL</b>	(100.0)	1,300,200

Source: Derived from ILO, *Economic and Social Effects of Multinational Enterprises in Export Processing Zones*, (Geneva, ILO, 1988) Figure 2, on p.10.

As regards the regional distribution in 1986, 95 EPZs were in operation in Asia and Pacific, 56 in Latin America and Caribbean, and 25 in Africa (see, Table-1). IN terms of EPZ employment, again Asia is a leading region. Table-2 shows that total employment in such zones reached to 1.3 million people in 1986. Out of this total 787.7 thousand (60.6 percent) people employed in Asia, 382.3 thousand (29.3 percent) in Latin America and Caribbean, and remaining 131.2 thousand (10.1 percent) in Africa.



In Asia, which accounts 60.6 per cent of all EPZ employment in developing countries, five main EPZ countries namely Singapore, South Korea, Hong Kong Malaysia and Taiwan account for 77.2 per cent of total EPZ employment (787.7 thousand) in the reion. In Latin America and Caribbean, Mexico and Brazi account for 82.1 per cent of total EPZ employed in three main EPZ countries namely Mauritius, Tunisia and Egypt (see Table-2)

**PART-II**

**THE ECONOMIC IMPACT OF EXPORT  
PROCESSING ZONES: THE PAST  
EXPERIENCES WITH EPZ  
IN DEVELOPING COUNTRIES**

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## PART II

# THE ECONOMIC IMPACT OF EXPORT PROCESSING ZONES: THE PAST EXPERIENCES WITH EPZs IN DEVELOPING COUNTRIES

### 1. Objectives and Functions of Export Processing Zones ✓

EPZs are established by developing countries for the purpose of realization of some of the following objective<sup>17</sup>

- to create employment and/or reduce unemployment,
- to diversify export base by promoting manufactured exports,
- to increase foreign exchange earnings,
- to attract foreign capital and advanced technology,
- to upgrade labor and management skills,
- to create external economic impact of EPZs, realization of above mentioned expected objectives have to be evaluated with respect to recent experience of developing countries.

In order to assess the economic impact of EPZs, realization of above mentioned expected objectives have to be evaluated with respect to recent experience of developing countries.

### 2. The Employment Effects of Export Processing Zones

One of the most important motivations for the creation of EPZs during

<sup>17</sup> UNCTAD (1985), p.4; p. Warr (1985), p.9; Journal of Flagstaff Institute (February 1987), p.34; Aleybeyolu (1986), pp. 69-70

the last two decades was to increase manufacturing employment and to generate jobs for the large number of newcomers into the labor force.

#### **A. Employment Growth in EPZs**

As seen in Tables 1 and 2, in the EPZ business, and total employment in these zones reached to 1.3 million people. Out of this total, more than 1.2 million people were employed in 14 main EPZ countries (see Table 3). Table 3 also shows that employment is not distributed evenly among these 14 countries. The largest 6 EPZ countries namely Mexico, Singapore, South Korea, Hong Kong, Malaysia and Taiwan, account for about 2/3 of total EPZ employment (859,000/1,300,000) in developing countries. The Table also indicates that most of the leading countries in terms of EPZ employment happen to belong to the group of Newly Industrializing Countries (NICs).

Second column of the Table 3 also shows that, in each leading EPZ country, total EPZ employment as a percentage of total manufacturing employment varies considerably. Firstly, in some small main EPZ countries such as Macau and Mauritius more than 75 per cent of employment in manufacturing sector is accounted for EPZ enterprises. Secondly, except Mexico, in larger countries (in terms of both land and population) namely Brazil, Egypt, Philippines, South Korea and Taiwan EPZ employment was less than 6 per cent of total manufacturing employment. Finally, in rest of the countries listed in the Table, EPZ employment as a percentage of total manufacturing employment ranges between 9.5 per cent and 35 per cent. IN mid-1980s, this average percentage for 48 developing countries was only 2 per cent.

**Table 3****The Main Export Processing Zone Countries in 1986 and  
Employment in Their EP Zs as a Percentage of Total  
Manufacturing Employment**

<b>Country</b>	<b>Total EPZ Employment (1986)</b>	<b>% of Manufacturing Employment</b>
Mexico	250,000	10.0 (mid-1980s)
Singapore	217,000	35.0 (1980)
South Korea	140,000	5.5 (mid-1980s)
Hong Kong	89,000	9.5 (mid-1980s)
Malaysia	81,700	23.0 (1980)
Taiwan	80,500	4.8 (mid-1980s)
Brazil	63,000	1.5 (mid-1980s)
Macau	62,500	90.0 (mid-1980s)
Mauritus	61,700	78.0 (1984)
Tunisia	40,000	20.0 (mid-1980s)
Philippines	39,000	1.2 (mid-1980s)
Dominican Republic	36,000	22.0 (mid-1980s)
Sri Lanka	35,000	16.0 (1981)
Egypt	25,000	1.5 (mid-1980s)
<b>(Total)</b>	<b>1,220,400</b>	
Average,	48 developing countries	2.0 (mid-1980s)

**Source:** Derived from ILO **Economic and Social Effects of Multinational Enterprises in Export Processing Zones** (Geneva, ILO, 1988) Figures 1 and 3 on pp. 8 and 21-22 respectively.

In the large countries, only in Mexico the EPZ employment reached to 10 per cent of the total employment in the manufactured industry. Because, the Border Industrialization Program of Mexico (The Maquila Program) started in 1969 in order to ease the unemployment problem and to develop the border region which is far from the center of heavily populated industrial center of Mexico. In 1969, five thousand employees were employed in Maquila industries. By mid-1980s, this figure had reached to 225,000<sup>18</sup>.

Table 4 shows the total of employees were employed in both EPZs and other offshore manufacturing facilities with respect to region and country in 1975 and 1986. As can be seen from the first and second columns of the table, from 1975 to 1986, total EPZ employment increased from 34 thousand to 132 thousand in Africa, from 392 thousand to 788 thousand in Asia and Pacific, and from 122 thousand to 381 thousand in Latin America and the Caribbean. Corresponding figures were more than doubled in Brazil and Singapore, and tripled in Mexico.

The distribution of employment in EPZ is highly uneven in each region. In Africa, the bulk of EPZ employment is only concentrated in five countries, namely Mauritius, Tunisia, Egypt, South Africa and Morocco. In Latin America and Caribbean, this concentration is occurred in Mexico, Brazil and Dominican Republic. However, in Asia and Pacific EPZ employment is spread over quite a large number of countries, such as Singapore, South Korea, Malaysia, Hong Kong, Philippines, India, Sri Lanka, Macau, Thailand, Pakistan, Indonesia, U.A.E., Bangladesh and others (see the second column of Table-4).

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18 For further information, see G.Ochoa (1986) in *Journal of Flagstaff Institute*, pp.30-32.

**Table 4**

**Employment in EPZs 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
<b>AFRICA</b>	34 102	131 190	5 300	37 600	39 402	168 790
Botswana	-	-	-	1800	-	1800
Cte d'Ivoire	-	-	2800	3200	2800	3200
Egypt	..	25000	-	-	..	25000
Ghana	-	2600	-	-	-	2600
Lesotho	-	-	-	1000	-	1000
Liberia	-	700	-	-	-	700
Mauritius	9952	61690	-	-	9952	61690
Morocco	-	..	..	10000	..	10000
Namibia	-	-	-	1600	-	1600
Senegal	150	1200	-	-	150	1200
South Africa	-	-	-	20.000	-	20.000
Swaziland	-	-	2500	..	2500	..
Togo	..	..	-	..	..	..
Tunisia	24000	40000	..	..	24000	40000
<b>ASIA AND THE PACIFIC</b>	391 892	787 730	29 541	198 800	421 433	986 530
Bahrain	2 770	..	4600	..	4600	2270



Country or area	Employment *					
	in export processing zones		in other offshore manufacturing facilities		Total	
	1975	1986	1975	1986	1975	1986
Bangladesh	-	4515	..	-	-	4515
Hong Kong	59607	89000	..	..	59607	89000
India	1249	17000	..	60000	1249	77000
Indonesia	-	13000	11191	..	11191	13000
Iran	-	-	..	-	..	-
Jordan	..	..	-	-	..	..
Korea (Republic of)	11250	140000	..	..	112250	140000
Kuwait	-	-	-	..	-	..
Macau		62512		..	62512	
Malaysia	40465	81688	..	16000	40465	97688
Oman	-	-	..	..	-	..
Pakistan	-	1500	-	12000	-	13500
Philippines	8177	39000	1650	50000	9827	89000
Qatar	-	-	-	1200	-	1200
Saudi Arabia	-	-	-	..	-	..
Singapore	105000	217000	..	..	105000	217000
Sri Lanka	-	35000	-	27000	-	62000
Syria	231	..	-	-	231	..
Thailand	-	4746	16700	28000	16700	32746
Tonga		1000		-		1000
Turkey	-	..	..	..	..	..
United Arab Emirates	-	1300	-	-	-	1300
Yemen (People's Democratic Republic)	-	..	-	-	-	..
Taiwan, China	62143	80469	..	..	62143	80469

Country or area	Employment *					
	in export processing zones		in other offshore manufacturing facilities		Total	
	1975	1986	1975	1986	1975	1986
<b>LATIN AMERICA AND THE CARIBBEAN</b>	122350	381284	243477	385155	365827	766439
Antigua and Barbuda	-	-	-	..	-	..
Argentina	-	-	-	..	-	..
Bahamas	-	..	-	..	-	..
Barbados	-	-	3000	6865	3000	6865
Belize	-	-	-	200	-	200
Brazil	27650	63000	100000	200000	127650	263000
Chile	-	2000	-	-	-	2000
Colombia	5600	6700	-	-	5600	6700
Costa Rica	-	-	..	8600	..	8600
Dominica	-	-	-	200	-	200
Dominican Republic	6500	36000	-	-	6500	36000
El Salvador	6143	2079	-	-	6143	2079
Guatemala	..	..	-	-	..	..
Haiti	..	5000	25000	38000	25000	43000
Honduras	-	2586	-	..	-	2586
Jamaica	-	8000	6100	..	6100	8000
Mexico	74676	250000	9632	..	84308	250000
Montserrat	-	-	-	220	-	220
Netherlands Antilles	-	400	..	-	..	400
Nicaragua	-	..	..	..	..	..

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

Source: O. Kreye, J. Heinrichs and F. Frobel, *Export Processing zones in Developing Countries: Result of New Survey* (Geneva, ILO, 1987) Table 4 on pp.10-11

The first and second columns of Table-4 also show that EPZ employment grew steadily in most of the leading EPZ countries, but in some countries there was stagnation (see Colombia and Panama), whilst in El Salvador the number of EPZ employment declined from 6.1 thousand to 2.1 thousand. Probably, the most important reason for this stagnation and decline is the existence of political instability in the Central American Region during the 1980s.

### **B. The Structure and Length of Employment in EPZs**

The recent studies concluded that the employment structure of EPZs in developing countries are very similar and this structure does not change over-time. The main characteristics of zone workers are as follows<sup>19</sup>.

- more than 75 per cent of zone employment is women;
- predominantly within the age group of 16-25 years;
- around 2/3 unmarried and without previous factory experience;
- predominantly unskilled or semiskilled but they are relatively well educated;
- female workers are paid lower wages than male workers of similar grade and skills;
- employed in monotonous assembly operations as production workers;
- the turnover is very high and average duration of zone employment is less than three years.

The most recent ILO study confirmed that, in early 1980's, the proportion of women in the total EPZ zone employment was 77 per cent in Mexico, 75 per cent in South Korea, 85 per cent in Malaysia, 79 per cent in Macau, 90 per cent in Tunisia, 90 per cent in Indonesia, 80 per cent in India, 74 per cent

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19 P. Warr (1985) p.24; UNCTAD (1985) p.18; O. Kreye, et. al. (1987) p.17; ILO (1988) Table 8 on pp. 60-61; M.L. Possas, et.al. (1987) pp.4 and 13; F. Frobel, et. al. (1980) pp. 344-345 and 350-353.

in Philippines and 68 per cent in Egypt<sup>20</sup>.

The ILO study also indicated that, in early 1980's share of female employment in non-EPZ manufacturing firms operating in the above mentioned countries amounted to: Mexico, 24.5, per cent; South Korea, 37.5 per cent; Malaysia, 32.9 per cent; Macau, 48.1 per cent; Philippines 48.1 per cent; Indonesia, 47.9 per cent; India 9.5 per cent and Egypt 16.5. per cent<sup>21</sup>.

EPZs continue to demand overwhelmingly un-and semiskilled young women who are entering the salaried labor force for the first time, and who tend to quit their EPZ job a few years after when they get married. Low proportion of women in the manufacturing sector of each EPZ country employment is most probably due to the nature of EPZ industries and not to social traditions, economic factors and cultural values of each country.

Educational level of EPZ workers are quite impressive. It is found that in 1982, in the Bataan EPZ of Philippines, 60 per cent of workers were high school graduates and close to 17 per cent had received post-secondary education. Similar high education level is also observed in other EPZs of Far Eastern countries<sup>22</sup>. Their highly educated workers are easily trainable who are quickly adaptable to a wide range of skills while wages remain relatively low.

### C. Working Conditions and Wage Levels in EPZs

Most important reason for the foreign investors to relocate labor-intensive manufacturing activities in EPZs of developing countries are the availability of low-cost, hard working, reasonably well educated and thereby easily trainable manpower. It is the fact that the wages in developing countries are low compared to those in the industrialized countries. For example, in the United States, average wage earning in manufacturing sector increased from

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20 ILO (1988) Table 8 on pp. 60-61.

21 Ibid.

22 P. Warr (1985), p. 24.

\$ 7.27/hour in 1980 to \$ 9.54/hour in 1985<sup>23</sup>. As can be seen from the Table 5, wage earnings per hour in USA is almost equal to daily (8 hours/day) earning of each skilled worker in most of the EPZ countries. This type of wage comparison and a somewhat exaggerated picture of harsh employment conditions are considered as "super-exploitation of the labor-force" in the EPZ industries<sup>24</sup>.

Working conditions in EPZs can only be understood in the context of conditions prevailing in the labor markets of the developing countries. Wage levels in EPZs are the only a small fraction of wages in industrialized countries. But, wages in EPZs do not generally deviate from that prevailing elsewhere in the EPZ countries<sup>25</sup>.

It is also recently stated that wages in EPZs are 10 to 25 per cent lower than those found in similar manufacturing sectors in the host country. These variations cannot simply explain the exploitation of labor in EPZs due to the following reasons. Firstly, there is always sharp difference between wages of female and male workers in all countries. Male workers in general are paid around 50 per cent higher than female workers in similar industries which are located in both EPZ'S and host countries<sup>26</sup>. As stated before, female workers are always more than 75 per cent of work force in EPZs. Secondly, variation in the wage rates is related to the wage rates is related to the type of work done by the different categories of workers and sector of employment. For example, garment and textile firms tended to pay lower average wages to the unskilled female workers than the electronics firms. Some of the EPZs are concentrated on electronics/electrical machinery as in the case of Malaysia and Mexico, whereas in Mauritius, Dominican Republic, Sri Lanka and Egypt overwhelming majority of EPZ workers are employed in textiles and garments industries<sup>27</sup>.

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23 ILO (1987) p. 744. Wage earning refers to cash payments received from employees before deduction of taxes and social security payments and include remuneration for normal working hours, overtime pay and all fringe benefits paid by the employee.

24 For further information, see F. Frobel, et. al. (1980), pp. 350-364.

25 E. Lee, ed. (1984), pp. 20-21.

26 M.L. Possas, et. al. (1977), pp. 12-13.

27 ILO (1988), Table 5 one pp. 38-9.

**Table-5**

**Minimum Wages and Fringe Benefits for Unskilled and Skilled Workers in the EPZs of the Selected Developing Countries (U.S. Dollar/Hour, Md-1970s and 1980s)**

	Unskilled Mid-1980s	(Mid-1970s)	Skilled Mid,1980s	(Mid-1980s)	Fringe Benefits, Mid-1985 (% of basic wager)
<b>EUROPE</b>					
Greece	1.25-1.50		2.00-2.50		n.a.
Ireland	2.00-2.50		3.00-3.50		16.4
Spain	2.00-2.30		3.00-4.00		33.0
Turkey	0.45-0.60		0.80-1.20		19.0-30.0
Yugoslavia	1.00-1.25		1.50-1.75		n.a.
<b>MIDDLE EAST AND NORTH AFRICA (MENA)</b>					
Egypt	0.50-0.65		0.75-1.00		n.a.
Israel	2.00-2.50		3.00-3.50		26.0-50.0
Jordan	1.25-1.50	(0.50)	2.50-3.00	(1.88)	n.a.
Lebanon	1.25-1.50		2.50-3.00		15.0-20.0
Morocco	0.50-0.70	(0.34)	0.70-1.00	(1.10)	30.0-40.0
Syria	1.00-1.75		2.50-3.20		n.a.
Tunisia	0.75-1.00	(0.39)	1.25-2.00	(0.68)	n.a.
<b>FAR EAST AND PAKISTAN</b>					
China (P.R.)	0.70-0.80		1.00-1.50		20.0-25.0
Hong Kong	0.45-0.90		1.00-2.10		16.0
Indonesia	0.30-0.60		1.00-1.30		50.0-90.0
Malaysia	0.60-0.90	(0.18)	2.00-5.50	(0.42)	n.a.
Pakistan	0.25-0.35		0.60-0.80		n.a.
Philippines	0.30-0.55	(0.15)	1.00-1.50	(0.28)	40.0
Singapore	0.30-0.60	(0.38)	2.00-4.00	(0.72)	25.0
Sri Lanka	0.20-0.30		0.25-0.60		n.a.
Taiwan	0.30-0.40	(0.23)	2.25-3.00		40.0-50.0
<b>SOUTH AMERICA AND MEXICO</b>					
Argentina	3.00-3.50		4.00-4.50		30.0
Brazil	0.40-0.50	(0.30)	1.25-1.50	(1.25)	46.5
Chile	1.05-2.40	(0.39)	3.00-1.50	(1.14)	40.0_50.0
Colombia	0.50-0.75	(0.24)	1.25-1.50	48.2	
Mexico	0.50-0.90		1.80-2.50		50.0-65.0

n.a. = not available

Source: Derived from W.H. Dimond and D.B. Dimond, *Tax-Free Trade Zones of the World, Volumes 1-3*, (New York, Matthew Bender & Co. Inc. 1988); For the figures mid-1970s, see F. Frobel, et. al, *The New International Division of Labor*, (London, Cambridge University Press, 1980), Table III.14 on p.351

Table-5 proves some data on minimum wages and fringe benefits in most of the EPZ countries. The wage levels have to be considered as a rough indicators due to the disparate nature of the data which meant that hourly wages had to be mostly calculated from the daily wages of EPZs.

It is also important to note that, in many countries of EPZs, minimum wages per hour (per day) differ with respect to the district of the developing country<sup>28</sup>. For example, in Mexico, minimum wages range from \$ 6 to 7 per day in the northern part of the country to \$ 6 a day in the border zones<sup>29</sup>

Table 5 also shows that in most of the EPZ countries, fringe benefits in the zones range from 20 to 50 per cent of the basic wages and salaries. Total fringe benefits usually includes social security contributions, free housing or housing allowance, insurance, payments for national holidays, bonuses and payments from the profit sharing plan.<sup>30</sup>

The Table also indicates that the level of wages in Egypt, Indonesia, Morocco, Pakistan, Philippines, Sri Lanka and Thailand are lower than the wages of more developed Eastern countries such as Hong Kong, Singapore, South Korea and Taiwan. In spite of this, the EPZs of the second group of countries are more successful than the first group of countries are more successful than the former due to the following reasons: Firstly they have more stable political and economic systems than the other EPZ countries. Secondly, their labor forces have a higher percentage of educated and technically trained people. In Hong Kong and Singapore some of the educated and skilled are being recruited from India, Malaysia and the Philippines.

In South Korea and Taiwan, the labor force is highly educated and easily trained, but is not as large as in previous years. Because, unemployment in these countries is less than 2 per cent of their labor forces. In these countries highly skilled and productive labor forces. In these countries highly skilled and productive labor force provides an excellent comparative advantage for products manufactured for export in their zones in spite of very rapid of very

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28 For details in formation, see EIU (1985) pp. 46-213.

29 Dimond and Dimond (1988). Vol. 2, pp. 3-4 Mexico.

30 Ibid., 11988 - Vol.1 and 2.

rapid increase in their wage rates during the recent years. For example, in 1987, in South Korea, unskilled workers were paid from \$ 213 to \$ 451 to \$ 996 per month in addition to the fringe benefits ranging from 50 to 60 per cent of their basic wages and salaries<sup>32</sup>

### 3. Industrial and Other Economic Impact of Export Processing Zones

#### A. Major activities in EPZs are textiles and clothing, electrical and ✓

Major activities in EPZs are textiles and clothing, electrical and electronic products, footwear and leather products. The secondary important activities are other metal products, sport goods and toys and "other" activities (see Table-6). The other activities include furniture and wood products, plastic and rubber products, chemical products, jewelry, watches and clocks and optical products.

Table-6 indicates that in every EPZ country, there is one dominant industrial activity in the EPZs. Textile and clothing industry is dominating in Mauritius, Bangladesh, Colombia, Dominican Republic, Haiti and Jamaica, electrical Mexico, footwear and leather products in Sri Lanka, Similar pattern also prevails in other EPZ countries. For example, in Brazil, Singapore and India the dominant industry is electronic products whereas textile and clothing is in Egypt<sup>32</sup>.

The rate of industrial concentration varies from one EPZ country to another. For example, in Mauritius, Bangladesh and Jamaica textile and clothing industry accounts more than 80 per cent of employment, in Malaysia, Taiwan, Barbodes and Mexico less than 60 per cent concentration in electrical/electronic products.

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31 *Ibid.*, Vol. 2, p. Korea 5.

32 ILO (1988) pp. 37-39. Due to the scarcity of data on the production structure of EPZ enterprises, employment or establishments data is used for the approximation of information, see *ibid.*, p.37.



**Table 6**

**Main Industrial 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 mental products	Sports goods and toys	other	Total (per cent)
Mauritius <sup>1</sup>	1986	91	1		3	2	3	100
Bangladesh <sup>1</sup>	1986	81		1	15		3	100
Sri Lanka <sup>2</sup>	1981		68		3		29	100
Malaysia <sup>2</sup>	1984	13		58	6	6	17	100
Philippines <sup>2</sup>	1980	30	11	13	12		34	100
Taiwan <sup>1</sup>	1983	17	4	54	6		19	100
Barbados <sup>1</sup>	1985		36	56			8	100
Colombia <sup>3</sup>	1985	46	3	10	23		18	100
Dominican <sup>4</sup>	1985	56	15	4	4		21	100
Haiti <sup>5</sup>	1981	36	7	21	2	23	11	100
Jamaica <sup>1</sup>	1985	89					11	100
Mexico <sup>1</sup>	1980		16	60	9		15	100

1 By employment.

2 By establishments.

3 By employment (only zona franca de Branaquilla)

4 By establishments (only four EPZs)

5 By US imports under tariff item 807.00.

**Source;** O. Kereye, J. Heinrids and F. Frobel, **Export Processing Zones in Developing Countries; Result of a New Survey (Genova, ILO, 1987) Table 5** on p.16.

It is recently estimated that in the mid-1980s, the electrical and electronic industries accounted for 42.5 per cent of total EPZ employment in the EPZ countries, whereas 26.5 per cent for textiles and garments industry, with the remaining 30-31 per cent for all other EPZ industrial activities such as footwear and leather products, transportation equipment, furniture and wood

products, jewelry and others<sup>33</sup>

## B. The Ownership Structure, Transfer of Foreign Capital and Technology of EPZ Firms

Recent ILO study clearly indicates that contrary to the expectations of developing countries, EPZs are attracting very little foreign capital and investment. In 13 major EPZ countries, the share of fully foreign-owned or largely foreign-owned firms account for only little over 1/3 of all EPZs enterprises in these countries. Domestically owned enterprises and joint ventures account for a 29 percent and 38 percent of total, respectively<sup>34</sup>.

The weight of domestic investors should be increased further when we include their share in joint EPZ ventures with foreign investors. In this case, it is estimated that approximately 44 percent of EPZ enterprises are controlled by domestic investors. Therefore, the share of foreign firms does hardly exceed 50 percent (around 55 percent) of all EPZ enterprises in these 13 selected countries.<sup>35</sup>

In EPZ industries, both product and employment are concentrated on a small number of branches and product groups, led by textiles and clothing, together with electrical and electronic products. From mid-1970s to mid-1980s there is only minor changes in this concentration, but there has been no market diversification in the structure of industrial activities in the most of the EPZs<sup>36</sup>.

It is stated that as a physical, economic and even social enclave in the host country, most EPZ enterprises are not very successful in achieving technological linkages between foreign subsidiaries and the economy of the host country. One of the main factors which discourages the development of this technological linkages is the weakness of their relationship with the local suppliers due to heavy reliance of EPZ firms on imported inputs and machinery.

It is important to note that the possibility of developing such technological linkages is heavily influenced by the level of host country's industrial development level and the competitiveness of local suppliers in terms of price, quality and delivery on time.

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33 *Ibid.*, p.70.

34 For further information, see *Ibid.*, Table-1, on pp. 26-27.

35 *Ibid.*, p. 28 Text of Footnote

36 O. Kreye, et. al. (1987) pp. 14-15.

**Table 7**

**Net EPZ Exports as a Percentage of Total EPZ Exports in Selected Developing Countries**

Country	Year	Net EPZ exports as % of total EPZ exports
Republic of Korea <sup>1</sup>	1971-73 average	34.3
	1974-76 average	51.1
Malaysia	1974-76 average	-5.2
	1977-79 average	5.6
Brazil	1968-70 average	-41.5
	1978-80 average	-658.0
Mauritius	1983-86 average	24.2
Philippines <sup>2</sup>	1976-78 average	33.6
	1979-81 average	25.7
Dominican Republic	1984	28.0
Sri Lanka	1980-81 average	5.1
India <sup>3</sup>	1974-75 average	59.9
	1976-77 average	
	1977-78 average	
	1979-80 average	
Indonesia	1978	0.8
	1981	50.3
Barbados <sup>4</sup>	1980	-36.5
	1972-75 average	14.0
Taiwan, China	1972-75 average	14.0

1 Masan EPZ only.

2 Bataan EPZ only.

3 Kandla EPZ only.

4 Figure for textile and electronic industries only.

Source; ILO, *Economic and Social Effects of Multinational Enterprises in Export Processing Zones*, Geneva, ILO, 1988, Table 6 on p.45

In addition, most of the technology of EPZ industries such as garments and textiles which accounts for over 1/3 of all EPZ employment are well known by the host countries which are compelled to import these sophisticated machineries from the industrial countries, and the output of the EPZ firms are mostly exported to the investor's country of origin. Thus, due to the weakness of the backward and forward linkages, EPZs can play at best a very limited role in transferring the technology to the local industry<sup>37</sup>.

Nevertheless, observations also show that the EPZ may, in some cases, have a substantial "demonstration effect" both for the local labor force and the managers. The technological, managerial and other practices in the investor's country of origin are demonstrated into host country through the EPZ firms. For example, as the years go by, it is expected that there is probably some transfer of technology, know how, managerial skills, discipline in production, quality control and marketing experience which are gained through the joint venture activities in the EPZs into the host countries, even though documentation of this process is very difficult<sup>38</sup>.

### **C. Export of EPZ Industries and Foreign Exchange Earnings**

One of the main motivations for establishing EPZs was to promote the export of manufactured goods by attracting foreign enterprises to invest in these zones. As it is mentioned before, EPZ industries tend to use a very high proportion of imported inputs such as components, parts, raw materials and semifinished goods. Therefore, their real contribution to the host country's trade balance should be measured on the basis of net exports, i.e. total exports minus imports.

As can be seen from the Table 7, the net export performance of EPZ industries varies considerably from one EPZ country to another. The table includes only 11 EPZ countries which account for around 45 per cent of EPZ employment in the developing countries. In this sense, it can be considered as a representative table. Currently information on the real (net) export performance of all EPZ countries is not available<sup>39</sup>.

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37 For further information, see A. Germidis (1984) pp. 50-51; ILO (1988) pp. 107-117.

38 Ibid.

39 ILO (1988), p.44.

The table shows that the net EPZ exports as a percentage of total EPZ exports are more than 50 per cent in South Korea, India and Indonesia, but it is around 5 per cent in Malaysia and Sri Lanka, and minus figures in Brazil and Barbados.

The table also indicates that after the initial years of the establishment of EPZ, the real export performance of EPZs is increasing, as in the case of South Korea, Malaysia, and Indonesia.

In the case of Brazil, the net export figure has been continuously negative, because there is no fully-fledged EPZ in the country. The Manaus Free Zone of Brazil was originally established as an EPZ, but it was later transferred into an import processing zone (IPZ) in a few years. Because there were no particular incentives in the legislation of this zone for exports. Enterprises in this zone directed their very heavy import oriented production and sales to the domestic market. Consumer electronic, transportation, optical equipment and watches are the main activities of this zone.

In 1983, first two activities employed more than 50 per cent of the 50,000 employees in the zone<sup>40</sup>. In the zone, firms are mostly importing semifinished goods, and transform them for subsequent sale on the domestic market. In this case, the economic contribution of the 50,000 employees in semifinished goods, and transform them for subsequent sale on the domestic market. In this case, the economic contribution of the Manaus Zone to Brazil should not be evaluated with respect to net exports, but in terms of the value added at the processing stage in the zone.

#### **D. Indirect Employment Effect of EPZs and Domestic Value Added**

Establishment of EPZs in some countries aimed initially at setting up a regional development pole and create employment rather than increase in manufactured export and foreign exchange earnings. As in case of Brazil, Mexico and Philippines. EPZs have become an important source of employment for the underdeveloped regions of the respective countries<sup>41</sup>.

The overall impact of EPZs on the employment of host countries is not

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40 For further information see M.Possas, et. al (1987) Tables 1-3 on pp. 4-6.

41 For further information about the regional development impact of EPZs in selected countries, see P. Warr (1987a); E. Wong (1987), J. Zaidenweber (1988), pp. 75-77; M. Possas, et. al. (1987), pp. 2-7, Ochoa (1986), pp. 30-33.

only directly generated number of jobs by EPZ firms. As a result of the demand of EPZ firms from local labor services and inputs additional income and indirect employment created elsewhere in the host economies. Thus, EPZ firms create a certain amount of value added which includes basically two major items, such as labor and indirectly. Physical inputs can be generated directly or indirectly. Physical inputs consists of locally purchased raw materials, components, semifinished goods and machineries. They may also purchase some services such as some jobs have been indirectly created in the host economy as a result of the spending of EPZ workers in the local economy as well as through locally purchased inputs by the EPZ firms.

Measurement and/or identification of indirect employment effects of EPZs are very difficult and speculative in nature. Recently, it is estimated that indirect employment ratios of the electronic industry, and the textile and garment industry are 18.2 and 17.6 per cent, respectively<sup>42</sup>. This means that every directly generated five jobs in the EPZs lead approximately one indirectly generated job in the local supplier industries. It is expected that indirect employment - generating effects of EPZs depend a lot on the nature of each EPZ industry. For example, the food industry is expected to generate indirectly a larger number of jobs than the plastic industry it purchases most of its raw materials locally.

The most important contribution of EPZs to the host country might be their effects on economic growth or the growth of industrial output. Unfortunately, such data are not available so far. Then, total value added in the manufacturing sector is used as a crude indicator for that purpose.

It is concluded that *"between 1973 and 1981, the 12 most important EPZ countries and areas have seen their share of world manufacturing value added increased more than that of the other non-EPZ developing countries"*<sup>43</sup>. It is speculated that the demonstration effects of a dynamic EPZs are the most important reasons for this successes. As a result of EPZ experiences and influences, most probably in each EPZ country industrial work discipline increased, infrastructural and administrative modernization and the liberalization have accelerated substantially.

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42 ILO (1988), p.75.

43 Ibid., p.132.

#### 4. Reasons for Successes and Failures and Final Assessment of Export Processing Zones

##### A. Reasons for Successes and Failures

There are usually many contributing factors for the successes and failures of an EPZ in every EPZ country. These are political circumstances in the host country and/or in the neighboring countries, the location factor, the level of infrastructure, the local wage level and the quality of the labor force, the competence of the EPZ Authority and the dynamism in the host economy<sup>44</sup>

In most cases, failure or success of any EPZ cannot be attributed to a single negative or positive factor alone. Rather, a number of combined factors affect its failure or success. In the recent EPZ literature, it is concluded that political climate of the host country and its region is the each EPZ. Political climate includes the political stability of the EPZ or host country and/or its region as well as the attitudes of its government and its people towards foreign investment and the tradition of respect for the government's international commitments. For example, Central American and Caribbean Regions contain a large number of unsuccessful or only marginally successful EPZ due to political disturbances in these regions. It is important note that potential foreign investors attach the utmost importance to the political stability<sup>45</sup>.

Outcome of a recent survey clearly showed that political stability was given a major reason for investing in Malaysia even though wage rates in this country were higher than in all of the neighboring countries with the exception of Singapore. Similarly, foreign investors gave political stability the highest ranks for investing Hong Kong.

Other most important factors which affect the success and failure of an EPZ are the location of the zone and the presence of sophisticated infrastructure within the zone and its environment. Each EPZ must be established in a location which has highly developed transportation and communication facilities. For example, the possible reasons for the slow start of the Indian Kandala Zone which was set up in 1965 were the location factor and com-

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44 For detailed information, see J. Currie (1985), pp.14, 23-32; P. Warr (1983), pp. 35-36; E. Lee (1984), pp. 76-77 and p. 240; A. Germidis (1984), pp. 22-34; p. Ryan (1986), pp. 54-55; p. Ryan (1985), pp. 63-66; Journal of the Flagstaff Institute (March 1986), pp. 22-23,34 and 43-44; R. Snape (1987), p. 107, p. Warr (1985), p.21.

45 A. Germidis (1984), p.32; P. Ryan (1985), pp. 62-63; P. Currie (1985), p.25.

and communication difficulties of this zone<sup>46</sup>

It takes a long time to build an EPZ and its infrastructure is very expensive. The typical way of developing an EPZ is to build roads, ports and warehouses, to install the electricity, the water and sewer systems, and to construct factory buildings and sophisticated telecommunication system. It is important to note that no country can attract foreign investment and industrial firms in its EPZs unless each zone has the physical facilities and so that EPZ companies can establish production units within the zone with a minimum costs and delay<sup>47</sup>.

The experiences of many EPZ countries have proved that no developing country can assume that generous incentives in the area of tax exemptions, duty free imports and exports and etc. are sufficient to attract foreign firms into recently established EPZs without having sufficient physical facilities within these zones, and political stability and an atmosphere of friendliness towards foreign investment in the host country and/or its neighboring countries<sup>48</sup>.

The availability of cheap and disciplined labor force is the next important factor motivating the foreign investors to invest in EPZs. Wage rates in a developing country are more than ten times higher than those of in a developed country. This difference is very important for the general decision of foreign investors to locate labor intensive activities into the developing countries. But, differences in wage rates are less important for foreign investors in their investment decision between one EPZ country to another. Because, in the same geographical area, differences in the wage rates of EPZ countries are not more than 50 per cent. This small difference can be more than to offset the combined effect of labor productivity, transport costs, bureaucratic delays and other favorable factors<sup>49</sup>.

In each EPZ country an EPZ Agency or Authority has to be responsible for the administration of these zones. The agency has to have high degree of financial and administrative autonomy. Because, whatever the incentive package of the EPZ is, the new investor will ask how the package is administered in practice. Administration of the incentive package is very important, because, any delay or confusion in the Zone Authority administration, including

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46 For further information, see J. Currie (1985), pp. 24-28.

47 ILO (1988), p. 107; E. Lee (1984), p. 70; Journal of flagstaff Institute (March, 1986), pp. 21-22 and 51-54.

48 Ibid.; D. Spinanger (1984), pp. 71 and 75.

49 J. Currie (1985) p.25.



frequent staff changes, can also defeat the purpose of incentives. The EPZ authority must be very competent and responsible for the day to day administration and maintenance of the Zone<sup>50</sup>.

Most of the successful EPZs in the South East Asian countries have minimized "red tape" by allowing EPZ firms to deal with a single administrative agency or authority. This authority is also working as an intermediary between EPZ firms and the various government departments. Most of the administrative cost of these agencies are expected to be covered from the direct charges<sup>51</sup>.

The efficiency of the backup essential services to the EPZ activities such as banking, sea transport, consultancy, legal and accounting services, telecommunications are also contributing factors for the success of an EPZ.

## **B. Final Assessment and Future Prospect of EPZs**

### **a. Final Assessment**

The difficulties of evaluating the performance of EPZs in different EPZ countries are considerable. The most important bottleneck is the scarcity of data on EPZ industries. Because, EPZs or EPZ industries are not treated separately in the national statistics on trade, employment and investment. Available incomplete data gathered mostly from EPZ authorities and/or individual EPZ firms. Unfortunately, these data rarely cover a sufficiently long period of time to be entirely meaningful.

Secondly, until mid-1985 there was no common framework of analysis of EPZs. Most of the case study evaluations were made long before the 1985 methodological guidelines of the UNCTAD and these as seen in this study, some attempts have been made about the beneficial part of EPZs in terms of employment, exports, foreign exchange earnings, transfer of technology, and other macro economic effects of these zones.

Establishment of an EPZ imposes some direct and indirect costs on the host country. The evaluation of direct costs is easier to evaluate, because they usually involve a measurable expenditures such as construction of buildings,

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50 E. Lee (1984), p. 70, ILO (1988), pp. 107-108.

51 P. Warr (1983), pp. 35-36.

roads, ports, and public utilities. Main difficulty arise when we want to evaluate indirect costs or subsidies. As mentioned before, all host countries offer some sorh of financial incentives to prospective EPZ investors in the forms of tax holidays, duty-free imports of inputs, rental subsidies, investment allowances, indirect subsidies for the purchase of local raw materials and dapreciation allowances on capital equipment.

Evaluation of these indirect costs or subsidies is very difficult because of the following reasons<sup>52</sup>.

firstly, access to information and the

calcutaion of the full range of incentives on offer can not be solved in practice.

- secondly, rate of incentives or subsidies are changing very rapidly in the short-run.

- thirdly, for each EPZ firms, measurement of the relative value or benefits of these various incentvtes and subsidies is almost impossible.

As a result, due to unavailability of comparable and up-to-date information on the indirect costs and their complxy, cost-benefit analysis can not be undertaken for this evaluation. because of this reason, very few attempts have been made to estimate the costs and benefits of EPZs during the last decade. Some empirical evaluations have been Malaysia and India. But these studies could not arrive at any firm conclusions on the subject<sup>53</sup>.

In short, due to the poor quality of the basic data on the EPZ incentives ad activities, and the enclave nature of EPZs, it is very difficult to draw a clear line between the cost incurred by the host country and those incurred by the zone, and between the benefits accrurf to the zone and those accruing the host economy.

#### **b. Future Prospect**

As mentioned before, objectives of EPZs varies from one country to

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52 For further information, see ILO (1988), pp. 29, 123-143.

53 For detailed analysis, see p. Warr (1987a), pp. 234-239; P. Warr (1987b), pp. 49-54; P. Warr (1984), pp. 176-184; R. Kumar (1987), pp. 1314-1316.

Table 8

## Main Cost and Benefit Items of Export Processing Zone Projects<sup>1/2</sup>

I Foreign exchange in-flows	II Foreign exchange outflows	III Foreign exchange retained by host developing country	IV Economic cost to host developing country (incl. foreign exchange outlays column II.B)	V Net income gain to host developing country
<p>A. Gross exports of EPZ (excl. reinvested profits out of gross proceeds)</p> <p>B. Foreign capital investment (including reinvested profits out of gross export proceeds)</p>	<p>A. Payments by EPZ firms and their employees</p> <ol style="list-style-type: none"> <li>1. Imported production inputs</li> <li>2. Repatriated salaries</li> <li>3. Repatriated capital, dividends, royalty payments, etc.</li> <li>4. Depreciation transferred overseas</li> <li>5. Foreign financing cost of EPZ firms</li> </ol> <p>B. Payments by host country</p> <ol style="list-style-type: none"> <li>1. Imported components of locally provided traded and non-traded production inputs</li> <li>2. Imported components of EPZ estate construction</li> </ol>	<p>A. Retained out of gross export proceeds (excl. reinvested profits)</p> <ol style="list-style-type: none"> <li>1. Locally provided traded and non-traded production inputs (incl. components)</li> <li>2. Wages for local labour</li> <li>3. Land lease, factory rent, EPZ maintenance fees</li> <li>4. Local financing cost of EPZ firms<sup>4</sup></li> <li>5. Tax payment by EPZ Firms.</li> </ol> <p>B. Foreign capital investment minus repatriated terminal value</p>	<ol style="list-style-type: none"> <li>1. Resource cost of items in column III, A, 1-2</li> <li>2. Resource cost of EPZ estate construction (land, capital, labour, etc.) and maintenance</li> <li>3. Cost of hosts country capital resources</li> <li>4. Cost of incentives and subsidies (to the extent not already reflected in preferential rates paid by EPZ enterprises, such as concessional land lease, factory rent electricity supply)</li> </ol>	<p>Discounted time-flow of</p> <ul style="list-style-type: none"> <li>- foreign exchange retained (column III) minus discounted time-flow of</li> <li>- domestic resource cost (column IV, 1-3)</li> <li>- economic cost of incentives and subsidies (column IV, 4) N.B. Net present value has to be corrected for positive or negative externalities.</li> </ul>

3. Foreign financing cost of EPZ estate construction
4. Overseas EPZ promotion cost to attract foreign investors
5. Tax payments by EPZ firms
- C. Repatriated terminal value of EPZ firms

a/ As the cost-benefit appraisal would value foreign exchange according to its scarcity value, that is, on the basis of the shadow exchange rate, any income gains accruing from the differential between shadow and official rates are implicitly taken into account.

**Source: UNCTAD, Export Processing Free Zones in Developing Countries: Implications for Trade and Industrialization Policies, (New York, UNCTAD, 1985), p.26.**

another. For example, based on a survey of WEPZA Secretariat, out of 24 questionnaires filled out, 7 indicated only the increase in employment and 3 of them included transfer of technology and regional economic development. In one country, after 20 years experience, the principle objective is changed from regional economic development to increase in employment<sup>54</sup>.

Discriminatory governmental policies have been used in order to reach intended objectives. These policies are limitations of the role of EPZs and their size, location, import, ownership, nature of product, level of investment and value added per worker<sup>55</sup>.

WEPZA secretariat also estimated that, at present, there are about 100 EPZs in developing countries and this number will increase 10 fold in the next decades. Currently, there are one thousand managers/professional/technical persons managing EPZs and 2,000 managing companies in all EPZs. In the next two decades, these numbers will reach to 10,000 and 200,000 respectively<sup>56</sup>.

In recent years, wage levels in Bangladesh, India and Sri Lanka have become almost one-fourth that in Far East. In spite of this, Far Eastern EPZs are still more attractive than Sri Lankan and bangladesli EPZs due to existence of unrest in these countries. however, recently, Singapore is reclining to saturation point. There is uncertainty in Hong Kong. Now Indian EPZs have become fairly attractive as offshore investment possibilities<sup>57</sup> Similarly, in the near future, more stable and more developed EPZ countries will have better chance to get more foreign invesment into their EPZs.

## 5. The Turkish Case: Turkish Free Trade Zones

Turkey is located not only between Europe and Asia, but also between European and Middle-Eastern countries. Turkey is a country of 780 thousand square kilometers, about three times the size of England or of West Germany. The country also has fairly large industrial base and she is a self-sufficient nation in food and Turkish agriculture is the breadbasket of many of her neighbours.

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54 Journal of Flagstaff Institute (February 1987) pp. 34-35.

55 Ibid.

56 Ibid., p. 32.

57 Journal of Flagstaff Institute (March 1986), p.22.

Before examining the Turkish Free Zones it is worth to give brief review about the past and recent changes in Turkish economic development policies and their effects on Turkey's trade structure

#### **A. recent Economic Developments in Turkey**

Turkish economic development strategies fall into two distinct phases. Before 1980, the economy through import-substituting industrial development. Until 1950's, when enterprising power was insufficient in every sense, state played a leading role in the industrialization of Turkey. During the 1950's public investment was mainly concentrated on infrastructural investment in both agriculture and industry, while private sector mostly invested in directly productive investment and mechanization of agricultural sector.

In 1961, the new Turkish constitution contained provision for planned approach to economic development, and created the State Planning Organization (SPO). During the First (1963-1967), Second (1968-72) and Third Five Year Plan (1973-77) periods average real growth rates of GNP were 6.6 per cent, and 6.5 per cent respectively. As a result, during the mid 1970's Turkey became one of middle income or semi-industrial countries of the world. During 1977-80, performance of the economy continued to deteriorate due to severe shortages of imports for industrial investment and the lack of sufficient imported oil for every aspect of Turkish economy. Because, while the Turkish economy was within the delayed adjustment process to the first oil shock, she confronted with the adverse effects of the second oil shock in 1979-80. To overcome these problems, the Turkish Government launched a programme of economic reform in January 24 th, 1980.

Economic reform measures of January 1980 represents a basic reorientation of economic policy away from import substitution to export-oriented growth. This programme included the following measures: an initial 33 per cent devaluation of Turkish Lira against the dollar and other convertible currencies on January 24, 1980 and afterward flexible exchange rate policy is adopted. More frequent and smaller exchange rate adjustments were implemented until the end of April 1981. In May 01, 1981, daily adjustment of exchange rate were introduced and this policy has been implemented until today. Turkish residents are now also entitled to hold foreign currencies and eligible to open saving accounts denominated in foreign exchange with the Turkish commercial banks.

Export promotion measures, including the liberalization of external trade and payments regulations, and in the tariff rates have also been changed gradually.

Other measures of the reform were the elimination of price controls in both public and private sectors, realistic interest rate policies, reorganization of public companies (SEE), introduction of a more liberal foreign investment policy, and above all the reduction of bureaucracy to a minimum level and the introduction of a rapid decision-making system in the implementation of this programme.

The main purpose of these economic measures have been taking since January 1980 in Turkey is to bring down the inflation, liberalizing the foreign trade regime and consequently increasing our export earnings in order to eliminate foreign exchange bottleneck for self-sustained economic growth. As a result of implementation of this export-oriented programme, pattern of trade and diversification of product increased substantially in Turkey. From 1979 to 1988, number of goods which were subject to exports increased from 800 to 3000; and share of merchandise exports and imports in GNP increased from 4 per cent (U.S. \$ 2.261 million) to 17 per cent (\$ 11.662 million) and 9 per cent ( 5.062 million) to 20 per cent (\$ 14.339 million) respectively. In addition, share of manufactured products in total Turkish exports increased from 34 per cent to 81 per cent during the period. Thus, due to increase in the share of Turkish Trade volume in GNP from 13 per cent in 1979 to 37 per cent in 1988, the Turkish economy became one of the most open economies of the world.

### **B. Turkish Zones**

The idea of establishing free trade zones (FZTs) goes back to late 1920's when Turkish Parliament passed a law in 1927 related to this issue. However, late 1920's and decade of 1930's were not suitable for the establishment of these zones due to the world economic crisis during these periods.

From Second World War to 1979, Turkey followed inward-looking trade strategies. In the early 1980's when Turkey started to emphasize export-oriented trade strategies, the idea of the establishment of FTZs emerged once more among the academic and political circles. Finally, Turkey passed legislation and regulations on June 6 1985 and intended to establish four zones near-by Mersin, Antalya, Adana, and zmir.

The Free Trade Zones Directorate (FTZD) of the SPO is responsible for all policy decisions to the Turkish zones. In addition, a regional FTZ Directorate (RFTZD) is established for the local administration of each zone.

#### **a. Antalya Free Trade Zone**

Antalya is located on the Gulf of Antalya in south central part of Turkey on the Mediterranean Sea. The Antalya FZT occupies 573.536 m<sup>2</sup>. and it has approximately 130 parcels of land. The zone of Antalya began operation in early 1987, As of June 1989, 230 firms applied to FTZD of SPO to obtain operating licence for Antalya Zone.

Out of this total 146 firms have been qualified as eligible. 146 selected firms, 11 of which foreign companies, are expected to invest a total \$ 120 millions and expected to employ 4.654 people. In June 1989, 41 firms started to construction activities, 16 firms started to trading activities, and trade volume of the operating firms in the zone has already reached to around \$ 37 million<sup>58</sup>.

Activities carried out in the zone include assembly, packaging, trade, banking, warehousing, machinery park and production namely foodstuffs, medical supplies, clothing and furniture. Most of the firms (close to 50 per cent) are involving with trade activities. Storage space at Antalya can handle 47.000 tons per year and the open storage area is adequate for 4.7 million tons.

#### **b. Mersin Free Trade Zone**

Mersin is located near the northeast corner of the Mediterranean and the Mersin zone occupies 765.000 m<sup>2</sup> of land with roughly 115 parcels. The zone Mersin started to operate in late 1986. As of September 1989, 395 firms obtained operating licence from the Turkish FTZD of SPO. Out of this total. 103 firms started to their construction and 39 firms are already operating in trading activities. There will be only 46 foreign firms in the zone. 395 firms are expected to invest a total of \$ 162 million and employ 13.300 people in the zone<sup>59</sup>.

Activities carried out in the zone include assembly, packaging, warehousing, maintenance, repair, and banking as well as manufacturing of clothing,

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58 Unpublished data obtained from FTZD of SPO of Turkey.

59 Ibid.



foodstuffs and some electro-optics. Mersin's enclosed storage capacity can handle 300.000 tons per year and the open storage is adequate approximately for 1.6 million tons<sup>60</sup>.

### **c. Adana-Yumurtalk Free Trade Zone**

Adana-Yumurtalk zone is close to the Syrian border. This zone will have an area of approximately 52 km<sup>2</sup>. Construction of this zone is expected to start in early 1990. Since the feasibility studies of the zone has completed during the second half of 1989.

Yumurtalk zone will be located near the Thermal Plant Project and be connected to the national transportation network with high standard railroads and highways. Proximity of the zone to the Middle East together with generosity of incentives and facilities, the zone will be expected to be one of the most attractive zone in the eastern part of the Mediterranean Sea.

### **d. Aegean Free Zone**

Aegen (zmir) Zone is expected to the first export processing zone (EPZ) in Turkey. Size of the zone will be 2.2 km<sup>2</sup> and will be located near the zmir port. Construction of this zone will be started during the first quarter of 1990.

This zone is expected to attract foreing investment with high technology endowed industries such as electronics, electrical equipments, computers, medical electronics optical instruments, modern telecommuniation equipments and similar activities.

## **C. Fiscal and Non-fiscal Incentives in the Turkish Zones**

### **a. Fiscal Incentives**

Turkish zones users may bring in free of taxes, duties or tolls any raw materials and intermediate goods they require from foreign sources. Commodities obtained from Turkey into the zones are treated as Turkish exports and priced favorably as a result of many export incentives. Turkish customs and poreign exchange regulations do not aply within the zones and only those goods that cross the each zones customs borders and that are destined for use inside Turkey are subject to customs regulations and relevant taxes and

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60 Dimod and Dimond (1988) p. Turkey-2.

In addition, in the Turkish zones<sup>61</sup>.

- There is no corporate tax, income tax, withholding tax on wages, interest incomes or dividends.

- All the convertible foreign currencies are used as medium of payments.

- Inventors can transfer freely their personal and corporate earnings to Turkey of foreign country without any tax and duties.

- There is 10 year tax holiday from income and corporate taxes for foreign firms and personnel operating within the zones.

- Foreign capital participation in the zones is not limited and they may own 100 per cent of the investment.

#### **b. Non-fiscal incentives**

Turkish Government has guaranteed that there will be no strikes or lock-outs within the zones for ten years. Employment of foreign managers and specialists is permitted. As of October 1989, the minimum wage rate for the entire country or the zones is less than \$ 100 per month. A 45 hour work week with a maximum of 270 hours of overtime per year applies within the zones. All social security regulations pertain within the zones. Total contributions for social insurance paid by employers range from 19 to 30 per cent.

Land rental charges are only two dollars per square meter per year, and quality of free zones infrastructures are comparable with international standards and they are financed by the Turkish Government. Cost of utilities and port charges are lower than the prevailing charges in most of the other Middle Eastern countries.

Turkish free trade zones are within easy access of the largest and best equipped Turkish ports on the Mediterranean and Aegean Seas. These ports namely, Zmir and Mersin ports play a major role in trade with Europe, Middle East and North Africa. In addition, Turkey has the best developed road and rail networks in the Middle East.

It is also important to note that bureaucracy both at the stage of investment and operation in the Turkish zones is minimized. One stop service is

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61 For further information, see The Turkish Free Zones Directorate (TFZD-SPO) (August 1989).

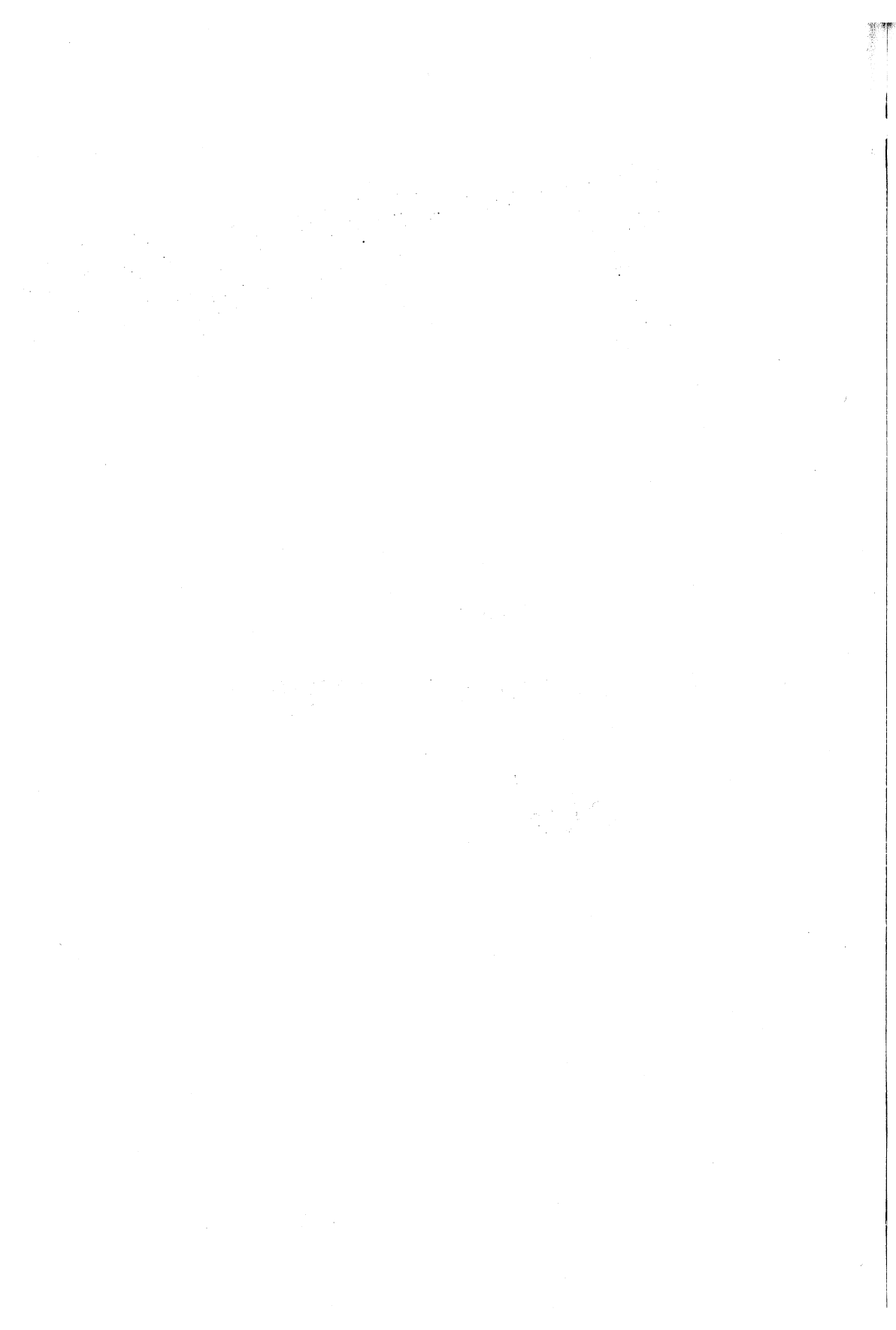
provided by the Turkish Free Trade Zones Directorate.

Inquiries about Turkish Free Trade Zones should be addressed to:

**Free Trade Zones Directorate (TFZD),**  
**SPO, Necatibey Caddesi, No:108**  
**Ankara, Turkey**  
**Telephone: 230 87 20 / 1871**  
**Telex : 42110 dpt-tr**

## **PART-III**

# **SUMMARY AND CONCLUSIONS**



What  
are the  
Purpose  
of

### PART III

## SUMMARY AND CONCLUSIONS

Establishment of EPZs represents a partial movement towards free trade by many developing countries in order to promote manufactured exports, generate employment, increase foreign exchange earnings and create linkages between EPZ industries and the domestic economy. EPZs have been operating more or less like "enclave" with duty-free access to imported inputs, while at the same time enjoying a variety of investment and export incentives.

This study attempted to show that EPZs have become increasingly prominent in the developing countries, even though their share in aggregate manufacturing employment, exports and output remain small. Their importance also varies considerably from one EPZ country to another. Ironically, the EPZs have played a far less important role in the labor surplus countries of Egypt, India, Indonesia, Pakistan and Philippines than the relatively high-wage countries of Ireland, Hong Kong, Malaysia, Singapore and South Korea.

✓ Criticisms of EPZs by some writers has generally focused upon employment conditions and low level of wages provided in these zones. But, this criticism has not always reflected familiarity with the employment conditions and wages elsewhere in the EPZ countries concerned. Employment conditions such as wages, benefits, working hours, health and safety etc. in EPZs are very similar to those prevailing elsewhere in the host economy.

Contrary to widely held belief, the labor cost advantage is not necessarily the most important factor for a firm's decision such to invest in an EPZ. Other factors as the political stability of the host country and its region, the country's labor force are more important than the cost of labor.

In all EPZ countries, share of female in EPZ employment is very high, on the average, 70 to 90 per cent, whereas this share varies between 10 to 48 per cent in similar local manufacturing sector of each host country. In all EPZs female workers have little upward mobility but their turnover is very high. More than half of the work force in EPZs works for less than 30 months.

Main EPZ activities are textile and garments, electrical and electronic products, footwear and leather products. Thus, the major portion of produc-

tion in EPZs is associated with consumer good, industries which involve assembly-type operations and simple processing. In general, developed countries send raw materials or components to their subsidiaries in the EPZs. Then, the assembled or processed products are exported back to the supplier in the investing countries or in some cases to third countries for further assembly, finishing or sale. Because of these reasons, EPZ industries do not have strong backward and/or forward linkages with the host economies.

Establishment of the strong linkages between the EPZ industries and the rest of the economy depends on the level of industrial stage of the host country and its competitiveness in supplying inputs to the EPZ firms. Establishment of more joint ventures in each zone might increase the backward and forward linkages between EPZ firms and local economy.

EPZs in South East Asian countries are more successful than EPZs in other countries. Because, the very success of EPZs depend on the existence of certain preconditions like political stability, sophisticated infrastructure, availability of low wage but well-educated labor force and dynamism in the host economy. IN that respect, East Asian Economies had superiority since their general economic and industrial performance of an EPZ closely linked with the overall economic performance of the host economy.

It is also important to note that all EPZ countries offer a wide range of financial and nonfinancial incentives to the prospective investors in EPZs. But, these incentives do not appear to play a major role in the investment decision of foreign firms without having the above mentioned prerequisites in the EPZ country.

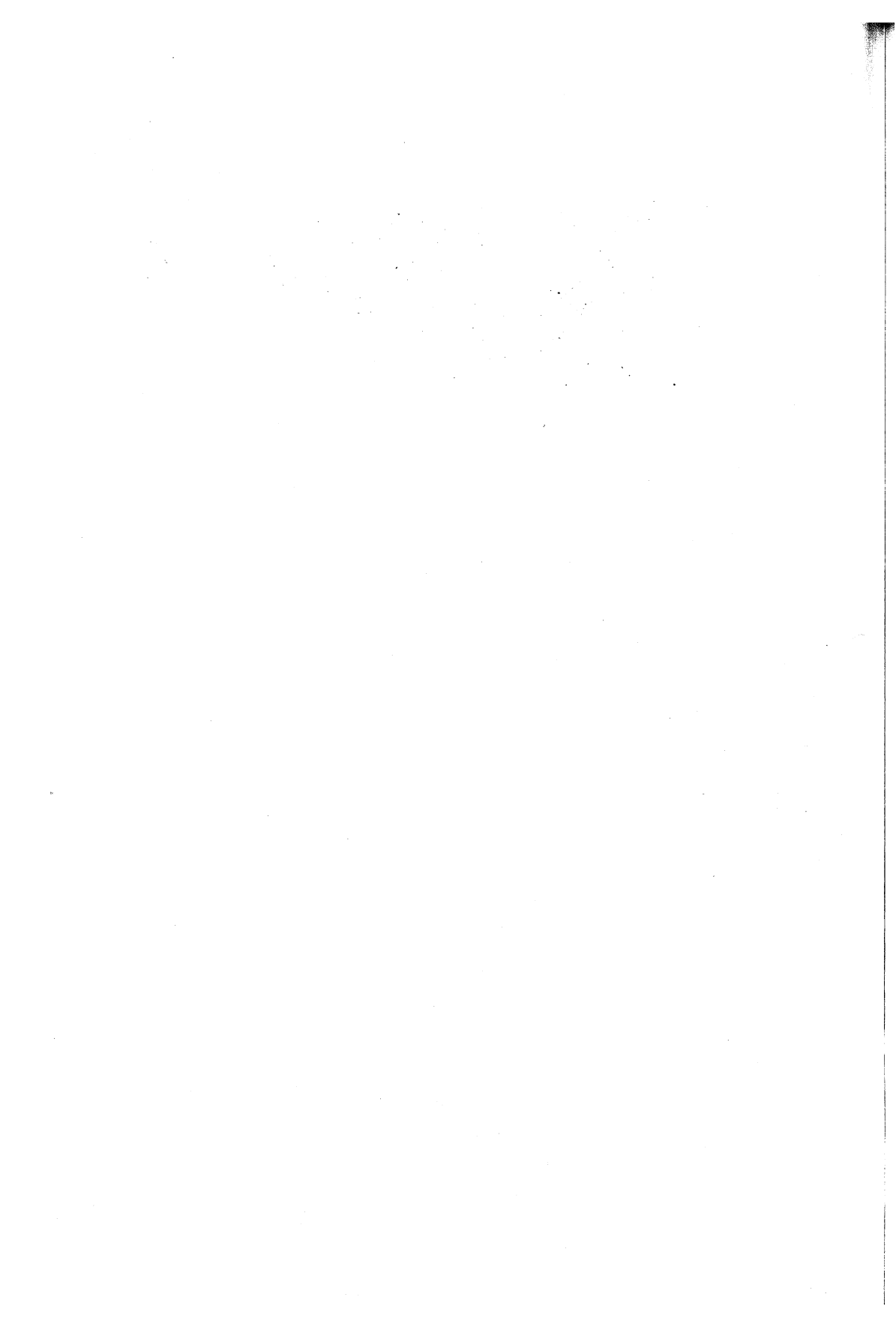
In EPZ literature, only a few evaluations of existing EPZs have been undertaken, but these studies could not reach firm conclusions on the subject due to the absence of common standards of evaluation, reliable data concerning EPZ activities. It is only generally accepted that demonstration effects represent the most important macroeconomic contribution to the host country's economy.

Conclusions about the benefits and/or costs of EPZs should be treated with caution until much more experience and greater availability of data will be possible to conclude with any degree of reliability that the benefits of trade expansion are greater than the cost of locational trade diversion.

In most EPZ countries, EPZs are under the administration of an EPZ Agency (Aunhority) which has a great deal of financial and administrative autonomy.

In conclusion, the economic and social importance of EPZs caries considerably from one EPZ country to another. As a result of differences in objectives and discriminatory governmental policies, one can conclude that there is no EPZ model which is suitable or might be generalized for all countries. In practice, each EPZ in an ad hoc establishment and its structure might be changed with respect to each circumstance of time and place of its location even in the same host country.





## APPENDIX-I

### INCENTIVES IN TURKISH FREE TRADE ZONES<sup>(\*)</sup>

#### I. WHY TURKEY?

##### 1. Political and Economic Stability.

Turkey remains one of the staunchest members of the NATO alliance, with strong economic and cultural links to Western Europe and the United States.

As a reflection of its political and economic stability, Turkey's ranking in the international financial community has shown spectacular improvement, registering the "most improved" status in the world on a number of occasions, as evaluated by authoritative financial publications. The country is repeatedly cited as an excellent example of economic discipline and balanced growth.

##### 2. Encouragement of Foreign Investment and Private Enterprise.

The liberal economic policies of the Turkish Government fully encourage free enterprise, competition and foreign investment.

Streamlined administrative procedures and special incentives, linked to the country's extremely attractive domestic potential, have produced a 5 fold increase in foreign capital investments within 10 years. Currently, nearly 400 foreign capital firms, and a dozen international banks operate in the country.

##### 3. Dynamic Domestic Market.

Turkey possesses the most dynamic and sophisticated economy in the region. A nation of 50 million people, Turkey is self-sufficient in food and possesses vast human and natural resources with a strong industrial and commercial base. As a reflection of the vitality of the economy, imports and exports are expected to reach \$ 11 billion and \$ 8 billion respectively, during 1985.

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(\*) Source: TFZD-SPO, Free Trade Zones of Turkey, Ankara, TFZD-SPO, 1989

#### **4. Unique Geographical and Cultural Positioning.**

Turkey straddles Europe and Asia, and is ideally situated for trade involving three continents. not only does the country enjoy strong and long standing economic and political ties to the West, but because of its historical and cultural background, it has been able to act as an economic and commercial bridge to the Islamic nations to the South and East of its borders.

## **II. LOCATION ON THE TURKISH FREE TRADE ZONES**

The FTZ s of Mersin and Antalya are within easy access to the largest and best equipped Turkish ports on the Mediterranean Sea Both ports play a major role in Turkish trade with Europe and the Middle East. Mersin in particular is a major entry point for products destined for Iran, Iraq and the Arabian peninsula The Mersin FTZ occupies 763,405 m<sup>2</sup> of approximately 130 parcels of land. The FTZ s of Adana (Yumurtalk) and zmir (Nemrut), the latter being located at a particularly advantageous location on the Aegean sea, will be opened as Free Industrial Zones in the not too distand future.

## **III.FOREIGN CAPITAL**

### **1. Limitations.**

There is no limitation on the proportion of foreign capital participation within the FTZ.

### **2. Transfer of profits and capital.**

Dividends and rofits, as well as the proceeds derived from the full or partial sale and or liquidation of capital shares by foreign domiciled persons or entities operating within the FTZ, may be added to their existing capital, or transferred to entities or sector encompassed by the Law for the Encouragement of Foreign Capital no.6224; or to other FTZ s within Turkey, or to other countries, provided that the Regional Free Trade Zone Authority is given due notification and that ownership of the funds can be fully documented.

### **3. Incentives.**

Foreign capital entities operating within the FTZ may benefit fully from all of the incentives described in Section IV.

## **IV. INCENTIVES**

Turkish and foreign entities possessing an Operating License for the FTZ s may benefit from the following incentives in both the investment and the production stages of their operations.

### **The Investment Stage:**

#### **1. Exemptions from taxes, duties and tolls.**

Investors may bring into the FTZ s any inputs they require from foreign locatinos without being subject to any taxes, duties or tolls.

#### **2. Export treatment of Turkish-origin inputs.**

In cases where investors select to obtain their necessary inputs from the host country, they will be able to obtain such inputs at attractive prices, due to the fact that such goods entering the FTZ will be treated as exports from Turkey.

#### **3. Exemption from export formalities.**

If desired by the investor, and subject to approval, goods of less than S 500 value may be obtained from the host country without having them subjected to export procedures.

#### **4. Income tax exemption.**

The salaries of persons working within the FTZ s are not subject to income taxes.

#### **5. Other incentives.**

Invenstors will also be able to benefit from any additional incentives that the Council of Ministers may deem to be appropriate.

#### **6. Payments in Local Currency.**

During the investment phase, payments for rents, salaries, and for services and goods may be made in the form of Turkish Lira.

### **The Production Stage:**

#### **1. Exemption from taxes, duties and tolls.**

All necessary production inputs can be transported from foreign locations into the FTZ without being subject to any taxes, duties or tolls whatsoever.

## **2. Export treatment of Turkish origin inputs.**

In cases where production inputs are procured from the host country, because of the fact that such transactions will be considered as exports, it will be possible to acquire such inputs at attractive prices.

## **3. Income tax exemption.**

No income taxes will be levied upon the salaries of those working within the FTZ s during the production stage.

## **4. Exemption of profits from income and corporate taxes.**

The FTZ-origin profits of those entities operating within the FTZ s are not subject to either income or corporate taxes and duties; nor will their accounts within the FTZ s be merged, for tax or any other purposes, with their accounts within the country. FTZ origin profits and income of corporate and real entities, who are subject to full or limited tax treatment in Turkey will also be exempted from income and corporate taxes, providing that it can be documented in accordance with foreign exchange regulations, that such profits and income have been brought into other locations within Turkey.

## **5. Right to benefit from new incentives.**

In cases where new incentives are deemed necessary to enhance the competitive position of the FTZ s, existing users will be able to benefit fully from any such adjustment.

# **V. BANKING, INSURANCE AND FOREIGN EXCHANGE**

## **1. Types of foreign exchange to be utilized.**

All real or corporate entities operating within the FTZ must make all payments, including service fees, rents, wages as well as payments for goods, in the kinds of foreign exchange that are bought and sold by the Central Bank of the Republic of Turkey.

## **2. Compliance with Turkish Law.**

Banks and insurance companies operating within the FTZ must conduct their transactions in compatibility with Turkish regulations.

## **3. Exemption from taxes.**

Any earnings that banks and insurance companies generate from their FTZ activities are exempted from all types of taxes, duties and tolls. The Council of Ministers is authorized (by Article 74 of the Banking Law) to make necessary adjustments in the regulations to facilitate off-shore banking operations within the FTZ s.

## **4. Necessity of opening a branch.**

Banks that have obtained an Operating License permitting them to conduct operations in the FTZ must do so by opening a-branch within the FTZ; they are also required to make a payment to the FTZ Establishment and Development Fund<sup>63</sup> equal to 4% of all gross revenues that they collect as cash or on account during the course of their activities.

## **5. Obtaining permission and making payment to the Fund.**

Banks that operate within Turkey and that have obtained authorization from the Undersecretariat of the Treasury and Foreign Trade to open a branch, may conduct banking activities within the FTZ after making a payment of \$ 50,000 to the FTZ Establishment and Development Fund<sup>64</sup>, and obtaining a License for FTZ operations.

## **6. Establishment of FTZ banking units.**

Foreigners who, while active in banking within Turkey, desire to open a branch or establish an independent bank that will conduct banking services limited exclusively to the FTZ, must submit an application the Undersecretariat of the Treasury and Foreign Trade and obtain permission from the Council of Ministers.

## **7. Extension of credit to FTZ clients.**

63 See section IX on page 12.

64 See section IX on page 12.

Banks operating within the FTZ are required to give priority to the FTZ-related financing needs of FTZ-based entities.

#### **8. Right to benefit from new incentives.**

In cases where new incentives are deemed necessary to enhance the competitive position of the FTZ s, existing users will be able to benefit fully from any such adjustments.

## **VI. CONDITIONS PERTAINING TO THE PRODUCTION AND FLOW OF GOODS**

### **1. Customs exemption.**

The FTZ s are outside of Turkish customs jurisdiction. The controls and restriction entailed by the Customs Law are not applicable within the Zones.

### **2. Imports into Turkey.**

Only those goods that cross the FTZ s customs borders and are destined for use inside of Turkey are subject to customs regulations and the relevant taxes, duties and tolls. These goods will be subject to import formalities, and pier duties will be levied upon those goods that arrive by sea transport.

### **3. Goods originating from or destined to the FTZ.**

The procedures rescribed in (2) above are not applicable for goods that arrive from or are destined to other FTZ s, or foreign locations. Nor are they applicable for goods destined from Turkey to the FTZ s.

### **4. Applicability of exemptions.**

These exemptions are applicable for both the investment and the production stage of FTZ operations.

### **5. Exports from Turkey.**

With the exception of goods that are specifically designated as being acceptable, or those valued at less than \$500, goods sent to the FTZ s from Turkiy will be considered as exports, in accordance with existing foreign trade regulations.

Goods sent to the FTZ s from Turkey will also be subject to procedures

specified by relevant export decrees and directives.

**6. No "E 8 D Fund"\* charge on Turkish origin goods.**

No charge will be made for the FTZ s from Turkey.

## **VII. EMPLOYMENT AND WORKING CONDITIONS**

### **1. Minimum wage.**

The minimum wage rates determined for Turkey in general are applicable within the FTZ s.\*1

### **2. The work-week and overtime.**

The 45 hour work-week and the 270-hour yearly overtime limits are applicable within the FTZ s.

### **3. Employment of foreign personnel.**

The employment of foreign managers and specialists is fully permitted for entities operating within the FTZ.

### **4. Unions and collective bargaining.**

Within the general framework of labor laws being applied in Turkey, unionization of labor and collective bargaining are permissible within the FTZ s.

### **5. Limitation of strikes and lock-outs.**

For a period of ten-years following the establishment of a FTZ, the strike, lockout and arbitration provisions specified by Law No.2822 \*2 are not applicable. However, any disputes arising from labor agreements during this period will be subject to the decision of the Superior Council of Arbitration.  
\*3

### **6. Procurement of workers.**

Operators within the FTZ may or may not, depending upon their preference, procure their personnel through the official Employment and Employee Procurement Agency of the Government.

### **7. Social security.**



All social security regulations are applicable within the FTZ s.

## **VIII. ADMINISTRATIVE STRUCTURE**

### **1. Central administration.**

The central administration of the FTZ s is conducted by the Undersecretariat of the State Planning Organization.

\*1: The current rate, as of 1 Nov. 1985, is TL 41.000 or approximately \$75 gross, per month.

\*2: Law No 2822 is the Law Pertaining to Collective Bargaining, Strikes and Lock-outs.

\*3: This is an independent State organization that was established to act as a mediator of last resort in labor relations.

(SPO), while local administration is the domain of the Regional FTZ Directorate.

### **2. Policy and planning.**

The Free Trade Zones Directorate (FTZD) of the SPO is responsible for all policy decisions pertaining to the FTZ s.

### **3. The granting and revocation of licenses to operate in the FTZ s.**

The FTZD has sole discretion in the granting of licenses for operations within the FTZ's. Where the situation warrants, the FTZD may revoke any such licenses that have been previously issued.

### **4. Regional administration.**

A Regional FTZ Directorate (RFTZD), staffed by the SPO, is established for the local administration of each separate FTZ. These local Directorates are attached to the Governor's office of the province in which their respective FTZ operates.

### **5. Obtaining licenses for more than one FTZ.**

A separate Operating License must be obtained for each FTZ in which an applicant wishes to operate.

## **6. Basis for revoking an operating license.**

In cases where an applicant fails to adhere to the conditions enumerated in his application documents, the FTZD may revoke his license prior to its expiration.

## **7. Approval of changes.**

Any changes in the scope of activities, in rentals or in the transfer of titles are subject to FTZD approval.

# **IX. THE "FTZ-ESTABLISHMENT AND DEVELOPMENT FUND"**

## **1. Objectives of the Fund.**

As its name implies, the Fund has been established to help finance the formation and the continued development of the FTZ s. The maintenance and repair of facilities, the training of workers, the provision of special incentives designed to encourage new entrants into the FTZ s, as well as projects involving modernization and research are some of the areas that the Fund is designed to support.

## **2. Organizational status of the Fund.**

The Fund operates under the direct authority of the Prime Minister, and can be utilized only through his instructions. The Fund is audited by the Prime Ministry's Superior Audit Council.

## **3. Payments to be made to the Fund.**

With the exception of goods that are Turkish made and that originate from Turkey, (and also with the exception of goods brought in for the investment stage and for maintenance and repair that remain within the FTZ for a maximum of six months), 0.5% of the CIF value of all goods brought into the FTZ, and 0.5% of the FOB value of all goods leaving the FTZ, will be paid into the Fund by the involved parties.

Four percent of gross revenues derived from activities within the FTZ by the company managing the FTZ, and by banks operating within the FTZ will also be paid into the Fund



NAME OF ZONE

FIRM NAME

NAME

SURNAME

SIGNATURE

APPENDIX-II

THE TURKISH FREE ZONES  
(OPERATING LICENCE APPLICATION FORM)

FREE ZONE

OPERATING LICENCE APPLICATION FORM

PRIME MINISTRY  
S.P.O. UNDERSECRETARIAT  
FREE ZONES DIRECTORATE

NECATBEY CAD. 108  
ANKARA  
TURKEY

Telex: 42110 dpt tr-44015 dpt tr

Tel: 90 (4) 2290071 - 90 (4) 2308913

Fax: (4) 2308637 (TURKEY) 90 (4) 2309738 (International)

Dear Applicant,

Our purpose in asking you to complete the attached "Application Form" is to acquire information regarding the operation you intend to undertake in the free zone, assess the total demand, establish the order of priority for the "Operating Licence" applicants within the frame of the objectives and potential of the free zone, and plan the new areas of development.

We believe that the enclosed pamphlets will serve as useful guides for you. Before proceeding to complete the "Application Form", please read the section on instructions and if you have any questions, rest assured that we will be at your disposal for further assistance.

With due concern both for the public and the entrepreneurial interests, our free zones have been planned so as to be competitive with all the other free zones in our surroundings. With your valuable contributions, we are convinced that these zones will be havens for investment, production, export, and profits.

Thank you for your interest in our free zones.

Republic of Turkey

Prime Ministry

Undersecretariat of the

State Planning Organization

## INSTRUCTIONS

1. The first 11 sections as well as sections 13 and 14 of this form are to be completed by all applicants.

2. The questions in section 2 pertain to the operation you intend to undertake in the free zone. By marking the relevant box in the column headed "Requested Licence Operation", you will be indicating the operation for which you are requesting an Operating Licence. Next to this column is a column headed "Complementary Activities" reserved for the activities which derive from the performance of the main operation specified in the first column and which are to be carried out in the same work place. The details for these activities will be given in section 12.

As an example, an applicant wishing to engage in production activities in the zone, will mark the box corresponding to "Production" in the first column and he will indicate the purchasing of inputs, the sale of his products, and the relevant storing activities by marking the boxes corresponding to "Purchasing/Selling" and "Storing" in the second column. If the applicant is also engaged in assembling in connection with his production activity, he will mark the box denoted "Assembling, Disassembling" in the second column.

The required information pertaining to the zone operation and complementary activities will have been supplied by the marking of appropriate boxes and the completion of the other sections in the following pages of the form.

3. Any deviation from the values supplied in the form, which are binding according to the Regulations, will be handled in your favor, provided that they do not exceed an error margin of 20%.

4. In case you find insufficient the spaces reserved for the required information, or wish to supply further details, please use separate sheets by indicating the related section numbers.

5. All information stated in the application form will be deemed confidential and not be utilized for purposes other than the expressed one.

**1. OPERATING LICENCE APPLICANT'S:**

NAME

ADDRESS

ESTABLISHMENT YEAR

MAIN LINE OF BUSINESS

PROPOSED ZONE OPERATION

COMMERCIAL/INDUSTRIAL REGISTRATION NUMBER AND LOCATION

PHONES

TELEX

AUTHORIZED CAPITAL \_\_\_\_\_ NUMBER OF PARTNERS \_\_\_\_\_

PAID-IN CAPITAL \_\_\_\_\_

LOCAL PARTNERS' SHARE \_\_\_\_\_

FOREIGN PARTNERS' SHARE \_\_\_\_\_

NAMES OF MAIN PARTNERS                      NATIONALITY                      PAID IN CAPITAL AMOUNT

(IF ANY) REPRESENTATIVE'S NAME

ADDRESS

PHONES

TELEX

(IF ANY) HOME COMPANY'S NAME

ADDRESS

ESTABLISHMENT YEAR

AUTHORIZED CAPITAL

PAID-IN CAPITAL

PHONES

TELEX

(IF ANY) APPLICANT'S, PARTNERS' OPERATIONS IN OTHER FREE ZONES

ACTIVITIES

COUNTRY

NAME OF ZONE

INVESTMENT AMOUNT (US\$)

**2. PROPOSED ZONE OPERATIONS (MARK APPROPRIATE BOXES)**

	REQUESTED LICENCE OPERATIONS (X)	COMPLEMENTARY ACTIVITIES
PRODUCTION	<input type="checkbox"/>	
PURCHASING, SELLING	<input type="checkbox"/>	<input type="checkbox"/>
STORING	<input type="checkbox"/>	<input type="checkbox"/>
PACKING, LABELLING, MARKING	<input type="checkbox"/>	<input type="checkbox"/>
ASSEMBLING, DISASSEMBLING	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR, MAINTENANCE	<input type="checkbox"/>	<input type="checkbox"/>
EXHIBITING	<input type="checkbox"/>	<input type="checkbox"/>
MACHINERY PARKING (IN ANTALYA FREE ZONE)	<input type="checkbox"/>	
RENTING	<input type="checkbox"/>	
BANKING	<input type="checkbox"/>	
INSURANCE	<input type="checkbox"/>	
AGENCY	<input type="checkbox"/>	
OTHER (SPECIFY BELOW)	<input type="checkbox"/>	<input type="checkbox"/>

(X) MARK ONE BOX BELOW

**3. REQUESTED OPERATING LICENCE PERIOD (CANNOT EXCEED 20 YEARS)**

**4. (IF ANY) NUMBERS OF OTHER OPERATING LICENCE APPLICATION FORMS FORWARDED FOR THIS ZONE**

**5. REQUIRED AREA**

REQUIRED OPEN AREA (m<sup>2</sup>) \_\_\_\_\_

IF A STRUCTURE TO BE BUILT ON THIS AREA

BASE AREA OF THE CONSTRUCTION (m<sup>2</sup>) \_\_\_\_\_

NUMBER OF FLOORS \_\_\_\_\_

GROSS CONSTRUCTION AREA (m<sup>2</sup>) \_\_\_\_\_

TYPE OF CONSTRUCTION \_\_\_\_\_

**6. CONSTRUCTION SCHEDULE**

PROJECT DESIGN PERIOD (MONTH) \_\_\_\_\_

CONSTRUCTION PERIOD (MONTH) \_\_\_\_\_



**7. INVESTMENT EXPENDITURES (IN LAST YEAR'S PRICES)**

CONSTRUCTION  
 MACHINERY AND EQUIPMENT  
 MANPOWER  
 OTHERS  
  
 TOTAL

PAYMENTS TO BE MADE IN FOREIGN CURRENCY (US \$)		PAYMENTS TO BE MADE IN TURKISH LIRA	
TO TURKEY	ABROAD	TO TURKEY	ABROAD

THE AMOUNT OF FOREIGN EXCHANGE (US \$) THAT THE FOREIGN ENTITY OR SHAREHOLDER INTENDS TO INVEST:

**8. AVERAGE (X) ANNUAL OPERATING EXPENDITURES (IN LAST YEAR'S PRICES)**

RAW AND INTERMEDIATE GOODS  
 MANPOWER  
 CREDIT, PRINCIPAL AND INTEREST  
 INTANGIBLE RIGHTS  
 OTHERS

PAYMENTS TO BE MADE IN FOREIGN CURRENCY (US \$)	
TO TURKEY	ABROAD

TOTAL

(X) REQUESTED OPERATING LICENCE PERIOD AVERAGE

---

**9. REQUIREMENTS**

---

WATER \_\_\_\_\_ m<sup>3</sup>/DAY

ELECTRICITY \_\_\_\_\_ KWA

PHONES \_\_\_\_\_ UNIT

TELEX \_\_\_\_\_ UNIT

---

**10. AVERAGE ANNUAL EMPLOYMENT**

---

ADMINISTRATORS  
OFFICE PERSONNEL  
QUALIFIED WORKERS  
UNQUALIFIED WORKERS  
TOTAL

TURKISH	FOREIGN	TOTAL

---

**11. DESCRIBE HOW YOU INTEND TO PREVENT ENVIRONMENTAL POLLUTION**

---





12.3 STORAGE

<u>STORAGE TYPE</u>	<u>m<sup>2</sup></u>	<u>M<sup>3</sup></u>
OPEN		
CLOSED		
COLD STORAGE		
OTHER (SPECIFY)		
<hr/>		
<u>MAIN GOODS TO BE STORED</u>		
<hr/>		

12.4 PACKING/LABELLING/MARKING

<u>GOODS TO BE PACKED/LABELLED/MERKED</u>	<u>ANNUAL AVERAGE QUANTITY</u>
---	--------------------------------

12.5 ASSEMBLING DISASSEMBLING

<u>GOODS TO BE ASSEMBLED, DISASSEMBLED</u>	<u>ANNUAL AVERAGE QUANTITY</u>
--	--------------------------------

**12.6 REPAIR, MAINTENANCE**

GOODS TO BE REPAIRED, MAINTAINED

ANNUAL AVERAGE QUANTITY

**12.7 EXHIBITING**

GOODS TO BE EXHIBITED

ANNUAL AVERAGE QUANTITY

**12.8 MACHINERY PARKING (IN ANTALYA FREE ZONE)**

MACHINERY TO BE PARKED

ANNUAL AVERAGE QUANTITY

WEIGHT OF THE  
HEAVIEST MACHINE

**12.9 RENTING**

CLOSED AREA TO BE RENTED

m<sup>2</sup>

m<sup>3</sup>

NUMBER OF FLOORS

OFFICE

STORAGE

WORK-SHOP

OTHER (SPECIFY)

13

**ESTIMATED GROSS INCOME IN "REQUESTED LICENCE OPERATION"**

	<u>ANNUAL AVERAGE (US \$)</u>
PRODUCTION	_____
PURCHASING, SELLING	_____
STORING	_____
PACKING/LABELLING/MARKING	_____
ASSEMBLING, DISASSEMBLING	_____
REPAIR, MAINTENANCE	_____
EXHIBITING	_____
RENTING	_____
BANKING	_____
INSURANCE	_____
AGENCY	_____
OTHER (SPECIFY BELOW)	_____

14. I HEREBY DECLARE AND CERTIFY THAT ALL INFORMATION GIVEN IN THIS FORM AND ITS ENCLOSURES IS CORRECT. ANY AMENDMENTS MADE BY MYSELF WILL BE FORWARDED WITHIN ONE WEEK, AND ALL PARTICULARS WILL BE ACCOMPLISHED IN COMPLIANCE WITH THE PROVISIONS OF THE REGULATIONS.

NAME  
TITLE

DATE (DAY/MONTH/YEAR)  
/ /  
AUTHORIZED SIGNATURE

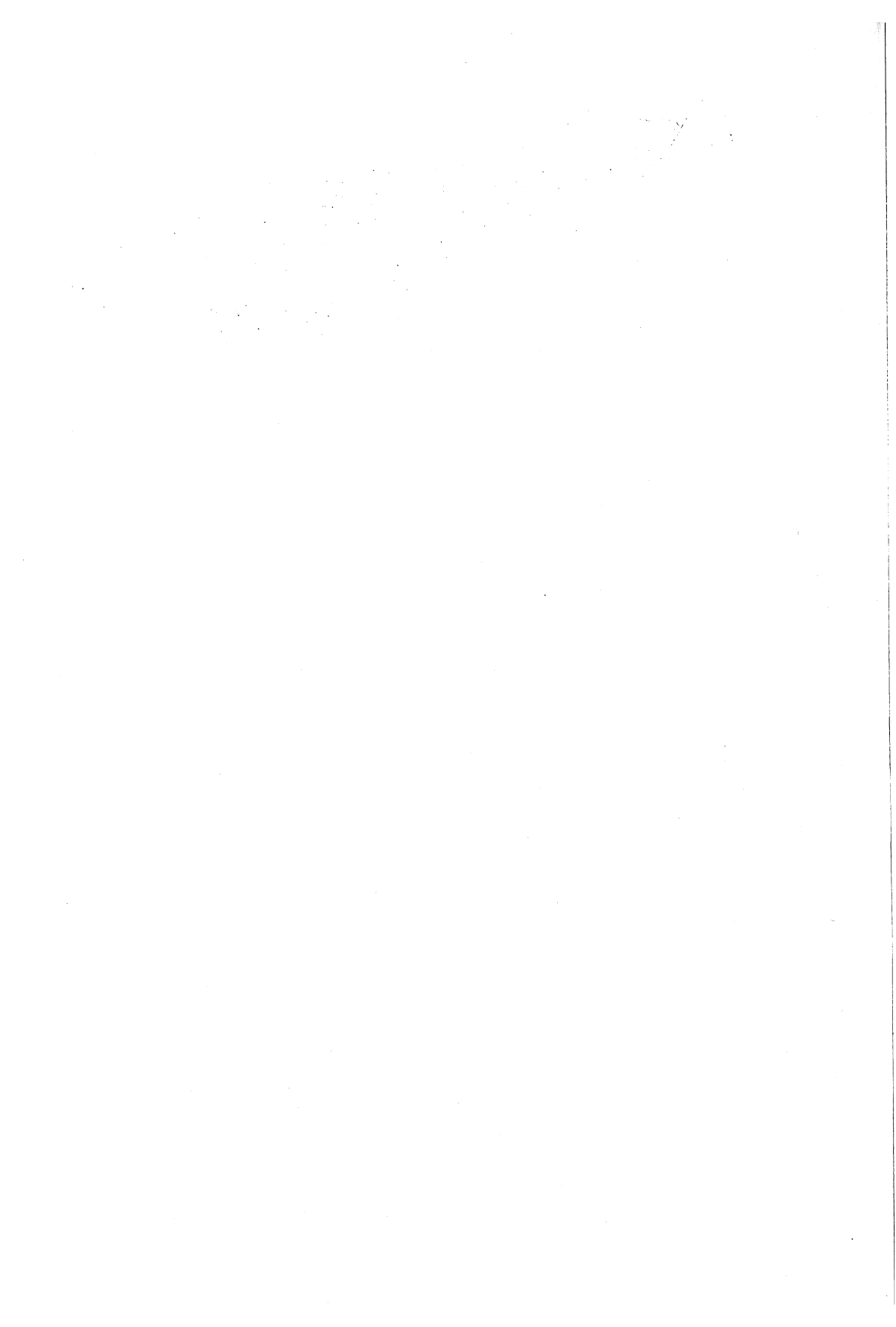
15. ENCLOSURES

TOTAL NUMBER OF ENCLOSED SHEETS .....

- 15.1 POWER OF ATTORNEY OF THE SIGNATORY
- 15.2 DESCRIPTIVE INFORMATION ON THE FIRM AND ITS OPERATION IN THE ZONE
- 15.3 LAST THREE YEARS' BALANCE SHEET,
- 15.4 (IF ANY) DOCUMENTS RELATED TO THE FOREIGN CURRENCY BROUGHT INTO TURKEY IN LAST THREE YEARS
- 15.5 DOCUMENTARY EVIDENCE OF APPLICATION FEE PAYMENT MADE TO THE CENTRAL BANK
- 15.6 BRANCH ESTABLISHMENT PERMIT FROM UNDERSECRETARIAT OF TREASURY AND FOREIGN TRADE (FOR BANKS ONLY)
- 15.7 A COPY OF THE COMPLETED OPERATING LICENCE APPLICATION FORM AND ITS ENCLOSURES







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