Chapter 3: Introduction to Export Processing Zones

3.1 History

3.1.1 EPZ Post 1960s

EPZ have grown considerably in size and number over the last few decades, but the model is not a new one. They are at least as old as western civilizations, having existed in the Phoenician city of Tyre and at three hundred (300) BC in the Greek Island of Delos, which as a result became one of the wealthiest islands in the world for nearly a century (Haywood, 2000).

Under the Roman Empire free trade zones were set up along commercial routes. Used for storing duty-free goods before re-exporting them, they were a marginal element in a mercantile economy. The free towns of the Middle Ages and the duty free ports of the British Empire (Singapore, Gibraltar, and Hong Kong) continued the tradition. (Marhoz and Szymanski, 1996)

At the end of the 20th century, free trade zones, used not only for trade but also for production, were emerging in the wake of the industrial revolution, colonial expansion and the internationalization of liberal economics.

3.1.2 Modern EPZ Revival and Expansion: 1960s and Beyond

The modern phenomenon of EPZ was born in 1958 in Ireland. The government's primary objective in establishing the Shannon Free Zone was to save the jobs of the 1,500 people employed at the Shannon Airport. These jobs were at risk because of advances in aviation technology which made it unnecessary for transatlantic flights to refuel at Shannon (Shoesmith, 1986). With its future threatened by the advent of the transatlantic jet, the airport was turned into a duty free production zone for goods with a high value added. Its success surpassed all expectations: in the first year, nearly 440 jobs were created. Ten years later, the zone employed 4,750 people, giving a new lease of life to the airport, whose staff grew from 1,250 in 1960 to 2,200 in 1975.

By 1970, less than ten countries had set up EPZ. In Asia, the first zone was created in Kandla, near Bombay. Sixteen years later, 1986, there were nearly 175 spread across fifty countries. Since then EPZ have been created in nearly half the world's countries, mainly in the Third World. (Marhoz and Szymanski, 1996)

The World Economic Processing Zone Authority's 1997 Edition of the International Directory of Free Zones and Export Processing Zones contains information on 847 zones in 102 of the 228 sovereign nations, dependencies and areas of special sovereignty in the world (some are Free Zones, some are EPZ, and many facilitate both trade and export manufacturing). (Bolin, 1999)

According to the International Labor Organization's latest figures, the numbers of EPZ has gone from 79 in 25 countries in 1975 to 3000 in 116 in 2002. (ICFTU, 2003)

3.2 Export Processing Zone Concept

The zone concept is so powerful, that more and more countries are recognizing a new paradigm of free zones. While the old free zone was often described as a static, labor-intensive, incentive driven, and exploitive enclave, the new zone paradigm is a dynamic, investment-intensive, management-driven, enabling, and integrated economic development tool (Haywood, 2000).

The fundamental concept of an export processing zone is that it is an alternative policy framework, developed by government, to promote social, political and economic policy objectives of government (Haywood, 2000).

EPZ are above all public policy instruments with social and political purposes and not exclusively limited to purely economic considerations (Baissac, 1996)

As a policy means of achieving greater economic openness and growth, the concept of EPZ has gained noticeable significance during the past three decades (Ge, 1999).

EPZ have become a common policy instrument aimed at stimulating exports, manufacturing production, generating foreign exchange, employment and economic growth (Tekere, 2000).

EPZ are above all a public policy instrument dedicated to improving, among other instruments, the economic situation of the country implementing it (Baissac, 1996).

EPZ are useful instruments for economic development but are only transitory as policy instruments during the first phases of industrialization and implementation of export-led growth strategies. As countries achieve higher levels of economic development and income, the relative significance of EPZ in economic terms can be expected to decline. Thus, developing nations embarked on export-led growth strategies cannot rely solely on EPZ to achieve higher levels of income and economic growth in the long-term. They should acknowledge the transitional aspect of EPZ, and manage wisely the opportunities they may bring to upgrade labor and managerial skills, acquire superior technology and access foreign markets. EPZ should be apart of a

more extensive package of polices aimed at improving the international competitiveness of a host nation (Jenkins, Esquivel and Larrain B., 1998)

According to Madani, 1999, there are four competing views on the role of EPZ in an economy. One considers it as an integral part to further economy wide reforms. EPZ are to have a specific life span, losing their significance as countries implement systemic trade, macroeconomic and exchange rate reforms. A second view sees EPZ in terms of a safety valve. They provide much-needed foreign currency to accommodate import needs for the host nation and create jobs to alleviate some of the national unemployment or under-employment. A third view is that EPZ can be used as laboratories to experiment with market economy, outward oriented policies. Finally, all these views still consider the EPZ as a source of technological transfers and human capital development.

3.2.1 Internationally Used Definitions

UNIDO (United Nations Industrial Development Organization)

An EPZ is a relatively small, geographically separated area within a country, the purpose of which is to attract export-oriented industries, by offering them especially favorable investment and trade conditions as compared with the remainder of the host country. In particular, the EPZ provide for the importation of goods to be used in the production of exports on a bonded duty free basis (UNIDO, 1980).

UNCTAD (United Nations Conference on Trade and Development)

EPZ are industrial estates which form enclaves within the national customs territory and are usually situated near an international port and/or airport. The entire production of such zones is normally exported. Imports of raw materials, intermediate products, equipment and machinery required for export production are not subject to customs duty

(UNCTAD, 1985: 10).

ILO (International Labor Office) /UNCTC (United Nations Centre on Transnational Corporations)

An EPZ could be defined here as a clearly delineated industrial estate which constitutes a free trade enclave in the customs and trade regime of a country,

and where foreign manufacturing firms producing mainly for export benefit from a certain number of fiscal and financial incentives (ILO/UNCTC, 1988: 4).

The World Bank

An *EPZ* is an industrial estate, usually a fenced-in area of 10 to 300 hectares that specializes in manufacturing for export. It offers firms free trade conditions and a liberal regulatory environment (World Bank 1992: 7).

WEPZA (World Export Processing Zone Association)

EPZ are all government authorized areas such as free ports, free trade zones, custom free zones, industrial free zones or foreign trade or any other type of zone, as the Council may from time to time decide to include (Statutes of the WEPZA, ID/W.6/266/6, 28th February 1978).

(Source Kusago and Tzannatos, 1998)

3.2.2 EPZ Terminology

There are many terms used that are synonymous to EPZ. The diversity in name reflects the evolving nature and distinct purpose of each zone and while the stated objective of the government is reflected in its terminology, the actual

operation of the zone can be quite different. Among the most commonly used are Special Economic Zones (China), Industrial Free Zones, Export Processing Free Zones and Free Trade Zones (Kusago and Tzannatos, 1998). (Table 2)

Table 2

The Evolution of Terminology

Term	Main users and date of first use
Free trade zone	Traditional term since nineteenth century; ILO (1982)
Foreign trade zone	Individual authors (R.S.Toman, 1956; W.Dymsza, 1964), India (1983)
Industrial free zone	Ireland (pre-1970), UNIDO (1971), Liberia (1975)
Free zone	UNCTAD (1973), USAID (1982), United Arab Emirates (1983)
Maquiladoras	Mexico (early 1970s)
Export free zone	Ireland (1975), UNIDO (1976)
Duty free export processing zone	Republic of Korea (1975)
Export processing free zone	UNIDO (1976), UNCTAD (1983)
Free production zone	Starnberg Institute (1977)
Export processing zone	Philippines (1977), Harvard University (1977), APO (1977), WEPZA (1978), UNIDO (1979), Malaysia (1980), Pakistan (1980), Singapore (1982), UNCTC (1982), ILO (1983), The Economist (1979)
Special economic zone	China (1979)
Tax free zone	Individual authors (W.H. and D.B. Diamond, 1980)
Investment promotion zone	Sri Lanka (1981)
Free economic zone	Individual author (H.Grubel, 1982)
Free export zone	Republic of Korea (1983
Free export processing zone	OECD (1984)
Privileged export zone	Individual author (N.N. Sachitanand, 1984)
Industrial export processing zone	Individual author (P.Ryan, 1985)

APO Asian Productivity Organization
ILO International Labor Office
OECD Organization for Economic Co-operation and Development
UNCTAD United Nations Conference on Trade and Development
UNCTC United Nations Centre on Transnational Corporations

UNIDO United Nations Industrial Development Organization
USAID United States Agency for International Development
WEPZA World Export Processing Zone Association

Source: Kusago and Tzannatos (1998)

3.2.3 EPZ Incentives

Incentive packages are usually divided into “hard” and “soft” ones. (Kusago and Tzannatos, 1998) Hard incentives include the provision of physical infrastructure and services necessary for manufacturing: roads, power supplies, transport facilities and so on. (Kusago and Tzannatos, 1998) Soft incentives include tax allowances and special trade concessions. (Kusago and Tzannatos, 1998)

3.2.4 Potential Benefits from EPZ

The potential gains from EPZ are increased foreign exchange earnings, greater utilization of local materials, additional capital equipment, additional tax revenue collects, increased gross exports, job creation and income creation, average wage in EPZ higher than average wage outside the zone, good source of labor training and learning by doing, management and supervisory training, catalyst effect and provides efficient industrial structure in countries that may not posses one (Mandani, 1999).

3.2.6 Potential Caveats to Potential Benefits from EPZ

The potential caveats to the potential gains from EPZ are that the foreign exchange earnings may be overstated, net imports not as impressive because of high import content of exports, lack of job security, prone to demand shocks, skills are generally low tech, forgone taxes, tariff revenues and opportunity costs of public investments related to the zone may be high and environmental damage and labor and work safety issues due to lax laws or governmental supervision (Mandani 1999)

3.2.7 EPZ Potential Static Benefits: Trade and Foreign Exchange

Foreign exchange earnings and an increase in exports are two of the main benefits expected from EPZ. Rising exports, solely, do not represent economic progress if import bills increase at a correspondent rate. What really matters is not the absolute volume of exports but the difference between export earnings and import costs (Shoesmith, 1986).

Mandani, 1999, contends that EPZ provide foreign exchange earnings that allow low income economies to slacken the foreign exchange constraints regarding their import needs for the rest of the economy and provides the

government with development funds. Mandani, 1999, explains that this inflow of foreign exchange could be earmarked for public investment, policies supporting the development of the domestic industries, or allow for a more graduated adjustment for countries undergoing structural adjustment programs.

The level of exports from and imports into the zone determines the impact of EPZ on foreign exchange. Tekere, 2000, argued that because EPZ rely on imported raw materials and capital goods in the long term the inflow of foreign exchange from exports would be minimal. He deduced that cases where firms fail to succeed in export business then results in a negative net impact on foreign reserves.

By creating new employment, host countries increase their foreign exchange earnings in the form of wage payments to their workers. Kusago and Tzannatos, 1998, affirmed that EPZ workers are indirectly paid in foreign currency and, from an economic perspective, this is similar to the direct export of labor. They maintain that EPZ can be preferable to emigration given social

effects in the host country and in the country of origin of multi-national companies that often accompany dislocation of labor.

3.2.8 Employment

The most direct impact of EPZ on the societies which host them is on the workers who find jobs in them (Shoesmith, 1986) Kusago and Tzannatos, 1998, clarified that during the course of industrial development and economic growth, the resulting ability of the economy to absorb surplus labor in more general ways reduces the effects of EPZ. Thus, whether the creation or expansion of an EPZ would lead to substantial employment gains would depend on the stage of economic development of the host country.

3.2.8 EPZ Potential Dynamic Benefits: Technology Transfer, Knowledge Spill-over and Backward Linkages

As a part of their rationale, EPZ are intended to facilitate the transfer of technology on the host economies. Mandani, 1999, contemplates that technology transfer and knowledge spill-over would foster industrial development in nontraditional goods and efficiency gains in production

processes of the traditional ones. Such a transfer would also foster a backward linkage to the country's firms, which would allow them to step in as suppliers to the EPZ firms in the medium to long run. Mandani, 1999, explains that this process would integrate the zone into the regional and national economy and promote regional development beyond the immediate and limited servicing of the enclave structure.

Eventually, it was hoped, these domestic supplier firms would mature to compete in the international market. Workers in the zone are exposed to 'new' technology, entrepreneurial and organizational skills that are transferred to the host country and hence the worker in the EPZ may be indirectly contributing to the adoption sector (Sinclair, 2001) This describes the EPZ as an institution of learning from which the host country can adopt technology without suffering the necessary fixed costs. The two main types of backward linkages are the utilization of domestic raw material inputs and subcontracting arrangements with domestic firms, which will accelerate industrial growth in the host country (Kusago and Tzannatos, 1998).

3.3 Global Experiences

EPZ have been often described as the “engine of outward-oriented economic growth” which, though debatable as a general proposition, has been nevertheless associated with significant industrial development in some countries, especially smaller ones such as Singapore, Republic of Korea, Taiwan (China), Hong Kong (China), Panama, Dominican Republic and Mauritius (Kusago and Tzannatos, 1998).

EPZ are quite concentrated geographically with most of them in just two continents. Latin America and the Caribbean is the home of 48% of world wide EPZ while Asia boasts another 42% (Kusago and Tzannatos, 1998).

One of the main differences between East Asian, Latin American, and African EPZ has been the success of the East Asian governments in actively promoting backward linkages. As a consequence, in East Asia, the share of locally purchased inputs and of domestic value added steadily increased after the first few years of EPZ operations. On the other hand, Latin American and Caribbean zones achieved a much higher share in manufacturing employment

and exports than those in East Asia workers (Jenkins, Esquivel, and Larrain B., 1998).

Countries in East Asia, Central America, and the Caribbean basin have successfully used Export Processing Zones as an instrument for economic development. Attempts to do the same thing in Africa have, with the obvious exception of Mauritius, have been significantly less successful (Watson, 2001).

3.3.1 Asia

Many of the most successful EPZ were established in Asia, especially Taiwan and Korea. Initially, zones in these countries attracted labor-intensive industries with relatively unsophisticated technologies such as electronics and garments that required large amounts of unskilled workers (Jenkins, Esquivel and Larrain B., 1998). In their evolution these EPZ did not commonly account for a high share in total exports.

In Thailand zones have the additional aim of decentralizing industries from Bangkok to overcome problems of congestion and pollution (Jayanthakumaran, 2003). In Singapore, the EPZ were originally meant as a part of a package intended to attract investment to a strategically located economy already free of import/export regulations (Jayanthakumaran, 2003). Economies in transition, for example South Korea, Malaysia and Thailand, initiated EPZ as part of a shift in policy from inward to an outward orientation (Jayanthakumaran, 2003). China initiated its open-door policy and ongoing economic reforms by introducing Special Economic Zones in 1979 (Jayanthakumaran, 2003).

Both Taiwan and South Korea successfully diversified away from low-skill labor-intensive industries that characterized their EPZ in the early years of operation (Jenkins, Esquivel and Larrain B., 1998). They were successful in promoting linkages between local industries and the firms in the zones.

In Taiwan, under government guidance, personnel from firms in the zones were placed at potential suppliers' factories to offer advice in production

methods, and quality control. As a result local supplies from domestic companies into the zones increased from eight (8) percent of total imports in 1969 to forty six (46) percent by 1979(Jenkins, Esquivel, Larrain B. 1998). In the Masan Zone of Korea the zone administration gave technical assistance to local suppliers and sub-contractors. This effort led to the domestic value added of the Mason Zone in Korea to increase from twenty seven point eight (27.8) percent in 1971 to fifty two point two (52.2) percent in 1979 (Jenkins, Esquivel, Larrain B., 1998). By efficiently integrating with the domestic economy, EPZ in South Korea evolved to the stage where they were no longer an enclave. Masan EPZ in South Korea facilitated the development of surrounding regions (Jayanthakumaran, 2003).

3.3.2 Caribbean and Latin America

The first EPZ in the region were inaugurated in Colombia, the Barranquilla zone in 1964, the Dominican Republic, La Romana in 1965, and Mexico, maquiladora program in the mid 1960s. Guatemala, Honduras and El Salvador inaugurated their first EPZ in the early 1970s (Esquivel and Larrain B., 1998). Nicaragua, 1976, Jamaica, 1976, and Costa Rica in 1981 followed suit. Belize inaugurated its first zone in 1992.

In Mexico, initially a high share of the maquiladoras produced garments and electronics products. Later, a more diverse group of industries emerged under the program. Backward linkages, however, never really formed, somewhat paradoxically given Mexico's large and well-diversified industrial sector. This exemplifies that the development of these linkages may not occur without the proper incentives.

The Dominican Republic EPZ firms account for a very high share of exports, especially manufactured exports, and employment. The Dominican Republic zones are some of the largest EPZ in the world in terms of employment. Similarly to Mexico, backward linkages with the domestic economy have been difficult to achieve.

In the Latin American case, governments seem to have used EPZ mostly as instruments to generate employment and foreign exchange, and backward linkages have been rare (Esquivel and Larrain B., 1998).

Central American countries EPZ programs have Textile, Electronics, Footwear/Leather, Machinery/Metal, Pharmacy/Medical, Other Manufacturing, Service and Commercial, Food and Marine industries (Esquivel and Larrain B., 1998). Costa Rica is the only nation in the region to have attracted electronics firms to its export-oriented regimes (Esquivel and Larrain B., 1998). At the other extreme, export-oriented activity in Honduras, Nicaragua and El Salvador is almost completely specialized in textiles (Esquivel and Larrain B., 1998).

There is a relatively large presence of Asian investment in Nicaragua, Guatemala and El Salvador, a small Asian presence in Costa Rica, and a small US investment in Guatemala (Esquivel and Larrain B., 1998).

3.3.4 Africa

Mauritius has been the only successful EPZ program in Africa. The Mauritius EPZ program is notable for the extent to which it diversified the economy by

increasing the export of manufactured goods and attracted local investment (Tekere, 2000)

Host countries in Africa are characterized by lack of alternative programs for effective economic development and job creation (Jauch, 2002). Export processing carried out in African EPZ is merely assembly and is characterized by repetitious tasks that require little skill (Tekere, 2000). Tekere, 2000, observes that new foreign investment inflows are limited chiefly to primary activities such as textiles, clothing, petroleum, mining and agriculture.

Most zones in Africa have failed because of lack of government commitment to the program, policy reversals, high costs involved with development of EPZ infrastructure bureaucracy, and non-transparent procedures in accessing the incentives (Tekere, 2000).

3.3.5 Export Processing Zones Evaluations

The literature on EPZ comprises descriptive, theoretical and benefit-cost analysis. Descriptive studies carried out by international organizations and academics focus on the conceptualization, objectives, incentives, development

effects and performance of EPZ (Jayanthakumaran, 2003). Theoretical studies focus on factor movements and use Hecckscher-Ohlin framework (Jayanthakumaran, 2003). The benefit-cost analysis captures the economic welfare of citizens of the host country by incorporating the benefits and costs for the entire lifetime of the project (Jayanthakumaran, 2003).

3.4.1 Export Processing Zones in the Global Economy

EPZ and other special regimes will be subject to substantial regulatory reforms as a result of the gradual integration of countries into the international economy (Granados, 2003). On the one hand, commitments in the World Trade Organization (WTO) entail the elimination of export subsidies (Granados, 2003). On the other, regional integration schemes normally exert pressure to eliminate tax and tariff exemption/reduction mechanisms on imports of inputs or equipment that are incorporated into or used in exports going to the trading partner in such schemes (Granados, 2003). The combined effect of these two forces has caused and will continue to cause a substantial change in the way these special regimes operate.

Under regional commitments EPZ are prohibited because it causes trade deflection, inequality between producers in different countries, in order to promote inter-industry integration and to attract FDI (Granados, 2003). Under multilateral commitments, WTO, the Agreement on Subsidies and Countervailing Measures of the Uruguay Round export subsidies, exemptions and reductions on direct taxes including profits and income tax, are prohibited (Granados, 2003). The Doha negotiations led to a mechanism that provided an extension from 2003 to 2009. Eighteen (18) countries of Latin America and the Caribbean benefited: Antigua and Barbuda, Barbados, Belize, Bolivia, Costa Rica, Dominica, Dominican Republic, El Salvador, Guatemala, Grenada, Honduras, Jamaica, panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Uruguay (Granados, 2003).

It is likely that as a result of the regional and multilateral forces, much of the production in EPZ will be incorporated into the national productive apparatus, and that there will be a harmonization of the tax regimes applicable to intra-and extra-zone companies. Similarly, to offset some deficiencies in the supply of

raw materials and inputs not found in the region, some “competitive reductions” in the Most Favored Nation (MFN) tariff might be necessary.

EPZ will be forced towards policies that attract investors by providing a stable and friendly tax and regulatory environment, physical proximity to markets, simplification of procedures, and better infrastructure. Several countries have been face with similar issues and have developed policies accordingly.

3.4.2 The Mexican Experience of Adjustment with NAFTA

When the North American Free Trade Agreement entered into force in January 1994 it was agreed to offer a seven (7) year period to Mexican goods that were benefiting from drawback or duty deferral, a period that expired on January 1, 2001. As part of the preparations for the implementation of that commitment, Mexico established a mechanism that was more or less similar to the one that Canada had implemented earlier when it concluded the Free Trade Agreement with the US. The mechanism is known as the “Sectoral Promotion Program” (PROSEC) and basically consists of the granting of a MFN tariff preference,

not above five (5) percent in most cases, for a list of over 5,000 inputs used in twenty two (22) branches of production. To benefit from this reduction, however, the companies that use the inputs must register with the program and must be manufacturers. Both exporting companies and those producing for the domestic market can profit from this program.

(Granados, 2003)

1.4.3 The Uruguayan Experience of Adjustment with MERCUSOR

With MERCOSUR's entry into force, the operation of Uruguayan EPZ was restricted by the approval in December 1994 of Decision No. 8 In the Protocol of Ouro Preto. Through tax exemptions at the national level, the state had fostered such zones as a way of attracting foreign investment and creating jobs, and a large number of them were set up country wide. With the approval of that Common Market Group decision, however, the EPZ were obliged to adapt their activities so as to safeguard the investments made. As of 1994, all goods produced in or entering the EPZ could not secure the certificate of MERCUSOR origin and, from a tax viewpoint, they had to pay the

Common External Tariff if they entered the territory of any of the other member countries. Hence the manufacturing establishments installed in the zones had to become free service and logistics zones and zones for distribution of, especially, extra-regional gods. The Uruguayan government issued a decree that some of the companies in the EPZ, under certain conditions, could cease to be so and could be declared companies of national interest, enjoying other incentives as if they were established in any part of the non-free territory.

(Granados, 2003)

1.4.4 The Costa Rican Experience of Adjustment with WTO

The authorities in Costa Rica, in preparation for assuming the commitment to eliminate export subsidies in 2003, identified a series of options on the best way to solve the problem arising from the need to remove some of the EPZ' incentives to exports and foreign investment. In Costa Rica the main problem was how to comply with multilateral obligations and at the same time maintain an appropriate tax system that did not adversely affect the country's capacity to attract foreign investment and retain the investments already made. The

main component of the proposed strategy was a tax reform that, in broad terms, harmonized the payment of income tax at a rate of between ten (10) percent and fifteen (15) percent for all local and foreign companies, irrespective of whether they exported or not, or of whether they operated under special regimes or not. This entailed a complete overhaul of the national tax system. Initially, according to the national press, the proposal triggered reactions from foreign investors. At the Doha ministerial meeting, however, since the ministers decided to defer the deadline for seven more years, the debate ended.

(Granados, 2003)