

COMMON QUESTIONS ASKED ABOUT EXPORT PROCESSING ZONES

What is an Export Processing Zone?

Export Processing Zones (EPZs) are a relatively recent form of free trade zone, established by governments to encourage the assembly or manufacture of goods primarily destined for export markets. EPZs remove Customs Duties, taxes, and/or regulatory burdens upon export-oriented enterprises operating within government-designated areas. In addition to this economic policy "software" (i.e. free market business climate) component, which is common to all free trade zones, EPZs also typically offer a distinctive "hardware" component -- an industrial park environment with prebuilt standard factory buildings for lease or sale to export producers.

In summary, what are the most important elements in a zone incentives program?

As described in more depth in LAC/CDIE Workshop Paper 3, "Frameworks Correlated With Export Processing Zone Success," the most important element to zone success is predictable, "transparent" access by private firms to free zone incentives -- a readiness, on paper and in practice, to offer automatic and expeditious approval of investment projects within EPZs. Zone incentives should be made available not only to export industries, but to private sector zone development/management organizations, and to the service providers located within the zone which provide needed utilities and amenities.

The second essential element is the substance of the incentive package itself. A standard EPZ incentives package includes:

- tax holidays or sharp reductions in levels of business taxation;
- exemption from Customs duties on imports used for export production;
- relief from foreign exchange controls;
- creation of "one-stop" regulatory approval centers; and
- permission to establish firms with 100 percent foreign ownership.

Beyond these common substantive elements, countries implementing free zone incentive regimes increasingly include removal of inflexibilities in labor codes and work visa policies; and demonopolization of utilities and services.

A third major element of successful free zone regimes consists of credible institutional arrangements to follow through with the promised benefits, to ensure that firms experience a favorable business operating environment in practice as well as on paper, especially with regard to Customs clearance procedures, visas, and movement of foreign exchange.

How successful can new zones be, given the competition?

EPZs have proliferated indeed in the developing world over the past two decades; at present, more than 140 are operational in over 45 countries, in comparison to fewer than two dozen in 10 countries in 1969. With the accelerating proliferation of free zones world-wide, incentive policies in most countries have grown steadily more liberal, reflecting a recognition by sponsoring Governments of the need to remain competitive internationally. The effect of the competition, perhaps surprisingly, has been to make new free zone projects more rather than less attractive to private developers. The effective removal of policy constraints -- combined with the highly visible successes of predecessor zones -- has prompted many indigenous and foreign private developers to put millions of dollars at risk for new free zone projects over the past five

years. Overall, private zones are now unquestionably increasing in proportion of leased space, employment and exports relative to public sector zones.

What are the optimal locations for free zones in a country?

To take advantage of lower freight and handling costs, EPZs are generally located within an hour or less ground travel time from established ports or airports. A population center of at least 20,000, and preferably more than 50,000, should be located within commuting distance.

How many free zones can a country normally support?

Ultimately, the goal of many zone-sponsoring countries is national adoption of free market-oriented policies -- in essence, the creation of a country-wide free zone. In practice, most countries begin by applying full-strength free market oriented policies to only a fraction of their territory, through designation of only one or two free zones. As the initial zone area becomes successful, political pressures often become overwhelming to grant additional free zone designations. A country such as the Dominican Republic (population 6 million) began with a single zone in 1969, and today has 16 operational zones employing a total of more than 105,000 workers.

What is the size of a typical zone?

EPZs exist in a wide range of sizes. Some zones as small as seven hectares have proven successful for private zone development groups; more typically, zone developers undertake projects on sites ranging from 20 to 200 hectares. Alternatively, some countries make EPZ incentives available on a single-factory basis (often called "sub-zones"), located at individual sites of the private investors' choosing.

What physical facilities and services does it usually offer?

A normal EPZ offers companies a choice between leasing vacant, pre-built "standard factory buildings" (typically 2000 sq. meters) or erecting custom-built facilities on improved land. A Customs fence normally surrounds the EPZ, to prevent unauthorized leakage of goods across the zone boundaries. The physical infrastructure of the zone is virtually identical to that of an industrial park; zone industries are offered a higher standard of electrical, telecommunications, water, sewer, and road systems than readily found outside the zone. The cost of special capital investments to ensure a better standard of infrastructure can often be recovered in part or whole by the zone developer through higher rental payments. In addition, zones can apply "user fees" for such services, as well as for refuse collection, zone lighting, security, employee pre-screening, health clinics for workers, use of training facilities, and other amenities. Another element increasingly found within EPZs is the option for foreign firms to send work to the zone without undertaking a direct investment. The arrangements making possible such producing sharing at low risk are known as "shelter programs" and subcontracting options.

How much capital is needed for a typical zone?

A medium-sized free zone (50 hectares) normally requires about \$25 million for site improvement, building construction, and operation over a 10 to 20 year period. Because well-conceived zone projects phase their development process, however, the total debt and equity financial package generally ranges from \$4 to \$8 million (the balance is unusually generated by the zone's lease revenues). Under favorable conditions, private zone developers often recover their investment in a 7-10 year period. This period can be shortened if the developers establish associated profit centers (e.g. shelter programs or subcontracting operations) in conjunction with the real estate venture.

Where do these zone development resources come from?

Private zone developers in LDCs have used a range of resources for their equity investment in zone projects. In addition to the local currency that such firms mobilize, private zone developers have also brought resources to bear by assembling in-kind resources, including land and building materials, and by repatriating hard currency holdings from overseas. In the Dominican Republic and in Costa Rica, multinational corporations have used blocked currencies and debt swaps to reduce investment costs. Debt financing commitments for free zones have been provided by a range of development institutions, including the World Bank (Mauritius, Jamaica, Colombia, the Dominican Republic), the Agency for International Development (Dominican Republic and Costa Rica), and the Overseas Private Investment Corporation (Dominican Republic and Africa). Debt/equity ratios ranging between 50:50 to 70:30 normally apply.

There are also some public sector costs related to EPZ programs incurred by sponsoring governments. At a minimum, host governments must pay for (or reallocate) the regulatory or supervisory personnel needed to monitor the regime. Most governments also sponsor agencies to promote the comparative advantages of their EPZ program. Government expenditures, however, greatly reduced if private investors are allowed to develop the zones themselves. In these cases, the government is only responsible for providing support infrastructure. In Turkey, the Bechtel Corporation has negotiated a framework to build two EPZs on a Build-Operate-Transfer (BOT) basis. Under this approach, Bechtel agreed to finance and build a \$220 million EPZ and deepwater port at no cost to the Turkish government, with cost recovery and profit achieved by the Bechtel-led private consortium over a zone transfer period of no more than 20 years. A similar BOT agreement between Gulf + Western and the Government of the Dominican Republic led to development of a highly successful EPZ, resort complex, and airport at La Romana.

While it is true that EPZ firms pay little or no taxes, the direct and indirect employment represents a significant source of revenue. Because employment in EPZ firms represents a shift of labor from relatively low-paying agricultural activities to modern industrial production, the employees normally generate fiscal dividends for the public treasury.

Aren't EPZs just enclaves of privilege for foreign investors?

In some nations, EPZs have appeared to be virtual enclaves for foreign investors, particularly in the early stages of their development. However, this perception is not inherent in the EPZ concept itself. Most free zone sponsoring governments today allow locally-owned firms, as well as foreign enterprises, to establishing operations within EPZs. In Mauritius, for example, legal provisions give equal treatment to foreign and local investors, and more than half of all EPZ investment is made by local entrepreneurs. In the initial stages of EPZ development, it is true that zone-based exporters often do little sourcing of raw materials and intermediate goods from local markets. Domestic market producers often are unable to meet international standards of price and quality given the lower standards prevalent under import substitution policies. Moreover, local suppliers often contend with higher taxes, duties, and more bureaucratic procedures and regulations than are the norm in world markets. As the growth of EPZ industries generates a significant and visible new "export" market, local firms often become more willing to enter into supply relationships. The extent and quality of such backward linkages has risen dramatically in cases where sponsoring governments extend EPZ-like export sector incentives to producers throughout the country. In such circumstances, many indigenous managers and technical personnel -- once employed by foreign-owned firms -- find it highly profitable to leave their original jobs and to establish export-oriented enterprises of their own. Finally, some governments have reduced the enclave-style nature of EPZs by permitting a portion of zone output into the local market, treating the items as "imports" in terms of duties and Customs. This allows the domestic population to benefit from higher quality, locally-produced merchandise.

Don't EPZs attract footloose industries?

Some observers have criticized EPZs for attracting firms with little permanent interest either in the host country or in their employees. Indeed, EPZ firms located in countries with deteriorating business conditions such as political instability, declining infrastructure, and a debilitating bureaucracy do tend to seek out a more favorable business environment. However, countries hosting successful EPZ programs have experienced a significantly smaller departure rate. Those firms that do leave a zone where conditions are generally favorable do so because of the natural rise in labor costs that result from businesses bidding against one another for workers.

EPZ firms in Taiwan, despite working under a law that now permits 100 percent repatriation of profits, re-invest 62 percent of their profits in their operations, a strategy not likely to be followed by firms expecting to depart in the near future. In parallel fashion, EPZ firms in South Korea have moved from light assembly operations to more capital intensive and integrated production of high-tech goods. The increasingly capital-intensive nature of these activities reflects the opposite of a footloose approach. Costa Rican EPZ firms, in spite of the fact that over half are in the labor-intensive apparel sector, have preferred to purchase -- rather than rent -- their land and factory buildings at a ratio of nine to one. Again, the behavior in this case reflects a commitment by firms to establish a long-term relationship in the sponsoring country.

Don't EPZs create an unhealthy dependency on a single industry (apparel)?

The high technology, capital-intensive firms in the more established EPZs stand in stark contrast to the labor-intensive apparel firms that dominated these countries EPZ programs in their early days. The apparel industry is traditionally the first sector to establish in an EPZ, given its minimal requirements for initial labor skills, capital, and infrastructure (water needs are limited and sewing machines use little electricity). The quota restrictions imposed by major importing countries under the Multi-Fiber Arrangement also force firms to seek new locations in order to expand. These factors typically prompt apparel makers -- who are in an extremely cost conscious industry -- to experiment with new free zone locations. As investors in other industries observe the success of an EPZ program, they begin to consider shifting their more capital-intensive industries there. As a zone matures, the industry mix normally shifts against the apparel sector. In Taiwan, spiralling wage rates have largely displaced apparel firms in the country's zones in favor of firms that require more skilled personnel and that can better justify higher wages. As evidence, apparel workers now account for only 16 percent of workers in Taiwanese zones. Similarly, in Mexico, apparel firms have dropped from 30 to 10 percent of all maquiladora firms in the past eight years.

What types of businesses are locating today within free zones?

EPZs can be designed either to host a variety of firms involved in diverse economic activities, or to attract specific industry sectors, such as light manufacturing, agro-processing or information services. At present the majority of EPZs are engaged in light manufacturing operations -- garment and electronics production represents approximately 75 percent of worldwide EPZ activity.

Most EPZ firms import semi-finished components for manufacture, assembly, and packaging, and export the finished products to their primary markets, usually the United States, Western Europe, and increasingly the developed countries of the Far East. Other industries have also utilized EPZs to a significant degree, including agro-processing, furniture manufacturing, footwear, leather products, toys, sporting goods, household goods, pharmaceuticals and other light manufactures.

More recently, EPZs targeting offshore service industries such as information processing, captive insurance, corporate registry, and financial services have been established with success,

especially in countries with relative proximity to the industrialized countries of Europe and North America. For example, the Dominican Republic has established four free zones with office park elements, providing data processing and computer-aided design services for export.

Foreign firms have found EPZs to be highly advantageous for manufacturing and distributing products destined to world markets. The primary reason for relocation or expansion of operations in EPZs within developing countries is favorable local wage rates. Labor savings in EPZs can be as high as 90 percent in some cases, and usually range from 30 to 60 percent.

However, cost savings resulting from low labor rates are not sufficient in themselves to attract a broad spectrum of foreign firms. Other ingredients necessary for successful promotion of the EPZ program include the tax, tariff and regulatory incentives discussed above and attractively packaged EPZ industrial facilities and services at competitive rates.

What can be done to build supply relationships between zone-based firms and local enterprises?

Local value-added ratios vary widely from country to country. EPZ exports in Taiwan and South Korea have had local value-added rates of as much as 67 percent, while zones in other countries more typically achieve value-added ratios of 25 to 33 percent. The percentage of value-added is largely a function of the availability of factor inputs at world market levels of price and quality. Raw materials and intermediate goods available in most developing nations are generally of inferior quality, and too expensive for EPZ firms. In other cases, domestic content is limited by the preferential tariff regime that many EPZ firms export under. Firms operating under re-export regimes such as the U.S. TSUS 9802 program (formerly 806.3/807) must utilize industrial country-source materials, as duty is levied on the foreign value-added.

The strength of supply relationships between local firms and zone industries varies according to the price, availability, and quality of local inputs that can be provided. Backward linkages of goods are limited in the short-run in most countries because local suppliers lack the technical and marketing expertise to produce the quality and quantity of goods necessary to meet international standards.

This is not to say that supply linkages cannot be created. While the percentage of local raw material inputs is only 3 and 11 percent in Mexico and Costa Rica respectively, the percentage of locally produced inputs rises to 47 and 52 percent for EPZ exports in South Korea and Taiwan. In South Korea for example, 90 percent of color television components, 75 percent of videotape recorder components and 60 percent of personal computer components are made locally. In other countries, including many potential African sponsors of EPZs, experience indicates that linkages would initially be limited to inputs for agro- or natural resource processing activities, and to services for equipment maintenance, legal/accounting services, and security, day-care and other services.

What other links between free zones and the surrounding economy can be established?

Contributions of EPZs to technology transfer also vary from zone to zone. In general, the extent of technology transfer has been greater in the older and more successful EPZs. Thousands of technicians employed by Japanese firms in Malaysia and Taiwan, for example, have been sent over the years to Japan for specialized training. In Mexico, the transfer of technology is evident in many of the complex manufacturing operations now taking place. In RCA's Juarez plant, for example, the company's most sophisticated assembly operations in the world are manned entirely by Mexican technicians. Dozens of locally-owned EPZ based subcontracting firms have been established in the Dominican Republic by individuals who gained their initial production know-how, and managerial and marketing expertise, as employees of foreign-owned zone firms.

In recent years, other trends toward technology-intensive operations have become evident in EPZs. Jamaica, the Dominican Republic, and Costa Rica have embarked upon programs to upgrade international telecommunication services to their zones, as a means of attracting labor-intensive data processing, computer-aided design, and software services operations. Another recent outgrowth of EPZs has been the emergence of Science-Based Parks; partly as a result of their EPZ program success, Taiwan, Singapore and South Korea have all recently established such facilities. Singapore's zone, started in 1984, was the home to nearly \$18 million in R&D spending in 1987. Activities were concentrated in biotechnology and biomedical sciences, computer software and hardware development, and chemical engineering.

Even in their earliest stages, EPZ programs lead to acquisition of new skills regardless of the type of industries present. For the majority of workers, employment in an EPZ firm is their first direct contact with a modern industrial sector and the industrial habits that are required. A host government also benefits from interacting with foreign investors. The presence of foreign firms necessitates the maintaining of high infrastructural and governmental response standards. In addition, local entrepreneurs improve as they strive to meet the quality and reliability standards of the international marketplace.

Who works in free zones and how good are the working conditions?

Female workers aged 18 to 25 are generally preferred because they have been found to be more manually dextrous and achieve higher productivity than males. For the most part, EPZ firms pay workers 5 to 20 percent higher wages than their counterparts in traditional sectors of the economy. In some cases, EPZ workers enjoy an even greater differential; workers in Chinese Special Economic Zones quintuple their income upon leaving the agricultural sector. Because of the huge wage differential, it is not uncommon for people to migrate 800 miles for a zone job. The rapid rise in pay scales has occurred without the imposition of higher minimum wages, and reflects a natural outcome of the higher productivity of these enterprises. In the process, EPZs have transformed social relations as women have become the principal breadwinners in numerous families or supplemental income earners in others. This income has given women economic independence unavailable only a generation before. While the term "sweatshop" can justifiably be used in regards to some factories, the concentration of similar enterprises in most cases means that the free zone firms must pay close attention to conditions or the workers will work for one of the neighboring firms. The vast majority of offshore manufacturers realize that productivity, turnover and absentee rates, and good labor-management relations are directly proportional to the conditions provided to workers. For this reason, zone developers in Costa Rica and the Dominican Republic have made arrangements for affordable transportation, health clinics, cafeterias, outdoor recreation centers, and day-care centers.

Labor relations, notwithstanding the above, have been troubled in some EPZs. Contrary to the spirit of deregulation, free zone legislation in countries such as Korea and the Philippines has denied workers the freedom to organize and to bargain collectively. Clashes resulting from such measures have erupted in these countries. In addition, cultural differences in labor/management practices have led to labor unrest against some Asian EPZ firms in Honduras, the Dominican Republic, and Jamaica. Workers in the Kingston zone in Jamaica have suffered from inadequate transportation and minimal amenities as a result of poor initial physical planning decisions.

How can zones avoid problems with smuggling and contraband?

Some duty free zones -- notably Manaus in Brazil and Colon in Panama, where imported consumer goods are available to retail shoppers -- have acquired reputations as centers of smuggling. EPZs concentrating on duty-free inputs for assembly/manufacturing tend to be far less prone to such abuses. In practice, many nations have established special free zone Customs units, inculcating higher standards of professionalism and training, to counteract abuses. Another problem in some countries consists of petty theft on the part of employees who smuggle clothing

out of the zone at the end of their work shift. Zone management organizations, with active support from zone employers, generally use spot checks and other systems to deter zone products from entering the local economy in this fashion.

What are the most common mistakes usually made in managing and marketing free zones?

The most typical shortcoming in zone operating practices is to entrust public sector or parastatal organizations with fundamental responsibility for zone management and promotion. For the most part, such organizations have greater responsiveness to political imperatives than to satisfactorily anticipating or responding to market needs. Such organizations often do little to set rental rates at economic levels or to collect rents in a timely fashion, resulting in endemic cash flow crises that in turn lead to deteriorated buildings, grounds, and tenant services. Finally, capable individuals operating within civil servant pay constraints seldom stay long in bureaucratic environments, compounding the difficulties of high turnover and low morale.

Regarding promotional practices, the primary mistake made by zones is to launch promotional campaigns before national free zone regime (and/or the specific zone) is a "marketable product." As noted in CDIE Free Zone Paper #3, "Frameworks Correlated With EPZ Success," a number of elements are critical to having a competitive free zone program at the national level. The absence of one or more of these major elements condemns free zone promotion campaigns to realizing a fraction of their potential. In the case of individual zone developers, the need to ensure the happiness of initial tenants is often overlooked. Such tenants are the most credible advocates (or critics) of free zone opportunities in the country, and are sought out for their opinions by subsequent potential investors.

Do EPZs generally advance or set back national policy liberalization efforts?

Despite efforts made on behalf of market-oriented reforms in developing countries, progress in achieving comprehensive national policy change in too many cases has fallen short of expectations. Efforts to introduce comprehensive economic reforms on a national basis are often blocked by entrenched bureaucracies and privileged interests. By contrast, the distinctive success of EPZs in bringing about sweeping policy reforms can be attributed to their geographically targeted nature. Because only a portion of territory is affected, institutions with a stake in the status quo seldom mobilize in intense opposition when liberalized new economic policies are proposed for (limited) zone areas. Fundamental improvements in zone investment climates can be obtained by proponents of liberalization without requiring that they spend prohibitive amounts of political capital. (After the success of pioneering zones, moreover, political pressures usually shift in favor of extending the reforms to new areas, through virtual "pork barrel" designations of new areas as eligible for free market policy reforms.)

EPZs also have traditionally aided countries in gaining institutional experience with market-oriented development policies. Taiwan, Singapore, and South Korea, all originally followers of import substitution policies, extended new export-oriented policies to the rest of the country after observing the success of their EPZ programs. In the Indian Ocean, the entire island nation of Mauritius has effectively become an EPZ. Procedures and practices conducive to export sector growth -- often in short supply in public sector and parastatal organizations in the early stages of industrialization -- can be applied and proven within free zone programs, and later become resources for national investment and export promotion programs.

Finally, as tangible examples of free market policy success, EPZs can help in changing the general climate of public opinion as well. Because EPZs are immune from many of the distortions caused by traditional policies, a successful EPZ program makes the contrasting capabilities of old and new policy approaches increasingly visible over time. Demonstration effects resulting from EPZ success thus can strengthen the intellectual case of those advocating liberalization for the entire economy. In all of the above ways, EPZs accordingly can become a catalyst for substantial integration of developing countries into the world market.