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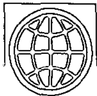

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Export processing zones

Export processing zones are potentially useful tools for export promotion. To foster development, however, zones must be set up properly, managed well, and integrated with other reforms.

Over the past three decades export processing zones have become popular instruments of trade policy, offering firms located in them free trade conditions and a liberal regulatory environment. In 1970 only a handful of countries permitted such zones, but by 1996 there were more than 500 zones in 73 countries (OECD 1996). This note outlines the general features and objectives of these zones, highlights country experiences with them, and offers policy recommendations for establishing them.

What is a zone?

An export processing zone is one of many export promotion tools, including bonded warehouses and temporary admission schemes. Today's export processing zones have evolved from their original definition as "an industrial estate, usually a fenced-in area of 10–300 hectares, that specializes in manufacturing for export." (World Bank 1992, p. 7). Many firms, called export processing firms, now benefit from the incentives offered in the zones without being physically fenced in. In addition, countries have liberalized domestic sales—Mexico, for example, allows 20–40 percent of its zones' output to be sold domestically.

Export processing zones have three main goals. They are to provide a country with foreign exchange earnings by promoting nontraditional exports. They are to create jobs and generate income. And they are to attract foreign direct investment, engendering technology transfer, knowledge spillover, demonstration effects, and backward linkages.

Zones generally share several common features:

- They allow duty-free imports of raw and intermediate inputs and capital goods for export production.
- Government red tape is streamlined, allowing "one-stop shopping" for permits, investment applications, and the like. In addition, labor laws are often more flexible than for most firms in the domestic market.
- Firms in zones are given generous, long-term tax concessions.
- Communications services and infrastructure are more advanced than in other parts of the country. Utility and rental subsidies are common.
- Zone firms can be domestic, foreign, or joint ventures. Foreign direct investment plays a prominent role.

Two main features differentiate export processing zones, however. First, zones can be publicly or privately owned or managed. Over the past 10–15 years the number of privately owned or managed zones has grown substantially because they are believed to achieve superior results. Second, zones can be "high-end" or "low-end," depending on the quality of the management, facilities, and services they provide firms.

As export processing zones have become more widespread, the policies governing them have become more important

Zone experiences

Not all export processing zones have served as engines of industrialization and growth,

as some proponents anticipated (Warr 1989, 1993; World Bank 1992). Zones have been engines—among others—in the economy when they have been given their proper place as a policy tool, and when their ultimate costs and achievements are taken into account. Zones have been very successful in Mauritius, for example, but have failed in Senegal.

Export processing zones are sensitive to the national economic environment and perform better when the host country pursues sound macroeconomic and realistic exchange rate policies. Properly managed, however, zones can generate income and create jobs—especially nontraditional employment and new employment opportunities for women (table 1). Their long-term contribution is twofold. A competitive, efficient zone provides an industrial infrastructure that many countries lack. In addition, zones build human capital directly and through their catalyst and demonstration effects on host country entrepreneurs.

Properly managed, zones can generate income and create jobs

Export processing zones build human capital in two ways. Previously unskilled workers benefit from job training and learning by doing (Rhee, Katterbach, and White 1990). These benefits are limited, however, because most production is low-skill and low-tech. Still, workers earn income and learn industrial work discipline and routine. Training also occurs at the supervisory and managerial levels, with local employees establishing foreign contacts and learning new organizational and managerial methods, negotiation and marketing skills, general business knowhow, and a spirit of entrepreneurship.

Catalyst and demonstration effects are also common in the host economy (Rhee, Katterbach, and White 1990; Rhee and Belot 1990), though backward linkages between zones and domestic firms have not always occurred. In general, some linkages have occurred in countries that did not already have a solid industrial base. But these linkages have been spotty and inconsistent, with some zone firms complaining of the poor quality or incompatibility of local inputs. (Exceptions include the Dominican Republic and Mauritius.) Linkages have also occurred in economies—the Republic of Korea, Taiwan (China)—that had a solid industrial base prior to the establishment of the zones. In these cases, however, export processing zones were only one of the tools used to foster growth.

Zones have increased gross foreign exchange earnings. In Mauritius zone export earnings jumped from 3 percent of gross export earnings in 1971 to 67 percent in 1995. Net foreign exchange earnings have not always lived up to expectations, however. In 1996 gross exports of three Jamaican zones

Table 1 Employment creation and exports in selected export processing zones

Region and economy	*Year of first zone*	*Year of data*	*Number of workers*	*Number of firms*	*Zone exports/ gross exports (percent)*
Africa					
Cameroon	1990	1995	2,567	16	32.5
Mauritius	1971	1995	80,466	481	67.0
Senegal	1974	1990	600	10	1.8
Asia					
Bangladesh	1983	1995–96	37,533	2 zones	11.1
Philippines	1972	1994	81,559	from 4 zones	11.0
		1991	43,858	—	7.7 (1990)
Sri Lanka	1979	1998	85,323	6 zones	—
		1990	60,000	—	23.0
Taiwan (China)	1966	1995	55,191	235 (3 zones)	5.6
Latin America and the Caribbean					
Costa Rica	1972	1996	24,000	191	21.0
El Salvador	1976	1991	6,500	14	14.5
Honduras	1976	1991	19,000	49 (9 zones)	12.0
Jamaica	1976	1996	16,804	56 (3 zones)	16.2 (2.0 of net exports)

Source: World Bank data.

totaled $235 million, but net exports were just $29 million. Such earnings may not cover a country's investment in a zone. Similarly, the opportunity cost of such investments may not warrant the concessions granted (on income taxes and tariffs) to accommodate a zone. In fact, some zones may have a negative net present value for the country.

Wages in most export processing zones are equal to or higher than average wages outside the zones, though there is considerable variance around this mean. For instance, in Thailand in 1990 and Sri Lanka in 1992 wages in export processing zones were higher than outside the zones. But in Mauritius in 1986 and Taiwan (China) in 1988 they were lower. And lax labor, safety, and health laws in many zones have raised concerns about workers' welfare.

The environmental impact of zones and lax regulation and monitoring have also raised concern. Environmental pollution has been confirmed in some zones (for example, in the Dominican Republic and Mexico). But systematic analysis is lacking that would lead to well-targeted, sensible regulation and monitoring. Some observers argue that government attitudes toward worker and health conditions in and the environmental impact of zones may not be much different from prevalent national practices. Still, these are important concerns.

Some analysts consider a successful zone a model for host country policymakers to mimic in liberalizing the rest of the economy. Others argue that a successful zone may become a stumbling block for liberalization by providing jobs and foreign exchange earnings, and thus easing the pressure on policymakers to undertake economywide reforms (as in India and Tunisia). Other countries (Uganda) have considered or established zones after macroeconomic and trade reforms to bolster foreign direct investment.

General recommendations

In distorted economies an export processing zone is one of a number of tools used to offset anti-export bias. But just like other export promotion tools (bonded warehouses, export credit insurance), an export processing zone is a second-best policy choice.

Zones can play a long-term dynamic role in their host country's development if they are set up properly, managed well, and integrated with a national reform and liberalization program. At the very least they should not become impediments to reform.

For three reasons zones should not be established in liberal, low-protection economies. First, lower than expected or unsatisfactory foreign direct investment may be due to inadequate laws or regulations, or to other distorted economic incentives (such as weak private property laws). Second, zones are distortionary trade instruments and introduce an element of discretion in the policy environment. Finally, even if export promotion is appropriate (and compatible with World Trade Organization guidelines), an export processing zone may not be the best way to achieve that goal. If post-reform economies are intent on establishing new zones, differential fiscal incentives should be minimized to reduce their distortionary impact on the host economy.

Zones should not be established in liberal, low-protection economies

Policies for success

An export processing zone is more likely to succeed when monetary and fiscal policies are sound and stable, private property and investment laws are clear, firms are free to repatriate earnings at market rates, and there are no restrictions on foreign exchange.

Zone firms should be moderately taxed. There is no need for overly generous tax incentives (permanent tax holidays, waiving of all taxes). Indirect taxation and licensing should be rationalized and minimized, and zones' imports and exports should be free of trade taxation and tariffs.

Utilities (water, electricity, sewage, and the like) should not be subsidized; doing so discourages economically rational use of resources and factors of production, undermining zones' benefits for host countries. Providing infrastructure outside the zone—telephony, roads, ports—can have positive spillovers for the local and national economy by facilitating transportation and communications. But onsite

Governments should be fully appraised of the costs and benefits of the incentives they offer to export processing zones

infrastructure—pavement, building shells—should be privately financed.

Business-friendly labor laws lower labor costs. But strengthening regulations and monitoring can mitigate potential labor law infractions and improve working conditions, reducing turnover and absenteeism and increasing worker productivity.

An essential first step toward minimizing environmental impacts is to develop a qualitative and quantitative understanding of industrial refuse and its effects on air, soil, water, and human health. Follow-up regulations, incentives, and monitoring should be tailored accordingly.

Zones in countries that are members of preferential trade arrangements (regional or bilateral) may be more attractive to firms targeting these markets, because such a membership enlarges potential market size and eases entry barriers (as in Mauritius). Exports from these zones may, however, face complex rules of origin regulations and restrictions.

Administration, regulation, and incentives

Governments should be fully appraised of the costs and benefits—to the budget and to the country—of the incentives they offer to export processing zones. Incentives should be compatible with World Trade Organization rules and timelines on export promotion instruments; otherwise host countries may face retaliatory actions by importing countries. In addition, zones and export processing firms should be allowed to locate in various locations (as in Mauritius).

Government should provide efficient, streamlined, and prompt services for setting up and running export processing zones (approval of investment applications, customs and other supervisory institutions).Privately owned and managed zones should be encouraged. If zones are public, considerable autonomy should be granted (as in Taiwan, China).

Zone firms exporting from one member of a trade arrangement should be aware of potentially complex rules of origin and restrictions.

Further reading

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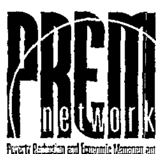

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