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Combining Export Processing Zones and Regional Free Trade Agreements: Lessons From the Mexican Experience

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Summary. — Export processing zones (EPZs) and regional trade agreements are two common initiatives utilized by developing country governments in order to increase the wealth creation effects of today's international trade and investment system. In this paper, we argue that these two initiatives are driven by somewhat incompatible economic rationales. Based on the North American experiment in combining a major EPZ (Mexico's *maquiladoras*) within the terms of a regional free trade agreement (the North American Free Trade Agreement), we test to determine whether the logic of a regional integration initiative or that of the EPZ is dominate. Our results suggest that the competitive dynamics of Mexico's EPZ industry have not been fundamentally altered by NAFTA's regional incentives. We conclude with recommendations for policy makers in other developing countries that might be considering attempting to impose regional development schemes on the large and politically powerfully TNCs that tend to dominate the global EPZ industry. © 2001 Elsevier Science Ltd. All rights reserved.

Key words — Latin America, Mexico, NAFTA, *maquiladoras*

1. INTRODUCTION

Export processing zones (EPZs) are a common initiative used by many developing countries in an attempt to facilitate economic development (ILO, 1998). Firms in an EPZ can often import raw and intermediate inputs duty free from any part of the world, process those goods using low-cost, developing country workers, and then export the finished product to another country for further processing or for sale to the final customer. As of 1998, the International Labour Organization estimated that 27 million people were working in EPZs in countries as diverse as China, Bangladesh, Malaysia, the Philippines, Mexico, Costa Rica, Honduras, Morocco, and Kenya (ILO, 1998). Regional trade agreements are another popular initiative employed by governments in both developing and industrialized countries in an attempt to increase the wealth creation effects of today's international trade and investment system. Over 200 regional trade agreements have been reported to the GATT or to its successor, the World Trade Organization, and over 130 of these agreements are currently in force. During 1995–2000, a total of 90 new agreements have been reported (WTO, 2000). While the specifics vary widely, the basic goal of these trade agreements is to reduce and/or eventually eliminate tariff and nontariff barriers to the free flow of goods and services between member countries.

Given the prominence of global EPZ activity and a clear trend toward regional integration, it is important to determine the effects of regional free trade agreements (RFTAs) on the operation of EPZ firms. While perhaps not inherently obvious, RFTAs and EPZs are driven by somewhat inconsistent economic rationales. For example, firms in an EPZ can generally import production inputs duty free from any part of the world. Within the context of a RFTA, however, this near universal EPZ benefit can be used as a tool enabling firms to avoid paying duties on their nonregional inputs. In order to close this loophole, the economic logic of a RFTA dictates that duty free importation benefits be taken away from EPZ firms. Given

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this and other inconsistencies between the economic logic of RFTAs and EPZs, the predominant view given in the academic literature around the time the North American Free Trade Agreement (NAFTA) was implemented was that this RFTA would largely do away with Mexico's contribution to the global EPZ industry, i.e., the *maquiladoras* (often shortened to simply *maquilas*). [1] For example, Vargas (1994, p. 4) stated that: "At the start of the next century, there will probably be few distinguishable characteristics between what is now a *maquila* (to be known then as an ex-*maquila*?) and a non-*maquila* operation." Weintraub (1994, pp. 48–49) went even further writing that "NAFTA has made the elimination of the *maquila* system inevitable" and "What is happening is that the *maquila*, or export processing zone, technique... has run its course in Mexico." These authors were not arguing that the *maquila* plants themselves would disappear, but that the regulatory structure supporting the industry would cease to exist. As a result, the EPZ industry in Mexico would gradually "transition from an enclave to an integral part of (Mexico's) national industrial structure" (Weintraub, 1994).

Given that NAFTA has been in effect since 1994, it would appear to be an ideal time to determine if the predictions of authors such as Vargas (1994) and Weintraub (1994) have come to pass. In this paper, we test to determine which of two models best describes the evolution of Mexico's EPZ under NAFTA. The adaptation hypothesis contends that authors such as Weintraub (1994) and Vargas (1994) are correct and that EPZs will lose their distinctive character as a result of a RFTA. In contrast, the status quo hypothesis proposes that given the specialized niche filled by the EPZ industry within the global economic system as well as the preferences of EPZ firms themselves, a RFTA may have little if any impact on EPZ firm behavior. Which of these two models is the most accurate has a number of important theoretical as well as practical implications. If regional integration initiatives can contribute to the positive evolution of EPZs, policy makers in other developing countries may want to learn from if not copy the Mexican example. In addition, we believe that the Mexican experience provides an excellent demonstration case of the difficulties created by attempting to impose a regional integration scheme on very large and politically powerful global companies. Our results suggest that these firms are far from passive recipients of government directed modifications in trade policy and will vigorously oppose any changes that they see as reducing their short or long-term profitability.

This paper is organized as follows. In Section 2 we discuss a number of the generic trade and regulatory conflicts that may result when an attempt is made to combine RFTAs and EPZs. In addition, we formally present the two competing models of how EPZ firms can respond to these conflicts. In Section 3, we briefly review the changes in trade and investment patterns between the United States and Mexico since the implementation of NAFTA in 1994. We then present our research methodology and study results. In Section 4, we conclude with a discussion of the theoretical and policy implications of this study.

2. THE CHALLENGE OF COMBINING EPZS AND RFTAS

As mentioned in Section 1, EPZs can be defined as industrial zones where special incentives such as tax holidays and duty free imports and exports are provided to companies as long as most if not all of the processed goods are exported (ILO, 1998). EPZs can provide a valuable boost to the economic health of the host country due to their capacity (among other things) to increase exports, create employment, and generate needed foreign exchange. An extensive literature has been compiled over the last two decades examining the structure and functioning of EPZs in developing countries (cf. Buitelaar & Pérez, 2000; Despres, 1991; Fatemi, 1990; Grunwald & Flamm, 1985; ILO, 1998; Johansson & Nilsson, 1997; Kaplinsky, 1993; Sklair, 1993; Wilson, 1992). One consistent finding from especially the earlier research on EPZs is that these firms typically assemble or manufacture standardized products in the mature phase of the product life cycle (Vernon, 1966). As a result, product and process technologies are often well established and nearly identical across competitors, cost competition is therefore intense, and firms have little choice but to migrate to low-wage developing countries in order to remain profitable. The products assembled and/or manufactured by EPZ firms generally fit neatly within this mature product profile; footwear, apparel, electrical equipment, and electronic components are common outputs. With this industry structure and typically little need to form either