Pergamon

www.elsevier.com/locate/worlddev

World Development Vol. 28, No. 9, pp. 1627–1642, 2000

Printed in Great Britain
0305-750X/00/$ - see front matter

PII: S0305-750X(00)00041-3

Maquila, Economic Reform and Corporate Strategies

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Summary. — Corporate strategies in *maquila* have changed over time. While they were originally geared only to the exploitation of low-paid, low-skilled labor, nowadays firms are upgrading human capital and increasing the scope and technological complexity of production processes. The adoption of the New Economic Model in host countries aimed precisely at this type of strategy change, but cannot solely be credited for it. In addition, policies regarding *maquila* under the NEM did not achieve all the stated goals regarding corporate strategy change: trends in local procurement and technology transfer are still unsatisfactory. Strengthening of local supply and absorption capabilities is required. © 2000 Elsevier Science Ltd. All rights reserved.

Key words — Mexico, Central America, *maquiladoras*, employment, technology transfer

1. INTRODUCTION

The evolution of *maquila* offers an interesting case for the study of the impact of economic reform on corporate strategies. *Maquila* has evolved into a major employer and key export sector in Mexico and in a number of Central American and Caribbean (CAC) countries. This paper concentrates on the Mexican case but also includes a comparison with the CAC *maquila*.

The *maquiladora* program is an investment attraction and export promotion scheme that offers benefits to qualified firms regarding import duties and other taxes (CEPAL, 1998a). The program was initiated in Mexico in the mid-1960s to ameliorate the high unemployment rates in the northern border zone that had resulted from the termination of the *braceros* program. It consisted of a facility to import duty-free raw material, intermediate inputs, and capital goods from the United States, for the production of goods to be re-exported to the United States. But the facility was not part of Mexican import-substitution industrial policy. It had some quite restrictive clauses in order to prevent *maquila* production from competing with local industry. As a consequence, firms from the United States and Mexico limited their use of the program to exploiting the immediate advantages of low-skilled and low-paid Mexican labor force. They used the benefits of this program and the US tariff item 807.00 to have a few simple assembly tasks carried out in Mexico.

Similarly, *maquila* industry was established in the CAC region in the 1970s, with the creation of Export Processing Zones (EPZs) whose main goal was to create employment for the region's low-skilled labor force. EPZs were not very successful, however, until the 1980s when economic and political reforms were adopted and tariff benefits on the US market were obtained under the Caribbean Basin Initiative (CBI).

* The authors wish to acknowledge the contributions of Ruth Urrutia to the fieldwork and analysis of results in general. Andrés and Elizabeth Dauhajre organized the Dominican Republic interviews. Ronney Zamora of the Costa Rican Chamber of Industry and Brenie Matute of FIDE in Honduras were extremely helpful in organizing fieldwork in their countries. Wilson Peres, Nola Reinhardt and Jorge Mattar provided useful comments and guidance.

Under the New Economic Model (NEM), starting with the economic reforms of the mid-1980s, the Mexican Government and the participating firms began to see *maquila* as an integrated part of export-led development and its specific legal framework was transformed. The aim was to change the corporate strategies, promote investment in human capital and the transfer of technology, and foster integration with local Mexican manufacturing industry. In the CAC region, a similar reorientation under the NEM has taken place, to a limited extent, in Costa Rica.

Critics of export-led development still refer to *maquila* to illustrate that opening-up only means low wages, disarticulation of production chains, few backward and forward linkages, no technological effort or learning processes, and subordination to the strategies of foreign firms. Thus, two central questions arise that are the subject of this paper. First, to what extent have *maquila* firms indeed changed their competitive strategies from exploiting only the static gain of low wages to creating dynamic gains through training, technological learning and local networking? Second, what role has economic reform in Mexico played in bringing about any change in corporate strategies?

The paper is organized as follows. First, a brief overview will be presented of the origin and evolution of *maquila* in Mexico, against the backdrop of Mexican and US public policies, international competition and technological change. Second, the performance of the *maquila* program and its corporate strategies with regard to its stated objectives are analyzed. This section uses the results and insights from a firm survey conducted by the authors in 1997 (CEPAL, 1998a). [1] The survey was also applied to *maquila* firms in Central America and the Dominican Republic, [2] and the third section compares the situation in these countries with that of Mexico. The paper concludes with a short reflection on regime change and corporate strategies.

It has to be pointed out that *maquila* is not an industry in the usual sector-specific sense of the word. The *maquila* programs and laws constitute an investment attraction and export promotion scheme. Hence, a great variety of *maquila* firms exist in different industries. Two important common features have been suggested in the literature: the orientation to the market of the United States, and the intensive use of relatively low-cost labor (Carrillo, 1997).

2. ORIGIN AND EVOLUTION OF MAQUILA FOR EXPORT IN MEXICO

The *maquila* program is a result of the intricate social, economic and political relations between Mexico and the United States, in the context of increasing global competition and rapid technological change. To start with the latter two points, *maquila* should be understood as a phenomenon pertaining to the international reorganization of production in the second half of the 20th century, as fittingly described in the product cycle theory. According to Vernon, the introduction of a new product on the market requires highly qualified personnel performing research and development activities and innovative production processes. Hence, these tasks are located in industrialized countries with a comparative advantage in this type of worker. When technology matures and the production process becomes standardized, the skill intensity of production diminishes. In consequence, the international competition will result in the transfer of the production of mature goods to developing countries with a comparative advantage in relatively less skilled workers (Vernon, 1966).

From the 1950s on, Japanese firms started to pose a challenge to US manufacturing industries. The relocation of labor-intensive production processes from Japan to other Asian countries in the 1960s and 1970s enhanced the challenge. In response, US manufacturing firms looked at Mexico and the Caribbean Basin as its reservoir of less skilled labor to counter the Asian challenge and move south its labor-intensive production processes (Frobel, Heinrichs & Kreye, 1980; Grundwald & Flamm, 1985). The US government incorporated this idea in its trade policy, designed to strengthen the competitiveness of US firms. Tariff item 807.00, introduced in 1963 following the earlier example of tariff item 806.30, is a clear expression of this strategy. Nowadays, these items are included in the Harmonized System as 9802.00.60 and 9802.00.80, respectively. The latter is the most important, and permits the importation of goods assembled in a foreign country with components manufactured in the United States. The duty is calculated only on the value added abroad.

The duty-free imports under the *maquila* program in Mexico came to complement nicely the 807.00 tariff provision, as did the same facilities in Export Processing Free Zones