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Economic impacts of NAFTA and transfer pricing legislation along the United States-Mexico border

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ECONOMIC IMPACTS OF NAFTA
AND TRANSFER PRICING LEGISLATION
ALONG THE U.S. – MEXICO BORDER

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ECONOMIC IMPACTS OF NAFTA

AND TRANSFER PRICING LEGISLATION

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ABSTRACT

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Economic theory predicts that small economies benefit most from regional economic integration. There is ample anecdotal evidence of the NAFTA economic benefit for Mexico in the post-Treaty expansion, both in size and number, of the many maquiladora manufacturing plants established from Matamoros to Tijuana. The U.S. is the large economy in the NAFTA regional integration arrangement. Have the Treaty economic benefits also extended to the large economy in this tripartite agreement? Employing trade data before and after NAFTA, the dissertation investigates the economic impact resulting from the Treaty for the U.S. as a whole and its sub-regions. The other purpose of the dissertation is to separately study the transfer pricing and NAFTA regulations administered by U.S. and Mexico taxation and customs authorities. Utilizing a unique survey, an evaluation is made of whether trade laws administered by the Internal Revenue Service (IRS), the Secreteria de Hacienda y Credito Publico (Hacienda), and the customs departments of the U.S. and Mexico are followed equally by firms of a variety of sizes, locations, industries, or corporate parentage.

The U.S. is a capital-intensive country and international trade theory predicts that this sector would be most impacted by the lowering of trade barriers. The findings of this research at the national level are consistent with this theory. Growth in U.S. per capita manufacturing income resulting from NAFTA export activity is both positive and statistically significant.

Per capita gross state product is a broad measure of the Treaty's economic effects. That is, gross state product captures the economic spillover and dispersion effects of trade activity resulting from NAFTA. Evidence gathered by this research suggests that the spillover and dispersion effects of the Treaty have yet to have a beneficial economic impact at the national level.

At the Canada and Mexico border state level, the result is the opposite. The economic spillover and dispersion effects (i.e., per capita gross state product) have been positive and statistically significant. However, per capita manufacturing income appears not to have benefited. These findings seemingly would be anticipated due to the general absence of a manufacturing infrastructure for most Canadian and Mexican border states.

Regulatory enforcement by the IRS, U.S. Customs and their counterparts on the Mexico side appears to be restricted. Reallocation of maquiladora manufacturing cost by either country's authorities to achieve a revised level of income subject to tax has not commenced in these early years of the Treaty. In addition, the research findings indicate planning for the changes implemented upon full transition to NAFTA regulations on January 1, 2001 was highly differentiated. Large multinational maquiladors did moderate to extensive planning for the transition changes whereas the small maquiladoras did not.

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CHAPTER I

INTRODUCTION

In the post World War II era, regional economic integration and the abolition of trade barriers have been the predominant influences in international trade relationships. Examples of economic integration include (1) the European Economic Community (EEC) treaties that were implemented in 1958, (2) the Single European Act (implemented in 1992) that established free trade relationships and sought to eliminate non-tariff barriers among the EEC members; and (3) the European Free Trade Association (EFTA) that established an industrial free trade area for nearly all of Western Europe. Other regional groupings include the Southern Cone Common Market (MERCOSUR) and the Central America Common Market (CACM) in Latin America, the Caribbean Community (CARICUM), the Central African Customs and Economic Union (UDEAD) and the Economic Community of the West African States (ECOWAS) in Africa.

North America has also begun to see these types of changes in trade regulations over the past two decades. For example, Canada and the United States implemented the Canadian Free Trade Agreement (hereinafter CFTA) in 1989, an agreement that was subsequently expanded and incorporated into the North American Free Trade Agreement (hereinafter NAFTA)[1]. This agreement establishes a free trade area among the Treaty partners, Canada, Mexico, and the U.S., while maintaining their separate national trade barriers against the remainder of the world. Recent changes to laws affecting international trade, such as transfer pricing legislation and customs legislation, have also occurred, and the general pace of enforcement of transfer pricing legislation has increased. Indeed, both Mexico and the U.S. now permit their customs departments to exchange information with their national tax departments for transfer pricing enforcement.

One of the purposes of this dissertation is to empirically assess whether the U.S., the large economy in the NAFTA agreement, has benefited from the Treaty. This question is addressed by studying data compiled by the Massachusetts Institute for Social and Economic Research (MISER) of the University of Massachusetts. In particular, per capita personal manufacturing income and gross state product before and after implementation of the Treaty is evaluated. This dissertation also studies trade effects of transfer pricing and NAFTA regulations administered by U.S. and Mexico customs and tax authorities. Using a survey for maquiladoras in Northern Mexico, this dissertation evaluates whether trade laws administered by the Internal Revenue Service (IRS) and the U.S. Customs Service (Customs) as well as their Mexican counterparts are followed equally by maquiladora firms of a variety of sizes, locations, industries, or corporate parentage. The survey employed here is, to my knowledge, the first systematic attempt of obtaining information on these topics.

This dissertation proceeds as follows. Chapter II describes the legislative background of the NAFTA Treaty, and the evolution of U.S. trade policy. Chapter III reviews fundamental international trade theories. This chapter focuses particularily on the

[1] The terms "Treaty" and "NAFTA" refer to the North American Free Trade Agreement.

theoretical tenets upon which the Treaty was constructed. The empirical methodology employed to study the economic impact of the Treaty is discussed in Chapter IV; this chapter also contains the empirical results using MISER data. Internal Revenue Service enforcement of transfer pricing rules and U.S. Customs brokers' role in handling goods imported into the United States[2] follows in Chapter V. Chapter VI discusses the methodology employed in the dissertation's survey research, and concludes with a summary of the survey findings. The final chapter, Chapter VII, establishes the conclusions and policy implications derived from the research of this dissertation.

[2] For those readers unfamiliar with the laws, court decisions, regulations, and practices of the Internal Revenue Service and U.S. Customs Service, a detailed technical discussion is in APPENDIX I.

CHAPTER II

EVALUATION OF NAFTA FROM AN INTERNATIONAL TRADE THEORY STANDPOINT

This chapter focuses on NAFTA as an instrument for loosening restrictions on manufacturing trade and cross-border investment constraints among Canada, Mexico, and the U.S. It concludes by identifying the specific economic stakes Mexico, Canada, and the United States have in the NAFTA agreement.

Legislative History of NAFTA

President Ronald Reagan initially proposed a free trade agreement with Mexico in his 1980 presidential campaign. The NAFTA Treaty was negotiated by the Bush Administration, but was ratified by the Clinton Administration with a Democratic Congress. Objections of the protectionist-minded Democratic Congress were overcome by the assertion that NAFTA did not matter; it was a marginal economic event for the United States, and simply represented a continuation of policies already implemented unilaterally (Conroy, et al, 1994). This "minimalist" assertion had some validity: at the time of the debate over the Treaty, trade with Mexico represented only seven percent of the entire U.S. export trade (Orme, 1996).

The critical dates leading to NAFTA's January 1, 1994 enactment date were November 17, 1993 (U.S. House approved 234-200), November 19, 1993 (U.S. Senate approved 61-38), November 23, 1993 (Mexican Senate approved Tratado Libre or NAFTA 56-2), and December 2, 1993 (Canada dropped its opposition to NAFTA after receiving concessions from the United States) (Roberts and Wilson, 1996). Given the close vote by the U.S. House of Representatives, passage of the Treaty by the U.S. was in doubt among policy makers and private industry planners until one month before the Treaty was scheduled to go into force. Therefore, institutions and states had little time to set in place an advantageous infrastructure for the new common market status they found themselves in on January 1, 1994. Both states and institutions had to start common market operations with regimes, regulations, and infrastructures whose collective objective was to protect separate markets.

As for Mexico, early 1994 had promised that the NAFTA Treaty would be ratified, a promise that was made continuously by the Clinton Administration as the year unfolded. On March 23rd of that year, Mexico's presidential candidate Donald Colosio was assassinated. This event, coupled with the Federal Reserve System raising U.S. interest rates,[3] encouraged Mexico's domestic and foreign investors to sell pesos. Mexico lost more than $10 billion of its $28 billion reserves in the ensuing weeks. While admittedly other events were taking place during this time, a set of currency exchange dynamics took place that led to a 13% peso devaluation on December 20th, 1994. After the devaluation, average labor costs fell in Mexico vis-à-vis the U.S. These events, falling on the heels of the Treaty's enactment, led conspiracy theorists to argue that Mexico had planned this devaluation from the beginning (Meltzer, 1995).

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[3] On May 17, 1994, the Federal Reserve Board tightened credit by raising discount rates from 3% to 3.5%, and the target for Fed Funds rate from 3.75% to 4.25%. On August 16, 1994 the Federal Reserve Board again raised rates: the discount rate and Federal funds rate were each raised by 0.5%.

With respect to Canada, NAFTA is an expanded version of the Canada-U.S. Free Trade Agreement (CFTA) that had been in force since 1989. The NAFTA Treaty incorporated, on a trilateral basis, most of the provisions of the then existing CFTA Treaty. It also expanded CFTA by addressing the protection of intellectual property rights, rules against distortions to investment (local content and export performance), and coverage of transportation services (NAFTA Treaty, Volume I).

Relevant Criteria For Evaluating NAFTA

International trade has often been labeled the "engine of growth." Within the general subject of growth, economists have identified two basic development strategies: import substitution and export promotion (export-oriented) growth. The import substitution strategy utilizes trade barriers to protect domestic industries from import competition. The export promotion or export-oriented growth strategy involves exploiting comparative advantage to promote development. Those goods costly to produce domestically are imported. The domestic industry specializes in producing only those goods which are inexpensive to produce, thus harnessing the country's individual comparative advantage. In other words, export promotion encourages industrialization where comparative advantage exists in the local economy (Yarbrough, et. al., 1994).

In principle, because NAFTA is a trade agreement, its effect on trade flows and its mutually beneficial impact across North American countries are relevant measures of the agreement's success (Weintraub, 1997). Arguably, an assessment of the Treaty should compare trade among members (trade creation) with the shift of trade at the expense of nonmembers (trade diversion).[4]

"Small Economy" Interest In A Free Trade Agreement—the Mexico and Canada Stake

The Heckscher-Ohlin Theorem (e.g. 1949) predicts that under unrestricted trade, a country will specialize in and export goods that use its abundant factors intensively. However, complete specialization would occur only in the absence of: (1) trade restrictions, (2) transportation costs, and (3) product or technological differentiation. In general, a small economy should benefit more than the large economy in a bilateral trade agreement because of the diversity of tastes, and hence the more intensive demand for the products in which the small economy specializes. In the specific case of NAFTA, following the Heckscher-Ohlin prediction, the U.S. economic stake is substantially smaller than the economies of Canada and Mexico. In addition, within the U.S. technological and public infrastructure, differences between and among individual states permit some states to benefit more from the gains in trade than other states. Thus, regionalism becomes the preferred doctrine for free trade. Another stimulus toward regionalism can be found in the small-country benefits from such alliances[5]. Whalley (1993, pg. 98) points out:

> ". . . smaller countries have been attracted to such (regional) arrangements as a form of insurance that guarantees access to their most important large

[4] In the article entitled "Free-Trade Agreements: For Better or Worse?" (1996), Ronald J. Wonnacott argues that trade diversion can increase welfare for both the diverting country and the world as a whole. Free trade triggers a process of liberalization in which standard effects of specialization, of increased competition, and trade pressure the participants' cost structures enough to make them the lowest cost sources of specific products.

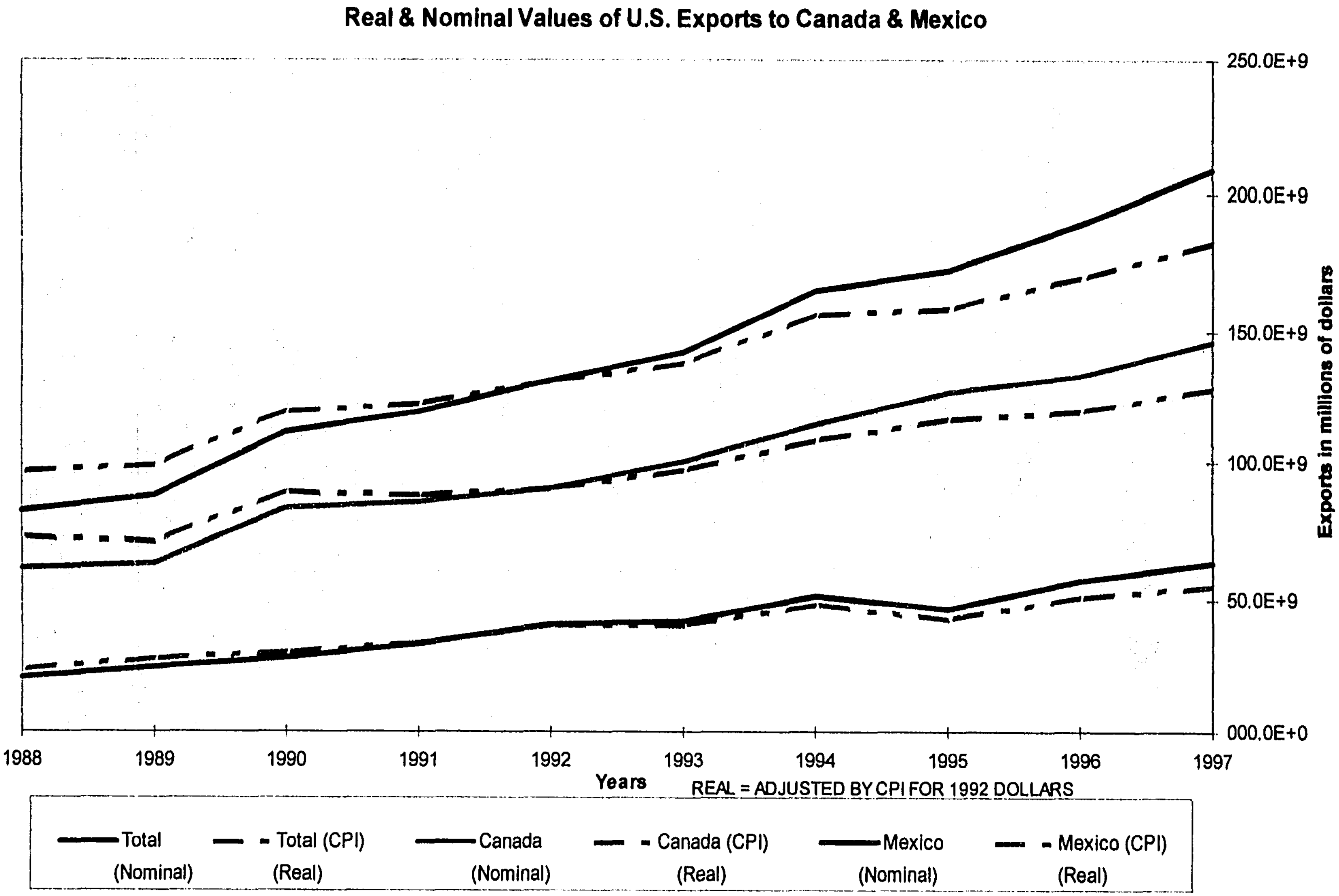
[5] Consistent with the small country motive concepts, testimony before the U.S. House of Representatives and Senate recounts that it was the Salinas administration in Mexico that first expressed interest through diplomatic channels in a free-trade accord with the U.S. in the summer of 1990. Canada expressed its concurrence (through representatives to the then existing CFTA in February 1991. These actions led to formal negotiations that commenced in February 1991 among all three nations (House/Senate Hearings 1993; Baer 1994).

> country market, even if their large-country partner erects barriers against the rest of the world and there is a worldwide increase in protectionism. Indeed, one can argue that the most vocal demanders of the new regional arrangements . . . were the smaller, not the larger countries: Canada in the US-Canada agreement, and Mexico in the initial framework agreement with the United States and now in the wider North American Free Trade Agreement negotiations."

According to several authors (Baer 1994, Casario 1996, Hufbauer et.al. 1992, Orme 1992 and 1996 and others), it was clear from the start that the Treaty impact would be felt first and most profoundly by Mexico. This was due to the fact that this country had long hid its seemingly inefficient industries and commercial interests behind protective tariffs and regulations. NAFTA represents a blueprint for the more efficient reordering of industrial production on a continental scale; as Mexico opened its borders, the indigenous industry of Mexico had to become globally competitive. Indeed, after NAFTA, Mexico's big corporations began contacting multinational corporations as a form of self defense, to gain access to technology, and to acquire management experience and insight into global markets (Torres, 1997).

The Economic Interest Of the U.S. In NAFTA

From an numerical standpoint, as shown in Figure 2.1, exports to Canada clearly have dominated the aggregate NAFTA trade picture. Through 1993 the U.S trade gap with Canada was widening compared to that with Mexico. Furthermore, leading up to the debate on the merits of the Treaty, an analysis of export data on a state-by-state level discloses that over one-half (28 total) of the states in the U.S. annually exported over $1


Real & Nominal Values of U.S. Exports to Canada & Mexico
250.0E+9
200.0E+9
150.0E+9
100.0E+9
50.0E+9
000.0E+0
Exports in millions of dollars
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Years
REAL = ADJUSTED BY CPI FOR 1992 DOLLARS
Total (Nominal)
Total (CPI) (Real)
Canada (Nominal)
Canada (CPI) (Real)
Mexico (Nominal)
Mexico (CPI) (Real)

billion of goods and services to Canada compared to only nine states that exported more than $1 billion per year with Mexico. In addition, four states engaged in over $10 billion of annual trade with Canada compared to a single state (Texas) achieving this volume with Mexico. Review of the state-by-state trade data discloses only two states (New Mexico and Texas) for which the Mexico export trade dominates that of Canada's. Because of the pervasive U.S. export trade gap that existed in 1994 between Canada and Mexico, it was in the U.S.'s economic interest to promote trade parity by increasing trade with Mexico. By promoting the Treaty, this trade policy strategy assumes that NAFTA represents the mechanism to achieve parity with Mexico as with Canada. However, this strategy does not address the question of how individual states and regional configurations will be impacted under the Treaty. This issue will be discussed in more detail later in this dissertation.

CHAPTER III

REVIEW OF FUNDAMENTAL INTERNATIONAL TRADE THEORIES

As discussed in the previous chapter, under NAFTA, the U.S., Mexico and Canada find themselves promoting free trade as a multilateral trade policy. But why is free trade advantageous? What standing do these free trade precepts have that resulted in the U.S., Mexico and Canada becoming committed to their implementation? This chapter discusses the origin of the concept of free trade and provides an overview of international trade theory.

International Trade Theories

In open market economies, individual firms make production decisions and engage in international trade. The earliest attitude toward international trade was dominated by the doctrine of mercantilism. The ideas of mercantilism expressed an outlook that today is roughly equivalent to "economic nationalism." Under the mercantilist doctrine, other nations were regarded as rivals, and powers of government supported domestic trade, manufacturing, and shipping (Elsworth, et al, 1984). A nation could gain through foreign trade only if it had an excess value in exports over imports. Under this early doctrine, net excess imports were thought to be detrimental because they had to be paid for in specie (gold or silver), reducing the nation's treasury claims on precious metals and the nation's "wealth." In addition, dependence on foreign goods was discouraged because, during war, goods coming from outside the country might not be available.

The mercantilist doctrine came under attack with the rise of the capitalist class in the 1500's and 1600's. During this period it became increasingly apparent that in a free market, output could be rapidly increased, and costs lowered by using new methods and sources of supply (Elsworth, et al, 1984). In the late 1600's, writers such as John Locke and Dudley North contributed the concept of the supply of money adjusting itself to the needs of trade. David Hume brought the ideas of the balance-of-trade and quantity theory of money into a coherent concept: "prices in any one country are determined by the quantity of money; prices in different countries are interdependent—a low price country can undersell a high price country; such underselling will lead to a flow of specie to the low price country, raising prices there and lowering them in the other country" (Elsworth, et al, 1984). That is, Hume pointed out that it is not the quantity of gold or silver a nation holds that is important, but the quantity of goods and services that the gold and silver can buy.

The free trade movement also benefited from the writings of Adam Smith. Smith's major conclusion was that the economic welfare of nations was not served by minute regulation, but by the greatest possible freedom of enterprise. Stated differently, "the selfish actions of individuals lead to the welfare of all, and continuous regulation of government is unnecessary" (Smith, 1776). This was especially true in foreign trade where a larger quantity of goods would be produced by the trading nations, thereby allowing each nation to be better off.

Adam Smith also labeled the condition of absolute advantage in international trade. Under the doctrine of absolute advantage, a country would be able to produce a larger output than other countries, with a given amount of capital and labor. Products in which a country enjoyed an absolute advantage would be traded to other nations for products in which the exporting nation experienced a marginal cost disadvantage. The gains from trade come from the chance to change consumption patterns and the benefits from specializing in production of specific products.

But what of those countries with no line of production clearly superior to rivals? In 1817, David Ricardo undertook a more precise formulation of the theory of international trade by introducing the doctrine of comparative advantage. Under Ricardo's concept of comparative advantage, gains from trade could exist even under conditions where a nation did not enjoy an absolute advantage. As long as the price ratios differed between countries, every country would be able to find some good it could produce at a relative cost advantage, thereby creating the opportunity for the initial opening of trade. A nation is said to possess a comparative advantage in those goods that can be produced at a lower cost (such as labor) than its trading partners, even though production costs may not be the lowest in the world (Ricardo, 1817)[6].

Some 100 years after Ricardo published his Principles of Political Economy and Taxation (1817), Eli Heckscher and Bertil Ohlin (H-O) studied the effects of factor

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[6] After restating Ricardo's doctrine of comparative advantage, John Stewart Mill added demand considerations to international terms of trade. According to Mill's analysis, the relative efficiency of labor in each country establishes the possible barter terms of trade. Within the range of terms, the actual ratio at which goods are traded will depend on the strength or elasticity of demand exhibited by each country in the negotiations (Mill, 1848).

endowments on international trade.[7] Their work, together with further contributions by Stolper and Samuelson, is referred to as the "factor proportions theory." This work noted that differences in a country's factor endowments may also be a cause for international trade. Briefly summarized, a nation will export those goods produced by large amounts of the nation's abundant (and therefore less expensive) factors, and will import those goods produced by large amounts of the nation's scarce and expensive factors (e.g., Lindert, 1986).

Under Heckscher-Ohlin and Stolper-Samuelson theorems, rewards to factors employed specifically in industries of comparative advantage will rise, and rewards to factors employed specifically in the comparative disadvantage will fall relative to autarky. Trade increases, but no automatic mechanism exists that distributes gains achieved by the winners to compensate for losses suffered by the owners of the more scarce resources. Panagariya and Suthiwart-Narueput (1998, pg. 382) have studied the interrelationship of wages and free trade, and conclude that:

> "Following Stolper-Samuelson logic, freeing up trade (as in NAFTA) must lower wages in one set of countries and raise them in others. An increase in all countries requires . . . increasing returns, complete specialization or asymmetries in production technology. It is shown . . . preferential trade liberalization can lead to increased real wages without the special circumstances of increasing returns, complete specialization, or asymmetries in production technology."

The concept of comparative advantage has dominated international trade theory from its introduction until today. Loosely stated, comparative advantage occurs when

[7] Simplifying assumptions were described by Appleyard and Field (1992) as two countries, two homogeneous goods, two homogeneous factors of production, identical technology in both countries, constant returns, and mobile factors of production within each county but not between countries.

countries trade to take advantages of differences such as labor costs or skill, capital, or natural resources. Recent studies have asserted that comparative advantage need not be the whole story, and that differences in technology across countries, an active role in demand conditions, economies of scale, imperfect competition and a time dimension can be independent causes of international specialization and trade. For example, authors Spence (1976), Lancaster (1980), Krugman (1987) and Wonnacott (1996) set forth the idea that nation-states specialize and trade, not only because of underlying differences, but also because of increasing returns to scale in specific geographical locations.

Current real-world patterns suggest that income-distribution effects of trade include "economies of scale." According to this view, industries characterized by economies of scale are not likely to be perfectly competitive. As an example, the first firm to raise production enough to dominate the whole industry's demand can, owing to economies of scale, cut prices sufficiently to drive out all direct competition. Therefore, if trade is based on economies of scale, then trade is destined to be dominated by giant international firms, and gains from trade will be distributed among these firms and their customers.

It should be noted that one of the assumptions on which the argument for free trade rests—perfect competition—is not realized in practice.[8] Throughout the

[8] The following are the assumed conditions for a perfectly competitive market (Breyer, 1982):

1. Many buyers and sellers in the market.
2. Individual sellers and buyers are unable to affect market price by varying output.
3. Resources move freely among productive uses sellers can
4. Sellers produce identical products.
5. Actors in the marketplace possess perfect information about prices, technology, and consumptive choices.

industrialized nations, most major industries are limited to a few large oligopolistic firms. Such an industrial structure is not a consideration of economic models constructed by Ohlin, Ricardo, or Smith (Ellsworth, et al, 1984). Recently devised trade theories such as the Product Cycle Theory, the Linder Theory, and the Krugman Model have added complexity to the earlier established theories to accommodate the complex market structure found in current international trade patterns (Appleyard, et al, 1998).

Moreover, countries often choose to erect barriers due to free trade for a number of reasons including (Hudgins, 1995, pg. 233):

1. To discourage consumption of a particular good or category of goods.

2. To generate revenue for the government through the imposition of a tariff.

3. To reduce imports so as to decrease a trade deficit.

4. To practice a protectionist policy so as to insulate a domestic industry from competition from foreign producers of the same good. The protectionist policy enables the domestic producer to capture larger market share and charge a higher price than would be possible without protection.

Emergence of the Theory of a Government Directed Economy

A more recent form of the traditional protectionist policy includes governmental activist industrial policies. National governments are frequently examining methods of intervention to benefit their domestic industries. The basic model of this policy calls for "exporting the country" into prosperity. In two papers, Brander and Spencer (1983,1985) wrote that, under certain circumstances, government policies such as export subsidies and import restrictions may deter foreign firms from competing in domestic markets. Other writings have been largely motivated by the need to examine the "economic miracle" exhibited by the post World War II Japanese economy. Individuals influential in the Clinton administration such as Robert B. Reich, Laura D'Andrea Tyson, and Ira Magaziner have written extensively on the subject (e.g., Borrus, Tyson and Zysman, 1986; Magaziner and Reich, 1982). These authors have concluded that government policy initiating interventionist actions serves a strategic role in the same way that government policy can encourage or discourage investment in a specific industrial sector or in a research and development objective.

Government-directed industrial policy is credited with playing a central role in the recent economic success of Japan, South Korea, India, Taiwan, Germany, and Brazil. Academics Raj Aggrawal and Tamir Agmon (1990, pg. 151) have described a model for interventionist industrial policies which argues in favor of producing government-directed comparative advantage. Their model divides this into three stages (the import substitution stage, the export promotion stage, and the foreign direct investment [FDI] stage) and includes a protectionist requirement which mandates that foreign technology be transferred into the country and installed in the protected domestic industry.[9]

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[9] According to Aggrawal and Agmon (1990) definitions of these stages and the protectionist requirement are:

> The import substitution stage-This is the phase of the government leading the corporate sector. The government changes relative prices through taxation, tariffs and perhaps quotas. Markets believed to offer a comparative advantage are identified. Successful corporations start to accumulate knowledge, production skill and skill in other business practices. Direct growth occurs when companies expand from production for domestic markets and commence to supply external markets.
>
> The export promotion state-Production is carried out in a protected market, but export sales take place in a competitive market. In the export market, companies must adapt themselves to the competitive mode. The government moves from the role of transition process manager to the role of partner.
>
> The FDI stage-Success in the export promotion stage (that of protected base and export lead growth) creates forces which expand in the export market. Expansion in the targeted export market introduces (continued on page 18)

The instruments of an interventionist industrial policy include tariffs, quotas, subsidies, and other activist measures. While all of these practices originated before interventionist industrial policies came into existence, there is an important distinction between their classical implementation and their role in interventionist policies. In the classical implementation, these measures existed in isolation to achieve some limited protectionist objective. In an interventionist policy, all of these measures are coordinated to protect domestic industry from foreign competition and concurrently to encourage domestic industry to export products at world-class standards. Those critical of interventionist policies argue, however, that it is impossible to formulate useful policies given the complexity of modern markets. In addition, the gains experienced by firms from intervention may be dissipated by entry of new firms encouraged by the same protected domestic market. As a result, critics argue that these policies will do more harm to the protectionist country than good.

The Case for Free Trade

While the concept of free trade competes with the concept of interventionist trade policies, resource and endowment constraints still hold because a country cannot protect everything and subsidize everything. Thus, interventionist policies to promote particular

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considerable risk. Direct investment in the targeted markets, both in marketing and production facilities, is undertaken for risk reduction rather than profit maximization. Technological and planning leadership is developed from the government to the industry or companies within an industry.

Role of technology-In the import substitution stage, firms are just developing the abilities to used modern technologies developed overseas. In the export promotion stage, firms become efficient in the use of foreign technology, and begin to adapt foreign technology for their own use. In the final stage, firms develop their own technology, and eventually the technology developed by some of these firms become the world standard.

sectors must draw resources away from other sectors, such that governments need substantial information to formulate efficient trade interventions.

The concern of inappropriate policy intervention occurs at two levels. First, to the extent that the policies work, they may have a "beggar-thy-neighbor" component that can lead to retaliations and mutually harmful trade wars. Second, at the domestic level, an effort to pursue efficiency through intervention could be captured by special interest groups and turned into an inefficient redistributionist program.

A Note on Nation-States' Tax Policy and International Trade

The objective of taxation policies and customs duty policies is to prevent multinational companies from realizing increasing returns in one country at the expense of another country. Because countries have a stake in the amount of multinational income they can tax, the legislative bodies have adopted transfer pricing legislation. The objective of transfer pricing legislation is to optimize taxable income within its jurisdiction. Each country is an adversary in this arena, however, and the competitive environment between tax authorities forecloses the opportunity for multinational companies to derive increasing returns in one country without affecting the returns of other trading partner countries. Chapter V discusses these actions taken under the NAFTA which would be expected to produce changes in customs and transfer tax enforcement.

Concluding Remarks

The objective of this chapter and the previous chapter was to establish the standing of the free trade argument in fashioning international trade policy. Assumptions underlying international trade theory have ranged from perfect competition, constant returns and immobile factors of production to the more modern theories that assume imperfect competition, increasing returns, mobile factors of production and economies of scale. The discussion in this dissertation now moves to analytically examine some changes in U.S. economic welfare as the result of NAFTA. Economic welfare in this instance is defined as per capita manufacturing income and per capita gross state product.

CHAPTER IV

ECONOMIC IMPACT OF NAFTA: PER CAPITA MANUFACTURING INCOME AND PER CAPITA GROSS STATE PRODUCT

Introduction

During the two years preceding the U.S. congressional vote on the North American Free Trade Agreement in November 1993, a lively debate emerged over whether this Treaty would benefit the U. S. economy. This debate focused on employment, the environment, and whether the Treaty would mitigate immigration from Mexico to the U.S. The consensus at the time was that the Treaty would be beneficial to the U.S. economy. In particular, both general equilibrium and partial equilibrium analysis predicted positive economic effects, particularly for the capital intensive sector (e.g., Roland-Holst, et al; Hufbauer and Schott, 1993).

More recently, empirical analyses have begun to use newly available data after NAFTA to explore the *ex post* economic impact of the Treaty. One notable example of this "backward looking" approach is by Gould (1998), who uses a model of bilateral trade flows. In his formulation, once the fundamental determinants of trade flows are accounted for, any extraordinary flows that have occurred since NAFTA's implementation are attributed to the free trade agreement. Gould finds significant positive effects on trade flows between Mexico and the U.S. beyond those expected from non-Treaty trade activities. However, his empirical assertion that export growth relates to an actual economic benefit to the U.S. is not tested in his paper.

In turn, this chapter analyses whether pre/post export growth contributed to the growth in the per capita gross state product and per capita manufacturing income of the U.S. states. We a priori suspect that the manufacturing income measure would be more sensitive to NAFTA economic effects because of the conventional wisdom that the U.S. is a capital intensive country, and because international trade theory predicts that this sector would be most impacted by the lowering of trade barriers. In addition, to make the investigation more comprehensive, gross state product is selected because this is a broad measure of the Treaty's economic effects. That is, gross state product captures the economic spillover and dispersion effects of trade activity resulting from NAFTA.

To anticipate, employing data compiled by the Massachusetts Institute for Social and Economic Research (MISER) and neo-classical economic growth methodology, we find that export growth attributable to NAFTA positively contributed to state-wide per capita manufacturing income. We also find that the states along the U.S.-Mexico and U.S.-Canadian borders seemingly benefited more from the Treaty.

Data and State Growth Summary Statistics

The analysis contained in this chapter employs a unique data set compiled by MISER. The data are collected by the U.S. Census Bureau's Foreign Trade Division. MISER has produced the data since 1987 under an agreement with the Foreign Trade Division. State specific exports are measured for the United States in two ways—origin of movement (OM) and exporter location (EL). OM data reflect the state from which the merchandise starts its movement to the port of export, while EL data are based on the exporters location. MISER has produced the OM series since 1987, and began producing the EL series of data in 1993. For both series, MISER improves the Census Bureau's unadjusted data, which contain records with missing states and industries. The missing information is proxied by an imputation algorithm developed by MISER and approved by the Census Bureau.

A potential shortcoming of the data is that the state reporting the exports may not be the one where the product was manufactured, grown, or mined. According to MISER, however, this problem is more acute for agriculture shipments, and less so for manufacturing products. Despite this problem, these data are generally acknowledged as the best available on state exports. The remaining state level manufacturing income and gross state product data are published by the Department of Commerce; the estimates of states' populations are published by the Census Bureau.

To begin our analysis, we investigate patterns in NAFTA exports for the periods before and after implementation of the NAFTA Treaty. Per capita 1988 gross state product and manufacturing income (Table IV-1) are selected to capture the effects of the U.S.-Canada Free Trade Agreement.

In general, states experiencing the highest growth in average NAFTA exports during the post-Treaty period tended to be those with the highest gross state product and manufacturing income at the inception of the Canada-U.S. Free Trade Agreement. States recording over $10 billion in total 1997 NAFTA exports were Texas ($40.4), Michigan ($25.5), California ($23.5), Ohio ($14.2), New York ($12.6) and Illinois ($11.3). Their high export trade volume is explained by the fact that these states are also the most important U.S. manufacturing infrastructure states as measured by 1997 manufacturing income. For most of these states, the growth in post--NAFTA average per capita exports over the pre--NAFTA amount was clustered in the mid sixty percent range.

There were, however, exceptions to this pattern. Michigan had the third highest per capita manufacturing income in 1988, but experienced a relatively modest 26.53 percent increase in post--Treaty exports. This is seemingly explained by the fact that the automotive industry is concentrated in Michigan, and had already diversified manufacturing into Mexico and Canada. In addition, at the inception of the free trade agreements, Michigan had the greatest per capita average exports to NAFTA partners. Therefore, adding growth to an already elevated base would be unlikely. Indiana was an opposite exception. With the 4^{th} highest per capita manufacturing income, Indiana's growth in the post Treaty period doubled that in the pre Treaty period. Review of Indiana's raw export data for the 10-year period subsequent to 1988 discloses an uninterrupted succession of export increases, unaffected by the 1995-1996 Mexico crisis.

The states with the highest per capita export growth in the post--NAFTA period were Kentucky, North and South Carolina, Alabama, Nebraska, Indiana, and South Dakota. Other than Indiana, none of these states are populated by an extensive manufacturing infrastructure as measured by manufacturing income. Therefore, the Treaty provisions appear to have opened up markets for these states unavailable in the pre--Treaty period.

Table IV-1: State Per Capita Pre and Post NAFTA Growth Statistics

State	GSP 88	MIC 88 ($)	NAFTA Exports (88-97) ($)	Pre-NAFTA Exports (88-93) ($)	Post-NAFTA Exports (94-97) ($)	Growth
1. Alabama	18,552	2,401	276.35	194.19	399.60	105.77
2. Alaska	45,027	886	246.45	222.73	282.03	26.62
3. Arizona	20,467	1,721	558.51	442.97	731.82	65.21
4. Arkansas	16,711	2,161	251.32	181.42	356.17	96.32
5. California	27,612	2,609	462.71	368.35	604.24	64.04
6. Colorado	23,471	1,832	200.24	163.49	255.36	56.19
7. Connecticut	31,585	4,238	500.80	413.91	631.14	52.48
8. Delaware	32,144	4,763	1491.55	1609.90	1314.04	-18.38
9. Florida	21,137	1,236	156.98	143.71	176.88	23.08
10. Georgia	23,075	2,326	301.10	238.51	394.98	65.6
11. Hawaii	27,838	629	21.58	23.75	18.34	-22.76
12. Idaho	17,119	1,657	228.81	194.72	279.95	43.78
13. Illinois	24,905	2,905	609.25	482.73	799.02	65.52
14. Indiana	20,474	3,768	699.91	498.99	1001.28	100.66
15. Iowa	19,799	2,422	458.83	346.96	626.64	80.61
16. Kansas	21,674	2,141	404.48	306.24	551.84	80.2
17. Kentucky	19,091	2,182	477.83	308.55	731.74	137.15
18. Louisiana	22,229	1,272	315.65	269.07	385.52	43.28
19. Maine	20,529	2,394	367.11	310.36	452.24	45.71
20. Maryland	25,353	1,451	205.78	184.46	237.75	28.89
21.	29,272	3,419	525.09	441.01	651.20	47.66
22. Michigan	22,094	4,361	1963.30	1774.95	2245.83	26.53
23. Minnesota	23,679	3,098	478.30	386.78	615.58	59.15
24. Mississippi	15,875	1,996	186.01	161.51	222.75	37.92
25. Missouri	21,976	2,566	402.54	328.13	514.16	56.69
26. Montana	16,622	728	220.28	194.61	258.78	32.98
27. Nebraska	20,735	1,579	281.27	199.05	404.59	103.26
28. Nevada	26,454	622	132.00	110.65	164.04	48.25
29. New	24,479	3,301	360.34	291.88	463.02	58.64
30. New Jersey	29,245	3,072	403.17	330.50	512.17	54.97
31. New Mexico	18,151	704	54.05	40.22	74.80	85.97
32. New York	29,603	2,426	476.73	382.11	618.67	61.91
33. North	23,178	3,257	461.12	319.14	674.10	111.22
34. North	16,831	577	508.54	417.00	645.83	54.87
35. Ohio	21,886	3,684	831.74	661.96	1086.40	64.12
36. Oklahoma	18,899	1,570	245.40	219.63	284.06	29.33
37. Oregon	20,649	2,385	308.27	286.80	340.48	18.72
38. Pennsylvania	21,610	2,793	367.95	276.12	505.69	83.14
39. Rhode Island	22,845	2,881	299.55	249.88	374.06	49.70
40. South	19,263	2,811	372.03	253.74	549.46	116.55
41. South Dakota	18,513	984	184.21	131.72	262.95	99.63
42. Tennessee	20,779	2,741	480.40	345.83	682.26	97.28
43. Texas	22,985	1,911	1332.05	1046.32	1760.65	68.27
44. Utah	18,261	1,589	222.04	196.56	260.25	32.40
45. Vermont	21,535	2,613	3556.88	3132.72	4193.12	33.85
46. Virginia	25,596	2,013	201.67	158.86	265.89	67.38
47. Washington	23,764	2,488	499.28	477.64	531.74	11.33
48. West	16,077	1,544	199.59	168.32	246.50	46.45
49. Wisconsin	21,860	3,440	544.78	426.66	721.97	69.22
50. Wyoming	27,620	489	141.09	108.40	190.12	75.38

Empirical Analysis And Results

One of the key properties of the standard neo-classical growth theory is its prediction that an economy that starts out proportionately further below its own steady-state position tends to grow faster. The theory predicts that economies with relatively low levels of output per capita will tend to grow at a faster pace than those with correspondingly high levels of per capita output. Thus, *ceteris paribus*, the poor economy tends to catch up with the rich one in terms of the level of per capita income or product.

For the purposes of this dissertation, we would expect to observe economic convergence among the states in the U.S. over time. This is so because state economies have similar socio-economic behaviors. Indeed, studies that have observed the economies of the U.S. states have estimated that this economic convergence to be around 2 percent per year (Barro, et al, 1995).

From an empirical perspective, to determine the variability in per capita growth rates of states during the pre/post--NAFTA period, theory requires that a growth regression should include the level of economic development of a state at the initial time (base) period. Employing state data on per capita gross state product and manufacturing income, we estimate

$$(1) \quad G_j \;=\; \alpha_1 + X_j\ \alpha_2 + \varepsilon_j\ , \qquad \text{for } j = \text{product, income}$$

where Gj denotes the per capita gross state product (GSP) growth rate (where j = product) and the per capita gross state manufacturing income (GSMI) growth rate (where j = income). Xj indicates the 1988 per capita GSP (when j = product), and the 1988 per capita GSMI (when j = income). α_1 and α_2 represent coefficients to be estimated, and ε_j is the error term with $E(\varepsilon_j) = 0$ and $Var(\varepsilon_j) = \sigma^2$.

As noted in Table IV-2, the coefficients on α_2 and β_2 are negative, supporting the convergence hypothesis as predicted by neo-classical growth theory. At this point it might be important to discuss the relative magnitude of the gross state product coefficient to the manufacturing one. For example, why is the gross state product convergence coefficient higher than the manufacturing one? We speculate that gross state product accounts for a variety of economic sectors that are more geographically mobile, whereas the industrial sector is relatively immobile and thus per capita manufacturing income takes longer to converge across states.

To continue our empirical analysis, average per capita gross state product and per capita manufacturing income for the pre- and post-NAFTA Treaty implementation were developed. Annual state exports to Canada and Mexico were aggregated to form the variable "NAFTA exports". For the pre-NAFTA period, the average over the six year period from 1988 to 1993 was determined. For the post-NAFTA period, the four year average from 1994 to 1997 was estimated. Logarithmic results were used and the difference between the two values was taken to be the export growth between the pre- and post-Treaty implementation periods.

Consider:

$$(2) \quad G_j = \beta_1 + X_j\,\beta_2 + Y\beta_3 + e_j \;, \qquad \text{for } j = \text{product, income}$$

where Y indicates per capita NAFTA exports by state, the β_i's denote coefficients to be estimated, e_j represents the normally distributed error term, and the remaining variables are the same as above.

The key parameters for this empirical exercise are β_2 and β_3. The sign of these two calculated parameters indicate the positive or negative influence the states' exports of the period had on the change in per capita manufacturing income or gross state product. If NAFTA had a positive economic effect, β_3 should be positive and statistically significant. β_3 is positive for both manufacturing income and gross state product. However, while only manufacturing income is statistically significant at a conventional level, we anticipated that trade barrier reductions would primarily benefit the manufacturing sector, given that the U.S. is a relatively capital intensive country. We note that Gould (1998) suggests that more trade activity necessarily translates into economic growth. Evidence here suggests that such a relationship exists only for manufacturing income.

NAFTA Regional Impact

To examine the regional economic impact of the Treaty, Equation 2 is further augmented with a border dummy and an interaction term between the binary and export growth variables, as seen in Equation (3). In this case, a distinction is made between exports to Mexico and exports to Canada.

$$(3) \quad G_j = \gamma_1 + X_j \gamma_2 + Y_k \gamma_3 + B_k \gamma_4 + Y_k{}^* B_k \gamma_5 + u_j \ , \qquad \text{for } j = \text{product, income}$$

where subscript k distinguishes between Mexico and Canada and Y_k is a vector of NAFTA exports to Mexico or Canada. B_k indicates a vector of binary variables indicating either Mexico or Canada $Y_k{}^* B_k$ denotes a vector of the interaction between the variables in Y_k and B_k. The γ_i's are coefficient vectors, and u_j represents the normally distributed error term. The remaining terms are defined above.

Both border regions have begun to manifest their own internal cultural and economic characteristics. Anticipated in Joel Garreau's Nine Nations of North America and Orme's Understanding NAFTA, the border states were to be likely economic beneficiaries of the NAFTA Treaty. The U.S.-Canadian free trade agreement has deepened this subregional consciousness in the northern United States. NAFTA has developed the same subregional consciousness in the Mexico border states.

Table IV-3 demonstrates the economic convergence for Mexican and Canadian border states as predicted by neo-classical growth theory. Both per capita manufacturing income and gross state product are shown to be in a state of convergence. Also, in the manner similar to that demonstrated by the national results shown on Table IV-2, the coefficient magnitude of gross state product exceeds that of manufacturing income. The same explanation would apply for the border states as applied to the U.S. national results. Table IV-3 also demonstrates that Canadian border states benefited economically from the Treaty. The gross state product variable γ_5, border states' NAFTA export growth, is positive and statistically significant. The gross state product variable measures the economic spillover and dispersion effects of the Treaty. In general, the Treaty favorably affected sectors of the border states economies outside of the manufacturing sector.

Table IV-2

NAFTA Economic Effect-U.S. Per Capita Manufacturing Income And Gross State Product

	Constant	α_2		Adj R^2
Gross State Product	-0.9765	-0.2985**	---	0.4435
Manufacturing Income	0.3578	-0.1062**	---	0.1466
	Constant	β_2	β_3	**Adj R^2**
Gross State Product	-0.9169	-0.2748***	0.6920	0.4572
Manufacturing Income	0.2450	-0.1269**	0.2784**	0.3021

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively,

The per capita manufacturing income variable y_5, is not statistically significant states bordering on either Canada or Mexico. It should be pointed out that California and Texas, on the Mexico border, and New York, on the Canadian border, had the highest, seventh highest, and second highest manufacturing incomes of the U.S. states in 1988, the base year. However, on a per capita manufacturing income basis, these states drop to the second quartile of all U.S. states for 1988. With the exception of Michigan, none of the states bordering Canada demonstrate a strong per capita manufacturing infrastructure in 1988. Therefore, these empirical results are seemingly consistent with the capital distribution of industrial sites.

V. Concluding Remarks

Gould (1996) offers the following logic in support of the attribution of economic growth directly to NAFTA: (1) Exports purportedly lead to jobs and economic growth; that (2) NAFTA, would lead to an increase in exports *beyond those expected,* and that, as such, (3) NAFTA should have yielded economic growth. The direct connection between exports and jobs is not empirically established, and therefore, represents a weakness in his study. The findings described in this paper strengthen Gould's contention by providing evidence suggesting that the NAFTA Treaty has been of economic benefit for the U. S.[10] In addition, it appears that the Treaty has registered spillover effects to broader sectors of the economies of the border states of both Mexico and Canada.

[10] The Stolper-Samuelson Theorem indicates that the increase in the price of the abundant factor and the fall in the price of the scarce factor because of trade implies that the owners of the abundant factor will find their real incomes rising and the owners of the scarce factor will find their real incomes falling. Even though the country as whole experiences gains from trade, some part of the economy (the scarce factor) will have an incentive to argue for protection rather than free trade.

Table IV-3

NAFTA Regional Economic Effect – Per Capita Manufacturing Income and Gross State Product for Canadian and Mexican Border States

	Constant	γ_2	γ_3	γ_4	γ_5	**Adj R^2**
Canadian Border States						
Gross State Product	-0.9820	-0.2989***	0.0132	-0.0634	0.1358*	0.4329
Manufacturing Income	0.2516	-0.1317**	0.2633*	0.0752	-0.0807	0.2561
Mexican Border States						
Gross State Product	-0.9324	-0.2845**	0.0141	-0.1233*	0.2370**	0.4403
Manufacturing Income	0.3123	-0.1114*	0.1004*	-0.0067	-0.0291	0.1700

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

CHAPTER V

TRANSFER PRICING WITHIN A FREE TRADE ENVIRONMENT AND UNDER THE NAFTA TREATY

Introduction

A multinational business unit may transfer goods or services to other related subdivisions. These transfers may be viewed as internal sales for which the seller receives a transfer price that is charged to the buyer. The question of what price the seller charges a related entity is referred to as international transfer pricing. Multinational business units can recognize incremental income from the relatively higher returns in those jurisdictions with the lowest tax rates and least regulation. Researchers have determined that tax minimization is an important variable affecting transfer pricing decisions in multinational corporations (Jacob, 1996; Hines, 1997). To offset the motivation of multinational corporations to concentrate income recognition in the most hospitable taxing jurisdictions, nation-states have adopted the protocol of transfer pricing. The idea behind transfer pricing is that each taxing jurisdiction is entitled to tax income on products produced within its borders. Nation-states accomplish this objective through regulations that determine how transfer prices are established on production carried on within their borders, but shipped to other countries. By regulating the pricing methodology, the way research and development costs may be expensed, and the manner in which other manufacturing overhead costs may be assigned, income taxable through the jurisdiction's income tax regulations becomes controllable by the tax authorities. That income is to be determined by the standard of an arms length pricing[11] of an uncontrolled entity.

This chapter traces the development of transfer-pricing legislation in the NAFTA era. Before NAFTA, duties were assessed on shipments between the NAFTA partners, and these duties represented a source of tax revenue for the source of production. Under NAFTA, however, the Treaty partners move to an environment of free trade by eliminating duties. Thus, to replace the source of taxes derived from duties, it is incumbent on each Treaty partner to replace this lost tax revenue with other sources of tax revenue. One such other source is comprehensive enforcement of income tax legislation. If the taxing jurisdiction can be assured, it can collect income tax on the appropriate level of income recognized from product created within its borders and shipped to a Treaty partner, the tax revenue lost from suspension of customs duties may be replaced. For this reason, the chapter begins with a discussion of the customs duty collection process existing before NAFTA. The chapter then develops the theory of transfer pricing legislation, and discusses ways in which this legislation attempts to ensure that each taxing jurisdiction collects a proportionate income tax derived from production activities occurring within its borders.

Transition From Customs Duties as a Form of Taxation

Customs duties are taxes assessed on goods entering a sovereign country. The duties are usually calculated on the declared value and classification of the product or

[11] Arms length pricing has come to mean the price that a willing buyer would pay and a willing seller would sell, neither party being under any compunction to complete the transaction.

products; however, some duties are assessed on an *ad valorem* basis, meaning the duty is assessed on an individual unit of product. Transfer pricing refers to charges within a business entity on a product transferred between sub-units of the entity.[12] This discussion focuses on the corporate entity, and simple examples are used to illustrate the transfer pricing concepts.

To begin, a distinction is made between inter-corporate transfer prices and other corporate transfer prices. The former designates transactions among related corporate entities, whether those transactions are made between divisions or separately incorporated entities. The latter corporate transfer pricing simply refers to negotiated pricing between unrelated corporate entities. Inter-corporate pricing is also used synonymously with transfer pricing.

Transfer price manipulation is presumed to exist only between related company entities. Non-related entities are presumed to deal with each other on an "arm's length" basis under U.S. law because the alternative presumption is a price fixing relationship. Thus, non-related entities would seldom come under scrutiny for price manipulation.

Within the U.S., Mexico, and Canada, transfer pricing is governed by the tax legislation of each NAFTA partner; the NAFTA Treaty contains no reference to the concept of transfer pricing. However, the NAFTA Treaty makes frequent reference to classifications and duty levels because this is the primary subject of the Treaty. Also, the customs authorities of each member country are charged with the enforcement of the new concepts and methodologies introduced by the Treaty, such as regional content value, non-originating materials, intermediate materials and transaction values. Because these

[12] Usually these business entities are corporations, but they can take on any other form, such as partnerships, cooperatives, sole proprietorships, trusts or estates.

concepts, methodologies and restraints are part of an international treaty, other U.S. Federal and state laws become subordinate to them. One objective of this chapter is to provide insight into maquiladora management's perception of the enforcement equality by the IRS, Hacienda[13], and U.S. and Mexican customs.

The general concept of free trade does not address the question of which jurisdiction should record the taxable income from trade. Because all three of the NAFTA countries have laws that tax the income of corporations, the issue of where the taxable income should be recorded is important to the fiscal authorities of each country. Tax authorities of the three NAFTA partners have developed the regime of bilateral and multilateral advanced pricing agreements (APAs) to settle these questions. An APA is a transfer pricing agreement negotiated between a corporate entity and the federal tax agency of either Canada, Mexico or the U.S.[14] The bilateral and multilateral nature of these negotiations has led the IRS to make compromises with Canada and Mexico on methodologies and tax administration.

Bilateral and multilateral APAs are costly in terms of time and money. Preparing the agreements requires attorneys, accountants, economists, and customs specialists from the countries involved, and the fee structures for these professionals can be quite high. A second objective of this dissertation is to examine whether small and medium size maquiladoras are using the APA as a means of protecting themselves from potential tax

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[13] "IRS" refers to the Internal Revenue Service, the U.S. federal agency responsible for all tax law enforcement other than customs duties. "Hacienda" refers to Secreteria de Hacienda y Credito Publico, Mexico's federal taxing agency.
[14] A complete explanation of the advanced pricing agreement process is presented in Appendix 1.

liability and penalties[15] assessed as a result of disagreements between the taxing authority and the maquiladora regarding transfer pricing practices.

An example of inter-company transfer price manipulation might follow the following scenario. A foreign subsidiary manufactures a product that it ships to the U.S. parent and prices at $1,000 each. The U.S. duty rate of 20 percent would result in an imported price of $1,200 for the parent company. Because the transaction is an inter-company sale, the domestic parent may require the foreign subsidiary to lower its unit price by an arbitrary amount, say $500. By lowering the price, the 20% duty would be reduced to $100 per unit, thereby saving $100 in import taxes. The income tax authorities of the subsidiary's host country and the domestic parent's country would have an interest in the structure of this transaction. In addition to reducing the import duties, the requirement that the subsidiary lower its price by $500 effectively transfers that amount of taxable income from the foreign subsidiary to the domestic parent. Assuming a final sales price for the parent of $3,000, and a subsidiary's product cost of $750, the taxable income changes would appear as follows:

	Foreign subsidiary		Domestic parent	
Taxable income before price change	($1,000-$750)	$250	($3,000-[$1,000+$200])	$1,800
Taxable income(loss) after price change	($500-$750)	$(250)	($3,000-[$500+$100])	$2,400

By ordering the price change, the parent company has shifted $500 of income from one sovereign taxing jurisdiction to another, and reduced its cost by avoiding the

[15] A complete explanation of the tax liability increase and penalty exposure for corporations engaged in international manufacturing is found in Appendix 1.

$100 in import duties. To prevent such manipulation, the 1994 final Internal Revenue Code regulations stipulates that inter-company transfer pricing will be determined by the following standard [Temporary Reg. Sec. 1.925(a)-IT(c)(4) Code Sec 925(a)]:

> ". . . the standard to be applied in every case is that of a taxpayer dealing at arm's length with an uncontrolled taxpayer."

The opportunity for manipulation takes on an added dimension if the importing parent company is free to capture the subsidiary's product cost at a value other than the value declared for custom's duty purposes. If after requiring the foreign subsidiary to reduce its selling price to $500, the parent captures the cost of the product in the parent's domestic accounting system at an inflated amount of $1,500, the company would avoid taxation on a portion of its income. This result is illustrated as follows:

	Parent company
Final selling price in the parent's country	$3,000
Cost of product as captured by the parent's cost system	1,500
Taxable income to parent	1,500
Product cost at subsidiary level	750
Untaxed income by either the subsidiary's host country or the parent company's country	$ 750

This resulting untaxed income amount illustrates the need for the Internal Revenue Service and the U.S. Customs Department to coordinate their enforcement efforts. Although both institutions are agencies of the U.S. Department of Treasury, they have historically existed autonomously because of legislative firewalls built between them. The IRS was prevented by law from sharing taxpayer information with the Customs Service (IRC 6103(a)), and neither agency viewed its responsibility as overlapping into the other's jurisdiction.

With the advent of multinational corporations conducting business on a global scale, the relationship between the IRS and the Customs Service has evolved accordingly. Their responsibilities have grown to overlap in the specific area of the transfer of products across national boundaries. Furthermore, legislation has been enacted to enable these agencies to share limited information under specific conditions and restrictions (IRC section 6103(1)(14)).

The U.S. is not unique in the integration of the border customs agency and the country's internal tax administration authority. Countries across the globe are affected by the identical need to integrate import duty and internal taxation responsibility, and have emulated the procedures and legislation of the U.S. in establishing the required collaboration between the two responsibilities. For instance, under a customs reform bill passed by the Mexican Congress on December 30, 1998, importers may secure coordinated advance pricing agreements with tax and customs officials. Because some multinational corporations produce and market products globally, taxing authorities have come to realize their stake in how and where these multinational corporations record their sales and income, as well as the location in which the companies conduct product development and manufacture products resulting from the development programs. Because each country's taxing authority has a stake in these transactions, coordination between the taxing authorities has become necessary. The multinational corporation is presented with the dilemma of dealing with these disparate and conflicting interests, laws and authorities.

New Responsibilities Conferred On Customs Authorities Under NAFTA

In the absence of a free trade, Customs responsibility lies principally in determining whether imported product has been assigned the correct duty rate. Under NAFTA, duties on product originating from any of the three Treaty partners bear limited or no duty assessment. Therefore, Customs responsibility has been shifted to determining if imported product qualifies as product from one of the three NAFTA countries. Under the general rules of the Treaty, goods manufactured in one NAFTA country may exported to another NAFTA country under the NAFTA schedule of import/export duties. To receive this treatment, however, the good must be deemed to have originated in a NAFTA country under four preference criteria specified in the Treaty, i.e. originating goods. A good that is not an originating good is said to be a non-originating good.

There are four criteria (A through D) stated in the Treaty for establishing the originating status of a good. Two of the criteria (A and C) are relatively straightforward; to be originating, the good must be "wholly obtained or produced entirely in the territory . . . of one of the parties." Criterion A deals with goods "wholly obtained or produced". Criterion C deals with goods produced "entirely in the territory of one or more of the parties" where the materials going into the good's manufacture qualify as originating by any of the Treaty criteria; in other words, the component materials may not fall within the definition of "wholly produced" but may qualify as originating themselves. Preference Criterion B establishes that non-originating material which undergoes a specified change in tariff classification (the tariff shift rule). The fourth preference criterion, Criterion D, deals with goods that do not meet the tariff shift requirement, but the Regional Value Content requirement is met.

The Regional Value Content (RVC) determination permits either of two methods for NAFTA duty reduction. One method is the RVC Transaction Method; the other is the RVC Net Cost method.

These two methods are expressed by the following formulas:

Transaction Method: $RVC_1 = \frac{TV-VNM}{TV} \times 100$

Net Cost Method: $RVC_2 = \frac{NC-VNM}{NC} \times 100$

RVC = Regional value context expressed as a percentage (RVC_1 = NOT LESS THAN 60%; RVC_2 = NOT LESS THAN 50%)

TV = Transaction value of the good

VNM = Value of the non-originating materials used to produce the good

NC = Net cost of the good (total cost less sales promotion, marketing, warranty, royalties, shipping and packing costs and non-allowable interest costs)

The Regional Value Content determination for duty reduction is illustrated below.

Assume a product has a transaction value of $120 per unit and the following costs:

Product Costs	
Value of Originating Materials	$30.00
Value of Non-originating Materials	$40.00
Other Product Costs	$20.00
Period Costs	$10.00
Other Costs	$0.00
Total Cost of Good A, Per Unit	$100.00

Excluded Costs	
Sales Promotion, Marketing and After Sales Service Costs	\$5.00
Royalties	\$2.50
Shipping and Packing Costs	\$3.00
Non-allowable Interest Costs	\$1.50
Total Excluded Costs	\$12.00
Net Cost (\$100 - \$12)	\$88.00

Under the RCV transaction method, the Regional Value Content is 66.67%, computed as follows:

$$RVC_1 = \frac{TV-VNM}{TV} \times 100$$

$$= \frac{120-40}{120} \times 100 = 66.67\% \qquad > 60\%$$

Using the RCV net cost method, the Regional Value Content is 54.5%, computed as follows:

$$RVC_2 = \frac{NC-VNM}{NC} \times 100$$

$$= \frac{88-40}{88} \times 100 = 54.5\% \qquad > 50\%$$

For a number of years, Mexico has had industrial development programs. These include the maquiladora program and the Temporary Import Program to Produce Goods For Exportation (PITEX). Both of these programs are to be phased out beginning January 1, 2001. This development will affect how Mexico-based manufacturers under the maquiladora and PITEX programs will view sourcing decisions. Prior to phase out of these programs, the origin of goods brought to Mexico for a manufacturing process is irrelevant. After phase out, originating goods will quality for NAFTA preferences, and product from a non-NAFTA country will be subject to ordinary Mexico duty rates.

The concept of duty-free and reduced duties on manufactured goods is illustrated in the following example. Suppose a company manufactures a good in Mexico using Mexican-originating materials and components. The cost to manufacture is $100. The good is exported to the U.S. for sale in the U.S. market at $120. Because the good is 100% Mexican, it would qualify for duty free export to the U.S. If, however, the good contains materials or component parts imported from a non-NAFTA country, then a determination must be made on whether the good is NAFTA qualifying under one of the previously described preference criteria.

For example, assume that instead of the good containing all Mexican materials and components, it contains a component part imported to Mexico from Korea (a non-NAFTA country), which cost the Mexican manufacturer $40. The Mexican manufacturer would owe duties to Mexico for the original importation of the Korean component part into Mexico. Therefore, the cost of the good would increase by the duties paid to Mexico. Assuming a 10% duty rate, the cost of the good would increase by $4 ($40 x 10%). Further, if the good were determined to be non-NAFTA qualifying, duties would be assessed upon export of the product to the U.S. or Canada. The good could be determined as NAFTA qualifying or originating by any of the preference criteria previously mentioned earlier. Under these conditions the good could be exported to Canada or the U.S. and the NAFTA duty schedule would apply which, most likely, is duty free. Mexico would continue to be entitled to collect the duties on the original import of the component materials from Korea. If the Mexico manufacturer chose to qualify the product as originating under Preference Criterion D, an example of the application of the Regional Value Content determination under the Net Cost Method is 66.67% computed as follows:

$$\frac{120 - 40}{120} \times 100 = 66.67\%$$

Since the RVC is not less than 50%, the widget qualifies for NAFTA schedule duties upon exportation to the U.S.

If, on the other hand, the materials and components imported into Mexico from Korea were \$70 and the NAFTA originating materials and labor were \$30, the cost of the product would be increased by the \$7 (70 x 10%) in import duties paid by the manufacturer. Further, the RVC as determined under the Net Cost Method would be 1.67% computed as follows:

$$\frac{120 - 70}{120} \times 100 = 41.67\%$$

Since this ratio is less than 50%, the product would not qualify for the NAFTA duty schedule.

If the product could not qualify as originating under any of the four preference criterion, the interplay of the Mexico and U.S. duty assessments would be illustrated by the following description of facts. Assume that the Mexico duty rate for the materials and components from Korea is 10%, from the first example, and assume the U.S. duty rate for the assembled product is 3.5% payable upon export from Mexico into the United States. The Treaty limits duties on goods exported to another NAFTA partner to the lesser of the duty paid on import or the duty paid to the other party. Returning to the example,

Export sales price into the U.S. = \$120.00

Mexico assesses an import duty calculated as 10% of \$70.00 = \$7.00

U.S assesses an import duty calculated as 3.5% of \$120 = \$4.20

The limitation is triggered:

Mexico collects \$6.00 - \$4.20 = \$1.80

U.S. collects \$6.00 - \$1.80 = \$4.20

Therefore, the conclusion is that while the NAFTA agreement has diminished the duty assessment role of customs authorities in the three partner countries, a level of complexity has been added to the process of determining whether imported products from Treaty partners qualify for the eliminated or reduced NAFTA duties. Further, had the manufacturer been able to secure a source for the component part from the U.S., Mexico or Canada instead of Korea, the good would be subject to NAFTA duty schedule and probably duty free upon export to the U.S.

Penalties for non-compliance with the NAFTA rules and regulations are severe. For example, the penalty for willful failure to comply is up to the lesser of \$100,000 or 75% of the appraised value of the exported product. The penalty for non-compliance caused by negligence is the lesser of \$10,000 or 40% of the appraised value of the exported product.

Concluding Remarks

Customs duties flow from the trade barrier of tariffs that may exist before implementation of a free trade treaty. Because tariffs are dramatically lowered or vanish under free trade, this source of tax revenue also vanishes for the participating nation-states. Duties are replaced with a regime that attempts to tax incremental income developed under free trade, and that incremental income is to be measured by the arms length pricing of a non-controlled entity. Transfer pricing introduces an entirely new compliance requirement for commercial enterprises and nation-states participating under a free trade agreement. In addition, under NAFTA, origin of the material content of exported product to a Treaty partner is important. The orientation of customs officials is somewhat modified. Less emphasis exists on establishing the correct duty classification of inbound product. Under free trade as established under NAFTA, determination of the origination of the material content of inbound product becomes important.

CHAPTER VI

THE TREATY'S INFLUENCE ON SPECIFIC MAQUILADORA MANAGEMENT OPERATING REQUIREMENTS

Introduction

Mexico introduced the maquiladora concept more than 35 years ago by officially permitting "in bond" manufacturing along the border areas with the United States. Companies operating under this program assemble, service, and manufacture goods from materials imported into Mexico duty-free provided that assembled or manufactured good is subsequently exported from Mexico.

Under NAFTA, the maquiladora program will be phased out. The practical consequence of this development is that parts and materials "originating" from the United States or Canada will enter Mexico duty free, but goods from non-NAFTA countries will be dutiable entering Mexico. Therefore, parts and materials produced in the U.S. or Canada will have a cost advantage over those sourced from a non-NAFTA country. In addition, some goods, parts or materials are available only from non-NAFTA countries, and products incorporating these "non-originating" items will experience a cost increase, strictly as the result of the Treaty's implementation

Maquiladoras' management must systematically undertake logistical and strategic procurement planning in anticipation of the fully phased-in Treaty on January 1, 2001. Assessment of operating constraints facing maquiladora management as of the end of

1997, planning activities pursued by management for transition changes, and expectations of management on the post-implementation environment are subjects central to this research.

Transitioning to full implementation of the NAFTA Treaty provisions requires the attention of maquiladora management. Some changes were applicable before the Treaty went into effect, other changes are occurring as the Treaty is being phased in, and still other changes will take place after full implementation. These changes are outlined below.

Changes upon Treaty implementation

1. Mexico lost its beneficiary developing country status for United States import duty determination on January 1, 1994.

2. Products imported from Mexico to the United States became eligible for the transition to duty free rates on January 1, 1994.

Changes during Treaty phase-in

1. Mexico is required to phase out most industrial development programs by 2001. These programs include the maquiladora program and the PITEX program (Temporary Import Program to Produce Goods for Exportation).

2. Prior to adoption of the NAFTA Treaty, the maquiladora program allowed duty free temporary importation of raw materials, replacement parts and other items needed for assembly of manufacturing goods for subsequent export. After adoption of the Treaty, materials and goods allowed into Mexico on a duty free basis must leave the Country within two years after arrival.

3. Prior to adoption of the NAFTA Treaty, when finished goods were imported into the United States, duties were paid only on the value of non-U.S. originated materials, and the value of Mexican labor and manufacturing overhead. After adoption of the Treaty, finished goods Imported into the United States became subject to the NAFTA classification regime and the schedule of duties was phased out in accordance with the Treaty schedule.

Changes subsequent to full Treaty implementation

Shipments to NAFTA countries

1. Non-originating raw materials will be dutiable in Mexico.

2. At time of export, Mexico will waive the lower of the Mexican duties on raw materials or the duties due to U.S. or Canada on finished goods.

3. The PITEX and maquiladora programs will be completely discontinued with respect to all imports and exports with a NAFTA partner country.

4. Because of items 1 and 3, non-originating raw materials and components will be at a cost disadvantage to NAFTA--sourced raw materials and components.

Shipments to non-NAFTA countries

1. PITEX and maquiladora programs will be continued for all products exported to non-NAFTA countries.

2. Components sourced from outside a NAFTA country will not be dutiable if incorporated into a subsequently exported product.

As of January 1, 1995, Hacienda has said a maquiladora must charge an "arm's length" price for services and product provided to its foreign parent or affiliated company. In addition to the changes listed above, this represents an additional operational change the maquiladora management must deal with.

Studies on the behavior of maquiladora management in adopting of these changes are limited. On the subject of transfer pricing, parent company managers are reluctant to disclose information because such disclosures may be used by tax authorities in an enforcement action against them: i.e. no attorney-client privilege exists regarding the data. On the subject of changes necessitated by phase out of the "in bond" program, this dissertation represents the single attempt to determine if maquiladora management is reacting to the new requirements under a fully phased NAFTA Treaty.

The Maquiladora Industry Transfer Pricing Committee, a part of the Maquiladora Association, retained a big five accounting firm to develop a study recommending a methodology that would satisfy requirements of both the U.S. and Mexican tax authorities. A methodology was developed by the study establishing recommended return on capital employed that lead to an arm's length markup on transferred products and services. Grubert and Mutti (1991) and Hines and Rice (1994) analyzed the aggregate reported profitabilities of U.S. affiliates in different foreign locations in 1982. Their finding that profitability is negatively correlated with local tax rates was concluded to be evidence of active tax avoidance through transfer pricing mechanisms. Jacob (1996) sampled firms based on fiscal year 1988 reported pretax earnings for U.S. firms and their foreign operations. His study concluded that profitability differences between U.S. and foreign operations are consistent with the management of transfer prices for tax reasons.

Survey Procedure

The survey instrument was developed by the author based upon the objective of the dissertation and his understanding of the maquiladora industry. A pilot study to assess the validity of the survey instrument was conducted in two ways. Twelve responses were received from maquiladora managers on an initial survey. The responses to this initial survey indicated how these companies were to be sized in term of annual sales volume and employment levels. In addition, a copy of the survey instrument was reviewed by Manager-Customs and International Trade Services of a large multinational accounting firm resulting in changes to some of the questions. Both of these sources of critical examination improved the overall quality of the survey instrument.

Mailing lists for maquiladora companies were secured from the sources shown on Table VI-1. The first mailing was completed on July 14, 1998. A total of 313 survey instruments were mailed to all maquiladora companies on the mailing lists received from the above sources. A second mailing was conducted on September 1, 1998. Forty-five usable responses were received between the first and second mailing. A third mailing was conducted on October 5, 1998.

Subsequent to the third mailing, an attempt was made to contact all non-respondents by telephone. Copies of the survey instrument were faxed to non-respondents stating that a copy of the survey instrument had never been received. Out of these procedures, twenty-nine additional usable responses were received. This brought the usable responses to a total of seventy-four.

Some maquiladoras were eliminated from the sample due to the fact that (1) the business had closed down, (2) the respondent did not consider the company to be a maquiladora, or (3) the general manager of the respondent company stated there was no intention to cooperate. Table VI-2 shows the number of surveys and responses for each border city in which the mailings were conducted.

Data Analysis

A probit model was used to analyze the data generated by the survey. A respondent's decision to agree or disagree with a survey question can be easily analyzed using this statistical model. The model can also be used to predict the likelihood that the respondent will make a choice of agreement or disagreement.

The determinants of the propensity of making a particular choice (e.g., agreeing with a statement in a questionnaire) can be specified as:

$$(4) \qquad I^*_i = X_i \beta + e ;$$

where $I^*_i > 0$ and $I^*_i < 0$ indicate that the respondent $_i$ agrees/disagrees with the choices given. Xi is a vector of factors related to the choices, and β is a vector of coefficients for equation (4).

Under the assumption that the index follows a normal distribution, the probability that a given choice is selected is given by:

$$(5) \qquad \Pr(I_i = 1 / X_i) = \phi(X_i \beta)$$

Where ϕ is the cumulative density function of a standard normal random variable. The model coefficients are estimated using the maximum likelihood method (Greene, 2000).

The variables used in the probit model are listed on Table VI-3. All are dummy variables take values of one or zero. The selection of these variables for each empirical test was determined by how appropriate they were in explaining each choice. For instance, those maquiladoras not conducting sufficient planning for the full Treaty implementation were thought to be the smallest of such entities. Therefore, only size in annual dollar sales volume was used as one independent variable. In addition, this survey had a collateral objective of determining if the industry or corporate parent headquarters had a statistically significant role in the level of planning. Therefore, these variables were also used in the model. Further, plant size was thought to strongly influence the IRS or Customs Department in their decision to examine the need for reallocating maquiladora income with its parent entity. Therefore, dollar sales volume was used as an independent variable. The number of employees at the plant was also taken into account. A large number of employees is an indicator of high labor content in manufacturing, a condition susceptible to transfer price manipulation. Therefore, number of employees was selected as an independent variable. Finally, to account for business and regional effects, corporate parentage, physical location of the plant, and industry were also included as control variables.

Table VI-1

Sources Of Addresses For Maquiladora Industries Survey Methodology

CITY	SOURCE
Brownsville/Matamoros	Brownsville Economic Development Council 1205 North Expressway Brownsville, Texas 78520
McAllen/Reynosa	McAllen Economic Development Corporation McAllen, Texas 78501
Laredo/Nuevo Laredo	Laredo Development Foundation 616 Leal Street; P.O. Box 2682 Laredo, Texas 78044-2682
Eagle Pass/Piedras Negras	Maquiladora Industry Association Eagle Pass, Texas 78753
Del Río/Ciudad Acuña	Del Rio Chamber of Commerce Del Rio, Texas 78659
El Paso/Juárez	El Paso Chamber of Commerce El Paso, Texas
Nogales, Arizona	Asociación de Maquiladoras De Sonora, A.C. Parque Industrial de Nogales; P.O. Box 893 Nogales, Arizona, 85628
San Diego/Baja California	South San Diego Development Council 1200 "A" Avenue National City, CA 91950

Table VI-2

Results of Mailing by City

Mailed Out

Matamoros		**Acuna-Del Rio**		**Reynosa**	
# started	42	# started	23	# started	45
# refusing	6	# refusing	3	# refusing	6
# no response	21	# no response	14	# no response	30
# responded	15	# responded	6	# responded	9
Nogales		**Tijuana-Mexicali**		**Nuevo Laredo**	
# started	57	# started	77	# started	26
# refusing	0	# refusing	9	# refusing	2
# no response	53	# no response	60	# no response	21
# responded	4	# responded	8	# responded	3
Piedras Negras		**Juarez-El Paso**		**TOTALS**	
# started	9	# started	34	**# started**	313
# refusing	1	# refusing	9	**# refusing**	36
# no response	6	# no response	22	**# no response**	227
# responded	2	# responded	3	**# responded**	50

Faxes Sent Out

Matamoros		**Acuna-Del Rio**		**Reynosa**	
# sent out	14	# sent out	5	# sent out	24
# responded	4	# responded	1	# responded	4
Nogales		**Tijuana-Mexicali**		**Nuevo Laredo**	
# sent out	0	# sent out	18	# sent out	14
# responded	0	# responded	2	# responded	1
Piedras Negras		**Juarez-El Paso**		**TOTALS**	
# sent out	4	# sent out	7	# sent out	86
# responded	0	# responded	0	# responded	12

# responded Mail-out	**50**
# responded Fax	**12**
# responded - personal	**20**
Total Response	**82**

Table VI-3

Definitions of Survey Variables—Survey Methodology	
Annual Sales < $5 Million	= Maquiladora with annual sales less than $5 million.
Annual Sales $5-20 Million	= Maquiladora with annual sales of $5 to $20 million.
Annual Sales > $20 Million	= Maquiladora with annual sales exceeding $20 million but less than $50 million.
Annual Sales > $50 Million	= Maquiladora with annual sales exceeding $50 million.
Electronics Products Industry	=Maquiladoras designated by respondent as operating within the electronics industry.
Industrial Products Industry	= Maquiladoras designated by respondent as producing industrial products.
Multinational Corporation	= Maquiladoras designated by respondent as one plant among many in other countries.
Multinational Parent	= Maquiladoras designated by respondent as a sub of a parent with subs in other countries.
Parent=lg multinat:sales > $1 bil/yr	= Maquiladoras designated by respondent as a sub of a large multinational, annual sales exceeding $1 billion/yr.
Plant with 100 - 500 employees	=Plant with 100 to 500 employees.
Plants with > 500 employees	=Plant with greater than 500 employees.
Procurement Shift – not concluded	=NAFTA non-originating raw materials and components not determined or no decision on whether a NAFTA producer exists.
Procurement Shift Destination – not concluded	= NAFTA non-originating raw materials and components not scheduled for NAFTA producer.
Tamaulipas Location	=A maquiladora located in the Mexican State of Tamaulipas.
U.S. Domicile Parent	=A maquiladora with a parent corporation located in the USA.

Empirical Results

The results from estimating a probit model for the degree of planning by maquiladora management are reported in Table VI-4. Results of the probit model disclosed that small firms (annual sales under $5 million) do little planning and that large maquiladoras (annual sales over $5 million) were more likely to do more extensive or moderate planning. There was no statistically significant relationship between those firms likely to do extensive/moderate planning and those having an U.S. domiciled corporate parent. Therefore, one may conclude that concern and planning for the transition issues is a global management attribute and not an attribute limited to U.S. management experience and training.

The empirical results from this model conform with expectations. Small maquiladoras tend to be single product line manufacturers whose products are incorporated into larger units upstream in the manufacturing process. They are likely to be contracted out specialty manufacturers. The management planning environment can be characterized as one of completing the production backlog on hand. Therefore, one would expect that smaller companies employ little Treaty transition planning. Conversely, large companies are more apt to employ long term planning horizons, and one would expect this planning regime to be imposed at the local manufacturing level. Therefore, extensive to moderate planning would be required of maquiladora management. The result that "number of employees" and "regional location" are not statistically significant determinants in the degree of planning is consistent with expectations that management experience and talent is not influenced by either of these characteristics. Therefore, large maquiladoras located in Juarez, Mexico are no more likely to do moderate/extensive planning as those in Reynosa. Furthermore, one would not expect small maquiladora talent and experience to be determined by the geographic region of the maquiladora facility.

Frequently, the IRS deploys agents in the headquarters of large corporations to audit the company's accounts and records. Under NAFTA, enforcement actions by both Customs and Federal tax authorities of all the Treaty partners take on increased importance. Given the pattern of focusing on larger corporations for routine tax and customs examinations, the agencies may be expected to target the larger corporations and their maquiladora subsidiaries for examination of their new enforcement responsibilities. Those in maquiladora management positions were asked whether the IRS or Hacienda had reallocated income or deductions with their related corporate entity. In addition, inquiry was made into whether U.S. or Mexico Customs had elevated the issue of consistent valuation of internal sales for duty and cost of sales purposes. These results are reported on Tables VI-5 through VI-8.

There were two statistically significant relationships that emerged from these lines of inquiry. The first was that the IRS has had a tendency to reallocate income among maquiladoras in the industrial products industry. The second finding was that Hacienda had a tendency to challenge the methodology of income allocation among maquiladoras located in the Mexican state of Tamaulipas. Inasmuch as the larger maquiladoras tend to be concentrated in the Reynosa and Matamoros industrial parks compared to elsewhere along the entire U.S.-Mexico border area, one may infer that Hacienda appears to be emphasizing size as a selection criteria. The finding that the IRS has only focused on maquiladoras in the industrial products industry leads one to infer that the IRS is relatively quiescent in examining of maquiladoras, at least from a transfer pricing standpoint. A second conclusion is that the possession of a transfer pricing study prepared by an external consultant has satisfied IRS examiners. Thirty-nine (approximately 49 percent) of the respondents indicated that their company had a transfer pricing study prepared for it. The existence of the transfer pricing study by an external consultant is usually sufficient to satisfy IRS questions. This may explain why it appears the IRS has not been active in challenging income methodology among the maquiladora population of companies as a whole.

As discussed in Appendix III of this document, penalty provisions of 20 percent or 40 percent of the underpayment amount apply to taxpayers using a non-arm's-length price to file a tax return. However, results of this survey indicate that both the IRS and Hacienda have been relatively quiescent in disclosing underpayment of taxes resulting from filing a return using a non-arm's-length price. Only 8 percent of respondents acknowledged that the IRS has reallocated income of the maquiladora as the result of a transfer pricing audit. Hacienda has been somewhat more active, having reallocated 13 percent of respondents. Referring to the earlier discussion of maquiladoras having had a completed transfer pricing study, if 39 percent of respondents have not had a transfer pricing agreement, and only 8 percent have had an income reallocation resulting from a transfer pricing audit, then the other 31 percent represent maquiladoras that have yet to show up on the IRS audit list.

Protection from penalties assessed by the IRS for engaging in transfer pricing practices not meeting the standard of "arms length with an uncontrolled taxpayer" requires preparation of a transfer pricing study. Entering into such a process requires experts in each country: attorneys, economists, CPAs, customs brokers, and translators. Such expertise is expensive and consequently small manufacturers must consider the cost of such a process against the risk of heavy penalties ensuing from use of a materially misstated transfer price. The objective of the study is to establish the uncontrolled arms length price; this procedure then becomes a rebuttable defense for the importer.

Maquiladoras are exposed to the risk of penalties for import price manipulation. To empirically test the degree that maquiladora management has obtained such studies, specific questions related to this issue were included in the survey. As shown on Table VI-9, statistically significant relationships were obtained; firms with sales of more than $50 million annually are more likely to have a transfer pricing study. In addition, those firms obtaining a transfer pricing study are likely to be in the electronics industry. One could conclude from these results that the maquiladora's size is an important determinant in deciding to have a transfer pricing study prepared for it. Such a finding is consistent with the operating methods of the IRS. Because of the penalty provisions of 20 percent or 40 percent of the underpayment, the larger maquiladora companies would be more tempting targets by IRS agents seeking to find unreported or underreported tax revenue.

Table VI-4

Degree of Management Planning for 2001 Transition Changes				
Dependent variable=little transition planning	**Probit-Regression Results**			
	Max. Likelihood Estimates		**Partial Derivatives**	
Explanatory Variables	**Coefficient**	**S.E.**	**Coefficient**	**S.E.**
Constant	-0.7802	0.6624	-0.2366	0.1945
Annual Sales < $5 million	0.7036	0.4023*	0.2134	0.1209*
Plants w/ < 100 employees	-0.7839	0.4731*	-0.2377	0.1405*
U.S. Domicile Parent	-0.3012	0.4579	-0.0913	0.1391
Multinational Parent	0.0005	0.4782	0.0002	0.1450
Tamaulipas Location	-0.2858	0.3617	-0.0867	0.1097
Electronics Products Industry	0.4679	0.4941	0.1419	0.1491
Industrial Products Industry	0.7489	0.3974*	0.2271	0.1181*

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log likelihood = -37.69
N = 82

Table VI-5

Degree of Management Planning for 2001 Transition Changes				
Dependent variable = moderate to extensive planning	**Probit-Regression Results**			
	Max. Likelihood Estimates		**Partial Derivatives**	
Explanatory Variables	**Coefficient**	**S.E.**	**Coefficient**	**S.E.**
Constant	-1.1962	0.6107	-0.4755	0.2451
Annual Sales > 5 million	-0.6882	0.3460*	0.2736	0.1377*
Plants w/ 100 – 500 employees	-0.5873	0.3346*	-0.2334	0.1339*
U.S. Domicile Parent	-0.0168	0.4670	0.0067	0.1856
Multinational Parent	1.3323	0.4715**	0.5300	0.1883**
Tamaulipas Location	0.2454	0.3557	0.0975	0.1414
Electronics Products Industry	0.0120	0.4533	0.0048	0.1802
Industrial Products Industry	-0.1151	0.3692	-0.0458	0.1467

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log likelihood = -36.53
N = 82

Table VI-6

The IRS has reallocated income or deductions with our related corporate group as a result of a transfer pricing audit

	Probit – Regression Results			
Dependent variable = income has been reallocated by IRS	**Max. Likelihood Estimates**		**Partial Derivatives**	
Explanatory Variables	**Coefficient**	**S.E.**	**Coefficient**	**S.E.**
Constant	-1.4522	0.8348	-0.1802	0.1040
Annual Sales $5-$20 Million	-0.1264	0.6890	-0.0157	0.0856
Annual Sales > 20 Million	0.5189	0.5898	0.0644	0.0724
Multinational Parent	0.0606	0.6553	0.0075	0.0812
U.S. Domicile Parent	-0.7245	0.6100	-0.0899	0.0741
Tamaulipas Location	-0.3462	0.5351	-0.0430	0.0652
Electronic Products Industry	0.4849	0.7757	0.0602	0.0924
Industrial Products Industry	0.9272	0.5993*	0.1150	0.0675**

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log Likelihood = -19.90
N = 82

Table VI-7

Hacienda has reallocated income or deductions with our related corporate group as the result of a transfer pricing study

	Probit – Regression Results			
Dependent variable = income has been reallocated by Hacienda	**Max. Likelihood Estimates**		**Partial Derivatives**	
Explanatory Variables	**Coefficient**	**S.E.**	**Coefficient**	**S.E.**
Constant	-2.1028	0.8120	-0.3257	0.1132
Annual Sales $5 - $20 Million	0.5102	0.5592	-0.0790	0.0879
Annual Sales > $20 Million	0.5773	0.5358	0.0894	0.0837
Multinational Parent	-0.6450	0.5064	-1.0000	0.0792
U.S. Domicile Parent	0.2494	0.5369	0.3863	0.0824
Tamaulipas Location	0.9989	0.5589*	0.1547	0.0777
Electronic Products Industry	-0.3394	0.6658	-0.0526	0.1024
Industrial Products Industry	0.3046	0.4687	0.0472	0.0722

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log likelihood = -23.30
N = 82

Table VI-8

U.S. Customs has raised the issue of consistent valuation of internal sales for duty and cost of sales purposes				
	Probit – Regression Results			
Dependent variable = income Has been reallocated by U.S. Customs	**Max. Likelihood Estimates**		**Partial Derivatives**	
Explanatory Variables	**Coefficient**	**S.E.**	**Coefficient**	**S.E.**
Constant	-0.7813	0.5534	-0.2564	0.1757
Annual Sales $5 - $20 Million	-0.9801	0.4138	-0.0322	0.1358
Annual Sales > $20 Million	-0.1953	0.3872	-0.0641	0.1269
Multinational Parent	-0.0501	0.4293	-0.0165	0.1409
U.S. Domicile Parent	-0.0798	0.4465	0.0262	0.1465
Tamaulipas Location	0.1306	0.3512	0.0429	0.1152
Electronic Products Industry	0.4585	0.4444	0.1505	0.1456
Industrial Products Industry	0.1233	0.3684	0.0405	0.1209

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log likelihood = -42.36
N = 82

Table VI-9

Mexico Customs raised the issue of consistent valuation of internal sales for duty and cost of sales purposes				
	Probit – Regression Results			
Dependent variable = income has been reallocated by Mexican Customs	**Max. Likelihood Estimates**		**Partial Derivatives**	
Explanatory Variables	**Coefficient**	**S.E.**	**Coefficient**	**S.E.**
Constant	-1.4414	0.6372	-0.3747	0.1520
Annual Sales $5 - $20 Million	0.3412	0.4473	0.0887	0.1159
Annual Sales > $20 Million	-0.4417	0.4362	-0.0115	0.1134
Multinational Parent	0.5588	0.4970	0.1453	0.1282
U.S. Domicile Parent	-0.0458	0.4775	-0.0119	0.1242
Tamaulipas Location	0.3560	0.3874	0.0925	0.1004
Electronic Products Industry	-0.2893	0.4776	-0.0752	0.1242
Industrial Products Industry	-0.2111	0.3980	-0.0549	0.1036

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log likelihood = -34.07
N = 82

Table VI-10

Respondents having had a transfer pricing study prepared for their maquiladora

	Probit – Regression Results			
Dependent variable = A transfer pricing sturdy had been completed for the respondent	**Max. Likelihood Estimates**		**Partial Derivatives**	
Explanatory Variable	**Coefficients**	**S.E.**	**Coefficients**	**S.E.**
Constant	-0.5901	0.4001	-0.2345	0.1602
Plants w/ 100-500 employees	0.1952	0.3904	0.0776	0.1552
Plants w/ > 500 employees	0.0552	0.5291	0.0219	0.2102
Annual Sales $20-$50 Million	0.4663	0.4755	0.1853	0.1890
Annual Sales > $50 Million	0.9211	0.4979 *	0.3660	0.1977 *
Multinational Corporation	0.7563	0.3916	0.0301	0.1556
Electronic Products Industry	0.7520	0.4449 *	0.2988	0.1767 *
Industrial Products Industry	0.1847	0.3456	0.0734	0.1374

*, **, *** indicate the significance levels at the 10%, 5%, and 1% , respectively, using two-tailed tests.

Log likelihood = -45.73
N = 82

Summary and Conclusion

There are two important conclusions drawn from this chapter. First, it appears that small maquiladoras (annual sales less than $5 million) have done little planning for the transition to the full implementation of the NAFTA Treaty on January 1, 2001. Second, one could conclude that from the survey the results that the IRS, Hacienda, and the U.S. and Mexican Customs have seemingly been quiescent in challenging income allocations methods between the two countries.

The first conclusion—that little transition planning is being conducted by the small maquiladoras—indicates that some smaller operations may not survive in the post-period, when the Treaty is fully implemented. The smaller maquiladoras are most frequently suppliers to larger maquiladora plants or plants located outside Mexico. Their product is originating product under the provisions of the Treaty. Therefore, their management may have concluded that transition planning would be unnecessary. In the period after full Treaty implementation, a cost advantage is conferred on component production from all maquiladora plants supplying plants located within the three NAFTA partner countries, as compared to those supplying other global component producers. The cost advantage is the amount of import duty charged on like components sourced from non-NAFTA producers. In the context of overall global logistical planning, multinational corporations located in the Canada, Mexico or the U.S. will examine this cost advantage closely in their planning. In fact, this cost advantage may offer a strategic opportunity for the smaller maquiladoras to expand production into other lines.

Therefore, the fact that management of small maquiladoras are not engaging in transition planning represents lost business opportunities to ensure the enterprises' successful survival in the post-implementation period. This fact also shows that smaller firms are not capitalizing on strategic opportunities afforded by the competitive shelter offered by the Treaty against other global producers.

The finding that medium and large maquiladoras are engaging in moderate to extensive transition planning conforms with expectations that the larger business organizations would be alert to the change in operating environment in the post implementation period. This finding represents activities in place in mid-1998, 2 ½ years before the date of full implementation, and an adequate time horizon to complete required planning.

While there was statistically significant evidence that Hacienda had engaged in income reallocation among maquiladoras located in the Mexican State of Tamaulipas, there was no statistically significant evidence from survey respondents that the IRS, U.S. Customs or Mexico Customs have challenged the transfer pricing methodology practiced by maquiladoras. Can this be a reasonable conclusion when one considers the very public discussion of transfer pricing by the U.S. Congress and the IRS since the late 1970's? Perhaps these findings are nothing more than an aberration, explained by the reluctance of companies to disclose anything on the subject of their transfer pricing practices or experience.

Anecdotal evidence emerging since the survey was taken has tended to confirm this dissertation's findings. As of April 21, 1999 the Mexican government had 10 to 15 companies under transfer pricing audit but none of these companies were maquiladoras (BNA, 4/21/99). A "big five" international tax partner located in Mexico City explained that this was due to the fact that the Mexican government would expect to realize more tax collections from non-maquiladora transfer pricing audits than those assigned to maquiladora companies. In addition, the government of Mexico was slow to organize itself to process advance pricing agreements (APAs). In June 1998, a six man cabinet level junta was created to process APAs. Included in the junta were the Secretaria de Hacienda y Credito and the Secretaria de Servicio de Administracion Tributaria. One year later, at its June 1999, meeting, the junta granted approval to 78 advanced pricing agreements covering the tax years 1995 and 1996 (BNA, 9/15/99). In the junta's meeting on October 7, 1999, approval was granted to an additional 91 APAs covering the tax years 1995, 1996, 1997, and 1998.

From a global baseline, of the 706 representatives of multinational firms responding to a 1999 survey conducted by a "big five" CPA firm, 45 % stated they are considering using an APA in the future. This compares with 37% in a similar survey conducted in 1998. However, only 4% of the 48 Mexican companies responding to the survey said they had made use of their country's APA program, and 38% stated they were considering one in the future (BNA, 11/10/99). The fact that the figures representing use by Mexican companies of advanced pricing agreements are lower indicate an inactive audit enforcement strategy by Hacienda in transfer pricing.

The IRS does not publish information on companies with approved advanced pricing agreements. Congress passed a law in 1999 protecting all APAs negotiated with the IRS from public disclosure under section 6103 of the Internal Revenue Code. However, some overall statistics are known. Since the APA program started in fiscal 1991, through January 2000, 230 APAs were approved and of those, 117 were bilateral (BNA, 1/26/00). Because an APA of a maquiladora would be a bilateral agreement between the U.S. and Mexico's tax authorities, this number indicates that there have been few maquiladora APAs. Some 27 companies have self disclosed their APA, and of that population, only 2 were with Mexico (BNA, 1/26/00).

As the result of the survey information developed with this dissertation and the anecdotal evidence developed by the Bureau of National Affairs, Inc., it appears that neither the IRS nor Hacienda have been aggressively auditing the transfer pricing methodologies practiced by maquiladora companies. However, general statistics seemingly indicate both countries are becoming more active in the APA process and this process is better understood by companies subject to transfer pricing enforcement.

Further Caveats

There are substantial limitations on securing research information on the methodologies employed in transfer pricing. In 1999, the U.S. Congress passed a law making disclosure of information contained in APA's a violation of the Internal Revenue Service Code. Therefore, there is no public record of companies obtaining APA's or the standard the IRS used in approving such agreements. In addition, companies are reluctant to disclose such information because of the absence of attorney-client privilege attached to such disclosure and the ultimate consequence that information contained in such a disclosure may be used to their disadvantage. Finally, an international tax partner of a "big five" CPA firm has the expectation that the majority of Mexico companies will not take the APA route; alternatively, most companies will choose to test the sophistication of tax authorities in the tax courts. The expectation by this authority is that future Mexico litigation will be very intense (BNA, 10/27/99).

CHAPTER VII

CONCLUSION AND POLICY IMPLICATIONS OF DISSERTATION

The U.S. trade policy has seen shifts in direction several times in this century. The General Agreement on Tariffs and Trade (GATT) was formulated through eight separate negotiating rounds; the first of these was held in Geneva in 1947 and involved 23 participating nations. The eighth and last round (known as the Uruguay Round) commenced in 1986 and concluded on December 15, 1993; this final agreement involved approval by 116 member nations. The Uruguay Round of GATT established the World Trade Organization (WTO) that replaced the GATT secretariat. The WTO is responsible for extending the GATT structure to the new disciplines agreed to in the Uruguay Round.

Discriminatory arrangements such as regional trade blocs were discouraged under the GATT Treaty. From the GATT's inception in 1947 until the late 1970's, U.S. trade policy involved an unconditional interpretation of the most favored nation clause of GATT. The official position of the U.S. was to be a principal proponent of the multilateral approach to international trade liberalization (Gruben, et.al. 1994). The shift in U.S. trade policy toward bilateral trade agreements in place of GATT-style multilateral agreements represented a major policy shift. According to Gruben and Welch (Dallas fed, 2n Q, 1994, pages 35-51):

> ". . . by the late 1970's, the United States had become frustrated with GATT. The sources of frustration were the caravan effect (GATT negotiations emulate a caravan that moves only as fast as its slowest camel); the free rider problem (some countries, chiefly the less developed ones, have benefited from the multilateral system without much lowering their own barriers); and the rise of trade-related issues not covered by GATT, such as direct foreign investment, trade in services, and intellectual property rights."

Other authors have addressed the justification of regional trading blocks. Hudgins (e.g. 1995/1996) asserted conditions for justifying regional blocks, among them being the elimination of internal trade barriers between a limited number of trading partners.

Appleyard (1998) describes the conflict between "rules based" versus "results based" U.S trade policy. "Rules based" trade policy adheres to international trade codes, such as those embodied in the WTO. "Results based" trade policy adheres to pragmatic evaluation of trade relations on an individual trading partner level. Each policy type directs a different approach to duties and trade barriers as instruments of trade policy. Super 301 and government directed trade policy (discussed on page 16) are examples of the U.S. application of "results based" policies. The long period of promotion of GATT and WTO trade regimes are examples of the U.S. application of "rules based" policies. Seemingly, the adoption of the NAFTA Treaty represents a blend of both "rules based" and "results based" policies. The Act certainly embodies WTO style trade rules.

The results of this dissertation suggest that there have been economic benefits from NAFTA. National per capita manufacturing income was statistically significant and positive in the post NAFTA period as commented on at page 28. At the border level, those states in direct proximity to Canada and Mexico experienced statistically significant higher gross state product in the post-NAFTA period than before. Also, this research validates the neo-classical growth theory predicting that states with smaller economies are growing faster than those with the larger economies.

With respect to the governmental institutions charged with the authority to enforce Treaty provisions, the results of this dissertation suggest restrained intervention on their collective parts. Findings were that both the IRS and Hacienda have been relatively quiescent in their examination for underpayment of income taxes caused by overstatement of product transfer prices. The same conclusion applies to the customs departments of Mexico and the U.S. These agencies appear to be more concerned with enforcement of the originating/non-originating provisions of the Treaty than enforcing transfer pricing legislation.

Finally, a conclusion determined by this research is that the profile of companies engaging in transition planning conforms with expectations: the larger maquiladoras have engaged in transition planning while the smaller ones have not. This characteristic appears to be attributable to the role that firm size plays in the need for long-range planning. Larger maquiladoras tend to be part of a global manufacturing program of large multinational corporations while small maquiladoras tend to be single product enterprises with discrete markets. Some smaller maquiladora plants may sell their product to the large maquiladora plants performing the required transition planning, and others may perform specific labor intensive processes integrated into manufacturing lines located elsewhere for a U.S. or other multinational parent corporation. Therefore, as of the date of this research, the transition planning requirement appears to be engaged, consistent with the size and exposure of the maquiladora.

The conclusion of the economic success of the NAFTA Treaty has important national policy implications. The Treaty appears to be a blend of "rules based" and "results based" policy initiatives. The policy implication therefore is that this blending approach will influence future trade policy decisions and initiatives. Simply stated, trade policy should be crafted to adhere to commonly accepted international guidelines and codes of behavior while advancing the U.S. economic interest vis-à-vis a specific trading partner or regional grouping of partners.

With respect to the institutional enforcement of the Treaty on both sides of the border, responses by maquiladora management appeared neutral. Overbearing institutional enforcement measures were not disclosed, leading to the conclusion that transitional enforcement changes were likely active in the government enforcement agencies as well. Thus, the period from January 1994, to January, 2001, may well be characterized as an adjustment period for both the private and public sectors. This may well have been what the Treaty framers had in mind in fashioning the transition in stages.

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APPENDIX ONE

A TECHNICAL DISCUSSION OF THE ROLES OF THE INTERNAL REVENUE SERVICE AND THE U.S. CUSTOMS SERVICE IN INTERNATIONAL TRADE

IRS ENFORCEMENT OF TRANSFER PRICING LEGISLATION

As the world economy has grown increasingly interrelated, opportunities for international expansion have developed. Multinational companies have been swift to organize to exploit these opportunities, and formerly "domestic-only" companies have organized themselves into multinational companies. Because of the difference in tax policies between nations, where a company earns its profits has become as important as how much is earned. Tax rate or tax code structure arbitrage became an important determinant in structuring international transactions. Efforts by the U.S. and other industrialized governments to counter the loss of technology by means of domestic tax policy have been significantly less visible than measures of under-industrialized governments to intervene and transition their economies.

Transfer pricing refers to the pricing of goods and services that are transferred (bought and sold) between corporate or other trading entities. The goods and services subject to such pricing includes raw materials, semifinished and finished goods, allocation of fixed costs, loans, fees, and royalties for use of trademarks, copyrights, an other intellectual property. Transfer pricing manipulation is presumed to exist only between related company entities. Non-related entities are presumed to deal with each other on an arm's length basis, and would seldom come under scrutiny for price manipulation.

Reasons for manipulation of transfer prices can be more complicated than simply the reduction of import duties and income taxes. Arpan (1994) has listed the following conditions in a subsidiary's country inducing high or low transfer prices on flows between affiliates and the parent.

Conditions in subsidiary's country inducing *low transfer prices* on flows from parent and *high transfer prices* on flows to parents	Conditions in subsidiary's county inducing *high transfer prices* on flows from Parent and *low transfer prices* on flows to parents
High ad valorem tariffs	Local partners
Corporate income tax rate lower than in parent's country	Pressure from workers to obtain greater share of company profit
Significant competition nationalize or expro-	Political pressure to
	priate high-profit foreign firms
Local loans based on financial appearance of subsidiary	Restrictions on profit or dividend remittances
Export subsidy or tax credit on value of exports	Political instability
Lower inflation rate than in parent's Country	Substantial tie-in sales agreements Price of final product controlled by government but based on production cost
Restrictions (ceilings)in subsidiary's	Desire to mask profitability

products that can be imported	of subsidiary operations to keep competitors out

It is likely that a country will simultaneously have conditions favoring both high and low transfer prices. For example, a country experiencing balance of payments difficulties may be restricting dividend outflows. A company using high transfer prices on sales to its subsidiary in such a country would succeed in taking out more money than it might otherwise have been able to get out. Alternatively, for countries with high ad valorem tariffs and low income tax rates, underpricing goods shipped to an affiliate lessens the duties and increases subsidiary profits because of lower input costs, resulting in higher income for the subsidiary. The specific combination of advantage conditions changes in each country over time, and alert companies are constantly reevaluating and changing transfer pricing strategies. However, such changes will be limited by measures adopted by many governments designed to thwart such actions. These limiting measures are described in the remaining portion of this paper.

Technology is frequently developed in an industrialized country, development expenses written off as tax deductible expense, and the technology then transferred to a related entity located in a tax haven or under-industrialized country for production and the realization of the related income. Transfer prices can be manipulated to lower taxable income in a given country, introducing the opportunity for tax rate and tax code structure arbitrage referred to earlier. Examples of efforts by the U.S. Government to counter these moves by multinational companies have included:

1. Strengthening the transfer pricing rules included in the Internal Revenue Code.

2. Developing the methodology of taxing future income of technology developed by U.S. parent corporations, but licensed to foreign subsidiaries located in countries featuring lower labor costs.

3. Enacting laws that establish the right and authority of the Internal Revenue Service to examine costs incurred by non-domestic corporations, on products marketed within the United States, with the objective of determining that an appropriate level of taxable income is recorded on the books of the U.S. Corporation.

4. Challenging, through the U.S. Courts, the reported income of foreign controlled U.S. Corporations.

5. Asserting Corporations "permanent establishment" status in audits of multinational corporations so that income of foreign parents may be taxed to the extent realized in the United States. Needless to say, "the extent realized" is a battle the foreign corporations would prefer to avoid with the IRS.

In the U.S., the enabling measures for these efforts have been contained in the following sections of the Internal Revenue Code:

1. Section 482 - which authorizes the Commissioner to allocate income and deductions among affiliated Corporations.

2. Section 6038A - which imposes information reporting and record keeping requirements on U.S. Corporations owned by a foreign person

3. Section 6038C - which imposes information reporting and record keeping requirements on foreign corporations engaged in business in the United States.

4. "Permanent establishment" clauses within tax treaties negotiated between the United States and most other countries (del Castillo, pg. 128).

Transfer Pricing Law and Regulations Before 1986

IRC Section 482 authorizes the Commissioner to allocate income and deductions among affiliated corporations. The earliest allocation authority of this type was granted in Article 77-78, War Revenue Act of 1917. The Revenue Act 1921 extended this authority and required that the Commissioner prepare consolidated returns for commonly controlled corporations. Authority for intercorporate allocation by the Commissioner was further extended by the 1928 Revenue Act (as section 45) (Treasury, 1988). The 1928 extension of authority was expressly predicated upon the duty to prevent tax avoidance and ensure the correct reporting of income among related parties.

Through the early 1960's a small number of United States and foreign companies had multinational affiliates. As a consequence, section 482 had little impact on income reported by country. However, in 1962 Congress considered how to stop U.S. companies from shifting U.S. income to foreign subsidiaries. No strengthened legislation was enacted until 1968. In the 1968 Proposed Treasury regulations, attempts were made to establish rules for specific kinds of intercompany transactions (Treasury, 1988). The requirement was reaffirmed that the taxpayer be able to demonstrate its use of an arms' length price under the comparable uncontrolled price method. Specific transaction-oriented models for making transfer pricing determinations were adopted in lieu of "mechanical safe havens" based on profit margins, percentage mark-ups or mark-downs.

On October 18, 1988, the Treasury Department issued a study entitled Section 482 White Paper On Intercompany Pricing. Among other things, this paper outlined the significant enforcement difficulties the IRS International Examiners were encountering in administering the regulations. In the paper, Treasury stated that its two primary problems in administrating section 482 were:

(1- The difficulty in obtaining pricing information from taxpayers during an examination.

(2- The difficulty in valuing intangible -- property connected to sales of tangible property (Treasury).

Actions Taken Through the U.S. Courts

A series of landmark judicial actions were undertaken in the 1980's in connection with the Internal Revenue Service's intention to enforce IRC 482. Preliminary audit of its returns for the tax years ended in 1975 through 1978 indicated to the IRS that prices paid by Toyota Motor Sales, Inc.-USA (Toyota USA) for automobiles manufactured by the parent, Toyota Motor Corporation (Toyota Japan) did not permit the domestic entity to make profits commensurate with the economic functions carried out (McCawley, 1991). The IRS concluded that profits earned by the U.S. subsidiary were intentionally shifted to the Japanese manufacturer through a transfer pricing structure. By shifting income, Toyota deprived the U.S. of tax revenues to which it was entitled.

Toyota Japan opposed the IRS enforcement action on the grounds of questioning:

(1- Whether the (U.S.) court has personal jurisdiction over Toyota Japan.

(2- Whether the subject matter jurisdiction existed over the IRS enforcement petition.

(3- Whether the venue is proper in the Central District of California.

(4- Whether Toyota Japan was properly served with process.

The Court sided with the IRS and denied Toyota's motion to dismiss on all four points in Order of March 14, 1983. In a second judicial action against Toyota USA, the Court again sided with the IRS regarding disclosure of records. In the language of the Court's decision (Feinshcreiber, 1995):

> "Of greater significance is the possibility that disclosure of Toyota Japan's financial records might undermine the national interests of the Government of Japan. Although Japan does not have a "blocking" statute prohibiting disclosure of the information requested here, its Government has taken the position that, in this case, compelling the production of documents located in Japan would violate international law. With all due respect to the Government of Japan's position, this Court must reject such a restrictive view in light of the authorities cited above. Although the Government of Japan may have valid concerns about the potential from double taxation arising from the IRS audit, this interest does not support a conclusion that the IRS request for information should be denied. The information sought by the IRS is necessary for a fair and accurate determination of Toyota U.S.A.'s tax liability; therefore, enforcement of the summons should help minimize the possibility of a double taxation situation arising. The IRS is, of course, bound by the Tax Treaty provisions designed to avoid double taxation"

In a third judicial action, the IRS petitioned the Court to require production of records by VETCO, Inc., an American corporation manufacturing offshore drilling equipment, and a wholly-owned subsidiary of the Swiss parent, VETCO International A.G. The court action also included the accountants, Deloite Haskins and Sells, the external accounting firm of VETCO, Inc. The Court again sided with the Internal Revenue Service, requiring the production of records even though that act may expose the officers of the Corporation to criminal liability under Swiss law. The conclusion of the Court was (Feinschreiber, 1995):

> "The district court did not err in failing to enter findings of fact and conclusions of laws. The Swiss-U.S. tax treaty does not preclude use of IRS summonses to obtain records of Swiss subsidiaries of American firms. Possible criminal liability in Switzerland does not preclude enforcement and sanctions. Application of a balancing approach in this case favors enforcement and sanctions. The interest of the United States in enforcement of the summons outweighs the contrary Swiss interest, and appellants have not shown a substantial likelihood of a successful Swiss prosecution.
>
> The orders appealed from are affirmed."

<u>The Legislative Response to the IRS Judicial Actions and Successes</u>.

The difficulty experienced by the Internal Revenue Service in obtaining data to effectively exercise authority under IRC section 482, as exemplified by the Toyota and VETCO cases, led Congress to expand reporting requirements in the Revenue Reconciliation Act of 1989 (McCawley, 1991). Amendments on the section 6038A renders it economically impossible for a foreign controlled corporation to operate in the U.S. unless it promptly makes all kinds of information available to the IRS, <u>irrespective of whether such information is contained in existing documents</u>.

One can speculate on the motivations of Congress in enacting this sweeping legislation. Notions of lost tax revenue and providing a level playing field for domestic corporations may have been two motivating factors. However, the thrust of these laws is that if any foreign owned corporation conducting business operations in the United States which fails to provide any and all information the IRS may reasonably require on transfer prices with related entities, may then be subject to severe penalties (McCawley, 1991). In addition, should such a foreign controlled corporation and/or related party fail to respond to an IRS summons for information, the IRS may proceed to make IRC Section 482 adjustments on whatever grounds it chooses, virtually immune to effective challenge in Court. These laws and regulations were enacted in the Revenue Reconciliation Act of 1989 (RRA) and the Omnibus Budget Reconciliation Act of 1990 (OBRA 1990).

As stated in the new regulations, the sole and exclusive purpose of IRC section 482 is to ensure that taxpayers clearly reflect income consistent with the economic substance of the business operations performed. Among controlled related corporations, the opportunity to maneuver income to the most favorable taxing jurisdiction manifestly exists. For the Internal Revenue Service, section 482 enforcement reduces to a very simple concept which is very complex to carryout. The 1994 regulations establish an arm's length standard to pricing between related parties (Lasser et al, 1995). The specific language in the 1994 final regulations is that:

> "... the standard to be applied in every case is that of a taxpayer dealing at arm's length with an uncontrolled taxpayer."

The arm's length standard is tested through comparison with comparable uncontrolled transactions.

The concept of comparable uncontrolled transactions encompasses from board economic functionality to narrow manufacturing process and technique. The U.S. standard, as established in the final IRC Section 492 regulation published in 1994, were originally crafted by the Organization for Economic Cooperation and Development

(OECD). The OECD guidelines were published in 1979, reissued in 1984, and at the present time, have been adopted by most industrialized countries.

Transfer prices are required to be determined by the "best method" rule. This requires that taxpayers use one of six methods for controlled transfer of tangible property, and one of four methods for intangible property (Sec. 492 Regs.). Methods for tangible property are:

1. the comparable uncontrolled price
2. the resale price method
3. the cost plus method
4. the comparable profits method
5. the profit-split method
6. unspecified methods

A brief description of the Research Institute of America's technical discussion of these methods follows:

The comparable price method (CUP). Transactions involving comparable or similar products exchange price unrelated parties need to be identified under this method. The exchange price agreed to by the uncontrolled parties is an independent arm's length measure of the price that should be applied to the controlled transaction, assuming everything else is equal. Obviously, many factors impact comparability - functionality, risks, contractual terms, economic conditions, similarity of products and service, for example. Thus, a comparison is made between the unrelated and the related parties, adjusted by identified factors.

The resale price method (RSP). Situations involving distribution or resellers usually require this method. The starting point of the analysis is the market-based retail price of the tangible property. The arm's length price is calculated by reducing this retail price by a gross profit percentage that is actually earned by distributors of similar products operating under similar circumstances. The RSP method shifts the focus toward functional comparability.

<u>The cost plus method (CP).</u> The computed cost plus method is appropriate when the controlled party manufactures, produces or assembles the transferred product. Under this method, the arm's length price is calculated by adding the gross profit margin (denominated in cost, not sales price) observed and documented uncontrolled transactions to the cost of goods sold actually incurred by the controlled party. As with other intercompany pricing methods, functional analysis is required to compare and adjust for the differences between the controlled and uncontrolled parties.

<u>The comparable profits method (CPM).</u> A comparable operating profit range is generated under this method. The earnings of the controlled party should fall within this range if its profitability reflects the same market forces encountered by the comparable, uncontrolled parties. The IRS' regulations describe the profit level indicators as ratios that measure the relationship of various financial an economic variables to each other.

<u>The profit split method (PSM).</u> Sometimes referred to as the formulary method, PSM evaluates whether the allocation of the combined operating profit or loss attributable to one or more controlled transactions is arm's length by reference to the relative value of each controlled party's contribution to the combined operating profit. In bilateral advance transfer price agreement negotiations, formulary methods often serve as a compromise method settlement between the interests of the bilateral parties.

<u>Other acceptable methods</u>. The regulations allow "other acceptable methods", but provide no clear guidance as to what those may be (RIA, vol. 5, 64406 to 64449).

Transfer pricing methodology applies to both tangible and intangible property. Intangible assets are not visible on the balance sheet as are tangible assets such as cash, inventories, plant and equipment. However, intangibles are frequently the difference between earning a normal return on investment and acceding to the level of excess earnings. Furthermore, the connection between intangible assets and intellectual property is often close, but its impact on operating profits not always discernible. Therefore, valuation techniques of intangible assets for transfer pricing purposes exhibits their own complex characteristics.

The Tax Reform Act of 1986 included legislative provisions placed there on the belief that R and D costs were incurred by a U.S. Corporation, and then transferred to foreign related entities where related income was earned (Wright, 1993). The 1983 proposed regulations established authority of the IRS to audit subsequent income of foreign U.S. affiliates utilizing U.S. developed technology, and this authority remains in the final 1994 section 482 regulations.

TRA '86 provides that the standard for dealing at arm's length on intangible property shall be that "income from a transfer or license of intangible property shall be commensurate with the income attributable to the intangible." In this case, income takes the form of royalty and the question of whether the royal is reasonable turns on the valuation of the intangible asset by the licensensor. The three generally accepted methods of valuing intangible assets are: cost, market and income (Feinschreiber, 1995). The value placed on an intangible asset by one of these three methods will determine the royalty rates.

> <u>Cost approach</u>-Develops valuation based on the cost to create and develop the asset.
> <u>Market approach</u>-Develops the valuation based on comparable transactions between unrelated parties.
> <u>Income approach</u> -Develops the valuation based on the present value of expected future income derived from the intangible asset. There are four

subsets of approaches within the income approach: excess earnings method,postulated loss of income method, relief from royalty method, and the residual income or rate of return method.

Comparable uncontrolled transactions, as it applies to intangible property, has the following limitations to meet comparability (Wright, 1993):

(1-Same type of product, process, and know-how

(2-Have the same profit potential as measured by the net present value of benefits, considering capital investment, start-up expenses and risk.

Thus, the IRS has the authority to review royalty agreements compensating the U.S. parent for technology transferred aboard, and adjust that income recognition to arms' - length standards.

The regulations permit periodic adjustments of compensation by the IRS based on subsequent determination of the income attributable to other intangibles (Wright, 1993). In addition, certain contemporaneous documentation is required to support a taxpayer's transfer pricing methodology. The regulations require documentation to cover nine specific facets of a transfer pricing analysis. The regulations use the term "must include", which implies these documents to be a minimum threshold level (Feinschreiber, 1995 Cumulative Supplement #1):

(1- Business overview - an analysis of the economic and legal factors affecting the pricing of its property and services.

(2- Organization structure - an organization chart of "who owns" or "who owns what."

(3- Section 482 documentation - an analysis of the requirements detailed in IRC see 482 for determining a proper transfer price.

(4- Method selection - a description of the alternative methods considered by the taxpayer and reasons for the selection.

(5- Rejected method - a description of the alternative methods considered by the taxpayer and reasons for rejection.

(6- Controlled transaction - a description of transactions between related parties, including terms of sale.

(7- Comparable - identification of price comparable used how comparability was evaluated, and the required adjustments.

(8- Economic analysis and projections - an explanation of the economic analysis and projections used in the transferring pricing conditions.

(9- General index - a general index encompassing both the principal documents and background documents contained in the study.

If the IRS concludes the taxpayer has erroneously calculated its transfer prices, accuracy related provisions described in IRC Section 6662 can be applied. However, the penalties that might otherwise apply, can be avoided if the taxpayer can furnish the above described documentation within thirty days of the IRS request. Therefore, it is obvious that all multinational corporations engaged in related party transactions prepare the documentation in advance, and have it updated annually (Feinschreiber, 1995).

Penalty Provisions Applicable to Transfer Pricing Misstatements

In establishing what the correct transfer price for related party transactions should be, the regulations introduce the concept of “arm’s length range”. This concept presumes that for any given product, three possible conditions exist (Feinschreiber,1995):

(1- There is just one arm's length amount: i.e., there is no range.

(2- The arm's length range applies to comparable transactions.

(3- The transactions are not comparable, and the arm's length range could be used if statistical methods were employed.

The taxpayer's pricing will not be adjusted if the IRS calculated transfer price is within the arm's length range.If the IRS discovers that the taxpayer used a non-arm's-length price to file a tax return, either a 20% or a 40% penalty applies. The following summarizes the categories of penalties for substantial valuation misstatement (Wright,1993).

Penalty percentage applies to underpayment amount	Valuation misstatement
20%	The IRS calculated price is 200% or more (or 50% or less) of the tax return price... or the net adjustment exceeds $10 million for a year.
40%	The IRS calculated price is 400% or more (or 25% or less) of the tax return price... or the net adjustment exceeds $20 million for a year.

For a given taxable year under examination, the IRS aggregates all proposed increases and decreases to determine if the $10 million and $20 million thresholds are met.

Penalty provisions have also been established for failure to provide documentation requested by the IRS in connection with a IRC section 482 examination. A penalty of $10,000 for failure to furnish any information required by the IRS within 30 days of receipt of the request. Thereafter, the reporting corporation must bring itself into compliance within 90 days or pay additional penalties of $10,000 for each 30-day period as long as the penalty continues (McCawley, 1991). Exceptions to the application of these penalties are narrowly drawn and therefore not useful in the ordinary course of operations.

Legislative Initiatives to Enforce IRC Section 482 Against Foreign Controlled U.S. Corporations

As described in the introduction to this section, Congress seems to have decided that if foreign controlled corporations conduct business operations in the U.S., they will have to comply with U.S. law irrespective of the consequences such compliance may cause in the foreign parent's home country. For IRC section 482 to be effectively administered, there must be records. The business records to be examined are manufacturing cost records, functional expense, and attendant administrative records. Obviously, if foreign controlled U.S. corporations raise the defense that such records do not exist, IRC section 482 enforcement would be significantly weakened. The IRS commented on the difficulty of obtaining pricing information in the White Paper On Intercompany Pricing published in 1982 (Treasury, 1988) . Toyota, Japan raised the non-existent record defense in the court cases earlier discussed.

In the 1989 Revenue Reconciliation Act (RRA), Congress took legislative action to eliminate the non-existent record defense. Furthermore, the 1989 RRA amendments replaced the 1982 standard of 50% foreign control with the new language of "25% foreign owned"(Feinschreiber, 1991). The language "foreigner owned" is interpreted to mean 25% of the voting power or total value of all classes of the U.S. corporations stock. This single definition may allow some maneuver room by foreign owners to escape application of the new reporting requirements.

Corporations meeting the 25% foreign ownership rule must now file IRS Form 5472 with their annual income tax return. Form 5472 is an information return that sets out monetary and non-monetary transactions (Feinschreiber, 1991). If the reporting company is then selected for IRS audit, books and records must be available pertaining to all factors which enter into the transfer pricing methodology. The reporting corporation may satisfy these requirements by having completed the transfer pricing study described on pages 10 and 11 of this report and having the records to support the study.

The legislation requires that the records be located in the United States, be in English and U.S. dollars, and be made available within 30 days of notice by the IRS. Failure to comply with any of these provisions exposes the company to a $10,000 penalty. Where notified by the IRS of such failure, the reporting corporation must bring itself into compliance within 90 days or pay additional penalties of $10,000 for each 30 day period during which the failure continues. Assuming the reporting corporation meets all documentation requirements outlined above, the IRS then must agree through its own independent analysis that the transfer prices charged are within the arm's-length range earlier discussed. Failure by the foreign controlled corporation to meet this test exposes it to the accuracy related penalties also described on page 12.

The Omnibus Budget Reconciliation Act of 1990 (OBRA 1990) added section 6038C to the IRS code thereby extending the foreign ownership requirements to branches of foreign corporations, and extending the record requirements to all open years tax returns. These is considerable doubt as to the constitutionality of extending the record requirements retroactively to all open years (McCawley, 1991).

Permanent Establishments Under U.S. Income Tax Treaties

The United States Model tax treaty with foreign countries was published by the U.S. Treasury Department in 1981. The Treasury Department expects to publish a revised version of the Model Treaty in the near future (del Castillo, 1994). Virtually all tax treaties the U.S. has with foreign nations have language which create permanent establishments (PEs) for their principals under prescribed conditions.

> 1 Article 7, Section 2 and 3 of the U.S. Model Income Tax Treaty reads as follows (Tax Treaty):
> 2. Subject to the provisions of paragraphs 3, where an enterprise of a Contracting State carries on business in the other Contracting State through a permanent establishment situated therein, there shall in each Contracting State be attributed to that permanent establishment the business profits which it might be expected to make if it were a distinct and independent enterprise engaged in the same or similar activities under the same or similar conditions.
>
> 3. In determining the business profits of a permanent establishment, there shall be allowed as deductions expenses which are incurred for the purposes of the permanent establishment, including a reasonable allocation of executive and general administrative expenses, research and development expenses, interest, and other expenses incurred for the purposes of the enterprise as a whole (or the part thereof which includes the permanent establishment), whether incurred in the State in which the permanent establishment is situated or elsewhere.

In recent audits of both wholly-owned U.S. subsidiaries of foreign corporations and unrelated U.S. corporations, the IRS has been raising the permanent establishment issue. The IRS is asserting that the U.S. branches, offices, technicians, etc. of foreign corporations constitute PEs. As a consequence, the Internal Revenue Service is seeking to impose additional tax upon the net business profits of the foreign corporations attributable to such alleged PEs, in spite of their foreign situs (Mandole, pg. 281). Specifically, the IRS is interpreting the PE section of tax treaties to mean that if any person, branch, or office of a foreign corporation has "sufficient nexus" to become subject to U.S. tax with respect to its business activities, then the business profits attributable to the U.S. PE will be taxed.

Whether a branch, office or employee representative of a foreign corporation constitutes a PE depends on certain criteria, including:

1. the degree of control that the principal exercises over its agent
2. who bears the entrepreneurial risk of the business connection
3. whether the business connection acts in the ordinary course of its business.

The characteristics of U.S. based activities that cause such activities to rise to the level of engaging in business are that they be "considerable, continuous, and regular" (Madole, pg. 287). Once the activities cross the threshold of "engaged in business in the United States, then that foreign corporation is subject to U.S. income tax on its net income "effectively connected" with that trade or business (Madole, 1994).

Whether the United States Treasury, through the offices of the IRS, will be successful in taxing the income of foreign corporations depends on responses by the tax authorities of the treaty partners. Briefly summarized, Madole (1994) sees three possible alternatives:

1. Acceptance of the U.S. characterization of PE income.
2. Rejection of the U.S. characterization, in which case, payment of tax by the affected foreign corporation would result in disallowed expense on the foreign books and double taxation by the affected corporate entity.
3. Appeal of the disputed characterization of income to the "competent authority" dispute resolution mechanism contained in the treaty.

The outcome of these moves to attribute PE status to common business relationships will undoubted have far-reaching consequences. An aggressive IRS posture on PE's would cause foreign businesses to pause before engaging in a business relationship in the U.S. Each relationship would have to be evaluated in the context of a pervasive reach by the IRS to assert a tax liability on income deemed to be "effectively connected" with the U.S. business partner.

The Advanced Pricing Agreement (APA)

Regardless of the transfer pricing methodology utilized, the essential element of the arm's length principle is the arm's length bargain. If related entities have engaged in pricing agreements negotiation that sufficiently resembles arm's length bargaining, then the basis for acceptable transfer pricing exists. Where no such internal arm's length bargaining has taken place, and where no outside comparables exist, what remains is a system of guess estimating, simulating, projecting, that becomes

> "a contest of subjective evaluations where there is more reason to believe the parties would disagree than they would agree" (Boidman, November 1994)

Elaborate statements and explanations of section 482, contained in the final regulations, does not change the essentially vacuous character of the transfer pricing process.

However, the advanced pricing agreement process provides an opportunity for the taxpayer to resolve many potentially intractable issues. For instance, included within an APA negotiation will be the following issues (Gelardi and Wong, 1996):

1. Which method of arriving at the appropriate transfer price rises to the standard of "best method rule" according to the IRS viewpoint, consistent with taxpayer negotiation.
2. Whether and how to segregate financial data according to the taxpayer's lines of businesses and products.
3. Allocations of expenses
4. The appropriate list of comparable companies or transactions.

Therefore, the APA program exists as an alternative to comprehensive examinations by the IRS agents, followed by protracted litigation for resolving the issues of exception (Gelardi et al, 1996).

The process of obtaining an advanced pricing agreement is similar to that of obtaining a private letter ruling from the IRS. The principal point of departure in this analogy is that in the private letter ruling procedure, the IRS renders an opinion on a tax matter that the taxpayer can rely on, and the process terminates at that point. However, in the APA ruling procedure, negotiation between the IRS and representatives of the taxpayer takes place throughout the procedure. In addition, after the APA ruling is finalized, reporting is required to the IRS for the years covered by the agreement. As a final point, the information provided in an APA could be more extensive than that normally supplied in a private letter ruling (Ryan, 1991).

Gelardi et al (1996) describes the advanced pricing agreement negotiation process as follows:

> "The prefiling conference permits the taxpayer an opportunity to have a general discussion with IRS representatives on the legal issues and transfer pricing issues as they may apply to their case. The taxpayer would give a generalized description of its transfer pricing practices, and the results of the practices. As the result of this discussion, the IRS could indicate whether the foreign jurisdiction would be likely to approve an APA. The prefiling conference may be conducted on an anonymous basis, and the taxpayer may request a follow-up meeting to clarify questions developed after the first meeting. From the prefiling conference, the taxpayer may be able to determine the benefits vs cost of pursuing an APA."

The APA request_begins the formal process of negotiation. The request should contain the following detailed information:

1. Description of the taxpayer's business operations
2. Description of the industry in which the taxpayer operates.
3. The functions performed by the taxpayer.
4. Identification of the particular transactions to be covered by the agreement.
5. Application of the proposed transfer pricing methodology to the three years preceding the first year for which an APA is requested. The list of methodologies approved by the IRS are described on page of this dissertation.
6. A report supporting the economic basis for the taxpayer's proposed transfer pricing practices and results
7. Proposed basic terms of the agreement: i.e.,
    a. Up to five years prospectively
    b. Whether the transfer pricing method will be rolled back to the open tax years.

8. A list of critical assumptions on which the continuing effect of the agreement is based.
9. Whether the taxpayer intends to seek approval from foreign tax authorities.

Accompanying the above listed items will be documents generally available such as shareholder annual reports, SEC forms 10-K and 10-Q, internal business plans, third party sales agreements, price lists, invoices, product descriptions, and tax returns. This information would be forwarded to the District Director's office for review. Simultaneously, the taxpayer, or foreign affiliate, might commence proceedings in the foreign jurisdiction.

Evaluation and negotiation of the APA request- A meeting called by the IRS should then occur within two months after an APA request is submitted. The IRS team will usually consist of a lead attorney and an international economist from the national office in Washington D.C., supplemented by agents and economists from the cognizant IRS district. If the taxpayer has requested a bilateral agreement, a competent authority representative will also be present for participation. At the initial meeting, the taxpayer will want to present an overview of the APA request. The following accomplishments should result from the initial meeting:

1. Questions the IRS has about the proposed transfer pricing method.
2. A schedule for handling the case.
3. Dates for IRS agents to visit the taxpayers operations if needed.
4. Schedule for required supplemental filings.

Following the initial meeting, the objective of all parties is for the IRS representatives to reach a sufficient level of comfort regarding the facts in the case. This stage in the process can take anywhere from a few months to more than a year to complete. Final section 482 regulations provide that ". . . transactions between unrelated parties provides the most objective basis for determining whether the results of a controlled transaction are arm's length." (1997 Federal Tax Regulations) Therefore, the follow-on negotiations usually focus on the reliability of the proposed pricing method, and selection of comparable companies or transactions. Unexpected, ancillary issues may arise during this stage of negotiations which may include:

1. Allocation of expenses
2. Sourcing of income.
3. Qualification of foreign taxes for foreign tax credit.
4. Permanent establishment classification
5. Treatment under the tax treaty

Thorough responses to IRS questions appears to be the key to expediting this phase of the negotiations.

<u>Bilateral and multilateral agreements</u> are now developed under a concept of simultaneous case development. In the initial years of the APA program, the IRS discovered that foreign tax authorities were frequently unwilling to accept APA agreements concluded unilaterally by the IRS. This state of affairs led logically to the concept of simultaneous case development whereby the IRS and the taxpayer attempt to coordinate their negotiations with negotiations concurrently proceeding with foreign tax authorities. The bilateral and multilateral nature of these negotiations has led the IRS to make compromises on methodologies and comparables. As and example, according to IRS

sources, representatives of Secretaria de Hacienda y Credito and the IRS meet every three months, alternatively in Mexico City and Washington D.C. to resolve APA requests.

Gelardi, et al (1996) cites the following statistics at the conclusion of his article which should encourage use of bilateral advanced pricing agreements:

1. In 1995, section 482 audit adjustments in large cases total $1.64 billion compared to $1.2 billion in 1994.
2. In 1995, Japan's federal tax authority doubled the number of deficiency adjustments assessed foreign owned companies based on transfer prices
3. Mexico began to be more aggressive on transfer pricing audits in 1994.

Therefore, in conclusion, the APA process may require considerable time to complete and involve significant costs. However, on the positive side, it virtually eliminates the possibility of penalties under section 6662, and can extend over several years if the taxpayer is successful in combining the APA with a rollback to open years. For U.S. based companies (i.e., companies usually subject to section 482, but not section 6662), an APA is designed to limit the scope of tax audits (Feinschreiber, 1994). Five substantial issues are subject to be raised to audit inquiry: (1-compliance with APA terms, (2-validity of the material representations, (3-correctness, (4-validity, and (5-consistency. Therefore, the audit scope is reduced because the District Director is precluded from re-evaluating the transfer pricing methodology itself, and this is area that most frequently is subject to court litigation.

Role of Customs Brokers In International Trade

The U.S. Customs Service is charged with the responsibility of administering the Tariff Act of 1930, as amended. The Service is an agency of the Department of Treasury with headquarters in Washington, D.C. The responsibility for enforcement is discharged through seven geographical regions, and further divided into districts with ports of entry within each district.

The Tariff Act of 1936 assesses tax, referred to as import duty on all goods entering the United States. The process of importing goods into the United States starts with the filing of entry documents for the goods with the district or port director at the port of entry. Upon arrival at a U.S port of entry, goods may be entered only be the owner, purchaser or a licensed custom house broker. After inspection by Customs and payment of estimated duties, delivery to the consignee of the goods may be authorized by Customs. The consignee then accepts goods for release, entry into a warehouse, or transfer in-bond to another port of entry. In the latter case, duties are usually assessed at the second port of entry.

It is evident from the above description that the customs brokers are essential in U.S. international trade. The United States Customs Services regulates customs brokers through the provisions of Part III - Customs Broker, of the Customs Regulations of the United States. Contained in this part of the Regulations are the detailed provisions for:

(1- Requirements to obtain the customs broker license.
(2- Duties and responsibilities of customs brokers.

(3- Cancellation, suspension, or revocation of the license or monetary penalty in lieu thereof.

(4- Monetary penalties assessable against licenses.

Customs brokers may practice as sole proprietors or in partnerships or corporations. The Regulations, Part III, establish rules for practice in each form of organization. In their practice, customs brokers offer the following services to international trade:

(1- Advisory services on the U.S. Customs laws and regulations affecting proposed ventures and expansions.

(2- Upon authorization, act as local representative before Customs, preparing the documentation to clear U.S. Customs on exportation or importation.

(3- Other customs clearing services such as

(a- Holding a shipment for payment of an invoice.

(b- Furnishing documents as may be required by letter of credit.

(c- Obtaining export licenses needed from other governmental agencies.

(d- Calculation of duties, and prepare all entry documentation.

(e- Execution of a bond in case of missing documentation.

(f- Presentation of the entry summary with duty payment to U.S. Customs.

(4- Other logistic type services such as:

(a- Warehousing

(b- Distribution

(c- Shipping

(d- Collecting

Some of the complexity and intricacy in dealing with U.S. customs is described in the next section. Of necessity, the description is abbreviated. Daily operations and related problems are more complex than illustrated here, but this section is intended to describe the day-to-day basics of customs brokers operations.

Customs Brokers Responsibilities Which Interface With IRS Responsibilities

Merchandise entering the United States must be valued first for customs duties and later for company inventory cost. There is an obvious advantage to be gained by valuing imported merchandise inconsistently: low for customs duties and high for inventory cost will lead to a high value of cost of sales and lower taxable income. The IRS methods of establishing imported merchandise valuation was described on pages 45 and 46 of this paper. Methods prescribed by customs regulations for import valuation follow.

Valuation Thresholds and Bases of Appraisement

Generally speaking, merchandise imported into the U.S. for commercial purposes, if valued at more than $1,250, is subject to "appraisement" or valuation. However, certain products such as textiles, shoes and a few other items require appraisement if over $250.00. This is done by the Import Specialist, an officer of the Classification and Value Division of U.S. Customs. This rule applies whether or not the merchandise is classified under special duty reduction tariff provisions such as NAFTA, Generalized System of Preferences (GSP), or any one of the seven other programs allowing special tariff treatment for importing goods into the United States. This appraisement establishes the value of the merchandise for customs purposes, especially for the assessment of import duties. The Import Specialist is prohibited from assigning arbitrary or fictitious values to imported merchandise. Appraisement must be made in accordance with certain formal value definitions or "bases of appraisement" codified in Section 401 of the Tariff Act of 1930, as amended by the Trade Agreements Act of 1979. These bases of appraisement have generally applied to merchandise imported into the United States on or after July 1, 1980 and have been implemented under regulations found in part 152 of the current Customs Regulations (19 CFR 152). The principal basis of appraisement is the transaction value method. Other methods of appraisement in the order of their authorized use are: transaction value of identical merchandise; transaction value of similar merchandise; deductive value and computed value. If the required conditions imposed by a basis of appraisement method cannot be met, the law requires the next alternative to be considered, then the next, and so forth. The order of precedence of the last two values can be reversed if the importer so requests.

Transaction Value of Imported Merchandise

The transaction value of the imported merchandise is the price actually paid or payable for the merchandise when sold for exportation to the United States, plus amounts equal to:

1. Packing costs incurred by the buyer.
2. Selling commission incurred by the buyer.
3. Value of any assist.
4. Royalty or license fee that the buyer is required to pay as a condition of the sale.
5. Proceeds, accruing to the seller, of any subsequent resale, disposal or use of the imported merchandise.

These amounts are added only to the extent that each is not included in the price and is based on information establishing the accuracy of the amount.

The price actually paid (or payable) for the imported merchandise is the total payment, excluding international freight, insurance and other CIF charges, that the buyer has paid or agreed to pay to the seller. This payment may be direct or indirect. An example of an indirect payment would be a seller-reduced price on a current importation to settle a debt owed to the buyer. Such indirect payments are part of the transaction value.

While the law specifies the above five items should be added to make transaction value, it also specifies that transaction value does not include the cost of the following if identified separately from the price actually paid or payable. 19 CFR 152.103(i) lists these as exclusions from transaction value if identified separately from the price actually paid or payable:

1. Any reasonable cost or charge that is incurred for (a) the construction, erection, assembly or maintenance of, or the technical assistance provided with respect to, the merchandise after its importation into the United States or (b) transportation of the merchandise after its importation.
2. The customs duties and other federal taxes currently payable on the imported merchandise by reason of its importation and any federal excise tax on, or measured by the value of, the merchandise for which vendors in the United States ordinarily are liable.

   Example: Equipment is purchased by a U.S. buyer from a foreign supplier. Technical assistance is included in the total contract price for the equipment, and the equipment cannot be purchased without technical assistance. The contract provides a breakdown

> of costs with the cost of technical assistance clearly shown as a separate cost item in the aggregate purchase price. As a consequence, the transaction value of this equipment would not include any reasonable costs for construction, erection, assembly, maintenance of, or technical assistance for the imported merchandise after its importation into the U.S., because these costs are separately identified on the invoice from the foreign vendor.

The definition of transaction value cited above included the term “assist” in item 3. Assists are defined in 19 CFR 152.102 (a) as any of the following items if supplied directly or indirectly, and free of charge or at reduced cost, by the buyer of imported merchandise for use in connection with the production or the sale for export to the United States of the merchandise:

1. Materials, components, parts, and similar items incorporated in the imported merchandise.
2. Tools, dies, molds and similar items used in the production of the imported merchandise.
3. Merchandise consumed in the production of the imported merchandise.
4. Engineering, development, artwork, design work and plans and sketches that are undertaken elsewhere than in the United States and are necessary for the production of the imported merchandise.

No service or work to which the above definition applies will be treated as an assist if the service or work:

1. Is performed by an individual domiciled within the United States.
2. Is performed by that individual while acting as an employee or agent of the buyer of the imported merchandise; and

3. Is incidental to other engineering, development, artwork, design work or plans or sketches that are undertaken within the United States.

The principles for valuing assists as follows:

1. The value is either (a) the cost of acquiring the assist -- if acquired by the importer from an unrelated seller, or (b) the cost of producing the assist -- if produced by the importer or a person related to him.
2. The value includes the cost of transporting the assist to the place of production.
3. The value of assists used in producing the imported merchandise is adjusted to reflect use, repairs, modifications or other factors affecting the value of the assists. Assists of this type include such items as tools, dies and molds.
   For example, if the importer previously used the assist, regardless of whether he acquired or produced it, the original cost of acquisition or of production must be decreased to reflect the use. Alternatively, repairs and modifications may result in the value of the assist having to be adjusted upwards.
4. In the case of engineering, development, artwork, design work and plans and sketches undertaken elsewhere than in the United States, the value is:
   a. The cost of obtaining copies of the assist, if the assist is available in the public domain.
   b. The cost of the purchase or of the lease, if the assist was bought or leased by the buyer from an unrelated person.
   c. The value added outside the United States, if the assist was produced in the United States and one or more foreign countries.

If the importer and foreign shipper or assembler are related parties, transaction value can still be found by the appraiser to exist, based upon the price agreed to for the merchandise between the related parties but with some restrictions. For clarification of which parties the government regards as "related," regulation 19 CFR 152.102 (g) states that "related persons" means:

1. Members of the same family, including brothers and sisters, (whether by whole or half blood), spouse, ancestors and lineal descendants.
2. Any officer or director of an organization, and that organization.
3. An officer or director of an organization and an officer or director of another organization, if each individual also is an officer or director in the other organization.
4. Partners.
5. Employer and employee.
6. Any person directly or indirectly owning, controlling or holding with power to vote, five percent or more of the outstanding voting stock or shares of any organization and that organization.
7. Two or more persons directly or indirectly controlling, controlled by or under common control with any person.

Under current appraisement law, the fact that the buyer and seller of imported merchandise may be, in any one of the above senses, "related" does not automatically remove their agreed prices from consideration as transaction values. The agreed price paid or payable may still be accepted as transaction value if the appraisement officer, by means of an examination of the circumstances of the sale, determines that the relationship between parties did not act so as to influence the prices agreed on. One aspect of the appraiser's examination of the circumstances of the related parties' sales will often be an inquiry into how the agreed prices were established. Were the prices determined in a manner consistent with industry practices within the industry in question? Alternatively, a related parties' price may be accepted as establishing a basis for transaction value if it is "closely approximated" by a yardstick comparison figure called a "test value." 19 CFR 152.103 (j)(2) defines these "test values" as 1. the transaction value of identical merchandise or of similar merchandise in sales to unrelated buyers in the United States or 2. the deductive value or computed value of identical merchandise or of similar merchandise.

Transaction Value of Identical or Similar Merchandise

If the facts of the international import transaction do not meet the requirements of the transaction value of the imported merchandise, customs appraised value for the merchandise may be established by the price paid or payable for merchandise which is identical or similar. It must, however, be exported to the United States at about the same time as the merchandise being appraised. Some examples of situations where this option would be taken by the appraisement officer include:

1. Relationships between the shipper and importer which influence the agreed price and the agreed price is not closely approximated by a "test value."
2. Merchandise consigned between parties, and no price either paid or payable is established.
3. Restrictions placed, either by the shipper or importer, on the disposition or use of the imported merchandise which act to affect the value of the merchandise; for example, merchandise imported under lease from the foreign shipper.

Customs Regulations define merchandise that is "similar" or "identical" to the imported merchandise undergoing appraisement as follows:

> "Identical merchandise" means merchandise identical in all respects to and produced in the same country and by the same person as the merchandise being appraised. If identical merchandise cannot be found, merchandise identical in all

respects to, and produced in the same country as, but not produced by the same person as, the merchandise being appraised, may be treated as "identical merchandise". "Identical merchandise" does not include merchandise that incorporates or reflects any engineering, development, artwork, design work or plan or sketch supplied free or at reduced cost by the buyer of the merchandise for use in connection with the production or sale for export to the United States of the merchandise; and is not an assist because undertaken within the United States.

"Similar merchandise" means merchandise produced in the same country and by the same person as the merchandise being appraised, like the product, and commercially interchangeable with the merchandise being appraised. If similar merchandise cannot be found, merchandise produced in the same country as, but not produced by the same person as, the merchandise being appraised, like the merchandise being appraised in characteristics and component material, and commercially interchangeable with the merchandise being appraised, may be treated as "similar merchandise." "Similar merchandise" does not include merchandise that incorporates or reflects any engineering, development, artwork, design work, or plan or sketch supplied free or at reduced cost by the buyer of the merchandise for use in connection with the production or the sale for export to the United States of the merchandise and is not an assist because undertaken within the United States.

If prices can be determined in sales of identical or similar merchandise, adjustments and exclusions are the same as those previously discussed for transaction value of imported merchandise. If sales of identical or similar merchandise have not occurred, then the next preferred basis of appraisement known as "deductive value" must be considered.

<u>Deductive Value</u>

Deductive value is rarely used to actually appraise merchandise. One reason that deductive value is not often used is that importers are provided another option under 19 CFR 152.101 (c). At time of presentation of the entry to Customs, the importer may request application of computed value method before the deductive value method. The option of reversal of valuation methods is commonly necessitated for merchandise for which no identical or similar transaction value can be found. Another factor explaining the infrequent application of the deductive value basis of appraisement is the large percentage of merchandise imported which is not intended for resale in the retail market. Obviously, if a manufacturer is importing machinery, material or components for a manufactured product, no retail sale is contemplated, and none would be available for use in the deductive value method.

Deductive value is calculated by taking the resale price of the merchandise after import into the United States and applying certain statutory deductions to arrive at deductive value. The statutory deductions include:

1. The importer's commission or his profit and general expenses on resale, provided these are reasonable.
2. Transportation and insurance costs applicable to the imported merchandise movement form its country of exportation to its place of delivery in the U.S.
3. U.S. Customs duties and federal taxes, including federal excise tax, payable on the imported merchandise.
4. The value of additional processing performed upon the imported merchandise after import in the U.S. under certain circumstances. The resale price of identical or similar merchandise made in the same or a different country of

origin may be used to establish the imported retail price if the merchandise being imported has no established retail price.

Computed Value

Each method of valuation for purposes of calculating import duties previously discussed have taken as their basis a price already paid, fixed or agreed to be paid prior to the time the goods were shipped. The computed value method is fundamentally from these previously discussed values in that it makes no reference to an previously negotiated price for the imported merchandise. Instead the computed value method is calculated by aggregating costs of production and manufacturer's profit. Cost of production for this method is expected to include the manufacturer's overhead, general expense, and selling commission. As in the transaction method, the value of any assist is to be include the computed value as well. A very large percentage of the total dollar volume of imports from Mexican assembly plants entering the U.S. are subject to appraisement under computed value method.

CFR 152.106 defines computed value as the sum of:

1. The cost or value of the materials and the fabrication and other processing of any kind employed in the production of the imported merchandise.
2. An amount for profit and general expenses equal to that usually reflected in sales of merchandise of the same class or kind as the imported merchandise that are made by the producers in the country of exportation for export to the United States.
3. Any assist, if its value is not included under either 1. or 2.
4. The packing costs.

For further clarification, the amount for profit and general expenses referred to in item #2 above is to be based upon the producer's profits and expenses, unless the producer's profits and expenses are inconsistent with those usually reflected in sales of merchandise of the same class or kind as the imported merchandise. In such an event, the usual profit and general expenses of such producers in such sales is to be used in the computed value calculation.

The cost of fabrication of an assembled article should include:

1. All actual labor costs involved in the assembly operations, including fringe benefits such as paid holidays, vacations, social security, school taxes, seventh-day pay, on-the-job training, housing allowance, and idle time. Labor efficiency and wage rate variances are to be included to ensure that the total actual labor costs incurred in the assembly are declared. The costs of engineering, supervisory functions, quality control, and similar personnel expenses are to be included.
2. Cost of dies, molds, tooling, special machinery and similar equipment costs are to be allocated to the particular product requiring their use and not to costs for plant equipment or machinery, which are included under general expenses.
3. Costs of research, development, design, engineering and blueprints.
4. Costs of inspecting and testing by the assembler.
5. Costs of subcontract work, including the general expenses and profit involved in such work. These costs are considered to be part of the cost of fabrication to the foreign assembler.

General expense, which are all of the assembler's expenses other than the cost of components, materials, fabrication, and packaging, include but are not limited to:

1. Building rent or depreciation;
2. Costs for utilities, including heat, light, power and water;
3. Telephone, telegraph, and cable costs;
4. Depreciation of machinery and equipment other than dies, molds, tooling, special machinery, and similar equipment allocable to the particular merchandise under consideration;
5. Expenses for maintenance, repairs, and renewals;
6. Fire and liability insurance costs;
7. Taxes on buildings;
8. Factory storage costs;
9. Expenses for office and factory supplies;
10. Administration salaries and expenses, and marketing salaries, commissions and expenses.
11. Travel expenses;
12. Advertising expenses;
13. Licensing fee paid to a foreign government;
14. Legal expenses;
15. Non refundable expenses relating to the importation of articles into a foreign country, such as foreign brokerage fees;
16. Auditing expenses of the foreign assembly operation;
17. Start-up costs (other than on-the-job training costs). These include legal fees for the consultant or entrepreneur, a fee for setting up the assembler corporation, costs for construction of buildings and installation of manufacturing machinery, engineering fees and material costs to acquire electricity or other power for the plant, fees for the insurance of any permits required, the cost of a bond given to show good faith, charges for securing a labor force as well as for their pre-training, costs of trusts established to satisfy foreign ownership, the cost of a plant bond to ensure exportation of all materials and imported machinery, and expenses of relocating plant management and production supervisors and their families. Start-up costs may be amortized over the period of time for which such expenditures are ordinarily amortized by assemblers of the same general class or

kind of merchandise in the country of exportation, in keeping with generally accepted accounting practices; and

18. All other general administrative and overhead expenses including janitorial services, security services and other services of a foreign warehouse officer.

With respect to computed value's "cost or value of the materials," more specific interpretative guidance has been received from the government. In its Trade Agreements Act Letter No. 20, dated March 27, 1981, the U.S. Customs Service ruled that the "cost or value" of purchased materials should include the cost of acquiring the materials (purchase price) plus the cost of transporting the materials to the place of production (cost of freight and insurance to the foreign plant's door).

It should be noted that all of the above elements, except assists, are valued as they appear on the foreign producer's books. Generally, costs that do not appear on the books of the foreign maker or meet the restricted definition of an "assist" are not considered part of the computed value. Appraisement officers expect to be furnished periodically (usually every six months) an actual cost reconciliation. This report is referred to as a "Cost Submission" and is reported on Customs Form 247. The importer is expected to attach supporting documentation and the cost report is subject to audit by the Customs Service at the manufacturer's plant. From the "Cost Reports", the import specialist calculates an aggregate computed value for all merchandise imported during the reporting period.

Liquidation

The formal entry that is prepared and presented to the U.S. Customs Service on the client's behalf, represents the first step leading to actual release of the merchandise from Custom's custody. This event is referred to as "liquidation". When the import specialist is satisfied that the values, classifications and quantities declared in the entry summary are all correct and proper, the appraiser "processes the entry to liquidation" or forwards it for an attendant to liquidate. Traditionally, such liquidation was performed by Customs at Regional Headquarters. Increasingly, liquidation is performed by Customs at the local port or district headquarters. Liquidation actually means the final computation of duties and taxes payable to result in release of the merchandise from Customs possession. The event of liquidation is of importance to the importer since it represents the closure of that entry. 19 USC 1501, 1514 and 1520 establish time limits for reliquidating liquidated entries for the purpose of correcting specific types of errors which may have inadvertently occurred in the original liquidation.

A customs broker may be expected to handle claims for duty refund after an entry has been liquidated. Time is always of the essence with post-liquidation claims, so it is necessary to act on errors in liquidation when discovered.

The Customs Procedural Reform and Simplification Act of 1978 added to law a new section, 19 USC 1504, which generally acts to compel the U.S. Customs Service to liquidate an entry within on year of the date of release of the imported merchandise. This new feature requires Customs to be more current in its liquidation action than previously. Prior to 1978, there was no requirement that an entry be liquidated within any specified period of time. This one-year limitation may suffer exceptions called "extensions" and "suspensions" but for the following reasons only (19 CFR 159.12):

1. Information needed by Customs for the proper appraisement or classification of the merchandise is not yet available.
2. The importer requests an extension of the entry in writing before the entry is one year old, showing good cause for the extension to be granted.
3. Liquidation is suspended by specific applicable statute or court order.

The official notification by Customs to the importer that a particular entry has liquidated is furnished by means of posting a bulletin notice of liquidation in a conspicuous place in the Customhouse at the port of entry where the entry was presented. In addition to this formal and legal means of notification, Customs also endeavors to furnish importers by mail a "courtesy notice of liquidation" (Customs Form 4333-A) identifying liquidated entries. This latter procedure should not be relied upon by the importer as a proof of notification as this process in not performed to fulfill any legal obligation on the part of the U.S. government.

Country of Origin Marking Requirements

A fundamental requirement for entry of merchandise into the United States is set forth in Customs Regulation 19 CFR 134, which is entitled "Country of Origin Marking" Basically this law requires that all foreign made articles imported into the U.S. be marked with their foreign country of origin in such a manner that the "ultimate purchaser" or the last person in the U.S. who will receive the article in the form in which it was imported will be informed as to where the article was made. However, country or origin marking can become a very complicated Customs consideration as evidenced by the following questions:

1. Is the location where the marking appears "conspicuous"?
2. Is the size of the lettering in the marking adequate?
3. Is the marking lettering permanent enough? Will it survive in legible condition through handling which occurs after import but prior to reaching the "ultimate purchase"?
4. Is the method which has been used in marking imported articles a method acceptable to the Commissioner of Customs for that type of article?
5. Do the imported articles fall under any "general exceptions" to the marking requirements?

This listing demonstrates that marking is a complex subject. Failure to meet any particular requirement enforced by Customs regarding country of origin marking may well result in imported goods being denied release by Customs or the imposition of fines and penalties. A customs broker may be expected to advise importers on the safest possible way to avoid marking problems. In some cases direct discussion with Customs is also advisable.

19 CFR 134.32 lists the general exceptions to the marking requirements. Some of these exceptions are:

(a) Articles that are incapable of being marking;
(b) Articles that cannot be marked prior to shipment to the United States without injury;
(c) Articles that cannot be marked prior to shipment to the United States except at an expense economically prohibitive of its importation;

Articles for which the marking of the containers will reasonably indicate the origin of the articles; (TD 74-122.)

There are some eleven additional listed exceptions to customs marking requirements, which is an indication of the importance placed on this requirement of the regulations. In addition to the general exemptions, specific classes of imported goods have been ruled as exempt from country of origin marking requirements although the outermost container in which the article ordinarily reaches its ultimate purchaser is still required to be marked to indicate the origin of its contents. Regulation 19 CFR 134.33 lists these exempt items in the J-List. This list is long and included here for reference only.

Admissibility of Imported Articles

In addition to country of origin marking requirements, other factors affect the "admissibility" of imported merchandise (i.e., its eligibility for entry into the commerce of the United States). Various laws enforced by Customs prohibit, under any circumstances, the entry of certain goods said to be "prohibited". Also, quotas or limits upon the quantities of certain goods which can be imported act to deny some goods admissibility at certain times. Such goods must be warehoused, destroyed or exported under Customs supervision. Visa requirements apply to other imported articles, notably soft goods, making such goods inadmissible without a visa issued for the shipment by the nation from which the goods are exported.

Inconsistencies Between IRS and U.S. Customs Enforcement of Laws

Dealing With International Trade

Importers seeking to minimize taxes would seek to assign low values to merchandise for customs duty purposes and high values for inventory valuation which ultimately is liquidated in cost of goods sold, thereby reducing taxable income and the related Federal and state income tax. To prevent a U.S. importer from whipsawing the Treasury by valuing merchandise inconsistently, Congress enacted section 1059A to the Internal Revenue Code in 1986. Prior to 1986, the IRS and Customs officials fought separately to establish arm's length valuations in related party import transactions (Meyer, 1994). Under section 1059A, importers are barred from taking a cost or inventory basis (tax basis) in property acquired from a related person that exceeds the value declared for customs valuation purposes.

In 1992 the IRS and Customs executed the Mutual Assistance Agreement with the announced goal of promoting interagency communication. Specifically, the agreement states that information should be exchanged that " . . . will assist both agencies in their enforcement and compliance efforts . . .". However, stringent statutory restrictions on disclosing returns and return information initially impaired the effectiveness of the Mutual Assistance Agreement. Recognizing Customs' inability to access specific information, Congress added section 6103(1)(14) as part of the NAFTA Implementation Act. This statutory addition to the IRS Code now allows the IRS to respond to case specific information.

Inconsistencies Between Tax and Customs Calculation Rules

While section 1059A's purpose is simple, application has proven to be complex. The customs brokers methods of import valuation and the IRS methods of import valuation were discussed in earlier sections of this proposed paper. To briefly review, Customs relies on the **transaction method** of valuation in roughly 90% of all imports and this method is based on the price paid or payable between unrelated parties of identical or similar merchandise. Customs also uses the following other methods of valuation: **transaction value of identical merchandise** (exact same product sold from the same source of manufacture to another party in the U.S.), **transaction value or similar merchandise** (same country of manufacture but the product is commercially interchangeable, not identical), **deductive value** (based on the first unrelated party retail price), or the **computed value** (based on production cost plus allocated general expense and profit). These valuations are increased by packing costs, selling commissions, assists, and royalties or license fees, but freight costs of bringing the goods to the U.S. are not included. In addition, U.S. fabricated components in the assemble of an article later imported into the United States may be deducted from the appraised value to arrive at dutiable value.

Under provisions of IRC section 482, the IRS uses the comparable price method, the resale price method, the cost plus method, the comparable profits method, and the profit split method. Acceptable tax accounting procedure requires inclusion of international freight and insurance charges, U.S. content returned and sales commissions.

Therefore, implementation of section 1059A becomes complex. As one might expect, this complexity has led to litigation, and the court's decisions have sometimes led to further complexity and confusion. In addition, the IRS has issued private letter rulings and technical advice memoranda to clarify certain specific questions. The findings of the cases and rulings are summarized below:

U.S. v Getz Bros. & Co.-The manufacturers' sales to trading houses were sales for exportation to the United States, and the price to the trading houses was the basis for export value; not the price from the trading house to the U.S. purchaser.

Private letter ruling 9406026-Not suprisingly, the IRS ruled that the section 1059A value limitation can be increased by the amount of its actual purchase price to middlemen.

Technical advise memorandum 9301002-The IRS ruled that the tax basis of imported goods may exceed the customs value if elements of value are properly taken into account for tax purposes and lawfully not taken into account for customs valuation purposes.

Nissho Iwai American Corp. v U.S.-Where there exists two viable transaction values for goods destined for the United States, the manufacturer's price to the reseller, rather than the resellers price to the U.S. importer, provides the proper customs value.

Recognizing that tax basis may be different from customs value due to legitimate distinctions between customs and tax valuation rules, and not to exploitative behavior on the part of the taxpayer, the IRS has promulgated a regulation for purposes of applying the section 1059A tax basis limitation. Regulation 1.1059A-1(c)(2) provides:

> "To the extent not otherwise included in the customs
> value, a taxpayer . . . may increase the customs value
> of imported property by amounts incurred by it and
> properly included in inventory cost for-

1.Freight charges

2.Insurance charges

3.The construction, erection, assembly, or technical assistance provided with respect with respect to the property after its importation into the United States

4.Any other amounts which are not taken into account in determining the customs value, which are not properly included in customs value, and which are appropriately included in the cost basis or inventory cost for income tax purposes."

However, Congressional intent established in section 1059A precluded establishing tax basis of imported property in all circumstances. Accordingly, this section has no application to property not imported from a related party (Meyer, 1994). In addition, the upward adjustments described in 1 through 4 above must be reduced by transactions that properly reduce the cost basis of in- ventory such as volume credits and payment discounts. Finally, the IRS is not limited by section 1059A as to inventory basis adjustment deemed appropriate under section 482 (Reg 1.1059A-1(c)(7).

Recordkeeping Requirements

An importer is required to maintain specific records to be in compliance with U.S. Customs regulations. The Customs regulations broadly define records to include statements, declarations, books, papers, correspondence, documents, electronic data and accounting books and records. Any of the above listed records that [19 CFR 162.1a(a)]:

1.Pertain to any importation of merchandise;

2.Establish the right to make entry;
3.Establish the correctness of and entry;
4.Determine the liability of any person for duties and taxes due or which may be due to the U.S.
5.Determine the liability for fines, penalties, and forfeitures;
6.Establish whether the person has complied with the laws and regulations administered by customs.

Documents or statements which contain material misstatements or omissions are conclusively established to be materially false. Civil penalties are assessable against any entity or person attempting to enter merchandise into the U.S. by materially false documents. In view of these conditions, importers should review their recordkeeping reinforce the goal of establishing an integrated North American market.

APPENDIX TWO

MAQUILADORA RESEARCH PROJECT SURVEY

Please answer all question to the best of your ability for your organization for the year ending in 1997 unless otherwise indicated. Any comments about your organization's a experiences will be appreciated.

1. Please check the box with the approximate annual dollar sales of the maquiladora plant in 1997:
   ☐Less than 1-5 million ☐5-20 million ☐20-50 million ☐50-100 million
   ☐ 100-500 million ☐500 million-1 billion ☐ More than 1 billion

2. Please check the box with the approximate average number of employees at your maquiladora plant in 1997:
   ☐Under 100 employees ☐100-500 employees ☐ More than 500 employees

3. The parent of this maquiladora is
   - ☐ A large multinational company manufacturing globally.
   - ☐ A small multinational company manufacturing in less than six countries.
   - ☐ A company embarking on multinational manufacturing. This maquiladora is among its initial efforts.
   - ☐ Not applicable. This maquila is not a subsidiary of another corporation.

4. The NAFTA Treaty with Mexico is fully phased in as of January 1, 2001. The degree of long range strategic planning to assimilate the required operations changes effective January 1, 2001 is described below (check all applicable).
   - ☐ Extensive/exhaustive
   - ☐ Moderate
   - ☐ Little
   - ☐ Outsourced to customs brokers or consultants/CPA's
   - ☐ Performed by headquarters

5. Please give information regarding ownership of your maquiladora by checking the appropriate line:

   Subsidiary of a NAFTA based corporation
   - ☐ U.S. domiciled
   - ☐ Canadian domiciled

- ☐ Mexico domiciled
- ☐ Subsidiary of a Pacific Rim country based corporation
- ☐ Subsidiary of a European Community based corporation
- ☐ Subsidiary of a company based in other than above
- ☐ Independent, not related to another entity

6.Approximately what percentage of your sales represent are made to:

	% of sales from this Mexico maquila to					
	United States	Mexico	Canada	Pacific Rim	EC	Other
Related corporations	____	____	____	____	____	____
Unrelated corporations	____	____	____	____	____	____

7.With respect to questions #5 above, if your maquila ownership or sales belongs to a Pacific Rim, EC, or Other categories, kindly provide country details:

State country of headquarters office: ______________________________________

Sales destination details, i.e., location and percentage:________________________

____

____

____

____

8. Maquiladoras frequently warehouse raw materials on the U.S. side prior to shipment to the Mexico plant site for processing. Please contrast the warehousing procedure your maquila follows with that of accepting raw material inventory at the Mexico plant site shipped directly from U.S. or foreign suppliers. The estimate for this maquila is:

	% of this maquila's raw mat'l received
Warehoused on the U.S. side, aggregrated and then shipped to the plant	_____
Received directly at the maquila plant site from a U.S. vendor	_____
Received directly at the maquila plant site from a Canadian vendor	_____
Received directly at the maquila plant site from a Mexico vendor	_____
Received directly at the maquila plant site from a non-NAFTA supplier	_____
Other (describe)	_____
Total	100%

9. Please answer the questions to the best of your ability by marking an "X" on the appropriate box. If you have any comment to any of these questions, please use the margin or the back of this paper.

A. What change do you expect in the taxes paid by your company to the Mexican government as a result of the new transfer pricing laws?
☐ Increase ☐ No change ☐ Decrease
$_________ dollars (Please give an estimate if you can)

B. What change do you expect in the taxes paid by your company to the Mexican government as a result of the nonresident personal income tax laws?
☐ Increase ☐ No change ☐ Decrease
$_________ dollars (Please give an estimate if you can)

C. What change do you expect in the total annual company operating expenses , for example, in increased wages or legal expenses as a result of complying with the new Mexican transfer pricing laws?
☐ Increase ☐ No change ☐ Decrease
$_________ dollars (Please give an estimate if you can)

D. What change do you expect in the total annual company operating expenses as a result of complying with the Mexican nonresident personal income tax laws?
☐ Increase ☐ No change ☐ Decrease
$_________ dollars (Please give an estimate if you can)

E. What change do you expect in future investment in Mexico by your parent company as a result of the new Mexican transfer pricing laws?
☐ Increase ☐ No change ☐ Decrease
$_________ dollars (Please give an estimate if you can)

F. What change do you expect in future investment in Mexico by your parent company as a result of the Mexican nonresident personal income tax laws?
☐ Increase ☐ No change ☐ Decrease
$_________ dollars (Please give an estimate if you can)

10. With respect to the following issues, please answer these yes/no questions:

	Yes	No
A. This maquila is not related to our customers, and therefore is not affected by transfer pricing issues (if yes, skip to part 8D ; if no, answer parts 8B and 8C below).	___	___
B. This maquila has had a transfer pricing study prepared for it.	___	___
C. This maquila has had a bilateral advanced pricing agreement prepared.	___	___
D. This maquila has submitted a case or cases to the tripartite committee responsible for uniform customs treatment among NAFTA Treaty members	___	___
If yes, the procedures followed by the committee were Transparent	___	___

Administered fairly ___ ___
The experience was reasonable ___ ___

E. After January 1, 2001, maquiladoras can freely sell into NAFTA member countries. At that time we expect antidumping duties to be levied by one or more NAFTA countries on some/all of our sale ___ ___

F. The IRS has reallocated income or deductions with our related corporate group as the result of a transfer pricing audit (if your maquila does not export to the United States, write "N/A", and refer back to question #3 and #4 for consistency of response). ___ ___

G. Hacienda has reallocated income or deductions with our related corporate group as the result of a transfer pricing audit. ___ ___

H. U.S. or Mexico customs has raised the issue of consistent valuation of internal sales for duty and cost of sales purposes (if your maquila does not export to the United States, write "N/A", and refer back to question #6 and #7 for consistency of response).
U.S. Customs elevated the issue ___ ___
Mexico Customs elevated the issue ___ ___

I. IRS audits of intercompany transactions were conducted by agents (write "N/A" if answer to 10F is "no").
1. Who were fair? ___ ___
2. Who were competent? ___ ___
3. Who strictly adhered to the Code and regulations? ___ ___
4. Worked in collaboration with a U.S. Customs auditor? ___ ___

J. Hacienda audits of intercompany transactions were conducted by agents (write "N/A" if answer to 10G is "no").
1. Who were fair? ___ ___
2. Who were competent? ___ ___
3. Who strictly adhered to the Code and regulations? ___ ___
4. Worked in collaboration with a Mexico Customs auditor? ___ ___

11. Following is a series of statements. Please circle the category that, in your opinion, best describes your maquiladora's position or circumstances. The categories are:
1. Disagree with the statement
2. "Need to Know" not at maquila operations level (i.e., handled by headquarters specialist.)

3. Not applicable or unimportant
4. This matter under consideration. No corporate decision has been made at this
5. Agree with the statement

A. A transfer pricing study is important to this maquila. 1 2 3 4 5

B. A bilateral advanced transfer pricing agreement is important to this maquila. 1 2 3 4 5

C. The cost of a transfer pricing study exceeds its importance to this maquila. 1 2 3 4 5

D. Our Mexico tax is calculated using the following methodology:

1. An asset tax of 1.8% of the value all assets employed 1 2 3 4 5
2. An income tax calculated by the 5% "safe harbor" method 1 2 3 4 5
3. An income tax calculated from an arm's length definition of profit with Hacienda 1 2 3 4 5
4. Other - please explain in notes section at conclusion of the survey. 1 2 3 4 5

E. The same intercompany transfer price is used for financial accounting, for managerial accounting, and for taxation. 1 2 3 4 5

F. Although composed of numerous legally separate entities, intercompany transaction decisions usually are made as though our organization is one economic unit. 1 2 3 4 5

G. The following methods are permitted for determining "arm's-length" prices applicable to intercompany transactions. The "best method"

1. Comparable uncontrolled price method 1 2 3 4 5
2. Resale price method 1 2 3 4 5
3. Cost - plus method 1 2 3 4 5
4. The comparable profits method 1 2 3 4 5
5. The profit split method 1 2 3 4 5
6. A formulary method negotiated between the IRS and Hacienda 1 2 3 4 5

H. The "best method" answer given in #G above was given based upon:

1. Informed judgement. 1 2 3 4 5
2. An completed transfer pricing study 1 2 3 4 5
3. A bilateral pricing agreement between the IRS and Hacienda. 1 2 3 4 5
4. An in-process bilateral APO or transfer pricing study. 1 2 3 4 5

I. The method of appraisement of export shipments from this maquila is:

1. Transaction value 1 2 3 4 5
2. Transaction value of identical/similar merchandise 1 2 3 4 5
3. Deductive value 1 2 3 4 5
4. Computed value 1 2 3 4 5
5. Other 1 2 3 4 5

J. Mexico's fiscal laws which took effect on January 1, 1997 are particularly focused financial transactions between related parties. The new reporting requirements are expected to:

1. Result in decreased investment in Mexico by our parent company 1 2 3 4 5
2. Have no effect on the future investment plans for Mexico by our parent company. 1 2 3 4 5
3. Have no effect because our maquiladora has no investment in one of the 66 low-tax jurisdictions as defined by the new fiscal law. 1 2 3 4 5
4. Have an insignificant annual compliance cost for reporting . (Failure to file annual reports detailing investment in low-tax jurisdictions will be a criminal offense after February, 1998.) 1 2 3 4 5

K. On January 1, 2001, the North American Free Trade Agreement "duty deferral" programs take effect. This maquiladora expects to shift procurement of components or raw materials after January 1, 2001 to North American suppliers. Procurement is likely to be shifted from

Japan	1 2 3 4 5
Korea	1 2 3 4 5
China (excluding Hong Kong)	1 2 3 4 5
Hong Kong	1 2 3 4 5
Other Pacific Rim countries	1 2 3 4 5
United Kingdom	1 2 3 4 5
Germany	1 2 3 4 5
Other European Common Market countries	1 2 3 4 5
South American supplying country/countries	1 2 3 4 5
Central American supplying country/countries	1 2 3 4 5
Have not concluded	1 2 3 4 5

L. The complex labeling requirements scheduled for implementation under NAFTA in 2001 is expected to add ____% to the <u>unit</u> cost of production.

Under 0.1%, and considered of no concern.	1 2 3 4 5
0.1%-0.5%	1 2 3 4 5
.051%-1.0%	1 2 3 4 5
Over 1.0%, and considered of great concern.	1 2 3 4 5
Have not concluded	1 2 3 4 5

M. Beginning January 1, 2001 this company expects to shift additional product sourcing into:

Mexico	1 2 3 4 5
USA	1 2 3 4 5
Canada	1 2 3 4 5
Have not concluded	1 2 3 4 5

N. If the answer to #M is "agreed", this production is to be shifted to:
1. Outside contractors. 1 2 3 4 5
2. Expansion of our own production facilities and equipment. 1 2 3 4 5

3. Have not concluded 1 2 3 4 5

O. Maquiladoras are affected by tax laws and customs laws of two countries. Please furnish your opinion regarding managing under these two sets of laws.

1. Mexico customs laws
    a. are transparent 1 2 3 4 5
    b. are administered consistently 1 2 3 4 5
    c. are administered fairly 1 2 3 4 5
    d. can be interpreted to facilitate compliance 1 2 3 4 5

2. Mexico transfer pricing tax laws
    a. are transparent 1 2 3 4 5
    b. are administered consistently 1 2 3 4 5
    c. are administered fairly 1 2 3 4 5
    d. can be interpreted to facilitate compliance 1 2 3 4 5

3. Mexico customs officials enforcing regulations at this maquila are competent in the administration of their duties. 1 2 3 4 5

4. Mexico tax officials enforcing regulations at this maquiladora are competent in the administration of their duties. 1 2 3 4 5

5. The enforcement of transfer pricing laws and regulations in Mexico appear to be
    a. focused on large multinational corporations 1 2 3 4 5
    b. directed at all corporations, regardless of size 1 2 3 4 5
    c. focus on enforcement unclear 1 2 3 4 5

6. United States customs laws
    a. are transparent 1 2 3 4 5
    b. are administered consistently 1 2 3 4 5
    c. are administered fairly 1 2 3 4 5
    d. can be interpreted to facilitate compliance 1 2 3 4 5

7. United States transfer pricing tax laws
    a. are transparent 1 2 3 4 5
    b. are administered consistently 1 2 3 4 5
    c. are administered fairly 1 2 3 4 5
    d. can be interpreted to facilitate compliance 1 2 3 4 5

8. The enforcement of transfer pricing laws and regulations of the United States appears to be
    a. focused on large multinational corporations 1 2 3 4 5
    b. directed at all corporations, regardless of size 1 2 3 4 5

c. focus on enforcement unclear 1 2 3 4 5

P. United States customs officials enforcing regulations with this are competent in the administration of their duties. 1 2 3 4 5

Q. United States tax officials enforcing regulation with this maquila are competent in administration of their duties. 1 2 3 4 5

R. Antidumping duties are expected to present a serious cost problem for this maquiladora after 2001 unless present law is changed. 1 2 3 4 5

S. Antidumping duties are currently a serious cost problem for this maquiladora. 1 2 3 4 5

T. By virtue of Mexico's trade agreements with other South and Central American countries, this maquila will be a export facility to countries with these agreements 1 2 3 4 5

Following are open-end questions. Any comments you make on the attached sheet will be greatly appreciated.

(1) In your opinion, what changes should be made to Code Section 482 and the accompanying Regulations?

(2) In your opinion, what incentives (tax or other) would cause your maquiladora to increase its exports to foreign (related or unrelated) customers?

(3) Reports have been made that Mexico has imposed licensing fees, and inspection fees concurrent with the tariff reductions agreed to under NAFTA. In your opinion, has your maquiladora and specific industry been subjected to these "non-tariff" barriers? How pervasive and what order of magnitude?

Please check the standard industrial classification of your maquiladora operations. Check all applicable operations. Again, thank you for your support of my efforts.

COMMENTS TO SURVEY

APPENDIX THREE

THE SUBSTANCE OF THE NORTH AMERICAN FREE TRADE AGREEMENT

The North American Free Trade Agreement is a very voluminous trade agreement. The Treaty is contained in two very large volumes plus a lengthy general note #12 of the Harmonized Tariff Schedule of the United States. A concept of the detail contained in the Treaty may be had by considering the following:

Volume One: 580 pages (est)
Volume Two: 480 pages (est)
General Note #12: 107 pages (actual)
Part (chapter) 181 of the U.S. Customs Regulations: 92 pages

By way of contrast, General Note #8 which describes the regulations of the United States-Israel Free Trade Area Implementation Act of 1985 are contained in a single page. Furthermore, as Notes (a)(i)and (a)(ii) of the General Note #12 describes, the tariff rates for individual commodities may be (and probably are) different. The tariff rates are specified in the "Special" column with the notation (CA) next to the Canadian tariff rate and (MX) designating the Mexico tariff rate. Viewed from this perspective, one can become lost in the detail and diverted from any generalized impact the Treaty may have on the signatory countries. The NAFTA Treaty gives preferential treatment in tariffs to products and services grown or produced within the countries that are members of the agreement: i.e., the United States, Mexico, and Canada. The rules by which a product is determined to qualify for such preferential treatment are covered within the "Rules of Origin" regulations which are discussed in a subsequent portion of this report. The term-of-art, "originating good" is applied to a good satisfying the rules of origin requirements, thereby qualifying for preferential treatment in tariffs and customs duties. Originating goods are:

1. A good wholly obtained or produced entirely in the territory of one or more of the countries that are members of the agreement.
2. Materials used in production of a good which undergo a change in tariff classification resulting from production occurring entirely in the territory of one or more member countries.
3. The regional content of the good meets the percentage threshold requirements set out the "rules of origin" discussion below.
4. The good meets the De Minimis Rule of the Treaty.

Country of Origin Requirements

United States Customs Service has rules of origin which apply to imports from all countries, whether or not they are NAFTA countries. These rules are set out in Part 102 of the Customs Regulations of the United States (1995 edition). The NAFTA Treaty establishes its own restrictions of "country of origin" requirements in General note 12(a),(b),and (c). The importance of these rules to the Treaty is shown by their prominence--they are the first three parts of the notes for Treaty enforcement.

Among the concepts introduced by the NAFTA Treaty is "regional value content" which means the value added within the countries that are members of the free trade agreement. The Treaty (Article 401) provides two methods of measuring the regional value content:

$$RVC = TV\text{-}VNM/TV \qquad > 60\%$$
$$RVC = NC\text{-}VNM/NC \qquad > 50\%$$

where:

RVC is the regional value content
TV is the value of the good
VNM is the value of non-originating materials
NC is the net-cost of the good

Transaction value has a technical meaning, and is defined by Customs regulations to mean "the price actually paid or payable for the merchandise when sold, plus amounts equal to :

1. The packing costs incurred by the buyer.
2. Any selling commission incurred by the buyer.
3. The value of any assist.
4. Any royalty or license fee that the buyer may require to pay as a condition of the sale.
5. The proceeds, accruing to the seller, of any subsequent resale, disposal or use of the imported merchandise.

The Treaty sets elevated "regional value content" requirements for cars and like products by requiring that 62.5 percent of the net-cost of cars, engines, and transmissions and 60 percent of the net cost of heavy trucks and busses be "regional value content".

Drawback and Duty Deferral Programs

In the general parlance of the customs business, drawback means a refund, in whole or in part, of a customs duty, internal revenue tax, or fee lawfully assessed or collected because of a use made of merchandise on which the tax, duty, or fee was assessed (Customs reg. 191.2). Article 303 of NAFTA limits the extent to which signatories can exempt from customs duties imports from non-member countries. This drawback limitation ensures that nonmember production will be subject to ordinary customs duties when imported into North America, without regard to whether such imports are ultimately consumed in the country of importation or shipped to another NAFTA signatory. A duty waiver, or refund is contingent on exportation, and may not exceed the smaller of:

1. Amount of duties on the initial importation into North America.
2. Amount of duties paid on the goods' subsequent shipment to another NAFTA country.

Predictions Of The Likely Impact Of The NAFTA Treaty On U.S. Industrial Sectors

Automotive products

The Mexican automobile assembly industry is entirely foreign owned. Eight assembly plants are owned by the U.S. Big Three auto makers (GM, Ford, and Chrysler) and the other foreign manufacturers present in the country, Nissan and Volkswagen.

(House/Senate, 4-8) The Mexican Government regulates the extent to which Mexican plants can be integrated into U.S. and Canadian industries by placing a value-added requirement, starting at 36 percent before Treaty passage, and reducing to 29 percent during the transition period.

Initially, NAFTA is forecast to result in a minor increase in U.S. trade in automobiles and automobile parts. U.S. imports of auto parts from Mexico will **not** increase, but U.S. exports of auto parts will increase 3 percent. U.S. auto-mobile imports and exports with Mexico are likely to increase considerably under NAFTA in the long term. U.S. imports of auto parts from Mexico are expected to expand considerably in the long term because the Mexican auto parts industry will become more competitive under a more liberal trade environment.

Flow changes between the United States and Canada cannot be made with confidence. Long-term Mexican production estimates indicate that Mexican production plants will likely displace some U.S.- Canadian automobile and auto parts trade.

Computers, computer components, and electronics:

U.S. producers dominate the electronics industry in Mexico and operate primarily from the maquiladora. However, most U.S. producers of consumer electronic goods are foreign owned (House/Senate 5-1). U.S. tariffs of Mexican electronic products will be eliminated immediately upon NAFTA adoption. Mexican tariffs on approximately 40 percent of U.S. exports will immediately be eliminated, and 50 percent will be phased out over 5 years. Most of the Canadian tariffs will be eliminated upon the adoption of NAFTA.

Upon the passage of the Treaty, it is expected that the short run increase in imports of electronic products will be no more than 5 percent. Even though U.S. tariffs come down upon passage of NAFTA, little effect is expected because a large portion of imports enter duty free or reduced duty under special provision of the U.S. tariff structure. In addition, U.S. exports of electronic products to Mexico are not likely to be affected by NAFTA because most of these goods entered Mexico duty-free as inputs of goods manufactured for export before the Treaty.

Textiles and apparel

Prior to the implementation of NAFTA, U.S. trade with Mexico in textiles and apparel has been dominated by a manufacturing operation integrated in the maquila sector. In a typical operation, U.S. firms assemble garments from U.S. components for re-export from Mexico to the United States.

Under the NAFTA regime, U.S. duties and quotas on textile and apparel imports from Mexico will be eliminated. In addition, the textiles and apparel sector will have its specific rules of origin requirements:

> Yarn forward: In order for NAFTA benefits to be conferred on an item of apparel, the item must be made in North America from the yarn state forward: i.e., only the fibers may be imported.
> Fiber forward: An even more restrictive rule. Goods made of cotton yarn, knit and nonwoven fabrics, and manmade fibers need be made of North American products from the fibber stage forward in order to qualify for NAFTA benefits.

U.S. exports to Mexico are forecast to increase 4 percent in the short term and 12 percent in the long term (House/Senate, 8-4). Mexico supplies acrylic and polypropylene yarn, denim, and cotton sheeting for the U.S. market. By removal of U.S. quotas and tariffs, an increase of U.S. imports of these commodities is forecast to be 14 percent in the short term and 25 percent in the long term (House/Senate, 8-4). In addition, removal of quotas and tariffs is expected to have a major impact on the apparel trade. Apparel imports from Mexico are like to increase 45 percent in the short run and 57 percent in the long term. The growth in this sector is likely because Mexico will become an attractive alter-native to Hong Kong, Taiwan, and Korea in apparel production as the result of quota and tariff removal by the United States.

U.S. textile and apparel trade with Canada is not expected to be appreciably affected by the Treaty. This is expected to be the case because most of the provision of the Canada-U.S. Free Trade Agreement were drafted into the NAFTA agreement vis-à-vis the United States and Canada.

Pharmaceuticals

Provisions of the NAFTA Treaty affecting the pharmaceutical industry were intended to strengthen intellectual property rights in Canada, and provide increased market access in Mexico. Upon enactment of NAFTA, tariffs on approximately 85 percent of total U.S. imports from Mexico will be eliminated. The Treaty will immediately eliminate Mexican tariffs on approximately 30 percent of Mexico's imports of pharmaceuticals from the U.S. and Canada. The duties remaining in place after the initial reduction will be phased out over from five to fifteen years.

Machine tools

Canada and Mexico are important export markets for the U.S. machine tool industry, because of the limited production facilities owned in either Canada or Mexico. Upon the implementation of the Treaty, U.S. and Canadian duties will be eliminated on qualifying machine tools. Mexican duties will be eliminated on 76 percent of trade, and remaining duties will be phased out over five years.

Based on the Commission's model, U.S. machine tool exports to Mexico are likely to increase by 9 percent in the short term, and 11 percent in the long term. U.S. exports to Canada are expected to be minor after Treaty adoption. No imports of machine tools are expected to come to the U.S. from either Canada or Mexico after adoption of the Treaty because neither country has production capabilities and facilities.

Bearings

Under the Treaty, tariffs will be phased out over 10 equal annual stages. The 10 year phaseout applies to 68 percent of U.S. imports from Mexico and to 56 percent of Mexican imports from the United States. Approximately, 55 percent of U.S. imports from Canada enter duty-free under the various agreements between these two countries (House/Senate, 7-2)

In the short term, U.S imports of bearings from Mexico will likely increase by only 1 percent due to the limited production capabilities of the country. In the long term, the Treaty will likely lead to a 6 percent increase in imports from Mexico. With respect to the reverse trade, in the short term, U.S. exports of bearings to Mexico are likely to increase only 2 percent. In the long run, the increase is predicted to be 8 percent.

Steel mill products

Upon implementation of NAFTA, tariffs for most steel mill products will be eliminated in equal stages over a 10-year period. Hot-rolled stainless coil, electrical steel, high speed steel, and certain tool steels will be granted duty-free treatment upon adoption of the Treaty. Tariffs on steel trade between the United States and Canada continued their phase out under NAFTA as previously agreed under the U.S.-Canada Free-Trade Agreement (House/Senate, 10-2)

U.S. steel imports from Mexico are forecast to increase less than 1 percent in the short term, and 3 percent in the long term. U.S. exports to Mexico are forecast to increase by 1 percent in the short term and 8 percent in the long term. The components of change are listed below:

1. U.S. pipe and tube exports are expected to increase due to access to PEMEX and CFE.
2. Those steel whose tariffs are immediately eliminated are expected to increase in trade to Mexico. Other stainless products are expected to benefit because of reduced tariff barriers.
3. The phaseout of Mexico's trade balancing and local sourcing requirements affecting the automobile industry should allow greater access for U.S. producers to sell to Mexico's auto producers.

On the U.S. import side, a minor short term and a modest long term effect is forecast. Mexico steels could become a substitute for Far Eastern or other steel. In the long term, Mexico steel technology is expected to benefit from the access and competition incident to the NAFTA Treaty.

Flat glass

Prior to implementation of NAFTA, only 7 percent of U.S. flat glass imports from Mexico were dutiable; the remainder entered the U.S. duty-free under various provisions such as the Generalized System of Preferences (House/Senate, 11-2). Under NAFTA provisions, the 7 percent of trade previously dutiable will have duties eliminated apart from approximately 4 percent of trade that continues dutiable until staged elimination over 10 years.

At an average of 20% ad valorem, Mexican duty rates prior to NAFTA were approximately 4 times higher than average U.S. rates. Under NAFTA, these rates were also to be phased out, but at a much slower rate than the U.S. tariff rate reduction. Five percent of line items bearing tariffs will be phased out immediately upon NAFTA passage, and 30 percent of the remaining 93 percent will have tariff reductions over a 5 year period. This leaves 63 percent of the line items scheduled for reduction beyond a 5 year time horizon.

The quantity of imports of Mexican glass is projected to increase less than 1 percent as the result of NAFTA. It was projected that import growth of Mexican glass would occur with or without NAFTA (House/Senate, 11-2). This development is attributable to purchase of latest technology production equipment by Mexican manufacturers, coupled with acquisition of U.S. based distribution and fabrication facilities. Mexican imports of U.S. manufactured glass is forecast to increase by less than 1 percent in the short term and about 3 percent in the long term (House/Senate, 11-2).

Household glassware

Prior to implementation of NAFTA, duties imposed by the United States on household glassware ranged from 6 percent to 38 percent. The duty rate had an inverse relationship to price: i.e., the lower priced goods were dutiable at the higher rates of 20 to 38 percent. Upon adoption of the Treaty, U.S. rates are subject to 15-year staged elimination. The Mexican rates of duty were somewhat lower, 10 to 20 percent, and are scheduled to be eliminated over a 10 year period under the NAFTA treaty (House/Senate, 12-2).

Under the provisions of NAFTA, U.S. imports of household glassware from Mexico is expected to show an increase of 1 percent in the short term and 10 percent in the long term. The majority of these imports are expected to be in the lower price goods sector. Concurrently, under the provisions of NAFTA, the quantity of U.S. exports is expected to increase 2 percent in the short term and by 16 percent in the long term.

Ceramic floor and wall tiles

Previous to the adoption of NAFTA, virtually all of ceramic floor and wall tiles into the United States are subject to duty rates of 19 to 20 percent ad valorem. The rates of U.S duty will be eliminated in 15 equal annual stages. Mexico has an identical duty rate on imports of ceramic floor and wall tiles, and it will be eliminated in 10 equal annual stages (House/Senate, 13-2).

The projected impact of the Treaty on the United States is that imports from Mexico will increase by 1 percent in the short term and 18 percent in the long term. Concurrently, U.S. exports to Mexico should increase by 2 percent in the short term and 21 percent in the long term (House/Senate, 13-3).

The Canadian market is import-dependent with negligible production capabilities within the country. Therefore, the Treaty should have no effect on the trade of these commodities.

Chemicals

Immediate duty elimination by the United States on chemical imports will be established under NAFTA. Those chemicals on which the duty is not eliminated under the Treaty, will be stage reduced over 10 years. Under NAFTA, Mexico will eliminate duties on approximately 70 percent of the import categories with the lowest duty rate (10%). Most of the remaining categories of imports will feature 10 year staged reduction under the Treaty (House/Senate, 14-2). United States' imports of Mexico's chemical products is projected to increase by less than 1 percent in the short term, and 3 percent in the long term, as the result of NAFTA. Concurrently, U.S. exports to Mexico are projected to grow by 1 percent in the short term and 6 percent in the long term as the result of the Treaty.

Industrial machinery

The United States and Canada have agreed to eliminate virtually all duties on imports of industrial machinery. Mexico also has an aggressive plan for elimination of tariffs in this industrial sector; approximately 33 percent of the trade categories will have tariffs eliminated. The remaining categories will have duty rates phased out over 5 years.

United States exports of industrial machinery to Mexico are predicted to increase by 6 percent in the short term and 10 percent in the long term. The United States imported only marginal amounts of industrial equipment from Mexico, therefore, adoption of the Treaty should have no effect on the position of U.S. imports in this sector.

Major household appliances

Mexico's tariffs on less than 10 percent of imported goods will be eliminated under NAFTA. The remainder of Mexico's duty rates covering these types of products will be eliminated over either 5 or 10 year staging periods. United States duty rates are either eliminated or phased out over 5 years. The likely result in NAFTA is a 2 percent increase in U.S. exports to Mexico in the short term. Thereafter, the U.S. importation of Mexican exports in this sector is expected to increase up to 15 percent in the long term (House/Senate, 16-2).

Petroleum, natural gas and related services

The Constitution of Mexico reserves to the state all activities connected with ownership or development of energy resources. This restriction exists in contrast to the environment of the other two NAFTA signatories, Canada and the United States, where virtually all energy development is undertaken by private ownership, and private risk. All three NAFTA countries have historically traded crude petroleum for refined products, and shipping natural gas between countries in pipelines connecting the member countries.

The United States and Canada had similar tariff rates affecting crude petroleum prior to the implementation of NAFTA. Pre-NAFTA, the ad valorem rate ranged from 0.5 percent to 1.0 percent, and with adoption of NAFTA, will be eliminated over a 10 year period. Mexico's tariffs, which ranged from 5 percent to 8.6 percent before the Treaty, will also be reduced over a 10 year period.

Under the Canadian-U.S. Free-Trade Agreement, natural gas can enter either market from the other country duty free. As in the case of crude petroleum, Mexico's pre-NAFTA duty rate of 10 percent will be staged down to free over a 10 year period.

U.S. and Canadian suppliers of energy related equipment, supplies, and technology should have greater access to the Mexican market. The Treaty does not change the exclusive purview of PEMEX over the petroleum and natural gas industries. However, PEMEX is to be required under the Treaty to accord open competition and equitable treatment to non-Mexican suppliers of equipment and services being procured by the Company.

The NAFTA treaty is projected to have a marginal impact on trade in natural gas, crude petroleum, and refined petroleum. Mexico sales of crude petroleum to the United States were not significantly affected by tariffs before the Treaty, and removal of tariffs will not cause that trade volume to increase. The same neutral effect is projected to exist with respect to both imports and exports from the United States in natural gas and refined petroleum products. Therefore, in summary, the NAFTA Treaty is not expected to affect imports or exports of petroleum or natural gas products among the Treaty signature countries (House/Senate, 18-2).

Primary petrochemicals

As in the case of crude and refined petroleum and natural gas, primary petrochemical trade is projected to be little effected by NAFTA, both in the short and long terms. Prior to NAFTA, the Canadian and U.S. markets were free of duty for each other's primary petrochemical products. Mexico's tariff rates for these products prior to NAFTA were 5 or 10 percent, and the Treaty calls for the to be staged reduced over 10 years. Pre-NAFTA exports by the U.S. of primary petrochemical products represented a significant share of the Mexican market. However, without liberalization of restrictions on foreign investment in this market, potential expansion in trade will be inhibited to both Canada and the United States.

The NAFTA provisions for the energy sector related to the United States and Canada are identical to the provisions set out in the U.S.-Canada Free-Trade Agreement. Therefore, NAFTA adoption should be neutral with respect to trade in this segment (House/Senate
(19-3).

Electricity transmission

Foreign investment in the energy sector is constitutionally prohibited in Mexico; in contrast, foreign investment in this sector is permitted by both Canada and the United

States. Within Mexico generation, distribution, and pricing of electricity is the exclusive purview of the state-owned Comision Federal de Electricidad (CFE).

Before NAFTA, the United States and Canada practiced duty-free trade in electricity, and the countries have enjoyed a vigorous cross-border trade. Such trade has been permitted because of the existence of a sophisticated interconnecting transmission system along the shared border. Unlike the Canadian-U.S. interconnections, those with CFE are not synchronized. Therefore, in order to increase the U.S.-Mexico trade, new interconnection grids would have to be constructed. Therefore, adoption of the NAFTA Treaty is projected to have an insignificant effect on trade in this industrial sector (House/Senate, 20-2).

Agriculture-all sectors

Canada exports fish, shellfish, live animals (especially cattle), miscellaneous meats, wheat, distilled spirits, and beer to the United States. The United States exports vegetables, fruits, animal feeds, and meat to Canada. Mexico buys food grains, oilseeds and meat offal's from the United States and sells fresh vegetables, fresh fruit, coffee, and shellfish to the U.S.. The U.S. has a net agriculture trade deficit with Canada and a net agriculture trade surplus with Mexico in the years leading up to the adoption of the NAFTA Treaty (House/Senate, 22-3).

NAFTA is projected to have a minor-to-modest impact on trade between the U.S. and Mexico in the short term. In the longer term, the Treaty is likely to have a modest to considerable increase on U.S. exports of grains, oilseeds, and certain other agricultural commodities to Mexico. With regard to imports from Mexico, the Treaty is projected to result in a minor-to-modest increase fruits, vegetables, certain fish products and citrus products, in both the short and long terms.

The provisions of NAFTA affecting agriculture are principally contained in article 703 of the Treaty. This specific article sets forth the bilateral agreements between the U.S-Mexico and Canada-Mexico. There is no separate U.S.-Canada agreement beyond that which is contained in the U.S.-Canada Free-Trade Agreement.

Projected NAFTA effect by commodity is described below:

Grains and oilseeds category encompasses a large number of commodities including wheat, corn, grain sorghum, barley, malt, rice, soybeans and soybean meal. Oils included in this category include soybean oil, sun flower seed oil, cottonseed oil, safflower oil, jojoba, castor, peanut, olive, and linseed oils.

Upon implementation of NAFTA, the United States will immediately eliminate U.S. duties on imports of Mexican grains including corn, grain sorghum, barley, malt, soybean meal, and about one-half of the oils enumerated above. The remaining grains and oils from seeds will be stage reduced over either a 5 or a 10 year period. On the other hand, Mexico will phase out the 10, 15, or 20 percent ad valorem tariffs assessed on all of U.S. produced grains and oilseeds over a 5 or 10 year period (House/Senate, 23-3).

The pre-NAFTA U.S. blended duty rate on Mexican grain and oilseed products was less than 2 percent, and as a consequence, the removal of tariffs is projected to have a marginal effect on U.S. import levels of these commodities with the adoption of NAFTA. However, as Mexico turns down its duty rate on U.S. produced grains and oilseed, exports by the U.S. to Mexico are forecast to increase. Estimates of the percentage change are shown below (House/Senate, 23-3:

Commodity	Short Term	Long Term
Barley	0	450
Rice	4	39
Sorghum	1	1
Wheat	6	46
Corn	0	381
Fats and oils	4	38
Soybeans	8	2
Soybean meal	5	50

Prior to enactment of NAFTA, Mexico was a net importer of U.S. produced grain and oilseeds, and this situation is not expected to reverse under NAFTA (House/Senate, 23-3).

Vegetables produced in Mexico have been principally intended for export to the United States. This contrasts with production in the U.S. which has been principally intended for domestic consumption (House/Senate, 24-2). Under NAFTA, the United States has committed to remove tariffs on the vegetable sector as a whole. Because pre-NAFTA duty rates imposed by the United States are relatively low, the elimination of duties is projected to result in an increase of less than 3 percent, both in the short and long term. Similarly, U.S. vegetable exports to Mexico after adoption of NAFTA are expected to increase 3 percent in the short term, and also in the long term. Because Mexican growers will continue to fulfill most of the Mexican demand, the possibility of an increase in U.S. vegetable exports to Mexico will continue to face constraints.

Citrus products are produced in three principal regions in the United States: Florida, Texas, and California. Japan and Canada are the primary customers for U.S. citrus products, enabling the United States to be a net exporter of citrus products. However, the U.S. is a net importer of citrus juice: most of these imports consist of concentrated orange juice from Brazil and Mexico.

In the short term, imports by the U.S. of citrus products from Mexico are projected to increase by 12 percent. Viewed from the long term prospective, the U.S. imports of vegetables are expected to increase by 17 percent. The greater increase experienced by Mexico is expected to be attributable to

1. Displacement by Mexican frozen concentrated orange juice (FCOJ) of this commodity currently coming from Brazil. This displacement expected to be facilitated by rules of origin which will govern imports by the U.S. in this sector.

2. Increased tree plantings in Mexico, which will ultimately produce more product for export for the U.S.

The higher U.S. imports are the result of tariff changes implemented under NAFTA. The pre-NAFTA rate of 27 percent ad valorem is to be ratably reduced over 15 years, and Mexico is to receive a tariff-rate-quota (TRQ) commencing with the first year of the Treaty. The TRQ is to decline in an irregular pattern over 15 years. Mexico has committed to match U.S. tariff line changes in duties on citrus products under the NAFTA Treaty (House/Senate, 25-2&3).

Other fruit (fresh and processed) consists of non-citrus fruit such as apples pineapples, grapes, peaches, berries, and watermelons. As in the case of citrus, duties covering these other fruit categories will have a staged decline over 15 years. In addition, melons will be subject to a TRQ of 54,000 metric tons for the May through September period for the initial 10 year period.

Mexico's 20 percent duty rate assessed on non-citrus fruit will have a staged decline over 10 years with the exception of pears and plums, which will be phased out over 5 years. Mexico will also impose a TRQ on apples grown in the U.S.

As the result of adoption of the NAFTA Treaty, U.S. imports of noncitrus fruit is projected to increase less than 1 percent in the short term and less than 5 percent in the long term. Mexico's imports of non-citrus products from the United States is projected to increase 5 percent in the short term and 35 to 40 percent in the long term.

Livestock and meat imports by the United States prior to NAFTA were affected by rates of duty which were already low: i.e., less than 2 percent. Mexico's duty rate was significantly higher: 15 percent on live cattle, swine, beef, and pork carcasses, 20 percent on fresh beef cuts, and 25 percent on frozen beef cuts (House/Senate, 27-2).

The United States will lift duties on imported live and cut meats upon the adoption of NAFTA. Mexico will adopt a 10 year phased reduction in the 20 percent tariff in place before adoption of the Treaty.

Because U.S. duty rates prior to NAFTA were low, the cattle and beef sectors were expected to be little affected by adoption of the Treaty. However, it is projected that the Treaty will lead to 4 percent more U.S. exports of live swine and fresh, chilled or frozen pork to Mexico in the short term and 35-40 percent more in the long term. U.S. exports of cattle to Mexico are to be unaffected by the Treaty.

Poultry trade should benefit as the result of the implementation of the NAFTA Treaty. The U.S. plans to eliminate all tariffs assessed on poultry products upon adoption of the Treaty. Mexico will allow duty-free treatment on a TRQ during the first 10 years, and withdrawal of TRQ's thereafter. Tariffs assessed by Mexico on imports in excess of the quota amount will bear heavy duties of 133 or 260 percent.

Sales of poultry in the U.S. are restricted by animal health and processing plant inspection requirements. Therefore, little effect on imports by the U.S. of these products is projected under NAFTA. With respect to Mexico, adoption of quota tariffs within NAFTA could reduce U.S exports of poultry products to Mexico in the short run. Manufacturers may shift exports to products not covered by the quota such as breaded chicken nuggets and other processed chicken parts. In the long term it is projected that U.S. exports to Mexico of poultry products will increase substantially.

Fish and fish product imports into the United States during the pre-NAFTA period were virtually duty-free. Therefore, adoption of the NAFTA Treaty is expected to have a minor effect on import trade in this sector. On the other hand, Mexico assesses duties of approximately 20 percent on imports of U.S. fish and fish products. With the adoption of

NAFTA, Mexico commits to scale back their duty rates over a 10 year period. The result of these duty reductions by Mexico is expected to have a minor effect on U.S. trade other than exports of canned sardines, which is expected to have more than a minor increase with these duty reductions (House/Senate, 29-2).

Alcoholic beverage markets in both the United States and Mexico are highly regulated. Furthermore, in the U.S. the regulation is on a state-by-state basis. As a consequence of the local regulation and the low duty rates prior to NAFTA on the U.S. side, adoption of the Treaty is forecast to have a very minor effect. Specifically, the forecast increased imports of Mexico's alcoholic beverages is set at less than 5 percent in the long term, and a negligible effect in the short term.

Under NAFTA, Mexico will eliminate duties on Tennessee and bourbon whiskey produced in the U.S. Other alcoholic beverage products are subject to duty rates of 20 percent. The Treaty calls for Mexico to phase these tariffs out over a 10 year period. As a result of the adoption of the measures, U.S. exports of alcoholic beverages has been forecast to increase 3 percent in the short term and 6 percent in the long term.

Lumber and wood products will have their duty rates reduced in a generally bilateral manner. Both Mexico and the U.S. plan to reduce pre-NAFTA tariff rates over a 10 year period for most products. The likely effect on U.S. imports from Mexico is believed to be negligible. However, the projected increase in Mexico's imports of U.S. products is about 2 percent in the short term and 18 percent in the long term (House/Senate, 32-2).

Sugar and sugar containing product imports by the U.S. are restricted by U.S. sugar program. Mexico's production levels have been such that the country has had to be a net importer of sugar and sugar containing products in the years preceding adoption of NAFTA.

During the initial 6 years of NAFTA, Mexico's duty-free exports to the U.S. will be limited to a quota set by the sugar program. In years 7-15, the 15 percent duty the U.S. has continued on this commodity will be reduced in a staged progression to zero. However, quota restrictions on import of surplus Mexican sugar will remain, but be increased by 10 percent/year through the phase-in period of up to 15 years.

Under NAFTA, Mexico is to bring its tariff regime into line with that of the United States. This means government managed quotas plus declining duty rates over 10 years.

The result of NAFTA should be that there is negligible change in the short term in either sugar or sugar containing products attributable to the Treaty. In view of a world surplus in sugar, it is likely NAFTA provisions will be marginalized and that world market conditions will be more influential in the U.S. and Mexico's import levels.

Dairy products will be subject to tariff rate quotas in the U.S. and Mexico under the NAFTA Treaty, and these TRQ's will be phased out over a specified transition period. The United States will TRQ's for milk powder and cheese, and these TRQ's will be phased out over 10 years. All other products in this sector lower TRQ's will be established compared to pre-NAFTA quantity quotas, and these TRQ's will also be phased out over 10 years. Imports in excess of the quotas will be dutiable elevated rates compared to the rates applicable to quota quantities.

Mexico will follow a similar strategy for this sector and establish tariff rate quotas, and these TRQ's are also scheduled to be phased out over a 10 year period. The pre NAFTA tariff rate of 20 percent will also be ratably reduced over the same 10 year period. NAFTA will likely have negligible impact on U.S. imports of dairy products from Mexico in the short term as well as the long term. Furthermore, it is projected that U.S. exports of dairy products to Mexico will initially be limited to the quota quantity allowed in the TRQ established by the Treaty. The same forecast applies to Mexico's exports to the United States, for the same reason (House/Senate, 35-2).

Peanuts are a major agricultural export commodity for the United States, in contrast to Mexico, which is relatively unknown in the world peanut trade. U.S. production is protected by a price support program which is expected to be continued after adoption of NAFTA. The U.S. price is set by the price support program, and therefore, may become an incentive for Mexican growers to export their crop rather than market it domestically at a lower price. To offset this tendency upon adoption of NAFTA, the U.S. will have tariff rate quotas in place which will phase out over 15 years. Mexico does not assess a tariff on uncooked peanuts, and under the NAFTA Treaty, the 20 percent ad valorem tariff will be phased out over 10 years.

Trade in peanuts between Mexico and the United States is projected to be unchanged in the short term as the result of NAFTA. In the long term U.S. exports to Mexico are expected to increase by 5 percent as a result of NAFTA. Mexico's exports to the U.S. are expected to be unchanged without additional acreage being made available and quality of product improved (House/Senate, 36-2).

Cotton is also a large export crop for the United States; the U.S. is a major supplier of cotton to both Mexico and Canada without the benefit of the NAFTA Treaty. Under NAFTA, the U.S. will implement a general tariff rate quota to apply to this entire product class. Tariffs will be eliminated for the TRQ amount, and imports in excess of the TRQ amount would be subject to a 26 ad valorem rate. The TRQ's and duty rate would be reduced over a 10 year period down to zero. Mexico's tariff rate of 10 percent will be reduced ratably over 10 years as well.

The projected impact of NAFTA provisions on cotton trade are minor compared to U.S. consumption as a whole. Although Mexico's exports to the U.S. could increase by 21 percent, this increase represents only 6 percent of the U.S. consumption. With respect to U.S. exports of cotton and related products to Mexico, the short term projection is an increase of 3 percent and a long term increase of 30 percent per annum (House/Senate, 37-2).

Services-All Sectors

The NAFTA Treaty provides for transparent licensing and certification of service providers, eliminates local citizenship and residency requirements among professional service providers, and establishes the principal of nondiscrimination in negotiation circumstances. The two exceptions to these conditions are financial services and air services, which remain subject to extensive regulation specific to all NAFTA signatories.

Therefore, any laws of the member countries which prohibit or limit foreign competition or limit foreign ownership will be eliminated, amended, or superseded by NAFTA text to achieve the Treaty objectives of free-trade in the services sector.

Telecommunication services provisions of NAFTA exempt basic voice telephony services from change under the Treaty. However, "enhanced" services including computer, data processing, and electronic data base services, are included in the Treaty provisions. Therefore, licensing and permit provisions relating to the furnishing of enhanced and value-added services in the permitted endeavors be nondiscriminatory.

With the opening of the Mexican market in this arena, the expectation is that U.S. and Canadian firms will set up Mexican operations. These cross-border operations will engender increased demand in this sector, particularly in software and network consulting services. With the reduction of tariffs on telecommunications equipment, Mexican firms and foreign firms operating in Mexico are expected to seek to establish their own intracorporate private networks.

Transportation services within the three signatory countries were to be harmonized under the NAFTA Treaty. Prior to the Treaty, the U.S. and Mexico both limited access to each other's countries. Under the Treaty, both countries have agreed to phase out these restrictions over 6 years from the date of entry into force of the agreement. Mexican charter and bus services will be granted access to the United States immediately upon Treaty implementation. Three years after implementation (January 1, 1997) U.S. and Canadian bus services may operate throughout Mexico. Control of transportation companies remains restricted between Mexico and the United States through 10 years from implementation of the Treaty, at which time all restrictions are eliminated.

The Treaty requires the member countries to eliminate standards differences in vehicle safety, driver training, weights and measures, nonmedical testing, engine emission levels, noise levels and many other operating differences in motor carrier and rail operations. It is anticipated that these differences will remain a barrier in the implementation of many of the transportation provisions of NAFTA.

In the short term, Mexican trucking services may gain market share in the U.S. border states. In the long term, the low cost of Mexican labor is expected to expose U.S. companies to price competition, both within Mexico, and after full access is granted, within the United States. The short and long term impact is forecast to be minor (House/Senate, 40-4).

Construction and engineering services are expected to be liberalized as the result of the prohibition of citizenship and residency requirements applicable to all professional service providers. The U.S. and Canada have no such barriers, and Mexico has agreed to eliminate its barriers with in 2 years of implementation of the Treaty. Within 5 years majority ownership in construction companies will be eliminated, excluding road construction for land transportation which will be reserved to Mexican nationals. The construction sector is expected to benefit from the Treaty because of:

1. U.S. investment in Mexico manufacturing facilities
2. Infrastructure improvements anticipated to be sought
3. Stricter enforcement of environmental laws
4. Access to work let out by PEMEX and CFE

As the result of the market changes, Mexican importation of these services is expected to grow 15 percent per year over the first three years. U.S importation of Mexican engineering services is expected to be low at the start of the agreement because U.S. firms enjoy a substantial technological advantage in this service sector.

Banking activities are scheduled to be liberalized under the NAFTA Treaty. Before enactment, foreign investment in Mexican commercial banks and bank holding companies was limited to 30 percent. Under the Treaty Mexico has placed its largest banks “off limits” from purchase by a foreign owner. However, the Treaty establishes the general right of U.S. and Canadian investors to provide in Mexico the same commercial banking services as provided by Mexican banks. This participation may be accomplished by either purchasing existing Mexican banks or by establishing foreign financial affiliates under full foreign ownership.

In addition, establishment of special financial institutions, such as mortgage lending institutions and credit card companies is permitted, and may have full foreign ownership characteristics.

During the short term, U.S. and Canadian bank participation in Mexico’s retail banking market is likely to increase modestly. Furthermore, if the objective of the Treaty is accomplished (higher earnings for citizens of all member countries) retailed banks domiciled in the United States will benefit as well (House/Senate 42-3).

Insurance company percentage foreign ownership is no longer a barrier under NAFTA. Under the Treaty, the general right of Canadian and United States invest-ors to own a majority share in insurance underwriting companies is established.

In general, NAFTA does not permit cross-border insurance transactions or sale of insurance in Mexico via branches of U.S. or Canadian companies. This barrier will continue to exist because of the differences in which each country chooses to regulate the industry within its borders. Therefore, the major trade effect in the insurance sector because of NAFTA will occur from direct foreign invest-met. This is likely to occur and U.S. and Canadian insurers expand their investment and financial backing in Mexican insurance companies (House/Senate, 43-3).