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Contract Enforcement and Trade Liberalization in Mexico's Footwear Industry*

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Summary. — The wave of formal legal system reforms sweeping developing countries provides only a partial solution to the problem of enforcing agreements between firms. Informal institutions govern the majority of interfirm transactions. Economic reform also necessitates changes in these institutions. This paper examines the evolution of contract enforcement in the Mexican footwear industry as trade barriers were removed. In the closed economy, geographic agglomeration of manufacturing allowed the manufacturers' trade associations to maintain information about the behavior of retailers and gave retailers strong incentives to maintain reputations. By providing an alternative source for procurement, trade liberalization weakened the power of manufacturers. © 1998 Elsevier Science Ltd. All rights reserved

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1. INTRODUCTION

Both academics and policy makers recently have drawn attention to the need to reform legal systems in developing countries (see Schleifer, 1994, e.g.). Stronger, more efficient legal systems reduce contractual uncertainty in transactions between firms and increase incentives for both domestic and foreign firms to make capital investments. But the formal legal system is only one of the many institutions which collectively determine whether a firm can reasonably expect its trading partners to honor their contractual obligations. Indeed, even in developed countries, most agreements between firms are enforced without direct reliance on the legal system. (See Macaulay, 1963 for the classic study.) Without denying the importance of reforms of formal legal systems, attention should also be given to the evolution of extralegal institutions which govern interfirm exchanges in the reformed developing economies.

This paper examines the evolution of contract enforcement in the Mexican footwear industry as trade barriers were removed and the industry changed from producing for a closed market to producing for an open market. Contract enforcement between manufacturers and retailers in the closed economy did not rely on Mexico's courts. Instead, extensive information-sharing among geographically agglomerated manufacturers allowed geographically dispersed retailers to maintain reputations as fair trading partners. The structure of the standard contracts used in the industry gave the appearance that manufacturers had to rely on the kindness of retailers. But manufacturers were protected by the ability to sully a retailer's reputation within the agglomeration of manufacturers. The manufacturers' trade associations played important roles in gathering the information that was the basis of the reputational enforcement mechanism.

The coalition-based enforcement of agreements between manufacturers and retailers functioned well in the closed economy. Manufacturers interviewed for this project reported that problems with retailers were very infrequent and these relationships had not been one of their major concerns. With trade liberalization, however, came new problems dealing with their clients. Interviewed in 1992 and 1993, manufacturers complained that domestic retailers had "lost their morality" and expressed a great deal of fear in working with foreign customers. The concurrence of these problems with trade liberalization can be explained by the fact that the

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functioning of the coalition-based enforcement system depended on the existence of a captive set of buyers. By giving domestic retailers the option of importing merchandise rather than purchasing from the coalition, trade liberalization weakened the sanctions which manufacturers could apply when retailers reneged on agreements. Since foreign buyers had never been captive to Mexican producers, the coalition was ill-equipped to monitor them. Trade liberalization thus created the need for a new set of contract enforcement institutions.

The agglomerations of footwear manufacturers in Leon and Guadalajara, Mexico have been described in a paper by Rabellotti (1995). In an interesting comparison with footwear districts in Italy, Rabellotti found cooperation among manufacturers in Mexico to be lacking. This paper complements her study by focusing on the structure of transactions between manufacturers and retailers and the role played by the manufacturer's trade association. The resulting picture of the dynamics of the agglomerations is somewhat different. Manufacturers did cooperate extensively to ensure that retailers met their contractual obligations. But the cooperative behavior which allowed manufacturers to enforce contracts with retailers appears to have weakened their incentives to cooperate on other aspects of production. If this is so, then by breaking the coalition, trade liberalization should have led to an increased level of cooperation among manufacturers. Rabellotti describes such a recent trend.

At its base, informal contract enforcement depends on repeated interactions. Agents who renege on an agreement in one round of play are sanctioned in future rounds. The simplest form of sanction is severing the relationship. For this to have bite, there must be profits in the relationship which are forgone in future play. Telser (1980) provides a model of informal enforcement in a bilateral setting. Kandori (1992) considers sanctions in a repeated game with community enforcement. In the community enforcement model, an agent who reneges on an agreement is penalized not just by the trading partner injured by the action, but also by other members of the trading community. In the case here, a retailer who reneges on an agreement may be penalized by all of the manufacturers located in the same city. The repeated framework is by now familiar enough that it will not be developed formally here (see Fafchamps, 1996, for example), though the framework is described in more detail in the context of the industry in Section 2.

Empirical examples of extralegal institutions governing contract compliance have been documented in diverse settings. Work on coalition enforcement of contracts was pioneered by Greif (1993) who describes a coalition of traders in North Africa during the 12th century and Milgrom *et al.* (1990) who examine the role of the Law Merchant in medieval European trade fairs. Greif's coalition and Milgrom *et al.*'s Law Merchant perform roles similar to those performed by the trade associations in this case. In more current development settings, Fafchamps (1996) explores informal contract enforcement in Ghana, but concludes that community sanctions are not important. According to Fafchamps, managers of firms in Ghana expressed the view that "Sharing information [about untrustworthy trading partners] would provide competitors with an undue advantage". That view was not shared by footwear manufacturers in Mexico, where such information was frequently exchanged. Schmitz (1995) traces the industrial structure of the footwear industry in the Sinos Valley in Brazil as it evolved from a cluster devoted to production for the domestic market to one oriented to the export market and Hsing (1993) describes trade in footwear in Taiwan. In these two exporting economies, middlemen perform the informational and arbitrational tasks performed by the trade association in Mexico. Middlemen never developed to play a significant role in Mexico's closed economy, perhaps because their role was replaced by the contract institutions described in this paper. The export countries may well provide a model for the future of the Mexican industry in the wake of trade liberalization. The Mexican case gives additional insight into the functioning of the coalition because the system faced a large exogenous shock just before the study was undertaken.

The institutional detail contained in this study comes from interviews conducted by the author with more than 100 manufacturers. Firms in the initial set of 40 interviews conducted in Guadalajara in 1992 came from a list provided by the local trade association. The information gained from these initial open-ended interviews was used to construct a more formal survey instrument, which was the starting point for discussions with just over 60 manufacturers in Leon in 1993. The latter sample was drawn randomly from a list of all members of the trade association in Leon. Some basic data for each of the members of the trade association in Leon were also made available to the author. In addition, interviews were conducted with a few supply

firms and footwear retailers, and with representatives of the manufacturers trade associations in both cities.

The rest of the paper is organized as follows: Section 2 outlines the characteristics of the industry, and Section 3 describes the nature of contractual problems faced by firms in the industry. Section 4 discusses the structure of contracts and contract enforcement in the industry. Section 5 explores how the institutions which enforce contracts were affected by trade liberalization. Section 6 offers some concluding remarks.

2. INDUSTRY OVERVIEW

The Mexican footwear industry developed in isolation from world markets. Import license requirements covering 99% of imports and tariffs averaging 47% resulted in imports of less than 0.1% of the domestic market in 1987, a year when exports accounted for only 3% of domestic production. Mexico lowered import barriers after joining the General Agreement on Tarriffs and Trade (GATT) in 1986. By December 1988, import license requirements had been eliminated and import tariffs were lowered to 17% in the industry (Ten Kate, 1992). As the data on Table 1 indicate, imports increased dramatically in the wake of liberalization, capturing nearly one-third of the market by 1991. Against a sluggish economy, the imports lead to decreased domestic production, with the total pairs produced falling nearly 20% during 1989–90[1]. Exports also increased, but less dramatically, to about 7% of domestic production in 1991. Mexican manufacturers were most successful exporting Western boots and *huaraches* (a type of sandal), with almost 10% of boot production exported in 1988. Larger firms are more likely to be involved in exporting. Among the firms interviewed for this study in Leon, the 14 who indicated that they were exporting had on average 99 employees, while the remaining non-exporters had on average 54 employees.

According to data from Mexico's industrial census, there were 2,337 leather footwear manufacturers employing 70,000 workers when the industry was opened to trade in 1988. Other estimates place the number of firms as high as 5,000 and the number of workers directly employed well in excess of 100,000[2]. The higher numbers are likely more accurate. Table 2 shows the distribution of manufacturers by size of employment. The level of concentration in the

Table 1. *Footwear production, imports and exports (millions of pairs)*

Year	Domestic production	Exports	Imports
1985	232	3.8	0.3
1986	237	4.3	0.2
1987	244	7.8	0.2
1988	245	9.5	5.5
1989	200	10.0	24.0
1990	204	10.0	86.4
1991	210	14.5	106.7
1992	212	15.1	NA

NA, Source: Manufacturers' Trade Association or the state of Guanajuato.

Table 2. *Leather footwear firms by employment*

Size by employees	Number of firms	Total employment
1–5	1216	2786
6–15	420	3997
16–50	405	11861
51–100	158	11322
101–250	101	15842
250 or more	37	23914
Total	2337	69722

Source: INEGI XIII Censo Industrial.

industry is very low. The largest manufacturer in the industry employed just under 6,000 workers in 1991, less than 10% of the most conservative estimate of industry employment. No other firm employed as many as 1500 workers and fewer than 150 firms employed more than 100 workers each.

The retailing side of the industry was even more disaggregated. According to the commercial census, there were more than 19,000 retail outlets in 1985. With the two largest retail chains having around 400 stores each, no firm controlled even 2% of retail trade.

When the economy was opened to trade, 50% of footwear manufacturing employment was located in the state of Guanajuato, primarily in the city of Leon. Jalisco (primarily the city of Guadalajara) and the Mexico City area had respectively 23% and 13% of employment in the industry. Agglomeration was even more pronounced at the subindustry level. Guanajuato specialized in men's and children's shoes and in Western boots (with 73%, 78% and 80%, respectively, of Mexican firms producing in these segments are located there), Jalisco in women's shoes (41% of the firms) and Mexico City in tennis shoes and slippers (with 52% and 67%, respectively, of the firms, Table 3)[3].

For the purposes of the discussion here, the concentration of the industry is appropriately measured at a more disaggregated level. From a marketing perspective, Western boots and women's dress shoes are different products, and manufacturers of one are not in direct competition with manufacturers of the other. Data at the segment level are more difficult to obtain, but some data are available for 742 manufacturers who are members of the industry trade association in the state of Guanajuato. These data indicate that there are more than 100 manufacturers in Guanajuato producing Western boots, men's dress shoes, men's casual shoes, women's casual shoes, tennis shoes and children's shoes. Ninety manufacturers report production of women's dress shoes. With additional manufacturers located in other regions of the country, every major segment of the industry is characterized by a large number of producers[4].

Footwear manufacturers are members of one of three industry trade associations based in the cities of Guadalajara, Leon and Mexico City[5]. The associations provided a variety of services for their members, offering training programs, organizing trade fairs and lobbying on behalf of the industry. Almost all of the members of the associations in Leon and Guadalajara were located in or near those cities, allowing the associations to offer an expanded set of services. Among these additional services were the credit and collection services described in more detail below. Neither the manufacturer association in Mexico city nor the retailers' trade association (also based in Mexico City) offered credit services. Members of the Mexico City-based associations were dispersed throughout the country.

3. MANUFACTURER–RETAILER RELATIONSHIPS

The most straightforward transaction between a buyer and a seller is a cash-and-carry sale, with goods and money exchanged simultaneously. With the buyer able to inspect merchandise before paying and the seller able to count money before delivering, no trust is needed between the trading partners. Interviews in the industry suggest that an insignificant portion of the production of footwear in Mexico was sold in this manner. Most production was made to order, with the order process following a standard form.

About six months before both the spring/summer and fall/winter fashion seasons, manufacturers developed samples of styles they were willing to produce. Though manufacturers sometimes developed original styles, most styles came from fashion magazines or trips to the United States or Europe. The number of styles offered and the extent to which styles changed from season to season varied significantly across segments of the market. For example, manufac-

Table 3. *Percentage of national footwear industry employment by state*

Region	% of manufacturing	% of retailing	% of population
Guanajuato	50.0%	6.7%	4.9%
Jalisco	23.0%	8.5%	6.5%
Mexico & Fed Dist	13.0%	28.2%	22.3%
All Other States	14.0%	56.5%	66.3%

Source: INEGI, XIII Censo Industrial; IX Censo Comercial; 1990 Population Census.

turers of women's dress shoes interviewed for the study offered an average of 66 styles, essentially all of which were changed every six months. Styles of Western boots varied less, with manufacturers in these segments offering an average of 37 styles, of which only a half dozen or so were new each fashion season. Estimating which styles consumers were most likely to demand six months hence was the task of the retailers, whose continuous contact with customers gave them the best information about consumer tastes. Clearly, more guesswork was involved in those segments where styles changed very quickly.

Manufacturers displayed the new styles at shoe fairs held in October and April in Leon, Guadalajara and Mexico City. Retailers attending the fairs chose from among the styles, placing orders—usually in writing—specifying the number of pairs of each size, style and color, the materials to be used in production and a range of delivery dates (covering a month, perhaps). A typical manufacturer sold to dozens of retailers, and a typical retailer bought from around a half dozen manufacturers. For each order, the retailer (or one of her employees) signed the order, and perhaps a *pagare* (promissory note) as well. Even for new customers, manufacturers did not normally demand any payment at the time the order was placed. Several months later, manufacturers produced and delivered the merchandise to retailers just before the start of the fashion season. Retailers generally payed within 30 days of delivery.

Producing to order and selling over long distances result in a separation in time of production, delivery and payment. This creates two types of contractual difficulties which manufacturers and retailers must resolve. First, agreements related to the quantity of goods to be delivered, the timing of the delivery and the price must be enforced. Manufacturers who ship goods before retailers pay for them need assurances that retailers will ultimately either pay for the goods or return them[6]. Outside parties (courts, for example) may be quite useful in resolving disputes involving delivery and payment because such agreements can usually be fully described in written contracts. If a dispute arises, signed order forms, shipping receipts, canceled checks and other written documents make it relatively easy for a court to verify which party has not lived up to his side of the agreement.

Even if a manufacturer delivers the agreed upon quantity of goods by the agreed upon date, the retailer may argue that the quality of the goods delivered is lower than that which was agreed upon or expected. Disputes between buyers and sellers over quality are more difficult to resolve because the quality specifications are rarely completely written down in orders or contracts. As a result, parties outside the transaction may be able to observe a dispute, but unable to determine which side is responsible for causing the dispute. Without knowing the quality level which (perhaps implicitly) was agreed upon, an outside party is unable to judge whether the goods meet that quality standard or not. In interviews, manufacturers routinely cited examples of retailers who returned merchandise some time after it was delivered on the grounds that the quality was defective. The manufacturers felt it was often the case that the quality was sufficient but the retailers simply had been unable to sell the merchandise because they had overestimated market demand[7].

In some circumstances, markets themselves can resolve quality disputes. Where a retailer returns goods as substandard and a manufacturer disagrees, the manufacturer is free to sell the goods to another client. The market ultimately decides which side is right. But for markets to be effective arbitrators of quality disputes, a manufacturer must have alternative clients for the same merchandise. In footwear, this is often the case for manufacturers in segments such as industrial boots. In this segment, manufacturers typically produce only a few styles in black or brown, and the styles very seldom change. As a result, manufacturers generally have inventories of each style/color/size combination, and goods returned from retailers can be placed back in inventory to be resold with little loss to the manufacturer.

But heterogeneity of the products makes markets less effective in resolving disputes. A manufacturer of women's dress shoes, for example, producing 65 styles in any of 10 different colors and 10 different sizes offers 6,500 distinct products. Having produced a quantity of one of those products—say 10 pairs of style number 50 in red, size six—finding an alternative buyer is difficult and costly. Reselling costs drive a wedge between the contracted price and the value of the goods to the manufacturer in an alternative use. In that regard, several manufacturers mentioned the special risk of producing goods to fill orders from US buyers, given the larger foot sizes in the United States. The fear expressed was that canceled foreign orders would be even more difficult to re-sell than domestic orders, since manufacturers have far fewer foreign clients than domestic clients

and since search costs are higher in foreign markets.

In the terminology of Klein *et al.* (1978) and Williamson (1979, 1985), the specificity of investments creates the possibility of hold-up in the relationship. Much of the early work on specific investments dealt with large, fixed investments (Monteverde and Teece, 1982; Joskow, 1987, for example). Recently, however, economists have begun to recognize the importance of determining appropriate governance structures of transitory specific investments such as those involving inventories or the scheduling of production (Masten *et al.*, 1991; Pirrong, 1993). Stone *et al.* (1992) discuss concerns similar to those outlined above which arise from production-to-order in the garment industries in Chile and Brazil.

When the complexity of transactions increases and markets are no longer able to ensure efficient outcomes, trading partners must develop alternative governance structures. At one extreme, trading partners may remove transactions from the market completely by integrating the activities together in the same firm. While integration between footwear manufacturers and retailers was not unknown in Mexico, only a small portion of sales were made through manufacturer-owned stores[8]. Alternatively, trade between buyers and sellers may be intermediated by third parties. The classic wholesaling function of transforming the large quantities of a few products produced by each manufacturer into the small quantities of many products demanded by each consumer is only one role which intermediaries can play in the production chain. Wholesalers, export agents or trading companies also lower search costs and serve as a conduit of market information (Stern *et al.*, 1996, Chapters 1 and 3).

In developing countries, intermediaries have been found to be important in technology transfer and product design, and in conveying appropriate quality standards to local producers. Both Levy *et al.* (1994) and Lall (1991) focus on the particular importance of intermediaries in developing country export industries. Hsing (1993) and Schmitz (1995) describe similar roles for intermediaries in the footwear industries in Taiwan and Brazil, respectively. But these authors described another crucial role of the brokers in governing trade in the industry. Intermediaries provide assurances to buyers that products of acceptable quality will be delivered on time and assurances to producers that buyers will pay for merchandise as promised. In Taiwan, Hsing describes the services provided by intermediaries acting as arbitrators in disputes between producers and their clients. She notes that these services are especially important in segments of the market in which styles change quickly (e.g., women's dress shoes), where goods delivered late may have little value in the market[9].

Market intermediaries played only a small role in Mexican footwear. A recent study of the industry found that the great majority of sales were made directly from manufacturer to retailer, with only 12% of sales passing through wholesalers or middlemen[10]. Given the large number of producers and retail buyers, the contrast to Brazil, Taiwan and other parts of the world is surprising[11]. The wholesaling function which intermediaries perform was apparently internalized by manufacturers in Mexico: the Mexican study concludes that manufacturers produced a broader array of products than footwear producers in other countries and produced to fill orders which were much smaller than the norm. But how were disputes between manufacturers and retailers resolved? None of the Mexican manufacturers interviewed for this study cited middlemen as playing arbitrational roles in Mexico. Rather, the manufacturers suggested that in the closed market, their trade associations developed mechanisms to govern trade and resolve disputes between manufacturers and retailers over quality and delivery. These institutions not only helped alleviate hold-ups, but allowed more predictable outcomes and reduced contractual uncertainty. The contractual relationships and the manner in which disputes were adjudicated is described in more detail in the next section.

4. CONTRACTS AND CONTRACT ENFORCEMENT

The structure of the transaction appears to have exposed the manufacturer to some risk. Given that the manufacturer produced and shipped the merchandise before receiving payment, he had to be able to protect himself from the retailer failing to pay and simply absconding with the merchandise. More subtly, the cost of finding alternative buyers meant that manufacturers suffered some loss if retailers returned merchandise after it was delivered.

For at least two reasons, firms in the industry rarely relied on courts to enforce the agreements made at shoe fairs. Most important, both manufacturers and retailers recognized the right of retailers to inspect delivered merchandise for adherence to the order and for defective

workmanship. Without this right, a manufacturer's incentives to produce products of quality workmanship would have been significantly reduced. But since the quality of workmanship was difficult to describe and write in the order forms, a party outside the transaction (a court) could not judge whether returns from a retailer were legitimate or not[12]. That is, the court could observe that goods were returned with a claim by the retailer that they were defective, but could not verify whether in fact they were defective or were returned for some other reason.

The second broad reason that orders were not enforceable in courts is that the Mexican legal system was widely viewed as inefficient and costly in relation to the size of a typical footwear order. Manufacturers were required to file legal actions in the (perhaps distant) city in which the retailer was located. The ability of defendants to slow the legal process made distant action even more costly. Finally, a favorable court judgement did not necessarily lead to any payment. One guide to doing business in Mexico advises, "Parties involved in business disputes in Mexico are advised to avoid bringing lawsuits whenever possible"[13]. In the footwear industry, retailers guarded against legal liability by having an employee sign orders, promissory notes, etc., or by registering their business in the name of their spouse or children. In either case, the assets of the retail business could not be seized to pay for documents signed by the retailer. Perhaps because of the difficulty in using courts, manufacturers used order forms which were not even recognized by the courts as legally enforceable contracts.

To minimize reliance on the courts, manufacturers developed a highly structured informal ("extralegal") contract enforcement mechanism which interviews suggest was effective in ensuring the enforcement of basic contractual arrangements. Upon receiving an order, manufacturers asked the retailer for references of other manufacturers with whom she had dealt. These could be checked against a data base of "commercial references" maintained by manufacturers' trade associations in Guanajuato and Jalisco. The credit services department of the trade association in Guanajuato had a data base which included information on some 4,300 retailers; the credit services data base maintained by the Jalisco chamber had information on some 1,300 retailers. The chambers' data bases included information not only about the retailer's payment history, but also about how the retailer handled herself in dealings—e.g., if she accepted orders when delivered, how often she returned orders for "quality" problems, and so forth. Behavior such as a retailer taking a discount for paying a manufacturer early, even when the discount was not authorized by the manufacturer, was also noted in the data base.

A bi-monthly bulletin of "defaulted clients" which listed retailers who owed money and refused to pay was sent to chamber members in Guanajuato. Manufacturers indicated frequent use of this bulletin. Lawyers employed by the chamber used the threat of listing a retailer in this bulletin as leverage in collecting payments. The head of the legal department in Guanajuato reported that retailers have the attitude "...if I don't pay the chamber lawyer, the chamber will put me in the bulletin and I won't be able to buy shoes in [Guanajuato] again"[14]. The chamber required some written proof of the problem before listing a retailer in the bulletin. But while the order form, signed shipping receipts and similar documents used in the industry were not legally admissible in courts, they did provide sufficient evidence for the chamber to include a retailer on its list of bad clients[15].

In addition to credit services, the legal departments of the trade associations in Guanajuato and Jalisco both provided collection services for members. The legal department in Guanajuato employed two lawyers who traveled regular routes to make collections for manufacturers. The association lawyers had several advantages over the formal legal system. First, they used the threat of placing non-cooperating retailers on the bulletin of bad clients. According to the head of the legal department, this threat was enough to resolve the majority of the disputes over the telephone. Where a visit to the retailer was necessary, lawyers reduced the cost by handling several cases in one geographic area on the same trip. Lawyers working for the Guanajuato association visited about 200 retailers in a typical year. Recovery was made on about 70% of the accounts with only about 30% of the cases involving court action. Courts were most often used when accounts were deemed unrecoverable and court certification of the loss was needed for tax purposes. The information gathered by these lawyers in the collection process supplemented the data base of references collected from the manufacturers themselves.

The geographical agglomeration of manufacturing allowed manufacturers to communicate at low cost. The references given by retailers were most often manufacturers in the same city and were often known to the manager needing the information. Knowing the reputation of the manufacturer providing the reference increased

the value of the reference to the manager. Since disputes between manufacturers and retailers were often couched in terms of quality defects, judging from the outside which party was at fault in any given dispute was not possible. Neither the goods delivered nor the quality level agreed upon was observed by parties outside a given transaction. Several managers noted that negative reports from certain manufacturers were discounted because "that manufacturer has trouble with everyone". Agglomeration allowed manufacturers to observe how retailers behaved with many different manufacturers, and how manufacturers behaved with many retailers. Where information was necessarily incomplete, this repeated observation was important.

The footwear associations had no formal agreement forbidding members from selling to blacklisted retailers. In fact, manufacturers reported a willingness to sell to retailers involved in disputes with other manufacturers, though they usually asked for payment in advance in such cases. Requiring payment in advance punished the retailer by weakening her bargaining position. If merchandise was delivered by a manufacturer later than the agreed upon delivery date, or if the quality of the merchandise was substandard, the advanced payment meant the retailer could not withhold payment or return the merchandise. Recognizing this, manufacturers who encountered production problems would delay shipment of merchandise to the retailers who paid in advance[16].

Retailers doubtless communicated to some extent as well, but their geographical dispersion was a deterrent to extensive information-sharing. Thus, reputation was less of a deterrent to the behavior of manufacturers. The "one-way" reputation mechanism provided a rationale for manufacturers and not retailers assuming so much of the contractual risk in the industry.

While the manufacturers' coalition helped overcome basic problems of trade in the industry, even before trade liberalization, there were suggestions that the system functioned imperfectly, with the resulting market being characterized by considerable friction. Manufacturers reported that on average only 10% of their customers were added within the previous year and they indicated a hesitancy to sell to new customers. The manufacturers' most common response to the difficult market conditions in 1992 (which resulted from the increased level of imports) was to try to increase sales to existing customers by increasing the number of styles and lines they produced rather than risking sales to large numbers of new customers. An increased number of styles and lines resulted in higher production costs because some economies of scale in production are lost. Trade liberalization shed further light on weaknesses in the system which had developed in the closed economy.

5. TRADE LIBERALIZATION

Restrictions on footwear imports into Mexico were significantly reduced in December 1987. Import license requirements for footwear products were eliminated, and tariffs in the sector were reduced from 35% to 17%[17]. In response, imports grew from 0.2 million pairs in 1987 to 24 million pairs in 1989. By 1991, imports were 107 million pairs, roughly one-third of the domestic market. The lack of established distribution networks may have slowed the reaction to trade liberalization. Few individual retailers were big enough to purchase even the minimum quantities foreign sellers were willing to provide, and the prevalence of direct manufacturer–retailer sales meant there were few wholesalers in the industry[18]. Not surprisingly, then, one of the first major importers was the largest footwear retailer in Mexico, which had about 400 stores but no manufacturing facilities. According to manufacturers, this chain had previously purchased all of its product from Mexican manufacturers. When it began importing, it canceled orders overnight. Many firms apparently were working exclusively for this one client, and many of them went bankrupt when the orders were canceled.

The willingness of the largest retail chain to damage her reputation among domestic producers indicates the major impact which trade liberalization had on the functioning of the market institutions then in existence. The availability of imported footwear reduced the cost of the retail chain losing her reputation among the domestic coalition[19]. As distributers entered the market, driven by the profits which could be made by coordinating the delivery of large import shipments, the incentive for other retailers to similarly disregard their reputations was increased. One manufacturer claimed that retailers had lost their morality. While they previously had always paid on time and rarely returned merchandise, they were paying late and returning shoes with more frequency in 1993. Other manufacturers made similar comments. Perhaps trade liberalization did coincide with a change in the moral values of retailers, but liberalization also reduced the manufacturers' power by providing retailers with the option of procuring shoes from foreign producers who

were not part of the coalition. This weakened the sanction which manufacturers were able to apply to retailers who did not cooperate.

The trade associations were ill-equipped to assist Mexican manufacturers in their relationships with foreign buyers. Few foreign buyers were included in the data base, and none were captive to the coalition of Mexican manufacturers the way domestic buyers had been. Only a small part of domestic production was exported prior to liberalization. That the most successful export niches were traditional Western boots and *huaraches* is instructive. The styles in these segments changed very slowly if at all, allowing manufacturers to maintain inventories and buyers to inspect the merchandise before paying. Thus, the contractual problems discussed above were not as difficult to overcome for these initial sales. According to manufacturers, initial export sales in these segments were made to owners of stores in the southwestern United States who traveled to Guadalajara or Leon and made purchases on a cash-and-carry basis. As Table 4 shows, in 1975, boots and *huaraches* represented almost half of Mexico's exports (but a much smaller percentage of domestic production), with 86% of exports in these segments going to the United States. France and Germany are the industry's second and third largest export clients, but distance makes cash-and-carry sales more difficult and means more serious contracting problems had to be overcome before Mexican manufacturers could export to Europe. These two countries accounted for less than 1% of exports in the boots/*huaraches* segments in 1975, but almost 40% by 1988[20].

Differences between domestic and export market styles and the distribution of foot sizes further increased the risk of producing to fill for export orders in segments requiring production-to-order. Manufacturers had heard many stories of foreign buyers placing orders for a series of deliveries over some time period, and then canceling later deliveries when the demand turned out to be lower than anticipated. Production ready to ship or work in progress at the time orders were canceled (and letters of credit withdrawn) resulted in large losses to the manufacturers. One manufacturer interviewed in Leon, Mexico, was in the process of forging a relationship with a buyer from the United States. Considerable mistrust was expressed by both sides, and the relationship broke down before production commenced when the manufacturer gave the buyer a bill for design and sample production services. The buyer gave the manufacturer a check, then flew back to the United States and stopped payment on the check. Given the cost of undertaking legal proceedings abroad, the manufacturer had little prospect of recovering the money. Of course, the incident would be reported to the trade association, making it difficult for the buyer to do business in Leon in the future. Clearly, though, given her other supply options the buyer had decided the privilege of doing so was not worth the small sum of money involved.

A more successful venture is represented by a former manager for a US-based footwear firm who had come to Leon to start a business selling Mexican manufacturers leather, soles and other inputs imported from the United States. His efforts in Leon gave him knowledge of the capabilities of manufacturers in Leon. This, combined with the contacts he had gained working in the industry in the United States left him well placed to help US buyers coordinate purchases from Mexican manufacturers. In fact, a former employer who was buying uppers from a local manufacturer had begun to pay him to oversee a contract they had with a manufacturer near Leon. He visited the factory frequently—at

Table 4. *Exports of footwear from Mexico*

Year	% of value boots/*huaraches*	% of boots/ *huaraches* to US	% of boots/*huaraches* Germany/France
1975	44.05%	69.82%	0.38%
1980	42.59%	76.88%	15.23%
1981	35.55%	86.32%	21.34%
1982	38.43%	77.54%	14.99%
1983	30.59%	82.24%	8.52%
1984	27.20%	83.17%	6.41%
1985	39.81%	70.86%	20.82%
1986	40.03%	57.22%	29.55%
1987	45.44%	45.75%	28.34%
1988	50.46%	46.73%	38.66%

Source: INEGI, Anuario Estadistico del Comercio Exterior de los Estados Unidos Mexicanos, various years.

least once a week—assisting them with quality control and inspecting all goods before they were shipped to the US buyer. The services he provided are similar to those performed by the intermediaries described by Hsing and Schmitz.

Trade liberalization also revealed weaknesses in the coalition-based enforcement system which operated in Mexico. Most important, many manufacturers reported that liberalization had forced them to increase the efficiency of their production process and lower production costs. For example, one had increased production per worker from 4.5 pairs to 6.0 pairs per day, without any purchases of capital equipment. When asked how, he discussed changes in the production process. The molds used to cut leather had not been precise before, and he hired two workers whose job was to "straighten" the shoes after they were made. After liberalization, he had the molds cut more precisely, eliminating the need for these two workers. When asked why, in competition with 4,000 other domestic manufacturers, he had not made these changes before the market was opened, the owner replied simply, "Because it wasn't necessary". Trade liberalization did not change the cost of making any of the changes he described; rather, it changed the incentive for doing so. In spite of the large number of manufacturers in Mexico, the market apparently allowed considerable slack in production efficiencies[21]. The manner in which coalition-based contract enforcement affects the incentives of manufacturers is explored in more detail elsewhere (Woodruff, 1997b).

Trade liberalization also had the effect of replacing the quality standard set by the manufacturers' coalition with one determined by world markets. The need to compete with imports had manufacturers making efforts to improve quality on several fronts. Lower tariffs on capital and intermediate goods made it less expensive for manufacturers to use higher quality, imported inputs, and there is evidence that they did this. But there is also evidence that manufacturers took other steps, increasing cooperative efforts among themselves and with their suppliers to find more efficient and effective ways of producing higher quality products. Writing based on interviews conducted in 1992, Rabellotti notes a new search for ways to reform the production process to improve product quality. "Both footwear enterprises and suppliers are now starting to realize the importance of a systematic view of the production process: only collaboration among them will in fact make it possible to produce an internationally competitive product" (Rabellotti, 1995, p. 36).

Tariffs and quotas had not prevented firms in the industry from cooperating in the closed economy, nor had they made cooperative ventures more costly. One plausible explanation for the change in attitude is that the standard for quality of workmanship came from within the coalition, whose members produced most of the country's footwear for a given segment. Raising the quality standard of all producers in the industry at the same time did not lead to an increased market share in the closed economy. As imports captured a bigger share of the domestic market after liberalization, incentives to cooperate in improving collective quality were strengthened as improvements in collective quality did lead to increases in market share.

6. DISCUSSION AND CONCLUSIONS

As this case suggests, trade reform is more than a matter of "getting prices right". Industries in liberalizing countries must also "get institutions right". The central role of the informal institutions governing trade between firms is reducing the cost of information about the reliability of trading partners, making trading relationships easier to develop and sustain. The greater complexity of sustaining relationships across borders and cultures creates an even greater need for information. The trade association mechanism described in this paper performed this role in Mexico's closed economy. But the mechanism was not designed to function in an open economy. Manufacturers lost some of their power to sanction retailers once the latter were able to procure products from abroad.

The evidence suggests that there is no single policy to address the needs of the industry. Institutions which function in one segment of the market may not function in another. The industry's relative success in exporting the more stable line of Western boots indicates that relationships with foreign buyers are easier to forge in this segment. Institutional arrangements feasible for large firms may be ineffective for small firms. In recent years, several of the largest producers in Mexico have established offices in the United States in order to respond more quickly to customers' demands, an option not available to individual smaller firms. Something like the converse of Say's Law holds here: demand creates its own supply. Trying to identify which institutional structure best resolves contractual problems in the myriad of conditions under which firms in the industry operate would be

ill-advised. What the government and industry associations can do, then, is help to create the conditions under which relationships between domestic producers and foreign buyers will develop.

In this regard, the most important policy is the one already taken, opening the economy to trade, creating the need for domestic manufacturers to export in order to survive. Two sets of further policies are being pursued. The first is the array of credit and technical assistance programs supported by the Mexican government make small- and medium-sized firms more appealing trading partners. The second set of programs promotes "associationism" among small firms. One of the potentially more interesting efforts in this area which the Mexican government has recently initiated is the *empresas integradoras* program. This program allows a group of firms to form a separate, cooperatively-owned enterprise to provide either upstream or downstream services to the owning firms. Several producers interviewed for this study expressed interest in forming integrated enterprises to produce inputs or market their products. Cooperative marketing would allow them to accept the larger order sizes typical of foreign buyers, with production divided among the owning firms. Integrated enterprises are a promising device to support cooperation among small firms in a manner similar to that described by Tendler and Alves Amorim (1996). Though more research on the use of this program is needed, the anecdotal evidence available to date suggests the *empresas integradoras* have seldom been used for these purposes to date. More effort in complementary programs like one recently undertaken by Mexico's Labor Department may be needed to provide the impetus for a more intensive use of integrated enterprises[22].

On a different level, there has been discussion in the literature about what constitutes a "cluster" of firms. This case suggests that we have to look beyond the number of firms in a given geographic region to understand how the firms interact with one another. Different forms of cooperation may evolve among geographically concentrated firms. The nature of the cooperation has an impact on the production incentives of firms. The city of Leon was a cluster of footwear manufacturers both before and after trade liberalization, measured by the number of firms in the area. But the manner in which firms interacted changed after the economy was opened. This is so even though the majority of firms is owned and managed by the same individuals. The entrepreneurs have not changed, but the incentives have.

NOTES

1. Data detailed in Rabellotti (1995) show an earlier decline in the industry, with employment falling by about 12% during 1985–88.

2. See Rabellotti, 1995, Table 2, for example. The 1988 census is used because it is more reflective of the industry at the point of trade liberalization. The 1993 industrial census counted 4,986 firms employing 83,000 workers. Since there is wide agreement that employment in the industry declined in the late 1980s and early 1990s, the higher count is certainly the result of a more thorough census rather than an increase in employment.

3. The breakdown by segments is based on industry chamber registrations from *Directorio Nacional de Industriales* (CCIEUM, 1984).

4. Just over one-quarter of the manufacturers report production in more than one major segment of the market.

5. The Mexican law requiring firms to be members of representative associations has recently been challenged in the courts. In reality, membership in the associations included the overwhelming majority of medium- and large-sized manufacturers, but most of the smallest manufacturers were never members of the associations.

6. Alternatively, if retailers pay for goods before they are shipped, they must be able to ensure that the goods are ultimately shipped or the payment returned.

7. For example, one manufacturer told the story of a retailer ordering several dozen pairs of children's dress shoes made from blue leather rather than the black or white leather from which these shoes are traditionally made. Some time after the goods were delivered the retailer returned them complaining that the were 'not the right shade of blue.' The manufacturer felt they were returned simply because the retailer was unable to sell the "exotic" shoes, but he had no alternative but to accept the return of the merchandise and resell them to another buyer at a considerable loss. Nothing in the written agreement allowed a court to decide

whether the shoes were the shade of blue agreed upon or not.

8. According to the Boston Consulting Group study, only 4% of sales are made through stores owned by manufacturers. The connection between vertical integration and the degree of specificity of investments in inventories is examined in detail in Woodruff (1997a).

9. This pattern is consistent with the theoretical developed in Biglaiser (1993).

10. The study by the Boston Consulting Group (1988) (p. 16) breaks sales down by independent retailers (41%), footwear retail chains (20%) and department stores (19%). Although there are two chains with more than 300 stores each, the vast majority of chains have fewer than a dozen stores.

11. Most of the comparative information comes from a study prepared for the Mexican Secretary of Industry by the Boston Consulting Group, 1988.

12. This verifiability problem is unique neither to this industry nor to Mexico. For a description of how brokers arbitrate such disputes, see Hsing (1993).

13. Another guide warns, "Litigation in Mexico is a lengthy, formal process" (Bridge *et al.* (1991)). Less charitably, a Mexican academic testifying before the US Congress opined, "[It] is not the incoherence of our body of laws that makes Mexico one of the most unpredictable and unreliable legal systems in the world. It is the immorality of the judicial process" (testimony of Adolfo Aguilar Zinser before a US Congressional Committee, February 25, 1993).

14. Interview with Lic. Ricardo Castro Hernandez, April 26, 1993.

15. The chamber requires some written documentation to avoid charges of libel from retailers. The legal department, however, has also sent general warnings of fraudulent retailers operating in given states, with advisories that manufacturers with clients in those states call the chamber for details. Even without written proof, the chamber can verbally "black list" retailers.

16. Generally, manufacturers had a "pecking order" of clients. When problems arose, orders for the most important clients—either by size or by duration of the relationship—were filled first. Paying in advance moved a retailer to the bottom of the pecking order.

17. Dominguez-Villalobos and Grossman (1992) and Ten Kate (1992).

18. The Mexican Peso was also devalued significantly in late 1987, just before liberalization. The currency appreciated in real terms by 17% in 1988 and 9% in 1989 (Lustig, 1992, p. 30). The real appreciation made imports cheaper relative to domestic goods.

19. In 1993, when the Mexican government placed anti-dumping tariffs on imports from China, the chain was trying to reestablish its reputation in the industry.

20. Unfortunately, the Mexican government changed the categories used in the import/export reports in 1988 and the breakdown by product category is no longer reported. The available statistics are sufficient to give a picture of exports in the closed market, however.

21. Another indication of slack in the industry was provided by an employment advertisement placed by the local Coca-Cola distributer in a Leon newspaper. Among the requirements for applicants to Coca-Cola was to "Never have worked in the footwear or leather industry" (A.M. Guanajuato, April 21, 1993).

22. The Mexican Department of Labor's *Programa de Calidad Integral y Modernización* is discussed in STPS (no date).

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